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## EDITORIAL:

# Introduction to the Special Issue based on papers presented at the Business Model Conference 2018

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The 2<sup>nd</sup> Business Model Conference provided a great opportunity to create constructive discussions on researching and teaching business models, both inside and outside the seminar rooms.

More than 60 academics and practitioners attended the Conference, with more than 40 papers being presented. Two inspiring and challenging keynote speeches were given during the Conference: Professor Joan E. Ricart opened the event with a presentation entitled *Business Models in the Sharing Economy*, while Professor Nicolai J. Foss gave a closing keynote on *Linking Top Management and Business Model Innovation*.

The Conference was also enriched by a PhD colloquium and a Teaching Forum. The PhD colloquium was organized by Professor Charles Baden-Fuller and Adjunct Professor Petri Ahokangas who sought to provide doctoral students with an opportunity to present and discuss their research with distinguished international faculty. The Teaching Forum was organized by Professor Anna B. Holm, PhD Fellow Christina M. Bidmon and Scholarship Holder Kirstin E. Bosbach with the aim of providing scholars with an opportunity to present innovative teaching formats and best practices for teaching business models. All the papers submitted for possible presentation at the Conference were reviewed by the Scientific Committee, with those selected being organized into 12

streams: Creativity and Innovation; Ecosystems; Risk and Uncertainty; Theoretical and Conceptual Issues; Frameworks and Tools; the Academic Sphere; Society and Sustainability; Accounting and Disclosure; Digitalization; Innovation; Value Drivers; and Future Scenarios.

Originality, significance and rigor were the three criteria that informed the Scientific Committee in the selection process of the 16 papers included in this Special Issue of the *Journal of Business Models*. The result is a balanced mix of contributions from different research streams and using different research approaches. Let me briefly introduce these papers by focusing mainly on their objectives, methods and respective contributions.

Bini et al. (2018) propose the concept of business model as a valuable tool for companies to increase the effectiveness of non-financial key performance indicator disclosure. First, the authors argue that the business model enables the identification of indicators that are aligned with strategic objectives. Moreover, they maintain that the business model acts as an integrated framework, showing how different capitals are combined to create value.

Brøndum et al. (2018) present a model for feasibility testing of novel ideas for business model innovators. In

particular, the authors suggest a five-step systematic involvement of non-domain-related knowledge intended to deliver more unique ideas that are feasible in the decision-making phase of business model innovation.

Cuc and Miina (2018) explores the relationship between business model, innovation and strategy. Through a systematic literature review and deductive analysis, the authors classify business models according to the degree of innovation, and strategic focus, hence providing a framework to evaluate and improve business models.

DaSilva (2018) investigates prior research and reframes business model innovation through a practitioner lens. Reporting on a content analysis of interviews with CEOs of small and medium enterprises in the technology industry, the author investigates their definition of business model innovation and contributes to a better understanding of the meaning of business model innovation from a practitioner perspective.

Di Fabio and Avallone (2018) investigate the use of business models in accounting through a literature review and discuss the findings considering management and banking research. The authors identify specific streams and areas of improvement by arguing that accounting literature could benefit from the contribution of research in other fields, as the banking one, which has extensively investigated the impact of business model on banks' performances, developing methodologies to identify the business model itself.

Doligalski (2018) explores the relations between the business models of internet companies operating in the B2C market and the types of goods they offer (i.e. private, club, common and public goods). His analysis shows that internet companies provide all four types of goods distinguished in the theory of economics.

Haas (2018) employs a qualitative approach to assess interaction intensities of business model elements based on expert interviews in the retail industry. Focusing not on the direction but on the intensity of interactions, the author identifies robust elements as well as elements with an indicator effect, a leverage effect and both effects.

Juho and Turcan (2018) use the business model theoretical lenses to explore the challenges that universities face in their pursuit of advanced internationalization into foreign markets. This conceptual paper conjectures that advanced internationalization of universities is unethical and calls for a revision of business model theory to incorporate ethics.

Lambert (2018) demonstrates how a business model framework based on object-oriented principles can be used to identify and articulate the social and environmental initiatives that are embedded in business models. The paper also presents a mini case study of a small landscaping firm to validate the framework.

Migol et al. (2018) present the results of a study of business model design themes of 30 retailers from Russia. The authors find a positive relationship between novelty-centered business models and company performance. Furthermore, companies achieved the best performance by combining elements of the efficiency and complementarity business model design themes.

Nielsen et al. (2018) propose a research program for the field of business models by focusing specifically on 4<sup>th</sup> stage research, which is concerned with the performative notions of business models. Five conceptual avenues for further research are depicted: 1) create empirically validated ontologies; 2) create decision-support structures; 3) connect key performance indicators to business model configurations; 4) benchmark value creation; and 5) report on the basis of the business model.

Perätalo and Ahokangas (2018) discuss a business model concept in a public smart city context. Starting from the consideration that there is no unified understanding of how smart cities create value for their stakeholders, the authors aim to contribute to the research by investigating the content and dynamics of a business model approach for smart cities.

Raith and Siebold (2018) develop a general framework that is suitable for a broad range of Sustainable Development Goals (SDGs) covering social and environment goals. The authors' strategic approach to business model design around sustainability targets unites the two traditionally distinct research fields of

sustainability entrepreneurship and social entrepreneurship. The authors argue that only a unified view will enable to consider and measure the impact of private or public initiatives that address several SDG's in combination.

Roslender and Nielsen (2018) assert that the business model concept has yet not been invited into the accounting sphere to address a crucial research question: can the profession take value propositions to customers into account? The authors provide a provocative discussion on the relative invisibility of customers within financial accounting and reporting, and on the fact that the business model concept promises to facilitate accounting for value creation for and delivery to customers. The authors argue that narrative approaches to reporting and disclosure may help to account for the intangible or emotional value, the pleasure, the positive sensations that customers experience as they embrace and enjoy appealing value propositions.

Small-Warner et al. (2018) addresses definitions, archetypes and assessments of sustainable business models. Then, her contribution summarizes the framework for strategic sustainable development to highlight its systematic, scientific and social strengths. Her discussion combines both concepts to conclude with a research approach that may scientifically and socially enhance sustainable business models.

Williamsson and Schaad (2018) address the interplay between the value chain and business model innovation. Using a case study, the authors explore how incumbents create a business model for biodiesel production through the re-combination of established value chains. Their findings highlight the importance of ownership and cross-industry cooperation for business model innovation.

It is noteworthy that this is a Special Issue composed of *short* papers, an innovative publication format adopted by the Editors of the *Journal of Business Models* designed to speed up the accumulation of business model research. This objective is reached thanks to a very lean template (max four pages) and a standard content (Introduction, Approach, Key insights, Discussion and conclusions, References) that lead authors to focus on a singular clear message. Such a format

enables a fast-track business model publishing process: decision in 20 days from submission to acceptance; minor revision or rejection; instructions for revision from each reviewer provided in max 100 words; two weeks given for submitting a revised version; in-print versions online instantly.

The 3<sup>rd</sup> Business Model Conference will be held at Fordham University, New York City, on June 3-4, 2019. Professor Bozena Mierzejewska and Professor Christian Nielsen will chair the Conference. Two influential keynote speakers have already been lined up: Professor Ramon Casadesus-Masanell (Harvard Business School, USA) and Professor Oliver Gassmann (University of St. Gallen, Switzerland). These arrangements promise to maintain the high standards evident at the two previous conferences and within the pages of the *Journal of Business Models*.

In closing, I hope that the reader will find the short papers included in this Special Issue of value. Being part of the Scientific Committee of the Conference gave me the opportunity and the privilege to gain a clear view on which research directions business model researchers are currently focusing their efforts. What I learnt from this experience confirms that business model research is a mature field and the time is ripe for performative contributions that explore what actually happens in companies when business model-related tools are designed, implemented and used, to provide insights on what works and does not work, on the levers and the barriers that can enable or hinder the design, implementation and use of the business model-related tools, as well as on the reasons for negative and positive experiences.

I would like to thank all of members of the Scientific Committee who contributed with their time and effort to the review process of the papers submitted for presentation at the Conference and to the selection process of the papers included in this Special Issue. My special thanks go to Professor Robin Roslender and Professor Christian Nielsen, for their support during the production of this Special Issue, and to Kristian Brøndum, for his excellent, conscientious editorial assistance.

**Marco Montemari**

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## References

- Bini L., Simoni L., Dainelli F., Giunta F. (2018), Business Model and Non-Financial Key Performance Indicator Disclosure, *Journal of Business Models*, Vol. 6, No. 2, pp. 5-9.
- Brøndum K., Byrge C., Hansen S. (2018), Business Model Creativity: A Horizontal Insight Model, *Journal of Business Models*, Vol. 6, No. 2, pp. 10-14.
- Cuc J.E., Miina A. (2018), Classifying the Business Model from a Strategic and Innovation Perspective, *Journal of Business Models*, Vol. 6, No. 2, pp. 15-18.
- DaSilva C. (2018), Understanding Business Model Innovation from a Practitioner Perspective, *Journal of Business Models*, Vol. 6, No. 2, pp. 19-24.
- Di Fabio C., Avallone F. (2018), Business Model in Accounting: An Overview, *Journal of Business Models*, Vol. 6, No. 2, pp. 25-31.
- Doligalski T. (2018), Business Models of Internet Companies and Types of Goods Offered, *Journal of Business Models*, Vol. 6, No. 2, pp. 32-36.
- Haas Y. (2018), A Qualitative Approach to Business Model Dynamics, *Journal of Business Models*, Vol. 6, No. 2, pp. 37-43.
- Juho A., Turcan R.V. (2018), Value, What Value? University Business Model in Pursuit of Advanced Internationalization, *Journal of Business Models*, Vol. 6, No. 2, pp. 44-48.
- Lambert S. (2018), Applying a Sustainability Lens to the Business Model, *Journal of Business Models*, Vol. 6, No. 2, pp. 49-53.
- Migol E., Tretyak O., Holm A.B. (2018), Business Model Design Themes, Value Propositions and Firm Performance, *Journal of Business Models*, Vol. 6, No. 2, pp. 54-58.
- Nielsen C., Lund M., Schaper S., Montemari M., Thomsen P., Sort J., Roslender R., Brøndum K., Byrge C., Delmar C., Simoni L., Paolone F., Massaro M., Dumay J. (2018), Depicting a Performative Research Agenda: the 4<sup>th</sup> Stage of Business Model Research, *Journal of Business Models*, Vol. 6, No. 2, pp. 59-64.
- Perätalo S., Ahokangas P. (2018), Toward Smart City Business Models, *Journal of Business Models*, Vol. 6, No. 2, pp. 65-70.
- Raith M.G., Siebold N. (2018), Building Business Models around Sustainable Development Goals, *Journal of Business Models*, Vol. 6, No. 2, pp. 71-77.
- Roslender R., Nielsen C. (2018), Accounting through the Business Model, *Journal of Business Models*, Vol. 6, No. 2, pp. 78-83.
- Small-Warner K. (2018), A Review of Sustainable Business Models and Strategic Sustainable Development, *Journal of Business Models*, Vol. 6, No. 2, pp. 84-89.
- Williamson J., Schaad G. (2018), Re-Combining Value Chains: Cross-Industry Cooperation for Business Model Innovation, *Journal of Business Models*, Vol. 6, No. 2, pp. 90-95

# Business Model and Non-Financial Key Performance Indicator Disclosure

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## Abstract

Business model disclosure is proposed as a communication tool for companies to increase the effectiveness of non-financial key performance indicator (NFKPI) disclosure. First, business model enables the identification of indicators that are aligned with strategic objectives. Moreover, it acts as an integrated framework, showing how different capitals are combined to create value.

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## Introduction

In the present economic context, companies base their competitive success on intangible factors (OECD, 1999; Teece, 2000; Bontis, 2001). Financial measures are not able to fully reflect the value of intangible assets because they are backward looking accounting-based metrics that reflect the use of physical capital (Smith and Van Der Heijden, 2017). For this reason, NFKPIs are necessary to assess a company's performance (Eccles, 1991; Ittner and Larcker, 2003; Montemari and Nielsen, 2013). The importance of NFKPIs has also been

recognized by standard setters and law-makers. Recent non-financial disclosure regulations, like the Companies Act Regulation 2013 in the UK and the European Directive 95/2014, have introduced the requirement for large companies to disclose relevant NFKPIs.

Despite the importance of NFKPIs, a big problem emerges in the identification of indicators that are relevant to the business (Badawy et al., 2016). This issue is especially critical for external users who may find it

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Keywords: Performance, Non-financial disclosure, Business model

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difficult to fully understand whether the NFKPIs communicated by a company are really “key” indicators (Holland, 2004). In keeping with previous BM literature and the most widespread regulating approach, this paper aims to propose the concept of business model (BM) as a valuable tool to assess a company’s NFKPI disclosure.

## Approach

It is well established in accounting literature that, in order to be effective, indicators should be consistent with the way a company uses different tangible and intangible resources to generate value (Grasenick and Low, 2004; Montemari and Nieslen, 2013). This approach is shared by the majority of the regulatory frameworks, which recommend that NFKPI disclosure give market participants a view of a company “through the eyes of management” (SEC, 1989). In other words, external users should be able to see the company “in a manner which aligned with senior managers’ (presumably) holistic view of the business” (Beattie and Smith, 2013, p. 10).

The way a company combines its resources and knowledge to gain a competitive advantage defines its BM (Nielsen, 2010; Casadeus-Masanell and Ricart, 2010). As stated by Osterwalder et al. (2005), the BM offers “a conceptual model that explicitly states how the business functions” (p.3). Thus, it is a valuable tool to create a shared understanding of the business, both inside and outside the organization (Perckman and Spicer, 2010).

As a simplified, focused representation of the company, the BM represents a template that helps understand the configuration of various components within the organization (Winter and Szulanski, 2001). It can contribute to improve “tractability, understanding, as well as our ability to measure, predict and communicate” the main features of an organization (Massa et al, 2017, p. 84). Bukh (2003) maintains that examining a company’s BM is essential for investors to fully appreciate information about non-financial indicators. According to Mouritsen and Larsen (2005), the knowledge of a company’s BM allows users to appreciate individual pieces of information and measurements that, by themselves, do not link up directly to the value creation process. In light of this, the BM becomes particularly useful to frame NFKPI disclosure, offering insights into the logic that underlies the value creation process.

## Key Insights

From the corporate communication perspective, the BM becomes a valuable communication device that can provide external users with “a convincing context to interpret the quantitative or relative indicators” (Holland, 2004, p. 97). This context-giving narrative allows external users to shape “a coherent picture”, where the interrelated factors that promote value creation are clearly identified (Nielsen and Bukh, 2013).

Linking NFKPIs and BM disclosure allows companies to offer investors a clearer picture of the value creation process (Bini et al., 2016). The BM serves two main purposes. First, it enables the identification of relevant NFKPIs – indicators that are aligned with strategic objectives. Moreover, it acts as a framework for disclosure, showing how different capitals are related and how they contribute to value generation. BM disclosure should highlight how the different resources are combined together to reach the results that are measured by appropriate NFKPIs.

This way, companies are able to offer an integrated communication: the strategy defines the objectives; the BM illustrates how different resources, both tangible and intangible, are used to reach those objectives; NFKPIs monitor progress against strategy (Bhimani and Langfield-Smith, 2007) and show how financial results are related to strategic objectives (Figure 1).

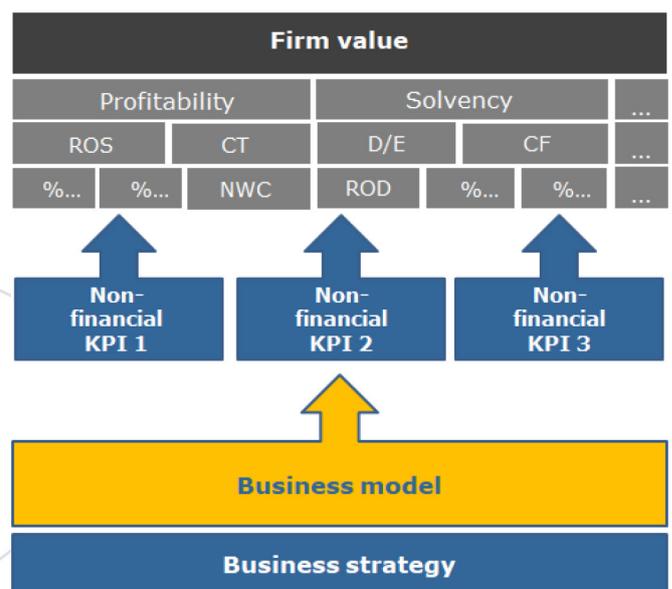


Figure 1: The link between strategy, BM and KPIs

## Discussion and Conclusions

This paper proposes BM as a communication device to frame NFKPI disclosure. By linking BM and non-financial indicator disclosure, companies may offer an integrated communication that is capable of showing the connections between a company's strategy and the way resources are combined to generate value. According to Holland (2004), the disclosure of BM "would create a level playing field for disclosure for those investors not privy to direct one-to-one contact with companies", (p. 101) thereby reducing information asymmetries in the market.

Our proposal can be helpful for companies that face the need to communicate NFKPI and BM. This is especially the case of large companies that have to comply with the EU Directive 95/2014 and of those that voluntarily publish an Integrated Report (IIRC, 2013). In both cases, linking the description of a company's BM with NFKPI disclosure allows enhancing the reliability of disclosure. BM description, on the one hand, provides the "information context" –a story that illustrates the connections and relationships between various BM components. NFKPIs, on the other hand, provide evidence for the veracity –the credibility– of the company's story over time (Holland, 2006).

Our proposal provides insights also for many categories of subjects –standard setters, regulators, consultants, auditors– who are developing guidelines on non-financial disclosure. An integrated disclosure that emphasises the linkages between a company's BM and the related NFKPIs, in fact, raises the need to identify a specific meaning of *relevant* NFKPIs, as well as a detailed description of what a BM description should focus on.

## References

- Badawy, M., El-Aziz, A. A., Idress, A. M., Hefny, H. & Hossam, S. (2016), A survey on exploring key performance indicators, *Future Computing and Informatics Journal*, Vol. 1, No. 1-2, pp. 47-52.
- Beattie, V. & Smith, S.J. (2013), Value creation and business models: Refocusing the intellectual capital debate, *The British Accounting Review*, Vol. 45, No. 4, pp. 243-254.
- Bhimani, A. & Langfield-Smith, K. (2007), Structure, formality and the importance of financial and non-financial information in strategy development and implementation, *Management Accounting Research*, Vol. 18, No. 1, pp. 3-31.
- Bini, L., Dainelli, F. and Giunta, F. (2016), Business model disclosure in the Strategic Report: Entangling intellectual capital in value creation process. *Journal of Intellectual Capital*, 17(1), pp.83-102.
- Bontis, N. (2001), Assessing knowledge assets: a review of the models used to measure intellectual capital, *International journal of management reviews*, Vol. 3, No. 1, pp. 41-60.
- Bukh, P.N. (2003), The relevance of intellectual capital disclosure: a paradox?, *Accounting, Auditing & Accountability Journal*, Vol. 16, No. 1, pp. 49-56.
- Casadeus-Masanell, R. & Rlcart, J.E. (2010), From strategy to business models and onto tactics, *Long Range Planning*, Vol. 43, No. 2-3, pp. 195-215.
- Eccles, R. (1991), The performance measurement manifesto, *Harvard Business Review*, Vol. 69, No. 1, pp. 131-137.
- Grasenick, K. & Low, J. (2004), Shaken, not stirred: defining and connecting indicators for the measurement and valuation of intangibles, *Journal of Intellectual Capital*, Vol. 5, No. 2, pp. 268-281.
- Holland, J. (2004), *Corporate Intangibles, Value Relevance, and Disclosure Content*, The Institute of Chartered Accountants of Scotland, Edinburgh.
- Holland, J. (2006), *A Model of Corporate Financial Communications*, The Institute of Chartered Accountants of Scotland, Edinburgh.
- IIRC (2013), "The IR framework", International Integrated Reporting Council, available at <http://www.theiirc.org/> (last access 28 October 2017).
- Ittner, C.D. & Larcker, D.F. (2003), Coming up short on nonfinancial performance measurement, *Harvard Business Review*, Vol. 81, No. 11, pp. 88-95.
- Massa, L., Tucci, C.L. & Afuah, A. (2017), A critical assessment of business model research, *Academy of Management Annals*, Vol. 11, No. 1, pp. 73-104.
- Montemari, M., & Nielsen, C. (2013), The role of causal maps in intellectual capital measurement and management, *Journal of Intellectual Capital*, Vol. 14, No. 4, pp. 522-546.
- Mouritsen, J & Larsen, H.T. (2005), The 2<sup>nd</sup> wave of knowledge management: re-centering knowledge management through intellectual capital information, *Management Accounting Research*, Vol. 16, No. 3, pp. 371-394.

Nielsen, C. (2010), "Conceptualizing, analyzing and communicating the business model", Department of Business Studies, Aalborg University, WP, 2, pp. 1-24.

Nielsen, C. & Bukh, P.N. (2013), "Communicating strategy: using the business model as a platform for investor relations work", The Business Model Community Working Paper Series 10 (2013).

Organization for Economic Co-operation and Development (OECD) (1999), "Guidelines and instructions for OECD Symposium", International Symposium Measuring Reporting Intellectual Capital: Experiences, Issues and Prospects, June, Amsterdam, OECD, Paris.

Osterwalder, A., Pigneur, Y. & Tucci, C.L. (2005), Clarifying business models: Origins, present, and future of the concept, *Communications of the Association for Information Systems*, Vol. 15, pp. 1-40.

Perkmann, M. & Spicer, A. (2010), What are business models? Developing a theory of performative representations, in *Technology and Organization: Essays in Honor of Joan Woodward*, pp. 265-275. Emerald Group Publishing Limited, Bingley, UK.

Securities and Exchange Commission (SEC) (1989), *Managements' Discussion and Analysis of Financial Condition and Results of Operations: Certain Investment Company Disclosures*, Financial Reporting Release No. 36, SEC, Washington DC.

Smith, S. & Van Der Heijden, H. (2017), Analysts' evaluation of KPI usefulness, standardization and assurance, *Journal of Applied Accounting Research*, Vol. 18, No. 1, pp. 63-86.

Teece, D. J. (2000), *Managing Intellectual Capital: Organizational, Strategic, and Policy Dimensions*, Oxford University Press, Oxford UK.

Winter, S.G. & Szulanski, G. (2001), Replication as Strategy, *Organization Science*, Vol. 12, No. 6, pp. 730-743.

# Business Model Creativity: A Horizontal Insight Model

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## Abstract

This paper presents a model for feasibility testing of novel ideas for business model innovators. It suggests a five-step systematic involvement of non-domain-related knowledge intended to deliver more unique ideas that are feasible in the decision-making phase of business model innovation.

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## Introduction

During the last decades, the study of business models has grown attention from both academics and practitioners. As a consequence, companies have started to focus not only on product or process innovation. By innovating operational business models and processes, companies can reinvent themselves in an ever-changing and complex market (Taran et al. 2016). Business model innovation has become a complement to the more conventional innovation types (Amit and Zott 2012).

Creativity seems to play a number of roles as part of innovating and establishing a successful new business

(model) (Govindarajan, 2010). In particular, creativity is closely linked to the activities before decision making in innovative processes. A key rationale for investing resources in creativity as part of business model innovation is that it results in more alternative ideas to choose from, hence more knowledge to base decisions on. As a result, leaders of business model innovation will be able to make better decisions if they invest resources in creativity prior to decision making.

Another rationale is that the creativity is likely to lead to more novel solutions. Hereby the business model

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Keywords: Business Model Innovation, Creativity, Horizontal Knowledge

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innovator will be able to choose solutions that can drive the company into blue oceans or gain unique competitive advantages in red oceans (Kim and Mauborgne, 2005). However, the problem with novel ideas is that they often seem unfeasible at first sight because it may be difficult to understand how to produce, process, or organize these ideas. Imagine having the idea of 'paper packaging for beers'. This idea has some novel aspects in terms of value offering including far simpler recycling, cheaper material and more flexible shapes than with glass and metal. This idea, however, seems unfeasible because paper loses its strength when wet and under pressure. Established companies in the beer equipment industry may have difficulty handling such novel and seemingly unfeasible ideas because they have created elimination systems for ideas that are *'[...] financially unattractive for the leading incumbent to pursue, relative to its profit model and relative to other investments that are competing for the organizations' resources'* (Christensen, 2006: 49).

This paper suggests a Horizontal Insight Model that provides a systematic creative approach for testing novel ideas for feasibility, to increase the number of novel ideas that are feasible into the decision-making process for inventing or reinventing business models.

## Approach

There are a variety of creativity methods to apply in the business model innovation process including Brainstorming (Osborn, 1953), Lateral Thinking (De Bono, 1992), Syntectics (Gordon, 1961), TRIZ (Altshuller *et al.*, 1997), Mind Mapping (Wycoff, 1991), Creative Problem Solving (Parnes, 1992), Creative Checklists (Davis and Roweton, 1968), Analogical Reasoning and Conceptual Combination (Martins *et al.*, 2015), Business Model Recipes (Baden-Fuller and Morgan, 2010; Sabatier *et al.*, 2010), Business Model Patterns (Gassmann *et al.*, 2014), and Design Thinking (Brown 2008).

Most of these creative methods focus the creative effort on the ideation phase. Also, Wirtz and Daiser (2018) suggest seven phases of a business model innovation process, and they identify creativity as a key ingredient in just one of these phases – the ideation phase. This paper suggests that creativity may play a key role also in the feasibility testing phase.

Design Thinking may currently be the most popular creativity method among practitioners. It seems to suggest that novel ideas may be tested for feasibility by gaining insights from potential users or domain-related experts. For some ideas, this kind of subject-related (vertical) insights may provide a clear answer about whether a novel idea is feasible or not. However, for a feasibility test on an idea like for example "paper packaging for beers", insights from users and domain-related experts are not likely to give any clear answer. The potential users would probably say that they like the idea because it offers new values not seen in the industry before. However, the domain related experts will reject the idea because their knowledge is based primarily on glass, metal and plastic, and may not include paper construction and paper packaging for food. In other words, they cannot make the necessary new knowledge combinations needed to further develop the idea for how a paper keg may be constructed and function as a packaging.

When taking a knowledge perspective on creativity, new ideas can be produced by combining knowledge in new ways (Ward and Kolomyts, 2010). This perspective is often considered as a cognitive process related primarily to the ideation phase. However, it may also provide a valuable understanding of how to test novel ideas for feasibility. Horizontal insights, i.e. knowledge and experiences not directly related to the problem or situation, might be crucial in that process. This type of knowledge typically comes from non-domain-related experts, but can also come from other knowledge sources. For example, an expert in "paper sacks for cement suitable for outdoor storage" is horizontally related to the idea for a "paper packaging for beers". Therefore, this is a horizontal expert that may provide us with insights to test the idea for a "paper packaging for beers" for feasibility and to further develop it into a feasible concept.

## Key Insights

The Horizontal Insight Model is made up of five steps. Before step 1 there may have been some systematic idea production or a collection of ideas from employees or team members.

Step 1 is a sorting activity where all ideas are categorized according to novelty and feasibility. The purpose of this step is to identify the ideas that are relevant to

the following steps. There will be four groups of ideas: (A) ideas that are both novel and feasible; (B) ideas that are novel but unfeasible; (C) ideas that are non-novel yet feasible; and (D) ideas that are non-novel and unfeasible. The ideas in category B are relevant for the later steps and can move on to the next step in parallel or independently. An example of such an idea may be a “taxi company without a taxi fleet”. This idea was novel at the time, and most people in the taxi business domain would probably have found it unfeasible.

Step 2 is an abstraction activity where the selected idea is translated into an inter-domain principle. The purpose of this step is to make it possible to search for relevant horizontal insights. A method for translating an idea into an inter-domain principle is to take out the domain related themes like the system being a taxi company, and the resource being a taxi fleet. Now we may have an inter-domain principle of a “system that does not own its core resource”, and it is possible to take this on to the next step.

Step 3 is a searching activity where the inter-domain principle is the search key for identifying horizontal domains where experts who have already tested a similar idea for feasibility in domains not directly related to the taxi industry. The literature on business model narratives, anecdotes, cases or business model recipes can be used as databases to search for existing business models that corresponds to your specific inter-domain principle. However, you may find far more potential horizontal insights when analyzing all kinds of businesses, NGO’s, and public organizations yourself.

The principle of a “system that does not own its core resource” may lead us to the knowledge domain of distributed computing, where horizontal experts have designed SETI@home as a similar idea and tested it for feasibility. When Berkeley SETI Research Center needed to analyze a huge amount of data from radio telescopes in the search for life in the universe, they found that building the necessary supercomputers to analyze this amount of data was simply not an option at the time. SETI came up with the idea of an Internet-based public volunteer computing system, and they developed a software that could send the millions of chunks of data to be analyzed by volunteer

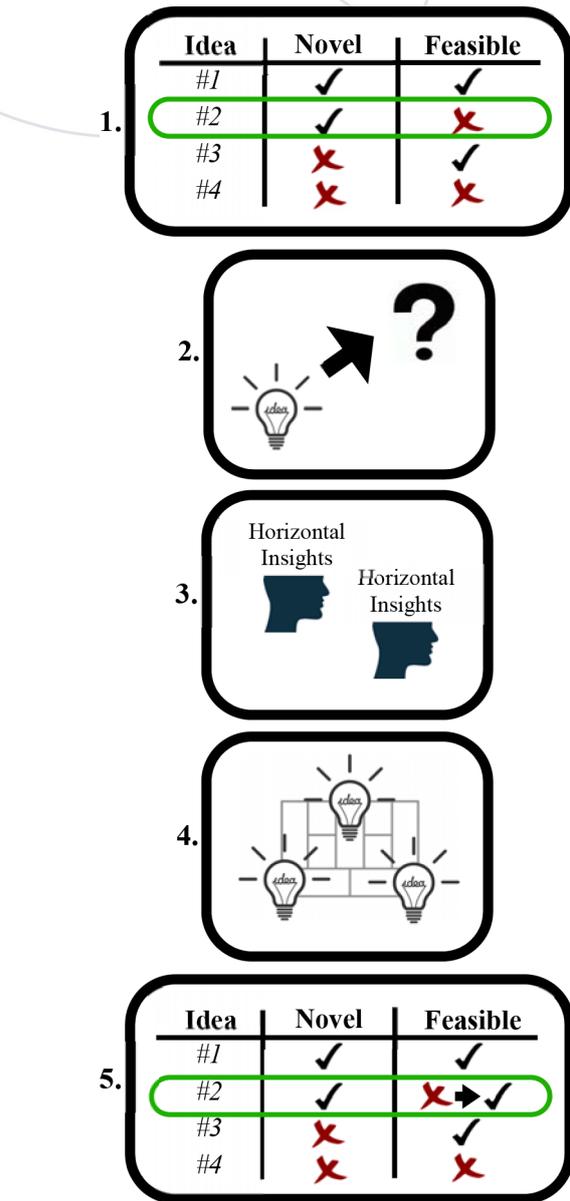


Figure 1: The Horizontal Insight Model

laymen using their private computers as the resource. Their inter-domain idea may be a “distributed system supporting and integrating laymen and laymen resources”. This example of a “system that does not own its core resource” can be used in the next step.

Step 4 is a knowledge combining activity where the new horizontal insights are integrated into the idea development. The purpose is to use the existing insights from a similar horizontal domain to further develop the concept of a “taxi company without a taxi fleet” and make it feasible. This step may be performed at different levels of engagement. The lowest level may be to simply read

about the specific horizontal knowledge from existing sources about SETI@home (e.g. details from the business model narrative, anecdote, case or recipe). An intermediate level may be to familiarize with the horizontal expertise, for example from trying out the SETI@home software. The highest level may be to gain access to the real horizontal experts, i.e. the specific business model innovators, who participated in key phases of the design and implementation of SETI@home.

The application of the horizontal knowledge in this step is a creative activity that requires all involved parties to have an open, curious, playful, imaginative and visionary mind. As a result, it may be necessary to facilitate this step as a full creative process, where individual elements of the SETI@home business model narrative, anecdote, case or recipe are explored and combined with the idea of a “taxi company without a taxi fleet”.

The insights from involving the SETI@home concept may lead us to an understanding that the idea of “running a taxi company without any vehicles” could be based on a distributed system (an App) supporting and integrating laymen (as taxi drivers) and laymen resources (their private vehicles as the taxi fleet). The idea of a taxi company without a taxi fleet is easier to accept as feasible now that we can see that a “similar idea” has already been successfully tested in an indirectly related domain.

Step 5 is an adjustment activity where the categories from step 1 are updated based on the new insights gained through step 2 to 4. The purpose is to prepare a list of ideas for decision making that takes into account any changes in the variables of novelty and feasibility. From the example, we will be able to move the idea of a “taxi company without a taxi fleet” from category (B) to category (A). As a result, we now have one more novel and feasible idea to choose from in the decision-making phase.

## Discussions and Conclusions

This paper offers a systematic model for using horizontal insights in a creative process to test novel ideas for feasibility. The hope is that this model will provide more novel and feasible ideas prior to decision making in business model innovation processes.

A key practical implication is related to the reduction of risk and uncertainty for business model innovators. The Horizontal Insight Model may help reduce risk and uncertainty for innovators who desire novel ideas, by making more of these ideas feasible prior to decision making. As a result, the decision-maker will have more novel and feasible ideas to choose from for inventing new or reinventing existing business models.

A key theoretical implication is related to the models for inventing new and reinventing business models. It may be possible to include the Horizontal Insight Model as one step or perspective as part of a more comprehensive process or model for understanding how to design and develop new business models. Also, the notion of “experts” as something domain related may be challenged by this new model. We may need to reconsider the users and the domain related experts as the key source of new insights for testing novel ideas for feasibility. It may be that each of these sources of insight play a unique (however, sometimes overlapping) role in the development and testing of ideas.

Finally, a philosophical implication is related to the notion of the role creativity plays in business model innovation processes. We may need to reconsider the general notion that creativity is merely related to the production of ideas – the ideation phase. Creativity may provide far more quality to the complex innovative processes of inventing new and reinventing established business models. Is there a need for a concept of business model creativity for the attempts to understand this role of creativity?

## References

- Altshuller, G., Shulyak, L., Rodman, S., and Fedoseev, U. (1997). *40 principles: TRIZ keys to innovation*. Technical Innovation Center.
- Amit, R. and Zott, C. (2012). Creating Value Through Business Model Innovation, *MIT Sloan Management Review*, 53(3), 41-49.
- Baden-Fuller, C. and Morgan, M.S. (2010). Business models as models, *Long Range Planning*, 43, 2, 156-171.
- Brown, T. (2008). Design Thinking, *Harvard Business Review*, 85-92.
- Christensen, C. M. (2006). The ongoing process of Building a Theory of Disruption, *Journal of Product Innovation Management*, 23, 39-55.
- Davis, G. A., and Roweton, W. E. (1968). Using idea checklists with college students: Overcoming resistance, *Journal of Psychology*, 70, 221-226.
- De Bono, E. (1992). *Serious creativity: Using the power of lateral thinking to create new ideas*. Harper Business.
- Gassmann, O., Frankenberger, K., and Csik, M. (2014). *The business model navigator: 55 models that will revolutionise your business*, FT Press.
- Gordon, W. J. (1961). *Synectics*. Harper.
- Govindarajan, V. (2010). Innovation is Not Creativity, *Harvard Business Review*.
- Kim, W. C., and Mauborgne, R. (2005). *Blue ocean strategy: How to create uncontested market space and make the competition irrelevant*. Harvard Business School Press.
- Martins, L. L., Rindova, V. O., and Greenbaum, B. E. (2015). Unlocking the hidden value of concepts: A cognitive approach to business model innovation, *Strategic Entrepreneurship Journal*, 9, 99-117.
- Osborn, A. F. (1953). *Applied imagination: Principles and procedures of creative problem solving*. Charles Scribner's Sons.
- Parnes, S. J. (1992). *A source book for creative problem solving*. Creative Behavior Foundation.
- Sabatier, V., Mangemtin, V. and Rousselle, T. (2010). From recipe to dinner: business model portfolios in the European biopharmaceutical industry, *Long Range Planning*, 43 2, 431-447.
- Taran, Y., Nielsen, C. Montemari, M. Thomsen, P. and Paolone, F. (2016). Business model configurations: a five-V framework tomp out potential innovation routes, *European Journal of Innovation Management*, 19, 4, 492-527.
- Ward, T. B. and Kolomyts, Y. (2010). Cognition and creativity. In James C. Kaufman & Robert J. Sternberg, *The Cambridge Handbook of Creativity*, Cambridge University Press, 93-112.
- Wirtz, B. W. and Daiser, P. (2018). Business model innovation processes: A systematic literature review, *Business Model Journal*, 6, 1, 40-58.
- Wycoff, J. (1991). *Mind mapping*. Berkley Publishing Group.

# Classifying the Business Model from a Strategic and Innovation Perspective

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## Abstract

This study explores the relationship between business model, innovation, and strategy. Through a systematic literature review and deductive analysis, it classifies business models according to the degree of innovation, and strategic focus, hence providing a framework to evaluate and improve business models. The research outline suggests a practical application.

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## Introduction

Despite the increasing relevance and importance of business model within the business and academic literature, (Casadesus-Masanell & Ricart 2010; Magretta 2002; Osterwalder & Pigneur 2010; Osterwalder et al. 2005; Teece 2010; Zott et al. 2011; Spieth et al. 2016), there is still a lack of appropriate frameworks, tools, and conceptual guidelines for assessing business models from the perspective of innovation, and strategy (Cortimiglia et al. 2016; Mezger 2014; Sako 2012). Therefore, this study identifies and explores the relationship between

these concepts through a systematic literature review, and reduces it into a classification of the business model according to the degree of innovation and strategic focus. The aim of this study is to provide an assessment tool that could help to evaluate and improve the business models. The article ends with a research agenda to find theoretical and practical implications, and in the future, validate the framework with an empirical data. Due to a large number of academic resources, it is possible that relevant articles were discarded in this study.

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Keywords: Business Model Innovation (BMI), business strategy, business model classification

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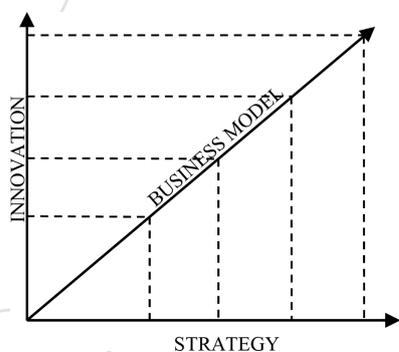
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## Approach

A systematic literature review was conducted to identify the most relevant business model approaches within the innovation and strategic management literature. The literature review consisted of the following three phases: Firstly, explore developments and recent findings regarding the business model concept. Secondly, identify and classify the main definitions of the business model based on its ontological and conceptual point of view, and finally, analyze the relationship between business model, innovation, and strategy to identify emerging concepts, produced by these interrelations. A confirmatory analysis was made using a bibliometric analysis of the co-occurrence of keywords and the most cited authors. This method helped to explore, to organize and to analyze the amount of data obtained (Daim et al. 2006) from the business model to obtain patterns and visualize the future development of the concept. In total 140 articles were reviewed using EBSCO host, Google Scholar, Scopus and Web of Science computed the keywords of business model, business model innovation, and business model strategy with and without quotes. Articles, in English, were chosen within the subject areas of business management, accounting, economics, econometrics, and finance, selected according to its relevance, the most popular authors, and year of publication, using a “snow ball” technique. Based on this literature-based investigation, a classification of the business model was made through a deductive analysis. A Venn diagram was developed to illustrate the relationship between business model, innovation, and strategy. Then, a tri-dimensional representation was created which help to identify the different combinations involved. For an easier understanding of these interrelations, it was analyzed in a two-dimensional model (See Figure 1).



**Figure 1: Two-Dimensional Analysis of Innovation and Strategy on Business Model**  
Source: Author's illustration

The two-dimensional analysis shows that innovation and strategy influences business models in low and high degrees. The combinations of high and low degrees produce four main categories which can be represented by a matrix classifying business model in four different types according to its purpose:

1. Business Models for Validation (BMV), in which the firms validate their business model in the early stages of their business' lifecycle (e.g. start-ups), or when they launch new ventures.
2. Strategic Business Models (SBM) the business model is used as a strategy to achieve a sustainable competitive advantage.
3. Business Model Innovation (BMI) consists in the process to improve or renew the business models throughout radical or incremental innovation.
4. Strategic Business Model Innovation (SBMI), the process of innovate strategically the business models to improve competitiveness and enhance business performance (See Figure 2).

The Strategic Business Model Innovation (SBMI) matrix allows the development of a conceptual framework to assess innovation success, and strategic decision-making effectiveness on business models in which firms restructure their business models at different degrees, which also helps the firms to make strategic decisions at different levels producing different business model approaches.

Degree of innovation on business model	High	<p><b>Business Model Innovation</b></p> <p><i>Incremental or radical innovation on business models.</i></p>	<p><b>Strategic Business Model Innovation</b></p> <p><i>The business model is used to conduct innovations and innovate the business model itself in order to achieve a sustainable competitive advantage.</i></p>
	Low	<p><b>Business Model for validation</b></p> <p><i>The configuration of business models with few or without any innovation or strategic focus.</i></p>	<p><b>Strategic Business Model</b></p> <p><i>Business model focuses strategically in order to achieve a sustainable competitive advantage.</i></p>
		Low	High

**Figure 2: SBMI Matrix, Classification of the business model according to its purpose (Based on the degree of Innovation and strategic focus).** Source: Author's illustration

## Key insights

The paper explores the relationship between business model, innovation, and strategy, identifying four main categories of business models. Based on this relationship, the paper develops a matrix to classify the business model according to the degree of innovation and strategic focus. It could also serve as a framework to assess the innovation success and strategic decision-making on business models. The study provides a managerial tool to evaluate and improve business models, allowing the firms to identify its strengths, its opportunities, and its critical issue. This conceptual framework can be a useful guide to identify either internal or external factors so firms can consider during the process of business model design. For the scholars, it provides insights concerning the development of the topic in the management, business and economics academic literature.

## Discussion and conclusions

The business model has become a new way to conduct innovation (Demil & Lecocq 2010), run strategies and even being a subject of innovation by itself (Chesbrough 2007). The relationship between the business model with innovation and strategy (Teece 2010) has produced emerging concepts such as Business Model Innovation (BMI), Strategic Business Model (SBM), and Strategic Business Model Innovation (SBMI). This paper analyses the business model, innovation, and strategy from a holistic approach. It provides a self-assessment tool to help firms to improve or renew their current business model. This study may suggest conceptual insights to further develop the concept of Strategic Business Model Innovation (SBMI), and a guide to its practical application. Nevertheless, it will be necessary conduct empirical research to validate the framework. Further research, quantitative and qualitative studies, is needed to validate and to get a better understanding of Strategic Business Model Innovation (SBMI) process.

## References

- Casadesus-Masanell, R. & Ricart, J.E., (2010), From strategy to business models and onto tactics. *Long Range Planning*, Vol. 43, No. 2-3, pp. 195-215.
- Chesbrough, H., (2007), Business model innovation: it's not just about technology anymore. *Strategy & Leadership*, Vol. 35, No. 6, pp. 12-17.
- Cortimiglia, M., Ghezzi, A. & Frank, A., (2016), Business model innovation and strategy making nexus: evidence from a cross-industry mixed-methods study. *R&D Management*, pp. 1-19.
- Daim, T.U. et al., (2006), Forecasting emerging technologies: Use of bibliometrics and patent analysis. *Technological Forecasting and Social Change*, Vol. 73, No. 8, pp. 981-1012.
- Demil, B. & Lecocq, X., (2010), Business model evolution: In search of dynamic consistency. *Long Range Planning*, Vol. 43, No. 2-3, pp. 227-246.
- Magretta, J., (2002), Why Business Models Matter A Conversation with Robert Redford. *Harvard Business Review*, Vol. 80, No. 5, pp. 86-92, 133.
- Mezger, F., (2014), Toward a capability-based conceptualization of business model innovation: Insights from an explorative study. *R and D Management*, Vol. 44, No. 5, pp. 429-449.
- Osterwalder, A. & Pigneur, Y., (2010), *Business Model Generation*, John Wiley and Son, New Jersey.
- Osterwalder, A., Pigneur, Y. & Tucci, C.L., (2005), Clarifying business models: origins, present, and future of the concept. *Communications of the Association for Information Systems*, Vol. 15, No. 1, pp. 1-43.
- Sako, M., (2012), Business Models for Strategy and Innovation. *Commun. ACM*, Vol. 55, No. 7, pp. 22-24.
- Spieth, P., Schneckenberg, D. & Matzler, K., (2016), Exploring the linkage between business model (&) innovation and the strategy of the firm. *R&D Management*, pp. 403-413.
- Teece, D.J., (2010), Business models, business strategy and innovation. *Long Range Planning*, Vol. 43, No. 2-3, pp. 172-194.
- Zott, C., Amit, R. & Massa, L., (2011), The business model: Recent developments and future research. *Journal of Management*, Vol. 37, No. 4, pp. 1019-1042.

# Understanding Business Model Innovation from a Practitioner Perspective

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## Abstract

While business model innovations are critical to a company's long-term survival, they are still poorly understood compared to other kinds of innovations. This paper investigates prior research and reframes business model innovation through a practitioner lens. Reporting on a content analysis of interviews with CEOs of small and medium enterprises in the technology industry, this research investigates their definition of business model innovation. This research intends to contribute to a better understanding of the meaning of business model innovation from a practitioners' perspective. These findings open new directions for theory development and empirical studies in the business model and innovation management literature.

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## Introduction

Although the literature agrees business model innovations are key to a firms' long term survival, they are still poorly understood compared to other kinds of innovations such as process or product innovations. In this manuscript, we investigate prior research and reframe business model innovation through a practitioner lens. We report on a content analysis of 63 interviews with the top management of small and medium size

enterprises in the technology industry, with the aim of recording their definition of business model innovation. This research intends to contribute to a better understanding of the meaning of business model innovation from a practitioners' perspective. These findings open new directions for theory development and empirical studies in the business model and innovation management literature.

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Keywords: Business Model Innovation, CEOs, Innovation

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Business model innovation (BMI) is increasingly relevant to practitioners as companies look for alternative ways to compete beyond product or process innovations (Henry Chesbrough, 2007; IBM, 2016). Whereas products and processes can often be easily copied by competitors, the dynamic and complex nature of BMI makes it harder to do so (Amit and Zott, 2012; Schneider and Spieth, 2014). Despite clear advantages, BMI tools and processes are deficient (Zott et al., 2011). One reason may be due to the lack of empirical and theoretical research to support BMI within organizations (Venkatraman and Henderson, 1998). In order to promote the establishment of adequate management frameworks and mechanisms that lead to BMI, more empirical foundations are necessary. Theory development should evolve toward a construct that best approaches “the hypothesized course of [observed] events” (Weber, 1949, p. 44) aimed at rigorous theory building (George and Bock, 2011). By elaborating a review and presenting findings from an inductive study of practitioner perspectives, our aim is to better understand BMI in order to advance scholarly knowledge and research. In a nutshell, to provide a preliminary bridge from the phenomenon in managerial practice to the literature. The findings of the analysis are discussed and implications are drawn in the conclusion. Finally, the limitations are stated and recommendations for future research presented.

## Approach

Given the lack of a consistent framework and the limited empirical studies on BMI, we took an alternative approach by asking practitioners about their understanding and application of BMI. Following the content analysis methodology and steps taken by (George and Bock, 2011), we proceeded to interview the CEOs of small and medium size companies from the high-tech industry.

## Key Insights

Based on an inductive study of practitioner perceptions, our research reveals that practitioners perceive BMI more as a way of orchestrating a new approach in order to reach new customers and markets with innovative products, than about engineering new revenue

possibilities or maintaining existing ones. It is more about reaching new (market and products) than reconfiguring existing resources and capabilities to generate supra returns. It is not about optimization of the existing, but creation of the new. It is not a vehicle for facing existing challenges or constraints, nor for keeping the existing business sustainable, but a way to explore new possibilities in an outward manner.

## Discussion and Conclusions

Research on BMI based on rigorous inductive or deductive logic is limited. This content analysis research presents an integrative framework for understanding BMI in the practitioner context. Our analysis of the language of BMI used in practice provides specific clues for understanding BMI in the broader management context. Our results reveal a lack of convergence on the meaning and definition of BMI. This research shows practitioners' general perception of BMI is fragmented. The following section will contrast the findings of our research with extended literature on BMI.

**Novel Orchestration.** A large number of respondents agree that BMI represents a novel approach to doing business. The category comprises five subcategories (New way of doing business, Change, Adaptation, Evolution and New solutions). Practitioners seem to clearly see BMI as an alteration of the existing status quo into a novel one. It is thus not a current state, but a process of transformation from one stage to another. In order to reach the new state, a firm has to master several processes and activities – both existing and new. These processes and activities, alongside resources (Hedman and Kalling, 2003) and capabilities (Morris et al., 2005), plus their orchestration may lead to the design of an innovative business model (Gassmann et al., 2015). BMI may therefore change the internal organizational structure and control, and possibly the company culture (Foss and Saebi, 2015). Business model changes towards a new way are almost by definition strategic issues for which the top management team is accountable.

**Customer Centric.** The second most cited category is stakeholders. Of the five subcategories, one clearly stands out: customers. A total of 41% of the respondents mentioned the term customers in their definition of BMI. The CEOs in our study seem particularly

concerned about their customers when defining BMI. Congruently, the literature reveals that every business model should serve certain customer groups (Chesbrough and Rosenbloom, 2002) and must answer the fundamental question “Who is the customer?” (Magretta, 2002). Further, Morris and colleagues (2005) argue that failure to adequately identify the right customer market is a key factor associated with venture failure. An approach commonly referred to as the customer value proposition (Johnson et al., 2008) is where organizations focus their activities on best serving their customers (Barnes et al., 2009). It addresses a customer’s problem, the solution to it, and value from the customer’s perspective (Chesbrough and Rosenbloom, 2002). A discussion that matches our data and is congruent with the research is undertaken by (Gassmann et al., 2015), who identifies customers as a central dimension when designing a new business model.

**Product Innovation.** The category Product/Service was the third most cited by practitioners. In fact, it is the second most cited in terms of total frequencies. Its subcategory, market, is the predominant term referred to in the interviews with an absolute frequency of 17 times, accounting for 27% of the practitioners’ mentions. They are clearly aware that BMI allows companies to deploy products in a specific market. From the respondents’ perspective, BMI seems intrinsically connected with new markets rather than existing markets in which they already operate. The word product is often joined with the word new or innovation, again revealing the practitioners’ perception that BMI mainly deals with the development of new products and new markets, rather than existing ones. BMI is clearly different from product and process innovation. Whereas products can often be easily copied, the dynamic nature of BMI means it cannot (Schneider and Spieth, 2014). New business models are hard to follow and copy given their complexity (Bucherer et al., 2012). Yet, new products and associated technologies can also be facilitators to shape new business models or readapt existing ones. For example, Apple’s iPod was not revolutionary per se since several companies had already offered devices using mp3 technology. However, combining the iPod with the innovative iTunes business model led the company to become the market leader and disrupt the music industry (Abel, 2008).

**Revenue.** The category value was the fourth most cited in our study. Its subcategory, revenue and profit, was important to the respondents when considering BMI, but not fundamental. The financial viability of a business model rests on its revenue model (Amit and Zott, 2001). It is an essential dimension of the business model as it represents the means by which a firm captures value (Zott and Amit, 2008). The interviews revealed respondents perceived revenue and profit as a consequence of BMI, not as its driver. New revenues versus maintaining existing ones were predominant in the responses. In fact, no respondent perceived BMI as a mechanism to prevent the loss of profitability. Chesbrough and Rosenbloom (2002) highlight the importance of BMI for sustaining profits in the long run: a notion that is clearly missing from our sample of responses. A possible reason for the lack of concern for maintaining the existing revenues might be that the interviewed CEOs were not from large corporations, but from more agile SMEs where chance and adaptation are more common. To sum up, our respondents consider BMI as a means to secure new revenues and profits, and less as a vehicle for sustaining existing ones.

**Exogenous.** In contrast, few respondents considered opportunity (subcategories: competitive advantage, rupture, differentiation, uniqueness, sustainability, attractability) as relevant to BMI. The results of our research contrast sharply with those of (George and Bock, 2011) study based on E-MBA students’ description of business model terminology. The authors build their research argument from the notion that “business models are opportunity-centric” and that the “business model is the organization’s configurational enactment of a specific opportunity”. Further, they justify firm formation as a decision “based on the enactment of an opportunity through an explicit or implicit business model”. The authors then define business model as “the design of organizational structures to enact a commercial opportunity. Fewer words that were used related to optimization (maximization, combination of resources, best practices, improvements), in contrast with scholars in the field who advocate the leverage and re-combination of existing resources within the firm in order to create new business models (McGrath, 2010). The least popular terms used relate to challenge (subcategories: challenge, threat, constrains, anticipation). This is not to say that BMI cannot be a

solution to a company's challenges, nor that threats play no role in BMI, but that practitioners do not perceive BMI as a tool to confront challenges or threats. This result is particularly interesting given that large corporations usually resolve to innovate their business models as a result of serious challenges (Chesbrough, 2007). Few companies resolve to innovate their business models before they are forced to do so by external events (Chesbrough, 2010). The reason might lie in the limited research on BMI and its application. Indeed, to date concrete solutions that support BMI, like they do with product innovation, are limited. Hence, the list of companies that failed innovate their business model is extensive. Kodak, for example, ignored digital photography and filed for bankruptcy in 2012 (Waters, 2012). Blockbuster ignored the innovative revenue models of its competitor and was forced out of the market by Netflix (Peers and Ramachandran, 2013). Siebel saw its CRM market share shrink as Salesforce brought in an innovative revenue model (DaSilva et al., 2013). Further examples abound, and the literature is clear in asserting it is critical for managers to recognize when to change their business model (Johnson et al., 2008).

## References

- Abel, I., 2008. From technology imitation to market dominance: the case of iPod. *Compet. Rev. Int. Bus. J. Inc. J. Glob. Compet.* 18, 257–274.
- Amit, R., Zott, C., 2012. Creating Value Through Business Model Innovation. *Mit Sloan Manag. Rev.* 53, 41–+.
- Amit, R., Zott, C., 2001. Value creation in e-business. *Strateg. Manag. J.* 22, 493–520. <https://doi.org/10.1002/smj.187>
- Barnes, C., Blake, H., Pinder, D., 2009. *Creating and Delivering Your Value Proposition: Managing Customer Experience for Profit*, 1st ed. Kogan Page, UK.
- Bucherer, E., Eisert, U., Gassmann, O., 2012. Towards systematic business model innovation: lessons from product innovation management. *Creat. Innov. Manag.* 21, 183–198.
- Chesbrough, H., 2010. Business model innovation: opportunities and barriers. *Long Range Plann.* 43, 354–363.
- Chesbrough, H., 2007. Business model innovation: it's not just about technology anymore. *Strategy Leadersh.* 35, 12–17.
- Chesbrough, H., Rosenbloom, R., 2002. The role of the business model in capturing value from innovation: evidence from Xerox Corporation's technology spin-off companies. *Ind. Corp. Change* 11, 529.
- DaSilva, C.M., Trkman, P., Desouza, K., Lindič, J., 2013. Disruptive technologies: a business model perspective on cloud computing. *Technol. Anal. Strateg. Manag.* 25, 1161–1173. <https://doi.org/10.1080/09537325.2013.843661>
- Foss, N.J., Saebi, T., 2015. *Business Model Innovation: The Organizational Dimension*. Oxford University Press.
- Gassmann, O., Frankenberger, K., Csik, M., 2015. *The Business Model Navigator: 55 Models That Will Revolutionise Your Business*, 1 edition. ed. FT Press, Harlow, England ; New York.
- George, G., Bock, A.J., 2011. The Business Model in Practice and its Implications for Entrepreneurship Research. *Entrep. Theory Pract.* 35, 83–111. <https://doi.org/10.1111/j.1540-6520.2010.00424.x>
- Hedman, J., Kalling, T., 2003. The business model concept: theoretical underpinnings and empirical illustrations. *Eur. J. Inf. Syst.* 12, 49–59.
- Henry Chesbrough, 2007. Business model innovation: it's not just about technology anymore. *Strategy Leadersh.* 35, 12–17. <https://doi.org/10.1108/10878570710833714>
- IBM, 2016. *Redefining Competition: The CEO Point of View*.
- Johnson, M.W., Christensen, C.M., Kagermann, H., 2008. Reinventing your business model. *Harv. Bus. Rev.* 86, 50–57.
- Magretta, J., 2002. Why business models matter. *Harv. Bus. Rev.* 80, 86–+.
- McGrath, R.G., 2010. Business Models: A Discovery Driven Approach. *Long Range Plann.* 43, 247–261. <https://doi.org/10.1016/j.lrp.2009.07.005>

- Morris, M., Schindehutte, M., Allen, J., 2005. The entrepreneur's business model: toward a unified perspective. *J. Bus. Res.* 58, 726-735. <https://doi.org/10.1016/j.jbusres.2003.11.001>
- Peers, M., Ramachandran, S., 2013. Dish Network to Close Its Remaining U.S. Blockbuster Stores. *Wall Str. J.*
- Schneider, S., Spieth, P., 2014. Business model innovation and strategic flexibility: insights from an experimental research design. *Int. J. Innov. Manag.* 18, 1440009. <https://doi.org/10.1142/S136391961440009X>
- Venkatraman, M., Henderson, J.C., 1998. Real strategies for virtual organizing. *Sloan Manage. Rev.* 40, 33-48.
- Waters, R., 2012. Kodak files for bankruptcy protection. *Financ. Times.*
- Weber, M., 1949. Objectivity in social science and social policy. *Methodol. Soc. Sci.* 78, 50-112.
- Zott, C., Amit, R., 2008. The fit between product market strategy and business model: implications for firm performance. *Strateg. Manag. J.* 29, 1-26.
- Zott, C., Amit, R., Massa, L., 2011. The business model: recent developments and future research. *J. Manag.* 37, 1019-1042.

# Business Model in Accounting: An Overview

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## Abstract

Despite the interest in business model (BM), the academic debate in the accounting field seems still in the early stage. We investigate the use of BM in accounting through a literature review and discuss the findings considering management and banking research. Specific streams and areas of improvement are identified.

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## Introduction

Within the accounting field, there has been lately an increasing interest from standard setters, regulators and professional bodies in the business model (BM). Many bodies support the introduction of a section on the BM in the annual report (CIMA, 2010; BIS, 2011; EFRAG, 2013); for instance, the UK Corporate Governance mandates disclosure on BM in the annual report. Additionally, the European Financial Reporting Advisory Group undertook a joint project with national standard setters leading to a Bulletin *'The Role of the BM in Financial Reporting'* and the Research Paper *'The Role of the BM in Financial Statements'* and revealing

strong support for the BM playing a role in financial reporting. Furthermore, the EU Directive on disclosure of non-financial and diversity information (2014/95/EU) requires that large public interest entities provide disclosure concerning the BM in the management report from 2017.

The BM has started to play a significant role also as a rationale for accounting valuation and measurement purposes. Indeed, the IASB introduced the BM approach to classification and measurement of financial assets in the scope of the *International Financial Reporting*

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Keywords: Business model; literature review; accounting research

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*Standard 9* (IFRS 9), applied in the European Union since January 1, 2018. Such intervention is inspired by the need for reducing the complexity in accounting for financial instruments and to the development of an even more principle-based accounting standard. The underlying assumption to this approach is that the BM is the primary determinant of the actual management of financial assets and of their use for cash flows' generation purposes.

Against this background, eminent scholars have problematized the role of the notion of BM and its implication for research, but the literature on the topic is still in its infancy (Beattie and Smith, 2013; Bini et al., 2016) and there is a lack of a comprehensive framework.

This paper aims at contributing to filling in this gap by investigating how the notion of BM has been used in the scope of accounting research. To this purpose, we present a literature review of accounting papers dealing with the BM and discuss them in the light of contributions brought by research in the management and banking field.

Our findings show that in accounting research the BM notion has been used mainly as a determinant of accounting choices concerning valuation and measurement of assets, and as an object of reporting. While the first perspective is adopted mainly by research in the field of financial reporting, the second is the focus of research within the non-financial reporting field. Additionally, the findings suggest that empirical studies dealing with the link between BM and accounting choices would benefit from stronger methodological underpinnings. Overall, our findings could trigger future studies investigating the usefulness of adopting a BM approach in the scope of financial reporting and further research on the link between the BM as a reporting framework and financial reporting.

The present paper proceeds as follows. The next Section synthesizes the methodological approach used to carry out the literature review. The third Section presents the results. In the fourth Section, we discuss the findings in the light of some contributions from management literature and from research in the banking field and conclude.

## Approach

The methodological approach adopted in this study is similar to other recent reviews in the intellectual capital and accounting literature (Massaro et al., 2016; Cuzzo et al., 2017). We resorted to the section of Business, Management and Accounting of the Scopus database (SciVerse Scopus) restricting the search to the keywords "BM – accounting" and "BM – financial reporting" in the scope of the article title, the abstract, and keywords. Additionally, the search has no time orientation, given our interest in highlighting the development of research over time. The first list is of 156 articles. We went through all the abstracts of articles selected and performed a meaning-oriented content analysis to understand whether the focus of the papers is consistent with our research objectives. After the exclusion of papers whose topic is not consistent with our research objectives, the final dataset consists of 51 papers.

The *Journal of Management and Governance*, the *Journal of Intellectual Capital*, and *Accounting Forum* are in the first place in the academic debate, followed by *Accounting and Business Research*

## Key Insights

Our results show that the BM notion has been used mainly in the scope of two research streams and papers can be grouped into: (i) papers focusing on BM as a determinant of classification and measurement of items in the balance sheet in the scope of financial reporting; and (ii) papers focusing on the disclosure on the BM. Overall, 39% of the papers concerned financial reporting-related issues, whereas 61% of the papers discuss issues within the field of non-financial reporting.

With reference to research developed in the scope of financial reporting, it especially considers the BM as a determinant of classification and measurement of items in the balance sheet.

Specifically, this stream develops as a response to the introduction of the BM by the IASB and implicitly assumes that the BM is the primary determinant of the management of financial assets and of their use

to generate cash flows. Opposing the BM approach Leisenring et al. (2012) maintain that the introduction of the BM concept by the standard setter is not significant and unnecessary due to its (supposed) identity with the notion of 'management's intent'. In their view, it is unfeasible for a firm to have a BM inconsistent with the managerial intention and the difference between these two concepts would only be due to the fact that BM could refer to the entity level, while management's intent could refer to the single item. Additionally, they both refer to the rationale underpinning management behaviour, which would be profit-seeking, and accordingly the managerial intent and the action undertaken will be aimed at achieving profits. Directly replying to them, Brougham (2012) asserts a significant difference between the two notions. The difference is explained by the level at which the BM is assessed and by the broader scope of the BM, whose underpinning rationale could be not only profit-seeking. In this perspective, the BM approach would enhance the relevance of financial information to users based on the idea that reporting should communicate to users if the BM has actually worked and since firms usually engage in different transactions, for different purposes and in distinct ways (Singleton-Green, 2014).

Two empirical papers explore whether the BM actually explains firms' accounting choices and provide contrasting evidence on the BM argument. Lassini et al. (2016) cluster a sample of 103 European listed companies based on different dimensions of the BM, using variables of (i) ownership, (ii) size, (iii) supply chain relation, (iv) internationalization, (v) R&D commitment, (vi) economic performance, (vii) operative growth performance, (viii) structural growth, (ix) financial profile, (x) liquidity profile. Examining accounting choices by companies in different clusters, their results show no significant associations between BMs and accounting choices. In contrast, Pinto et al. (2015) find that the BM is a predominant factor in explaining accounting choice for measuring investment properties in publicly traded real estate management companies in Brazil.

With reference to research focusing on the disclosure on BM, these studies have mainly developed within the field of non-financial reporting - although exceptions exist as the paper by Bagnoli and Redigolo (2016) and the one by Mechelli et al. (2017) - with either a focus on

integrated reporting or restricting the scope to intellectual capital and sustainability.

Beattie and Smith (2013) study the BM concept from the perspective of intellectual capital, based on the idea that the BM is the higher-level concept that should 'drive the IC disclosure' (Beattie and Smith, 2013, p. 252). Indeed, both the notions of intellectual capital and of BM relate to the transformation of resources (capital) into value, but the BM notion seems key to explain how the intellectual resource is used in combination with others to engage in value creation activities. In their view, while the BM constitutes the holistic macro-level view, inspired by the managerial theory of the firm through a top-down approach, financial accounting is a bottom-up and transaction-based micro-level process. Interestingly, the interviews to sophisticated users as financial analysts (Nielsen and Bukh, 2011) remark difficulties in capturing the essence of the whole BM and understand better the specifics of each strategy.

Among empirical papers dealing with disclosure on BM (see also Melloni et al., 2016), Bini et al. (2016, 2018) provide a considerable methodological contribution to analyse BM disclosure building on the guide provided by Osterwalder et al. (2005). Accordingly, they use the four pillars constituting a BM (namely (i) product, (ii) customer interface, (iii) infrastructure management, and (iv) financial aspects) as relevant dimensions for coding text units. Specifically, Bini et al. (2016) evaluate BM disclosure presented in the Strategic Report in the perspective of the contribution of intellectual capital to company competitive advantage, and Bini et al. (2018) analyse the BM to capture the firm commitment to sustainability, which should be reflected in the BM (Atkins et al., 2017). Their content analysis of BM disclosure allows shedding light on the business model disclosures companies to detect their approach to sustainability and highlight areas whose approach to sustainability should be enhanced.

The paper by Nielsen and Roslender (2015) is the first attempting to connect these two streams of research. Indeed, they identify a critical tension between the perspective adopted by the BM as a framework and the perspective of financial accounting. In their view, the BM is concerned with value creation, delivery and

capture, whereas the focus of financial reporting is the capture of shareholder value. From this angle, the BM should be the starting point for an 'enhanced approach to financial reporting' (p. 263) as it has the potential to provide a framework for understanding the value proposition of a firm (Osterwalder and Pigneur, 2010) explaining the flows through which the process of value creation develops (Nielsen et al., 2009). Specifically, Nielsen and Roslender (2015) acknowledge the need for understanding how financial reporting can be combined with the business model notion, without seeking to incorporate the latter in the first.

## Discussion and Conclusions

This paper investigates how the notion of BM has been used in the scope of accounting research. Overall, the findings of the literature review show that in accounting research the BM notion has been used primarily (i) as a determinant of accounting choices concerning valuation and measurement of assets, and (ii) as an object of reporting. While the first perspective is mainly adopted by research in the field of financial reporting, the second is the focus of research within non-financial reporting.

These two views are only partially overlapping and relevant differences exist.

First, studies within the area of financial reporting discuss the BM as a criterion for accounting valuation; from this angle, the BM influences the accounting numbers reported by firms. Studies that deal with the BM as an object of reporting, and specifically those developed within the field of integrated reporting, look at the BM as a superior framework that determines the presentation, the narratives and the numbers included in the report.

Second, when dealing with issues concerning valuation and measurement of assets, research considers the BM as referring to an aggregate level (Brougham, 2012) but this level is not necessarily the level of the firm and potentially it could even coincide with the level of the single item. In contrast, a shared assumption of studies dealing with the BM as an object of reporting is that the level at which the BM is defined and observed is always superior to the one of the single item and it

corresponds to the organization. In particular, the BM of the entire organization is central within the Framework for Integrated Reporting (Girella et al., 2018).

Third, financial reporting refers to the BM as identified based on historical data to provide information that is verifiable and reliable. In contrast, research dealing with the BM as an object of reporting emphasizes a forward-looking perspective (Nielsen and Roslender, 2015) and the extent to which the BM will be sustainable in the future.

The analysis shows that scholars mobilizing the notion of BM from the perspective of integrated reporting draw on the contributions brought by management literature to enhance their theoretical underpinnings and move forward the debate (Beattie and Smith, 2013). Additionally, they exploit the management literature to build their methodological bases (see Bini et al., 2016, 2018). Differently, studies in the financial reporting field use various methodologies to identify BMs. On the one hand, this implies that comparing their findings can be arduous; on the other hand, it could be difficult agreeing on what they consider as the BM.

In this respect, accounting literature could benefit from the contribution of research in other fields, as the banking one, which has extensively investigated the impact of BM on banks' performances, developing methodologies to identify the BM. A first approach adopted in the scope of banking literature implicitly assumes that the BM of an organization can vary over time and exploits indicators of the BM's characteristics combined through cluster analysis (Ayadi et al., 2015; Roengpitya et al., 2014). An alternative approach assumes that the organization's BM does not vary over time and that it is an underlying, latent strategy, whose outcomes are the observed variables. In line with these assumptions, this approach draws on factor analysis to identify BMs (Mergaerts and Vander Vennet, 2016). In our view, such contributions may support accounting research interested in classifying BM based on financial statements' data to develop qualitative analyses as well as research aiming to encompass the BM as an explicit variable in regression models, without leaving it included in fixed effects.

Based on our analysis, future research could answer the call launched by Singleton-Green (2014) and investigate

the relevance of financial information that reflects the BM by exploiting either qualitative and quantitative and considering a wide range of users. Furthermore, the European public interest entities can represent a challenging setting, as they apply the BM approach as mandated by IFRS 9 and they have to comply with the EU Directive on disclosure of non-financial and diversity information (2014/95/EU).

This paper has some limitations, mostly deriving from the use of a single database and from the exclusion of the papers published after March 2018. Nevertheless, its findings can support the development of further research in an area that, from an accounting perspective, has been thus far under researched.

## References

- Ayadi, R., De Groen, W. P., Sassi, I., Mathlouthi, W., Rey, H., & Aubry, O. (2016). Banking Business Models Monitor 2015 Europe.
- Bagnoli, C., & Redigolo, G. (2016). Business model in IPO prospectuses: insights from Italian Innovation Companies. *Journal of Management & Governance*, 20(2), 261-294.
- Beattie, V., & Smith, S. J. (2013). Value creation and business models: refocusing the intellectual capital debate. *The British Accounting Review*, 45(4), 243-254.
- Bini, L., Bellucci, M., & Giunta, F. (2018). Integrating sustainability in business model disclosure: Evidence from the UK mining industry. *Journal of Cleaner Production*, 171, 1161-1170.
- Bini, L., Dainelli, F., & Giunta, F. (2016). Business model disclosure in the Strategic Report: Entangling intellectual capital in value creation process. *Journal of Intellectual Capital*, 17(1), 83-102.
- BIS (2011). The future of narrative reporting. Consulting on a new reporting framework. September 2011. Available at: <https://www.gov.uk>.
- Brougham, A. (2012). Discussion of 'Business-model (intent)-based accounting' by Jim Leisenring, Thomas Linsmeier, Katherine Schipper and Edward Trott (2012). *Accounting and Business Research*, 42(3), 345-347.
- CIMA (2010). Corporate reporting to business reporting – The way forward. Lalith Fonseka, World Congress of Accountants, Concurrent Session 22, 9 November 2010.
- Cuozzo, B., Dumay, J., Palmaccio, M., & Lombardi, R. (2017). Intellectual capital disclosure: a structured literature review. *Journal of Intellectual Capital*, 18(1), 9-28.
- EFRAG (2013). The Role of the Business Model in Financial Statements. Research Paper. Available at: <https://www.efrag.org>.
- Girella, L., Tizzano, R., & Ferrari, E. R. (2018). Concepts travelling across disciplinary fields: the case of the business model. *Journal of Management and Governance*, 1-30.
- IIRC (2013). Business model: Background paper for integrated reporting. International Integrated Reporting Society. [www.iirc.org](http://www.iirc.org).
- Lassini, U., Lionzo, A., & Rossignoli, F. (2016). Does business model affect accounting choices? An empirical analysis of European listed companies. *Journal of Management & Governance*, 20(2), 229-260.
- Leisenring, J., Linsmeier, T., Schipper, K., & Trott, E. (2012). Business-model (intent)-based accounting. *Accounting and Business Research*, 42(3), 329-344.
- Massaro, M., Dumay, J., & Guthrie, J. (2016). On the shoulders of giants: undertaking a structured literature review in accounting. *Accounting, Auditing & Accountability Journal*, 29(5), 767-801.
- Mechelli, A., Cimini, R., & Mazzocchetti, F. (2017). The usefulness of the business model disclosure for investors' judgements in financial entities. A European study. *Revista de Contabilidad*, 20(1), 1-12.

Melloni, G., Stacchezzini, R., & Lai, A. (2016). The tone of business model disclosure: an impression management analysis of the integrated reports. *Journal of Management & Governance*, 20(2), 295-320.

Mergaerts, F., & Vander Vennet, R. (2016). Business models and bank performance: A long-term perspective. *Journal of Financial Stability*, 22, 57-75.

Nielsen, C., & Bukh, P. N. (2011). What constitutes a Business Model: The perception of financial analysts. *International Journal of Learning and Intellectual Capital*, 8(3), 256-271.

# Business Models of Internet Companies and Types of Goods Offered

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## Abstract

The article presents the relations between the business models of internet companies operating in the B2C market and the types of goods they offer (i.e. private, club, common, and public goods). The analysis shows that internet companies provide all four types of goods distinguished in the theory of economics.

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## Introduction

The purpose of this article is to relate the typology of the business models of internet companies operating in the B2C market to the types of goods they offer, as distinguished in the theory of economics.

By “internet companies” (pure players) the author understands companies whose only (or at least predominant) environment for developing relations with customers is the internet. The remaining companies can be divided into multichannel (brick-and-click) companies, i.e. those which provide value to their customers using a combination of traditional and interactive

channels, and brick-and-mortar companies, which operate largely outside of the internet.

The typology of business models of internet companies operating in the B2C market used in this article includes (Doligalski, 2018): online vendors (internet stores and sellers using e-commerce platforms), e-service providers (companies which offer an automated service provided through the internet), content providers (companies which publish content on the internet), multisided platforms (internet intermediaries), and community providers (companies which allow for

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Keywords: business models, internet, public good

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interactions between people who share common interests). For the purpose of this discussion, the following typology of goods will be used: public goods, common goods, club goods, and private goods.

An analysis of these business models provides a comprehensive overview of the way companies function. The typological approach used in this article additionally reveals differences in the functioning of organizations – in this particular case, internet companies operating in the consumer market. The business models distinguished above are ideal (pure) types which do not fully reflect the complexity or diversity of real-world companies. Nonetheless, as simplified analogues, they embody their most crucial properties. Knowing the ideal types within the range of business models and the types of products these business offer enables us to understand the basic logic according to which real world companies operate, even if their business models and products are hybrids of ideal models.

## Typology of Business Models of Companies in The B2c Market

**Online vendors** are companies that deal in the sales of tangible products through an online store or an e-commerce platform. Online vendors can be middlemen who offer products that are manufactured by other companies, or, less commonly, they may sell products which they manufacture themselves. These vendors typically provide physical products, traditional services (e.g. travel packages) or digital products (e.g. software). Online vendors that offer material goods or traditional services sell private goods that are characterised by rival consumption and a feasible exclusion. Rival consumption is understood as the situation in which the consumption of a good by one person diminishes its utility to others. Paid digital products are an instance of club goods, the consumption of which is non-rival, but still remain not available to anyone.

By an **e-service** we understand a service which is provided remotely over the internet, based on the server of the provider, without any direct involvement of any employee of the provider. An e-service is thus an internet tool, often of an infrastructural nature, which requires self-management from the customer and

offers individualized values. Examples of e-services include e-mail, internet search engines, internet banking systems, and network storage. E-Services are characterised by non-rival consumption (consumption of the good by one person does not limit its utility to others) and scalability, understood as the capability to serve a greater number of customers. However, such consumption may become rival when congestion problems occur, limiting the convenience of these internet services.

**Content providers** are entities that distribute content online. The scope of content provided by this type of business varies widely and includes text, graphics, audio, and video. This type of activity is characterised by the high cost of content creation and the ease of its publication in different forms and through various channels. This explains the relationships that often exists between internet content providers and enterprises in the media industry. Similarly to e-services, content is usually consumed through non-rival consumption, as long as there are no limitations to scalability.

**Multi-sided platforms** are intermediaries between different groups of customers, and provide an environment in which transactions or other types of interactions take place. They can enable financial transactions (e.g. auction platforms, travel platforms) or at least aggregate two groups of users, facilitating interactions between them (e.g. classified ad platforms, dating services). The product offered by these platforms is interaction with users from the complementary group; it is typically rival in nature and usually leads to a customer obtaining a private good. If—less commonly – a platform brings together consumers and sellers of digital goods, then it usually makes it possible to obtain a club type of good. The character of this interaction is thus dependent to a large degree on the type of good being offered.

**Community providers** are companies that offer people of similar needs, interests or identities the opportunity to enter into different kinds of interactions, such as the exchange or sharing of resources, communication, and, in some cases, cooperation. Communities are therefore based on interactions, ones that do not directly involve transactions, but instead utilise value co-creation that is oriented towards others in the community, that is the contribution of a certain user-made work or sharing a

resource to benefit the community as a whole (Doligalski, 2015). Community providers thus offer non-rival interactions with other users, interactions that lead to the creation and provision of a certain good (e.g. discussions, open source software).

Often in case of multisided platforms and community providers it is difficult to unequivocally assign companies to either of the models, as they usually combine the characteristics of each, i.e. rivalry over scarce goods (e.g. private goods, position within a ranking) and cooperation between users (e.g. sharing opinions about sellers).

## The Relationship Between Business Models and Types of Products Offered

As mentioned above, online vendors offer private goods (tangible goods or traditional services) or club goods (digital products). E-Service and content providers charge fees to their customers while offering club goods. If they are offered free of charge, should they be distinguished as public goods, or at least as commons?

Public goods are characterised by two values: the impossibility of excluding anyone from consuming the good, and non-rival consumption (Adams & McCormick 2006; Kaul, Grunberg & Stern 1999). On the other hand, if rival consumption occurs, we are dealing with a common good (commons). Typical examples of public goods include lighthouses and the ozone layer, while in the case of commons, it is parks and public roads.

So do free content or e-services bear the characteristics of one of these two types of goods? The question requires us to differentiate between two criteria: the purpose and technological properties of a given good. Both free content and e-services are offered according to the principle of common accessibility. Technically there are many ways in which a person could be denied access to a website. An internet site may not be displayed to users with a particular kind of terminal (desktop or mobile), a specific browser, or a particular IP address, which is associated with the location of the user (geoblocking) or their internet provider.

So does the technical capability to block access to certain content or e-service settle the question of the

character of these goods? One might argue that a similar form of denying consumption may occur in the case of a public good such as a television signal, which can theoretically be blocked for users inhabiting a particular area. Public roads are often given as one example of a common good, but in this case, exclusion may take place by limiting access to particular types of vehicles.

These ambiguous criteria make it more difficult to qualify free content and e-services. But if we assume that a search engine or the content of a particular blog is, generally speaking, available to anyone and any potential exclusions are notably rare exceptions, then these goods are of a more public than club character. This approach may seem to contradict the formal definitions of public and common goods, nonetheless these goods are often classified as elements of a continuum or as non-pure public goods (Kaul, Grunberg & Stern 1999).

On the other hand, if content and e-services are offered free of charge over the course of limited-time promotions, after which the customer is required to make a payment (e.g. Netflix), these should be classified as club goods. This situation resembles a club that allows anyone to enter in the afternoon, but charges an admission fee in the evening.

There remains the matter of qualifying goods offered by multi-sided platforms and community providers. Multi-sided platforms usually offer rival interactions with users from the other group. In some cases, access to a platform is restricted by payment (e.g. the dating website eHarmony), and thus its product should be counted as a private good. Provided that access to the platform is free, then its product – rival interaction with users from the other group – bears the characteristics of a common good. This resembles a used car market – in the first case, there is an entry fee, while in the other, there is not. In both cases buyers compete for the best used cars offered by sellers. Community providers, on the other hand, offer non-rival interactions which may lead to the creation of certain goods (discussions, open source software). Some of them are open to everyone (e.g. Twitter, open chat forums) and hence are of a public good character. There are communities with restricted access (e.g. chat groups for classmates), and these offer a club good.

	<b>Feasible exclusion</b>	<b>Non-feasible exclusion</b>
Rival consumption	<b>Private goods</b> <ul style="list-style-type: none"> <li>• Online vendors selling tangible products or traditional services</li> <li>• Multi-sided platforms with restricted access</li> </ul>	<b>Common goods</b> <ul style="list-style-type: none"> <li>• Multi-sided platforms with free access</li> </ul>
Non-rival consumption	<b>Club goods</b> <ul style="list-style-type: none"> <li>• Online vendors selling digital products</li> <li>• Paid e-service providers</li> <li>• Paid content providers</li> <li>• Providers of communities with restricted access</li> </ul>	<b>Public goods</b> <ul style="list-style-type: none"> <li>• Free e-service providers</li> <li>• Free content providers</li> <li>• Providers of communities with free access</li> </ul>

**Table 1: Proximal relations between business models of internet companies and the types of goods offered**

While this discussion is concerned with ideal types, in practice these entities usually combine the properties of both types. Table 1. presents an attempt to associate business models of internet companies in the B2C market with the basic types of goods they offer.

## Discussion

This article presents an attempt to relate business models to the types of products offered. It combines internet companies, i.e. entities that have operated for more or less the past 20 years, with an older economic concept, namely, the typology of goods. The analysis shows that internet companies provide all

four types of goods distinguished in the theory of economics.

The proposed classification is of a proximal character, as the goods offered by internet companies may not always be qualified unequivocally. Examples of goods that are difficult to categorize include e-services offered using the freemium model. A basic free version of an e-service bears the characteristics of a public good, while the paid premium version is a club good.

The classification of goods based on the criteria of rivalry and feasible exclusion does not account for revenues obtained through other channels. Thus internet content that is offered for free but allows for a display of intrusive advertisements bears the characteristics of a public good. Similarly, websites that offer free e-services, while at the same time selling – or enabling other entities to sell – their customers’ data, are classified as public goods. The definition proposed by Kaul (2001) is a contemporary attempt to approach the problem of the public good by proposing that it is inclusive (public in consumption), based on participatory decision-making and design (public in provision), and that it is just (public in benefits). Under this definition, many companies that provide their content or services free of charge would not be included in the category of public goods, though these would include both Wikipedia and open source software.

The above remarks, as well as the complexity and the hybrid character of products offered by internet companies, indicate the need to formulate a new categorization of goods, one that would better reflect the conditions of the modern economy. Such a categorization could include external effects that accompany consumption, both positive (e.g. interactions between users) and negative (e.g. congestion problems).

## References

Adams, Roy & McCormick, Ken (2006) *Private Goods, Club Goods, and Public Goods as a Continuum*, *Review of Social Economy*, 45:2, 192-199, DOI: 10.1080/003467687000000025

Doligalski, Tymoteusz (2018) *Modele biznesu firm internetowych działających na rynku odbiorców indywidualnych – ujęcie typologiczne (Business Models of Internet Companies Operating in the B2C Market: Typological Approach)*, *Marketing i Rynek*, 12/2018, approaching.

Doligalski, Tymoteusz (2015) *Internet-Based Customer Value Management*, Springer, Heilderberg.

Kaul, Inge (2001) *Public Goods: Taking the Concept to the 21st Century. The Market or the Public Domain*, Drache D. (comp.), London & New York: Routledge, p. 255-273.

Kaul, Inge, Grunberg, Isabelle & Stern, Marc A., (1999) "Defining Global Public Goods", in Kaul, Inge et al., Eds. (1999) *Global Public Goods: International Cooperation in the 21st Century*, New York: Oxford University Press, p. 2-19.

# A Qualitative Approach to Business Model Dynamics

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## Abstract

We provide a qualitative approach to assess interaction intensities of business model elements based on expert interviews in the retail industry. Focusing not on the direction but on the intensity of interactions, we identify robust elements as well as elements with an indicator effect, a leverage effect and both effects.

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## Introduction

In the last two decades, the concept of business models has become popular in theory and practice, where it is connected to the creation of competitive advantage, innovation and growth (Magretta 2002; Johnson et al. 2008; Zott and Amit 2008; Teece 2010; Wirtz et al. 2016; Foss and Saebi 2017). The widespread use and manifold interpretations of the concept have directed the debate on defining the notion (Wirtz et al. 2016 and Massa et al. 2017 summarize and condense the debate in their reviews) and deriving key elements of business models (e.g., Amit and Zott 2001; Osterwalder et al. 2005; Johnson et al. 2008; Casadesus-Masanell and Ricart 2010). However, despite the interpretation of business models as 'logic of the firm' (Casadesus-Masanell and Ricart

2010, p. 195) whereby scholars assume '(...) *multi-layered dependencies among the elements of a business model such that the 'whole' (business model) is simply not a sum of its parts (elements)*' (Sorescu et al. 2011, p. 4), research about business model dynamics is only at the beginning. Especially, little is known about the interactions of the key elements so far (Demil and Lecocq 2010; Cavalcante et al. 2011; Aversa et al. 2015; Wirtz et al. 2016; Nyström and Mustonen 2017). We argue that determining the interaction effects between business model elements is essential to understand the interdependencies of a company's decision areas and corresponding logic as well as to predict the effects of business model change and innovation - areas which

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Keywords: Business Model Dynamics, Retailing

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scholars consider to be of greatest importance in future business model research (Wirtz et al. 2016).

Understanding the company as a complex and dynamic system, which consists of numerous subsystems and elements, all of them with numerous links and feedback effects between them (Ulrich 1970), we admit that capturing and describing a company's business model as a formal representation of the logic of that system is a great challenge. We address this challenge by supplementing previous papers about the interactions of business model elements (e.g., Casadesus-Masanell and Ricart 2010; Demil and Lecocq 2010; Cosenz and Noto 2018) with a qualitative approach. The difference of our approach is that we do not focus on the direction but on the intensity of the interactions between business model elements. This means that we do not study *which* other elements or sub-elements are affected by a change in a particular element but *how much* they are, in general, affected by a change in a particular element. To do this, we conducted a qualitative analysis with ten expert interviews in the German retail industry. We chose the retail industry because of its inherent dynamic character (McNair 1931; Kumar et al. 2017). The dynamics in the retail industry have even more increased by modern challenges such as digitalization and vertical integration (Sorescu et al. 2011; Cao 2014), so that there are many business model changes available for studying interaction effects. We chose interviews because we wanted the retailing experts

and practitioners to describe business model changes and the corresponding interaction effects of elements unrestrictedly. In this way, we could also assess the background of the effects. In this short-paper, we start with describing our methodology, the data set and the data analysis. We then present and discuss the key findings. We conclude with limitations and future research directions.

### Approach (Method and Data)

Adopting a quantitative system analysis approach ('intensity relation-matrix' according to Vester 2000; Ninck 2004) to the business model context qualitatively, allows us to use it as a framework for estimating interaction intensities between business model (sub-) elements. Figure 1 shows that depending on whether elements are highly or lowly connected within the business model and whether they have a more active or passive character, we classify them into four different categories (cf., figure 1). We distinguish between elements (I) with an indicator effect (this element is affected by changes of many other elements), (II) with leverage and indicator effects (this element is affected by changes of many other elements and leads to changes in many other elements), (III) with a leverage effect (even though this element is affected by only few elements it leads to changes of an over-proportional large number of other elements), and (IV), with overall few effects (robust elements).

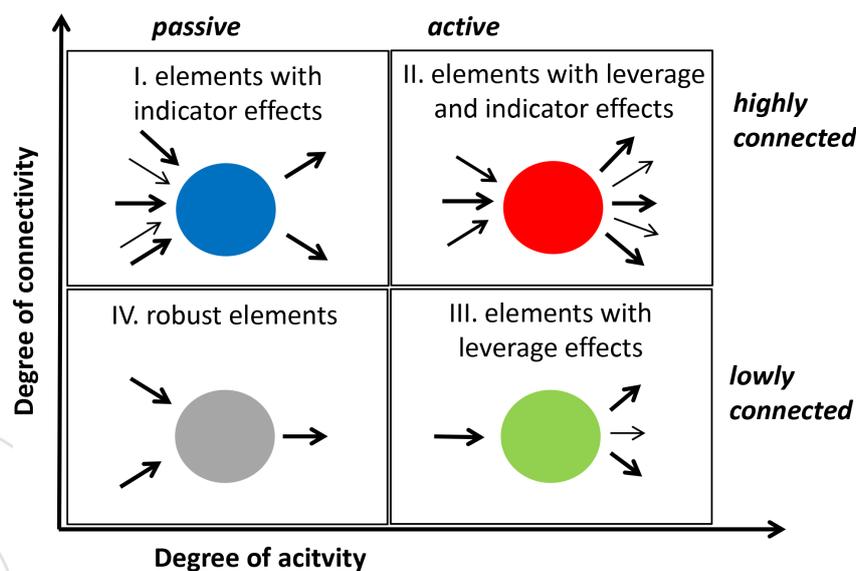


Figure 1: Interaction intensities of business model elements in an intensity-relation-matrix

We collected our qualitative data by conducting ten face-to-face interviews in the German retail industry. Four respondents were leading experts of the German retail industry (the managing director of a retail consultancy, of a scientific retailing institute, a regional department of the German Chamber of Industry and Commerce and an editor-in-chief of a retailing journal) and six were CEOs or board members of German retail companies out of the grocery, textile and furniture sector which had a size of national importance. The interviews lasted around one hour each. They were based on a semi-structured questionnaire and on a generic retail business model framework (RBM) that we have developed in a parallel study (Haas 2018).<sup>1</sup> The questions regarding business model dynamics included which major business model changes the interviewees implemented (for managers) or observed (for industry experts) in the last five years, to which generic (sub-)element they corresponded and which effects on other (sub-)elements they had. We audio-recorded and transcribed all interviews, which yielded a textual data set of 47,730 words.

For reducing, condensing and analyzing the data set, we used the qualitative analysis-method GABEK® (GAnzheitliche BEwältigung von Komplexität – holistic processing of complexity) and corresponding software WinRelan® (Zelger 2000). In the coding phase, we began by manually dividing the data set in a way that every single line of thought built one text unit (building text units). For every text unit, we coded keywords in a way that they were free of synonyms and represented the semantic content of the text unit (keyword coding). For every keyword, we further specified whether it was mentioned in a positive or negative context (evaluation coding) and whether it was causally related to other keywords in the text unit, e.g., 'the more A, the more B' or 'A is a cause of B' (causal coding). In the analysis phase, we used the causal network-analyses provided

<sup>1</sup> In a parallel study, we conducted expert interviews in the retail industry and combined our results with theoretical findings about retail business models (Sorescu et al. 2011; Cao 2014). Based on this, we determined the following elements and sub-elements of a generic RBM (1) value proposition (e.g., assortment, services (including personnel decisions), prices, availability of products, store atmosphere, store layout), (2) customer relations, (3) horizontal integration (choice and integration of communication and sales channels), (4) vertical integration (make-or-buy-decisions including, e.g., contract manufacturing, logistics), (5) partner relations, (6) value appropriation.

by Gabek-Winrelan. Keywords are interconnected in terms of content and frequency, if they appear together in the same text unit. Causal networks consist of those interconnected keywords that are moreover attributed to be in a causal relation.

## Key Insights

Figure 2 shows the causal network of all keywords that were attributed to be in a causal relation with a change in logistics (keyword 'logistics\_changed'). As the interviewees mentioned these keywords when talking about last major changes in their RBMs, we interpret the keywords as (sub-)elements (hereinafter, elements) of a generic RBM. The points with arrows indicate the amount of one-sided and two-sided effects for every element. The causal network shows that six elements have an effect on 'logistics' (changing them leads to a change in logistics), but the 'logistics' have an effect only on 'personnel' (changing the logistics leads to changes in personnel). Furthermore, there is a two-sided effect between 'logistics' and 'partners and networks' (changing logistics implies changing partners and/or networks and vice versa). In this context, the interviewees frequently mentioned the example that an adoption of an online-shop as a new sales channel ('horizontal integration') necessitates larger warehouses and the introduction of a delivery system ('logistics'). The new challenges of handling an online-shop and a delivery system necessitate hiring employees with different qualifications ('personnel') and starting a cooperation with new shipping partners ('partners and networks').

In the right table, we further indicate how we assigned the present elements to one of the four categories of the intensity-relation-matrix based on the original approach by Vester 2000. If the quotient (Q) of effects on other elements (active sum) to effects from other elements (passive sum) was one or more, we assigned the respective element to the active site of the matrix (category II 'red' or III 'green') or vice versa. If the product (P) of active sum and passive sum was ten or more, we assigned the respective element to the highly connected site of the matrix (category I 'blue' or II 'red') or vice versa. All results of the analysis are presented in the right column. For example, we could identify 'logistics' as an indicator element, 'prices' as a leverage element, 'horizontal integration' as a leverage and indicator element and 'personnel' as a robust element.

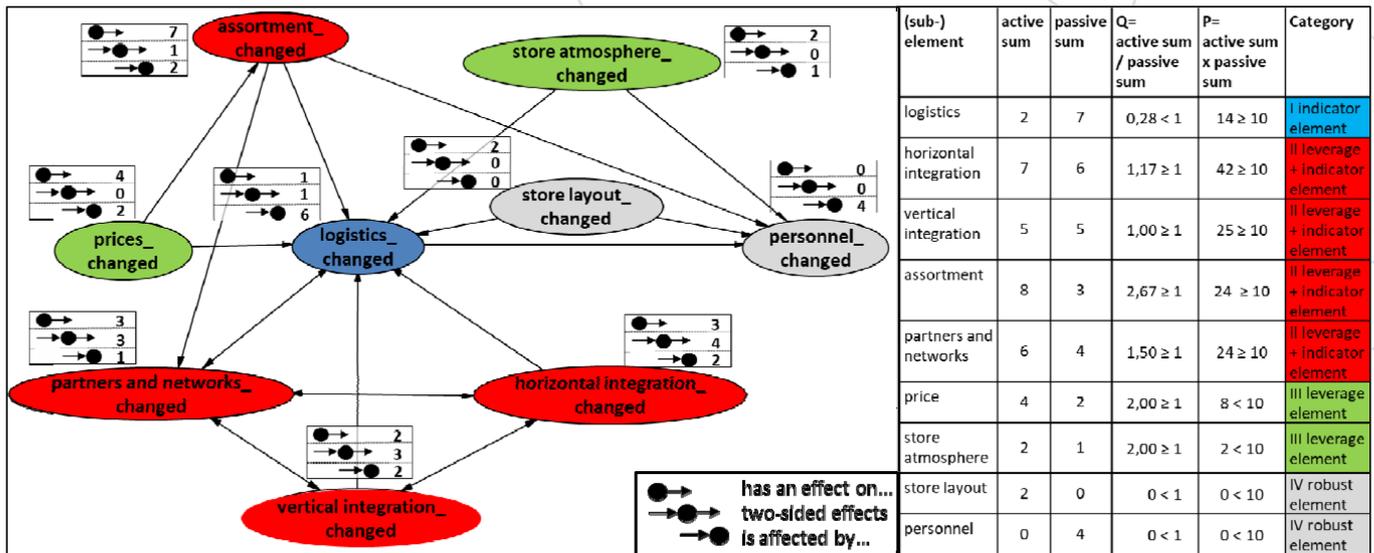


Figure 2: Causal network of 'logistics\_changed' with assigned element categories

### Discussion and Conclusions

In this study, we took the example of the retail industry to qualitatively analyze interaction intensities between business model elements. We identified how much a change of a particular business model element affected other elements or was affected by other elements. We presented our key findings drawing on the RBM element 'logistics' and all of its causally related RBM elements. We base the interpretation of our findings on the systems approach of *Vester 2000* and its application to a management context by *Ninck 2004*. Having identified the 'logistics' as an indicator element implies that many changes of the business model became apparent in this element. However, changing the element 'logistics' did not have a substantial effect on the overall model, so it would not have been advisable to start here in terms of problem solving or business model revision. 'Horizontal integration' was an example for an element with both indicator and leverage effects. This means that this element was extensively involved in the overall model so that it could act as a catalyst for developments. In contrast to that, 'personnel' or "store layout" were examples for robust elements. Even though the interviewees considered them as crucial for a business model, they could make staffing or store layout decisions relatively independent from other decisions. Consequently, they did not have a substantial impact on the overall business model. Finally, 'price' was an example for a leverage element.

Because of its low interactions but active character, it was suitable as a specific problem solution. This means that changing the 'price' enabled a specific revision of the business model without having unmanageable side effects.

In total, the study contributed to the field of business model dynamics by assessing interaction intensities of business model elements based on qualitative data. In this way, it expanded this mainly theoretical and case study-based research field with an alternative methodological starting point. It further gave insights into business model dynamics in the retail industry by providing retail-specific elements and sub-elements and by explaining the key findings on the example of a change in 'logistics'. A first limitation of the study was the data base of ten interviews in the German retail industry. Even though it is difficult to convince CEOs of big retail companies to talk about sensitive topics like their business models, it would be relevant to substantiate the findings with more interviews in different branches and countries. Furthermore, future research efforts should be directed on identifying the interaction intensities not only on the sub-element 'logistics' but on all elements and sub-elements of a retail business model. A second limitation is that small and big changes of an element may affect the dynamics within a business model differently, which can lead to strongly varying results of a respective study. Taking this into

account, we already asked the interviewees to tell us about business model changes that they considered to be essential for the last five years. Nevertheless, we identified a need for specifying an 'element change' in future studies. A third limitation is that we studied business model dynamics within a fixed timeframe and framework of elements. As business models evolve over time, future research should also examine when and how elements may change their position (e.g., from being a core to a minor element) or their dynamic character (e.g., from being a leverage to an indicator element) within the model.

## References

- Amit, Raphael and Zott, Christoph, 2001. Value creation in E-business. *Strategic Management Journal*, 22 (6-7): 493-520.
- Aversa, Paolo, Haefliger, Stefan, Rossi, Alessandro and Baden-Fuller, Charles, 2015. From Business Model to Business Modelling: Modularity and Manipulation. In Charles Baden-Fuller and Vincent Mangematin: *Business models and modelling*. Bingley, Emerald, pp 151-185.
- Cao, Lanlan, 2014. Business model transformation in moving to a cross-channel retail strategy: A case study. *International Journal of Electronic Commerce*, 18 (4): 69-96.
- Casadesus-Masanell, Ramon and Ricart, Joan Enric, 2010. From Strategy to Business Models and onto Tactics. *Long Range Planning*, 43 (2-3): 195-215.
- Cavalcante, Sérgio, Kesting, Peter and Ulhøi, John, 2011. Business model dynamics and innovation: (re)establishing the missing linkages. *Management Decision*, 49 (8): 1327-1342.
- Cosenz, Federico and Noto, Guido, 2018. A dynamic business modelling approach to design and experiment new business venture strategies. *Long Range Planning*, 51 (1): 127-140.
- Demil, Benoît and Lecocq, Xavier, 2010. Business Model Evolution: In Search of Dynamic Consistency. *Long Range Planning*, 43 (2-3): 227-246.
- Foss, Nicolai J. and Saebi, Tina, 2017. Fifteen Years of Research on Business Model Innovation. *Journal of Management*, 43 (1): 200-227.
- Haas, Yvonne, 2018. A Literature Review and Qualitative Study for developing a generic Retail Business Model. *Proceedings of the 32nd British Academy of Management Conference (September 4th - 6th)*, Bristol.
- Johnson, Mark W., Christensen, Clayton M. and Kagermann, Henning, 2008. Reinventing your business model. *Harvard Business Review*, 86 (12): 50-59.
- Kumar, V., Anand, Ankit and Song, Hyunseok, 2017. Future of Retailer Profitability: An Organizing Framework. *Journal of Retailing*, 93 (1): 96-119.
- Magretta, Joan, 2002. Why Business Models Matter. *Harvard Business Review*, 80 (5): 86-93.
- Massa, Lorenzo, Tucci, Christopher and Afuah, Allan, 2017. A critical assessment of business model research. *Academy of Management Annals*, 11 (1): 73-104.
- McNair, Malcom P., 1931. Trends in Large Scale Retailing. *Harvard Business Review*, 10 (1): 30-39.
- Ninck, Andreas, Bürki, Leo, Hungerbühler, Roland, Mühlemann, Heinrich 2004. *Systemik: Vernetztes Denken in komplexen Situationen*. Zürich, Industrielle Organisation
- Nyström, Anna-Greta and Mustonen, Miia, 2017. The dynamic approach to business models. *AMS Review*, 7(3-4): 123-137.
- Osterwalder, Alexander, Petermann, Günter and Tucci, Christopher L., 2005. Clarifying Business Models: Origins, Present and Future of the Concept. *Communications of the Association for Information Systems*, 16 (2-40).

Sorescu, Alina, Frambach, Ruud T., Singh, Jagdip, Rangaswamy, Arvind and Bridges, Cheryl, 2011. Innovations in Retail Business Models. *Journal of Retailing*, 87 (1): S3-S16.

Teece, David J., 2010. Business Models, Business Strategy and Innovation. *Long Range Planning*, 43 (2-3): 172-194.

Ulrich, Hans, 1970. *Die Unternehmung als produktives soziales System: Grundlagen der allgemeinen Unternehmungslehre*. Bern, Haupt.

Vester, Frederic, 2000. *Die Kunst vernetzt zu denken: Ideen und Werkzeuge für einen neuen Umgang mit Komplexität*. Stuttgart, DVA.

Wirtz, Bernd W., Pistoia, Adriano, Ullrich, Sebastian and Göttel, Vincent, 2016. Business Models: Origin, Development and Future Research Perspectives. *Long Range Planning*, 49 (1): 36-54.

Zelger, Josef, 2000. Twelve steps of GABEKWinRelan: a procedure for qualitative opinion research, knowledge organization and systems development. In Renate Buber and Josef Zelger: *GABEK II: Zur qualitativen Forschung - on qualitative research*. Innsbruck, Studien-Verlag, pp 205-220.

Zott, Christoph and Amit, Raphael, 2008. The fit between product market strategy and business model: implications for firm performance. *Strategic management journal*, 29 (1): 1-26.

# Value, What Value? University Business Model in Pursuit of Advanced Internationalization

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## Abstract

Through business model theoretical lenses, we explore challenges universities face in their pursuit of advanced internationalization into foreign markets. This is a conceptual paper. Based on theoretical and empirical insights we conjecture that advanced internationalization of universities is unethical, calling for a revision of business model theory to incorporate ethics.

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## Introduction

Through business model theoretical lenses, we explore in this paper issues and challenges universities face in their pursuit of advanced internationalization into foreign markets. The context of this paper is defined by universities from developed countries entering developing or emerging countries via advanced international entry modes, such as joint ventures, acquisitions, green field or brown field investments.

Fifteen-twenty years ago, universities from developed countries 'jumped on the bandwagon' of higher education internationalization and globalization. They

entered developing and emerging countries by entering joint-venture agreements, acquiring existing facilities or building brand new campuses to deliver joint programmes at Bachelor and Master levels. This period is also characterised by massive withdrawal or de-internationalisation of these universities from the foreign markets they initially entered by closing down campuses or exiting the joint-venture partnerships (Turcan and Gulieva, 2016a).

In our paper we conjecture that one of the key reasons for exiting foreign markets is due to the incompatibility

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Keywords: Advanced Internationalization, University Autonomy, Business Model, Ethics

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between the business model university adopts to create, deliver, and capture value (Massa et al., 2017)—in this context, academic value – within its national borders and the business model it adopts for the same purpose in the foreign target market.

## Approach

This is a theoretical paper. We draw on a number of sources of data to conceptualise issues and challenges universities face in their pursuit of advanced internationalization into foreign markets. First, we build on university autonomy, international business and business model theories to conceptualise the phenomenon of interest. Second, we analyse publicly available data, anecdotal evidence where the phenomenon we study is explicitly observable.

Empirical research of this phenomenon is virtually non-existent. Mainly, this is due to the fact that the academic autonomy in the developing foreign target markets is limited, involving “background, subtle, political and social pressures which may, nevertheless, exert a powerful influence” (Turcan et al. 2016),p.240). Even international scholars from developed countries are reluctant or cannot share their experience as “a measure of direct or effective censorship or recognition of the sensitivities of colleagues, institutions, and/or governments to what they might say” (Turcan et al., 2016, 240). The following quotes from Turcan et al. (2016, p. 240) capture best these issues and challenges:

- “I can’t send you my contribution due to the formal organizational reasons”;
- “my [university] senior management informed me that they did not wish me to go ahead with the chapter I had proposed”;
- “the material was planned to be quite critical, but it can’t be approved by my [university] administration”;
- “I am being held up by the need for others to check what I send out and what I make public and/or keep private”;
- “there would have been nothing of any significance left”;
- “the rules in my [university] dramatically changed since I agreed to contribute, and now . . . it must be approved by the administration”;

- “I was strongly advised not to proceed”;
- “[the administration] may not be happy about everything I write becoming available in the public domain.”

## Key Insights

The business model universities adopt within their national borders to create, deliver and capture academic – teaching, research, and knowledge dissemination – value rests on four pillars of academic freedom. These pillars are: organisational autonomy, financial autonomy, staffing autonomy, and academic autonomy (EUA, 2007). *Organisational autonomy* refers to a university’s freedom to decide on its own structures, contracts, election of decision-making bodies, and staff. *Financial autonomy* refers to a university’s freedom to acquire and allocate funding, decide on tuition fees, and accumulate surplus. *Staffing autonomy* refers to a university’s freedom to recruit, set salaries, and promote its staff. *Academic autonomy* refers to a university’s freedom to decide on awarding degrees, curriculum and methods of teaching, as well as on areas, scope, aims, and methods of research.

These four pillars of academic freedom define a university, its vision, its mission, what it stands for. Within the business model theory, the expected enduring question is whether a business model a university adopts within its national borders can be transferred *as-is* or *adapted* to a target, emerging foreign country in the pursuit of advanced internationalization. Wearing university autonomy theory lenses on top of business model theory lenses we conjecture that neither is a viable option.

Transferring own business model *as-is* to an emerging or developing target market might seem an easy option in which the process and practices will be repeated in a new context. Nonetheless, the main challenge is how to ensure organizational, financial, staffing and academic freedom in an environment that is fundamentally different from the home environment? Concepts related to university’s core values such as diversity, transparency, integrity, collaboration, and excellence may have a different meaning in the home country than in the host country. Notably, the host country’s legislation may limit some organization structures at the university and on the other hand, the legislation

may force some additional elements to the curriculum, contracts and decision-making processes. It is important to notice that implementation of university advanced internationalization without people who carry the home organization's "DNA" – hence core business model – is impossible and the staff immobility is one of the key challenges (Turcan and Gulieva 2016a). For example, the authoritarian leadership style, that is relatively common in emerging countries, may not support the parent institutions values which might cause gap both in ethical practice and implementation of the core processes in terms of all four pillars. Cultural differences, such as high power distance, may create strong hierarchical structures that will make collaboration between faculty and administrative personnel challenging or collaboration between faculty and leadership team difficult. These challenges may lead to lack of support for faculty and be a threat to academic autonomy and integrity. Hence, if the "DNA" of a university cannot be 'exported', despite the reason, the implementation of the business model *as-is*, is impossible. For example, in 2005 Warwick University declined a generous financial offer from Singapore Government to establish a campus there due to concerns over the state of human rights and academic freedom in Singapore (Burton, 2005).

*Adapting* own business model in the pursuit of advanced internationalisation would mean to operate changes in the original, home-based organisational, financial, staffing and/or academic settings to tailor them to the institutional university autonomy settings in a target market; hence make changes to the university DNA. Separated from the pillars of academic freedom the localization of the curriculum as suggested by Turcan and Gulieva (2016a) is important to create the value for the students and local industry, but the university should not compromise on key aspects of own academic autonomy, freedom, mission, and vision. Confusion about the level of control and depth of adaptation may lead to unethical outcomes such as discrimination, nepotism, corruption, inequality among the students, and low quality of teaching or motivational problems from the parent organization's perspective. Adapting the business model challenges the hierarchy and the roles between the parent and daughter organization. Adapting the business model in terms of four pillars of academic freedom is too abstract to

give clear guidelines for the adapted business model and therefore the implementation is impossible. If the host organization does not have a clear vision of how to adapt the culture, processes, and practices of the parent organization, the leadership may aim to gain short-term victories, such as pleasing students as customers at the cost of the quality of academic performance. This lowers the quality of the institution and leads again to commitment and motivational problems among the staff and students. What is the competitive advantage if the new international unit is merely like any local university rather than following the standards of the parent organization? Due to such conflicts with the four pillars of academic freedom in the new context, adapting the business model is also impossible.

Universities may have another option to consider. In its pursuit of advanced internationalisation to developing countries, a university may design a completely new business model in cooperation with its foreign partner – a new business model that has no resemblance or association with the university home-based business model. To our knowledge, such empirical reality has not been observed or documented yet. Nonetheless, this option will be based on a compromise between two different, incompatible, conflicting institutional university autonomy settings raising concerns of individual and university-wide autonomy as well as concerns about the sustainability of university advanced internationalization efforts. As discussed above, such compromise is not a viable option.

## Discussion and Conclusions

The above theoretical as well as empirical, though anecdotal, insights led us to conjecture that *advanced internationalization of universities is unethical*. Emerging economies with growing middle class and growing young population may look like a low hanging fruit for universities seeking growth from overseas, but implementation of a university business model in pursuit of advanced internationalization is challenging. Universities that do adopt foreign direct investment mode of internationalisation *and* realize – though post-internationalisation – the ethical dilemma they face decide to divest or de-internationalize their international operations and return home to create, deliver and capture the value within the national borders employing the

traditional, proven business model. However, withdrawing the international operations is easier said than done. Having invested in a high risk, high cost and high commitment entry mode, de-internationalizing or divesting from an international market is an arduous decision to make. Due to project, psychological, social and organizational factors that respective universities are exposed to, these universities tend to escalate their commitment to the failing course of action (Drummond, 1994). These escalation situations include repeated decision making in the face of negative feedback about prior resource allocations, uncertainty surrounding the likelihood of goal attainment, and choice about whether to continue (Brockner, 1992). In other words, universities continue investing and committing resources to their advanced international business model despite negative feedback that emanates from its external and internal environments and stakeholders.

Investing in and developing a university campus, branch, or joint venture is a long process as instilling a university-autonomy-based organization culture takes time - especially if the original home country's culture and institutions differ substantially from the host country's culture. From managerial point of view, our conjecture acts as a warning for those universities that wish to pursue advanced internationalisation business model into developing countries. As current noise from the field suggests, neither our conjecture nor the above insights will however refrain universities from developed countries to continue 'jumping and riding the bandwagon' of advanced internationalization into the emerging, developing countries. In this case, our theoretical and empirical insights could offer number pointers to consider before deciding to pursue advanced internationalisation as well as to aid decision makers in designing an advanced internationalisation business model.

For example, since an advanced entry into a foreign market with substantially different, divergent university autonomy settings will demand from the start to adapt, making changes to the original university business model, the internationalizing university will need to put in place internal risk and crises management policies and respective operating procedures. These should be functional before foreign direct investment negotiations commence. During and as part of the negotiation process, the internationalizing university shall insist on developing and agreeing on short-to-medium term aims, objectives, road maps and respective action plans all aimed at achieving joint university autonomy settings that are internationally accepted (see e.g., Estermann and Nokkala, 2009). Proper due diligence, feasibility study and evaluation processes centred on the four pillars of university autonomy will provide a deeper understanding of the target institutional context. Even though careful planning is paramount, the implementation is the key denominator between success and failure of the university internationalization process.

These, 'jumping-and-riding-the-bandwagon advanced internationalization of universities,' as well as other recent trends "in politics (the rise of populism and nationalism in the EU, Brexit, and the election of the USA President), science and technology (GM crops, nuclear energy, fracking, global warming, artificial intelligence), health (eating disorders, immunization, resistance to antibiotics), and society (mass migration, extremism, and terrorism) - most of the time with negative signs and negative social impact" (Turcan, 2018) - demand a revision of business model theory to include **ethical** concerns as well as of respective business model design strategies, tools and mechanisms to accommodate such **ethical** concerns in the process of business model design and innovation.

## References

- Brockner, J. (1992). The Escalation of Commitment to a Failing Course of Action: Toward Theoretical Progress. *Academy of Management Review*, 17:1, 39-62.
- Burton, J. (2005). Warwick Votes Against Singapore Campus. *Financial Times*. October 14, 2005. [goo.gl/UOGtYR](http://goo.gl/UOGtYR) (accessed: March 21, 2013).
- Drummond, H. (1994). Too Little Too Late: A Case Study of Escalation in Decision Making. *Organization Studies*, 15:4, 591-607.
- Estermann, & Nokkala, T. (2009). *University Autonomy in Europe I. Exploratory Study*. Brussels: EUA Publications.
- EUA (2007). *The EUA Lisbon Declaration – Europe’s Universities beyond 2010: Diversity with a Common Purpose*. Brussels: European University Association.
- Massa, L., Tucci, C., & Afuah, A. (2017). A critical assessment of business model research. *Academy of Management Annals*, 11:1, 73-104.
- Turcan, R. V. (2018). Sociology of Knowledge Perspective on Entrepreneurship. In R. V. Turcan, & N. M. F. (Eds.), *The Palgrave Handbook of Multidisciplinary Perspectives on Entrepreneurship*, Palgrave Macmillan (forthcoming).
- Turcan, R. V., & Gulieva, V. (2016a). De-Internationalization of Universities: An Exploratory Study. In M. Marinov, & O. Sørensen (Eds.), *Finding Solutions to the Challenges of Internationalisation*, Aalborg: Aalborg University Press, 313-329.
- Turcan, R. V., & Gulieva, V. (2016b). University Internationalization and University Autonomy: Toward a Theoretical Understanding. In R. V. Turcan, J. Reilly, & L. Bugaian (Eds.), *(Re)Discovering University Autonomy: The Global Market Paradox of Stakeholder and Educational Values in Higher Education*. New York: Palgrave Macmillan, 215-235.
- Turcan, R. V., Reilly, J., & Bugaian, L. (Eds.) (2016). *(Re)Discovering University Autonomy: The Global Market Paradox of Stakeholder and Educational Values in Higher Education*. New York: Palgrave Macmillan.

# Applying a Sustainability Lens to the Business Model

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## Abstract

This paper demonstrates how a business model framework based on object-oriented principles can be used to identify and articulate the social and environmental initiatives that are embedded in business models. A mini case study of a small landscaping firm is presented to validate the framework.

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## Introduction

This paper addresses the problem of directors and CEOs identifying and communicating to others the sustainability characteristics that exist in the firm and whether existing sustainability policies have been implemented. By incorporating business model object attributes of environmental and social sustainability into a hierarchical business model framework, information on corporate sustainability can be extracted. This effectively applies a sustainability lens to the existing

business model representation. The structured, visual approach assists managers to consider all aspects of the organization in the analysis.

An authentic case study is used to demonstrate how a hierarchical business model framework that is modelled on object-oriented principles, can be used to identify, extract and communicate the social and environmental contributions of the firm.

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Keywords: business model framework, sustainability lens, case study

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## Approach

A hierarchically structured business model schematic is proffered as a means of capturing and communicating in a visual form, the social and environmental benefits embedded in the organisation. The business is firstly depicted at a highly abstract level but, because of its hierarchical format (Lambert 2012), it can be fleshed out to a very granular level whilst maintaining the integrity of the model. Sustainability factors are incorporated into business model representations thereby providing a coherent, understandable picture of sustainability in the business and how this relates to the business model of the enterprise. The sustainability characteristics of the business can be articulated using the same structure used to depict operating and profitability focused aspects of the business – its strength therefore is in the use of common structures and language irrespective of circumstances.

The Hierarchical Business Model Framework (HBMF) that is used in this paper was developed purposefully to accommodate multiple levels and units of analysis, and multiple conceptual foci and can extend traditional business model representations to reflect sustainability factors that are present in the existing business models of an entity. It does so by utilising object-oriented modelling principles that allow complexity to be abstracted and distilled into an understandable form (Lambert 2012).

A small to medium sized landscape construction company (LCC) is the subject of the mini case study. In this small business, the HBMF was originally used as a tool

to assist the director to decide on the best strategy to grow his business. The business model representation was then modified to identify, record and communicate how the business incorporates environmental and social sustainability factors into its business decisions. The hierarchical nature of the business model representation permits interrogation at a whole-of-business level as well as at a very granular level for selected aspects of the business.

Figure 1 shows the four value propositions that LCC offers to its two customer types, residential customers and commercial customers. The revenue model is fee for service but there are differences in the timing of the revenue streams from each of the customer types. Because of the nature of the services LCC uses a purely physical channel of delivery. LCC must be accredited by the Builders' Licencing Board and the Government Certification Board (for commercial customers).

For each of the four value propositions there is a complex value adding process that is modelled at lower levels of abstraction.

The activities that make up the Maintenance Value Adding Process, along with the Resources and the Capabilities of the semi-skilled workers are mapped and modelled in Figure 2.

LCC originally collected monetary data about their business model objects along with operational details that explain how the business operated. As part of a tendering process the owner was required to include

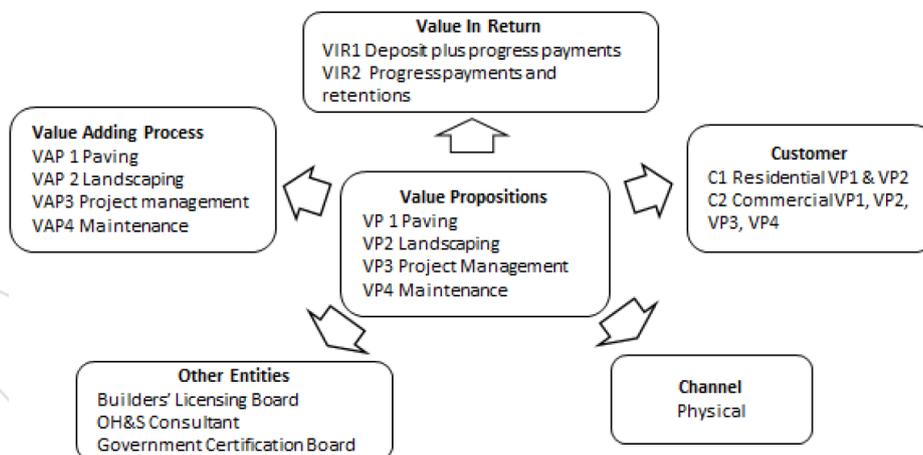
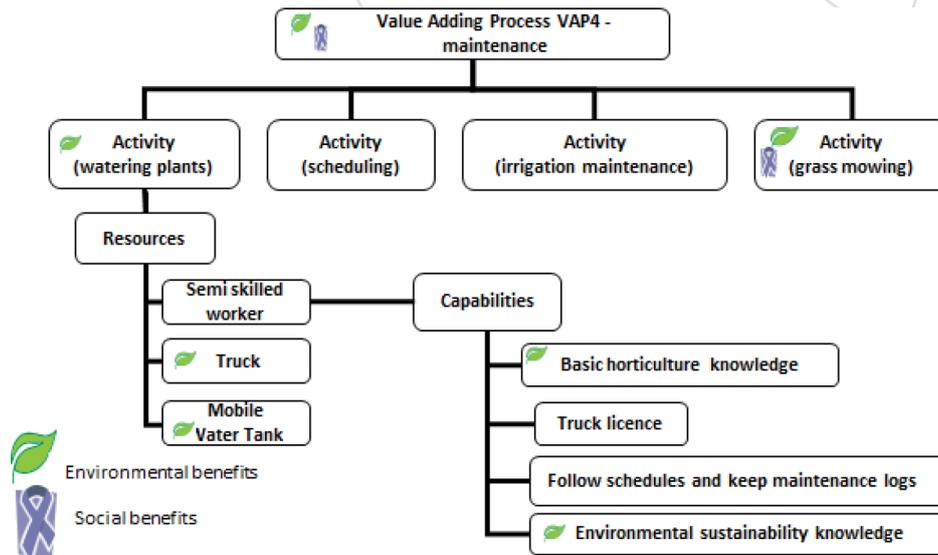


Figure 1: Landscape Construction Company Business Model



**Figure 2: Maintenance Value Adding Process**

information about the company's commitment to social and environmental sustainability. Using the HBMF model it had already developed and adding data of a social and environmental sustainability nature, the company was able to quickly identify, document and communicate the social and environmental sustainability aspects of the business and show how the commitment to sustainability was evident throughout the business model of the firm.

Figure 2 shows the Maintenance Value Adding Process with symbols for environmental and social benefits or measures taken. The company did not try to measure the impact of the decisions, it simply identified and described its commitment to social and environmental sustainability through its business model. More details, including impact measures can be included in the individual business model objects using existing tools such as the Sustainability Balanced Scorecard and the Environmental Management Accounting Framework both of which measure and compare sustainability factors to benchmarks for external reporting. The benefit of using the business model representation to demonstrate the firm's commitment to sustainability is that the pervasiveness of the commitment is illustrated. An organisation can show social and environmental

initiatives that are embedded into the business model through different value propositions, relationships with third parties, resource and activity choices rather than through a narrative.

## Key insights

The HBMF enables the depiction of a business and its sustainability factors using a common language and structure. The use of a visual communication device, the schematic depiction of the business model, capitalises on the increased memory retention and understanding associated with communicating complex concepts through images (Agrawala et al. 2011). It is not designed to make an assessment of a business's performance or categorise and outline the information needs of a business in way that the Sustainability Balanced Scorecard (Dias-Sardinha et al. 2002; Figge et al. 2002; Möller & Schaltegger 2005) or Environmental Management Accounting Framework (Burritt et al., 2002) do. However, the modelling capability can combine with other sustainability management tools to increase internal accountability and ensure those charged with corporate governance have a means to assess implementation of sustainability policies in all aspects of the business.

## Discussion and conclusion

This paper introduces a modelling tool which is flexible, adaptive to context, and offers a degree of detail appropriate for managers to understand how sustainability policies and initiatives are incorporated into the very fabric of a business as well as the failure of or dysfunction of such implementation efforts.

The social and environmental benefits that are associated with the value propositions themselves, the benefits arising from value adding process choices and the benefits arising from decisions to deal with particular third parties can be identified and categorised. Equally importantly from a governance perspective the negative social and environmental impacts of decisions can also be recognised.

The mini case study demonstrates the power of the business model to collect and communicate information about social and environmental sustainability characteristics of organisations. However, the implications of this are more far reaching since there is no limit to the number and diversity of lenses that can be applied to the business model representation. The limitation is how much and the type of detail that can be economically collected, stored and retrieved.

## References

- Agrawala, M., Li, W. & Berthouzoz, F. (2011), Design principles for visual communication, *Communications of the ACM*, Vol. 54, No. 4, pp. 60-69.
- Burritt, R.L., Hahn, T. & Schaltegger, S. (2002), Towards a comprehensive framework for environmental management accounting—Links between business actors and environmental management accounting tools, *Australian Accounting Review*, Vol. 12, No. 27, pp.39-50.
- Dias-Sardinha, I., Reijnders, L. & Antunes, P. (2002), From environmental performance evaluation to eco-efficiency and sustainability balanced scorecards, *Environmental Quality Management*, Vol. 12, No. 2, pp. 51-64.
- Figge, F., Hahn, T., Schaltegger, S. & Wagner, M. (2002), The sustainability balanced scorecard—linking sustainability management to business strategy. *Business Strategy and the Environment*, Vol. 11, No. 5, pp. 269-84.
- Lambert, S.C. (2012) A multi-purpose hierarchical business model framework Centre for Accounting, Governance and Sustainability Occasional Working Papers, No 5, University of South Australia, Adelaide, July.
- Möller, A. & Schaltegger, S. (2005) The Sustainability Balanced Scorecard as a Framework for Eco-efficiency Analysis. *Journal of Industrial Ecology*, Vol. 9, No. 4, pp. 73-83.

# Business Model Design Themes, Value Propositions and Firm Performance

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## Abstract

This paper presents the results of a study of business model design themes of 30 retailers from Russia. We find a positive relationship between novelty-centred business models and company performance. Furthermore, companies achieved the best performance by combining elements of the efficiency and complementarity business model design themes.

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## Introduction

While there has been much research on business model configurations (Gassmann, Frankenberger, & Csik, 2015), business model types (Baden-Fuller & Haefliger, 2013) and business-model innovation (Foss & Saebi, 2017) during the past 15 years, little has been done on the link between business models and firm performance (George & Bock, 2011). In turn, the lack of research (Morris, Shirokova, & Shatalov, 2013; Zott & Amit, 2007, 2008) hinders the analysis and assessment of the link between business model configurations and firm performance (Amit & Zott, 2001; Tretyak

& Klimanov, 2016). The aim of this paper is to help fill this gap. This line of research is considered important for the insights it can provide to researchers and practitioners on how to increase firms' value creation and capture (Zott & Amit, 2007).

This paper is based on the notion that a company's business model signifies its value propositions, value creation, value delivery and value-capture activities. Moreover, the business model can be viewed as a representation of its realised business strategy (Casadesus-Masanell & Ricart, 2010). Here, business strategy is

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Keywords: Business model type, business model design theme, firm performance

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understood as the way in which a firm chooses to position itself against competitors in its potential markets (Zott & Amit, 2007).

Drawing on research by Amit and Zott (2001) and Zott and Amit (2008), we investigate how a company's value proposition, driven by its business strategy, influences its performance. We define a company's value proposition as the bundle of products and their characteristics (e.g. product or service, level of standardisation, differentiation, brand, etc.) required to solve a customer need (Holm, Günzel, & Ulhøi, 2013), or to "get a job done" (Johnson, Christensen, & Kagermann, 2008) for a consumer. A company's value capture is represented by its cost structure and revenue model, which result in monetary consequences, i.e. its economic performance.

## Approach

As we have indicated above, we follow Amit and Zott (2001) in recognizing four sources of value creation: efficiency, complementarities, lock-in and novelty. Later papers by Zott and Amit (2007, 2008) concluded that these four sources of value creation can be analysed as design themes that determine the construct of a business model. By efficiency is meant transactional efficiency, according to which efficiency is increased when the price of a transaction is reduced. Complementarity is understood as achieving some synergistic effect from selling a set of products and / or services. In other words, the value of A and B is higher when these goods are purchased together than if they were purchased separately and at different times. How effectively a company manages not only to attract new customers, but also to retain them, is also directly related to the creation of additional value. A lock-in design theme mainly focuses on preventing customers switching from a company to its competitors. The development of new products and services, new methods of production, distribution, marketing technologies, and new markets are all ways of creating new values. The source of value creation - novelty, or innovation - is aimed at creating completely new markets or developing new approaches to improving transactions in existing markets. Thus, companies employing one of the design themes will adjust their business models' components,

including their value propositions, to the chosen design theme.

Following Amit and Zott (2001) and Zott and Amit (2007), we proposed the following five hypotheses:

H1: The more a company's value proposition is efficiency-oriented, the better the company's performance.

H2: The more a company's value proposition is complementarity-oriented, the better the company's performance.

H3: The more a company's value proposition is lock-in-oriented, the better the company's performance.

H4: The more a company's value proposition is novelty-oriented, the better the company's performance.

H5: Value-propositions from different business model design themes will have a positive effect on a company's financial performance.

To test the hypotheses, we collected data on the value propositions and business model design themes of the top 30 Russian retailers in the home appliances and consumer electronics markets in Russia. The selected firms are either national players or international subsidiaries, with a combined market share of approx. 70%. The economic crisis in Russia in 2014 resulted in a sharp drop of around 25% in the sale of consumer goods, so most of the retail companies in the study were already looking for new ways of generating profits and experimenting with various business model configurations. This made them very suitable for studying business model elements and their influence on performance.

The data were collected by means of a survey instrument and structured face-to-face interviews in March and April, 2015. Five experts from the Russian branch of the German marketing research company GfK were asked to complete a special questionnaire designed to identify business model design themes in each of the studied companies. These experts regularly conducted market and company analyses of the home appliances and consumer electronics retailers and markets in Russia, and interacted with top- and middle-level employees in the studied companies on a daily basis. Thus, they were aware of most of the internal processes in the companies, including business objectives and

market strategies, so their knowledge of the companies' business models is both profound and relevant. Moreover, given that they do not work in any of the studied companies, we can probably assume that their evaluations are less subjective and skewed towards the positive than if we had interviewed actual employees from each company.

We asked each expert to evaluate the business model design of all 30 companies, resulting in 150 different questionnaires. Once these questionnaires were aggregated, we then carried out a follow-up discussion with the experts to formulate and confirm a common approach to evaluating all attributes of the business model design themes of each company. For each company in the study, a design theme of the business model and corresponding elements of its value proposition were identified and measured on efficiency, complementarities, lock-in and novelty characteristics. The items for measuring each design theme and value propositions were borrowed from the approach developed by Zott and Amit (2007). The strength of each of these items was measured using 5-item Likert scales and coded into a standardized score. Each business model design theme was measured as a variable at a particular point in time. These variables were then regressed on a range of performance measures, provided by GfK RUS.

In line with other empirical studies (McArthur & Nystrom, 1991; Tushman & Anderson, 1986), we employed financial representation of the growth in sales turnover as the measurement of a firm's performance and our dependant variable. The data were analysed using linear regression analysis with the least square root method. Hypotheses H1, H2, H3 were rejected, suggesting that value propositions based on efficiency, complementarity and lock-in did not determine the financial performance of the studied firms. Hypothesis H4, however, was accepted, pointing to the importance of novelty-focused value propositions for business model performance.

To test hypothesis H5 we built a model using the method of stepwise regression, where individual items from each design-theme value proposition were considered or rejected as part of the set of items explaining the dependant variable, i.e. firm performance in terms of the

growth of sales turnover. The coefficients of determination for this model were 0.62 ( $R^2$ ) and 0.54 (adjusted  $R^2$ ), suggesting a goodness of fit and good explanatory power of the model, as well as confirming hypothesis H5. Three value-proposition items were found to be highly significant, with positive coefficients:

1. One company's product / service enabled customers to solve their problems with the least effort (an efficiency design-theme attribute);
2. Customers of another company combined the use of several products / services to achieve synergistic effects (a complementarity design-theme attribute);
3. Key business partners do not collaborate with competitors of the company (a novelty design-theme attribute).

However, the efficiency and complementarity items were significant with a positive coefficient only in combination with the novelty items, suggesting that they only influenced firm performance if the firm's value proposition had a novelty focus.

## Key Insights

The study has confirmed some findings from existing research and also produced a number of new insights. Like Zott and Amit (2007, 2008), we find that a complementarity and lock-in focus in business model design is insignificant for firm performance, although this research treated them as independent variables, and not as control variables. Furthermore, our analysis confirms a positive relationship between novelty-centred business models and firm performance. With this in mind, we can assume that a positive development in firm performance affects the renewal of the business model, related to the change in the value chain itself. In other words, companies whose business models are more innovative-oriented, e.g. offer and develop new products, create new needs for clients or develop new approaches to doing business, are more likely to demonstrate better economic performance.

An important new finding is that the highest correlation between value propositions and firm performance was found in a business model design composed of items from different initial design themes developed

by Zott and Amit (2007, 2008). More specifically, two items from the complementarity- and efficiency-focused value propositions were found to be significant for firm performance. The first is related to a company's ability to combine its products and services in such a way as to create synergy for its customers, while the second is related to the level of efficiency with which a company's products and services satisfies consumer needs. This proves Zott and Amit's (2008) statement that the identified four design themes of the business model are not mutually exclusive: elements of all the design themes can be present in a single business model, though there should always be a preference for a particular design theme (*ibid.*).

## Discussion and Conclusions

Like Zott & Amit (2007), we also find that novelty-centred business models enhance firm performance, measured here as growth in sales turnover. However, our research further shows that the performance of a novelty-based business model can be improved by adding elements from other business model design themes, when adjusting value propositions to market conditions.

This leads to two important questions for discussion:

1. First, whether business model design themes can be defined as being novelty-, efficiency-, lock-in- or complementarity-centred, as suggested by Amit & Zott (2001) and Zott & Amit (2008). A business model configuration can also be influenced by the business environment as well as the industry, or even society, it is embedded in. For example, a study of Chinese firms by Wei, Song and Wang (2017) finds that manufacturing flexibility promotes both efficiency- and novelty-centred business model designs, and, subsequently, firm performance. Furthermore, the relationship between manufacturing flexibility and an efficiency-centred business model design is strengthened by competitive

intensity, but weakened by demand heterogeneity. In contrast, the relationship between manufacturing flexibility and novelty-centred business model design is weakened by competitive intensity, but strengthened by demand heterogeneity. Their findings thus indicate a need to adjust business model design to the competitive landscape.

2. Second, whether a company's business model is secondary to its business strategy, and, as suggested by Casadesus-Masanell and Ricart (2010), represents the company's realised strategy. Zott and Amit (2007) also find that novelty-centred business models can enhance firm performance when coupled with product market strategies that either emphasize differentiation (i.e. innovation) or cost leadership, suggesting that business models and business strategies are complements, not substitutes for each other.

Following this line of discussion, the fundamental question for managers and entrepreneurs is what to choose first, i.e. a competitive business strategy or a business model design. For example, Holm and Günzel-Jensen's (2017) research on freemium business models of online digital firms shows that choosing a freemium business model implies choosing a specific way to compete. The study finds that successful freemium companies employed similar business model designs, a 'prospector' strategy (Miles & Snow, 1978), and similar sets of tactics to outperform their rivals. However, the research does not show what the companies chose first, i.e. a strategy or their business model designs, or whether the two were evolving hand-in-hand.

As in the above-mentioned and other research contributions, our study illustrates and confirms a link between business model design and firm performance, albeit one which depends on the choice of business strategy and its implementation through the business model design elements. However, this complex relationship requires further studies before we can help practitioners design their business models to achieve the desired company performance.

## References

- Amit, R., & Zott, C. 2001. Value creation in e-business. *Strategic Management Journal*, 22(6-7): 493-520.
- Baden-Fuller, C., & Haefliger, S. 2013. Business models and technological innovation. *Long Range Planning*, 46(6): 419-426.
- Casadesus-Masanell, R., & Ricart, E. J. 2010. From strategy to business models and onto tactics. *Long Range Planning*, 43(2-3): 195-195.
- Foss, N. J., & Saebi, T. 2017. Fifteen years of research on business model innovation: How far have we come, and where should we go? *Journal of Management*, 43(1): 200-227.
- Gassmann, O., Frankenberger, K., & Csik, M. 2015. *The Business Model Navigator: 55 Models that Will Revolutionise Your Business*: Pearson Education.
- George, G., & Bock, A. J. 2011. The business model in practice and its implications for entrepreneurship research. *Entrepreneurship Theory and Practice*, 35(1): 83-111.
- Holm, A. B., Günzel, F., & Ulhøi, J. P. 2013. Openness in innovation and business models: Lessons from the newspaper industry. *International Journal of Technology Management*, 61(3-4): 324-348.
- Holm, A. B., & Günzel-Jensen, F. 2017. Succeeding with freemium: Strategies for implementation. *Journal of Business Strategy*, 38(2): 16-24.
- Johnson, M. W., Christensen, C. M., & Kagermann, H. 2008. Reinventing your business model. *Harvard Business Review*, 86(12): 50-59.
- McArthur, A. W., & Nystrom, P. C. 1991. Environmental dynamism, complexity and munificence as moderators of strategy performance relationships. *Journal of Business Research*, 23(4): 349-361.
- Miles, R. E., & Snow, C. C. 1978. *Organizational strategy, structure, and process*. New York: McGraw-Hill.
- Morris, M. H., Shirokova, G., & Shatalov, A. 2013. The Business Model and Firm Performance: The Case of Russian Food Service Ventures. *Journal of Small Business Management*, 51(1): 46-65.
- Tretyak, O., & Klimanov, D. 2016. New approach to business model analysis. *Russian Management Journal*, 14(115-130).
- Tushman, M., & Anderson, P. 1986. Technological discontinuities and organizational environments. *Administrative Science Quarterly*, 31(3): 439-465.
- Wei, Z., Song, X., & Wang, D. 2017. *Manufacturing flexibility, business model design, and firm performance*.
- Zott, C., & Amit, R. 2007. Business model design and the performance of entrepreneurial firms. *Organization Science*, 18(2): 181-199.
- Zott, C., & Amit, R. 2008. The fit between product market strategy and business model: Implications for firm performance. *Strategic Management Journal*, 29(1): 1-26.

# Depicting A Performative Research Agenda: The 4th Stage Of Business Model Research

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## Abstract

This article provides a research program for the field of business models. It focusses specifically on 4th stage research, which is concerned with the performative notions of business models to which six conceptual avenues for further research are depicted.

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## Introduction

The goal of this article is to articulate a research program for the field of business models (BM) specifically in relation to the 4th stage of business model research, which is argued to be the performative research phase in the field. In 2010, Lecocq et al. depicted a research program for the field of business models (BM), under the inspiration from Lakatos (1969, quoted in Lecocq et al., 2010), suggesting that science is organized in research programs. It was concluded that business models presented a progressive research program (and not a degenerative one). A research program typically

encompasses a set of core assumptions, for example in the form of protective hypotheses. One example of this would be the contemporary “customer centric” understanding of business models that focusses on the value propositions delivered to customer groups instead of e.g. the competitive advantage discourse of strategy. Another would be the current work on establishing ontologies of business model patterns (Gassmann et al., 2014; Taran et al., 2016).

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Keywords: Business models, research agenda, performative research

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## Approach

As our point of departure, we use the general results of a structured literature review recently conducted by Nielsen et al. (2018). This study depicts four current and co-existing stages of research in business models (see also Figure 1). It is important to note that these research stages do not supersede each other, but rather co-exist simultaneously. Also, none are more important than the others, and their co-existence confirms the research field as a developing one. The result of the structured literature review led to the identification of dominant themes of research.

## Key Insights

The business model concept has been steadily growing in popularity amongst both academics and practitioners over the last decades. This success is mainly rooted in the strong emphasis on customer value creation (Nielsen and Roslender, 2015), being that it is the customers' perception of value that determines the level of success. In other words, the value of the products seen from the customer's perspective, and not the products' technical features by themselves, determine success. The concept of business models embraces this line of thinking by focusing on the value proposition constructed in the interface between the customer, the infrastructure management, and the financial aspects of the organisation (Osterwalder et al., 2005). Arguably a major source

of the business model field's intrinsic potential is that it operates as a platform where these multiple aspects of a companies' operations conceptually converge.

## Four current stages of research

Let us take a brief look at the four stages before zooming in on stage four:

The 1st stage of BM research is concerned with definitions and concepts as e.g. discussed by Jensen (2014) and Fielit (2014) respectively. Current arguments pose researchers to be critical towards the BM concept and its defining elements, as depicted by Jensen (2014) in his narrative about whether one business model definition is enough? Future research might also engage in discussing what is not a business model or the implications of having an accepted definition in the field. Further critical angles could focus on the different functions that business models may have from a managerial perspective. They may be concerned with controlling functions as depicted by Montemari and Nielsen (2013) or about sense-making as outlined by Michea (2016).

In the 2nd stage of BM research, innovation of business models and their underlying value propositions are in focus. Current research has focused on the processes of business model innovation (Wirtz et al., 2017) and how

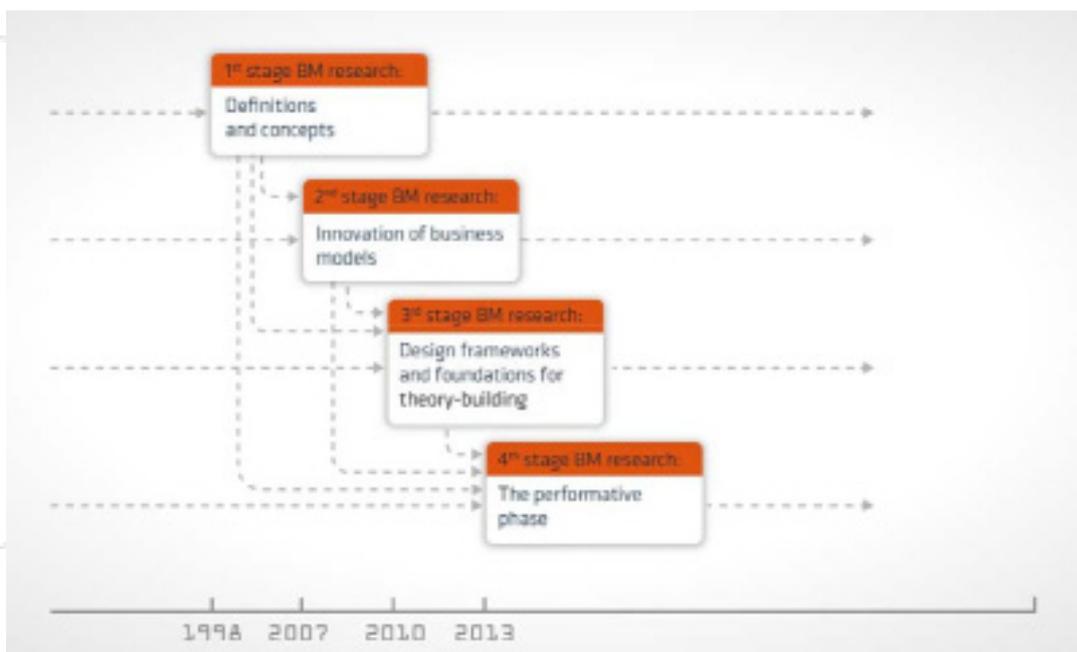


Figure 1: The four stages of Business Models research

business model innovation introduces new partnerships into existing business model (Lund and Nielsen, 2014) to achieve scalability (Nielsen and Lund, 2018). Future critical research could focus on understanding the barriers to business model innovation and business model implementation (Montemari et al., 2018) as well as identifying decision-support systems for these processes as exemplified by Nielsen et al. (2017).

The 3rd stage of business model research focusses on identifying frameworks and theories for describing and analysing BMs. Wirtz et al. (2016) argue that business model researchers should focus on consolidating and confirming existing BM descriptions and BM innovation frameworks empirically and in different contexts such as the public sector versus the private sector. This is parallel to the developments in other emerging fields like Intellectual Capital research (Dumay, 2013). This would constitute an important step in building empirical BM taxonomies and from these taxonomies building BM archetypes. In the end, this would enable BM theory to be constructed.

Finally, the 4th stage of BM research concerns the performative notions of BMs. Research here should work on establishing relationships between BM elements and financial values. Further, an important contribution would lie in establishing links between BM performance and a broader understanding of performance measure identification (Montemari et al., 2017) and other contextual factors such as cultural variables, further enhancing the connection between BMs, BM innovation and managerial issues.

### **Current trends forming the meaning of performance**

In the past decade, several new forms of organisation and ways of creating value have appeared. In conjunction with this, new technologies have emerged. Together, these mechanisms of organisation, value creation and technology leverage combinatorial innovations (Varian, 2010) by creating new spaces for value creation, new ways of serving customers, and sometimes entire new products. This is currently discussed in terms of disruptive innovation. Consider Uber's disruption of the taxi industry, how Airbnb currently challenges the hotel industry, and the way in which Skype set the standards for Internet-based phone services

over a decade ago. Such disruptions (Christensen and Raynor, 2013) might radically alter the value creation in any given industry. It may be expected that these changes will alter the performance measurement information that is relevant for guiding managers' decision-making; not to mention the potential BM innovation trajectories available to them.

At present, performance of organisations can be accounted for in financial reporting and management-based KPI identification rests on a series of management models and frameworks such as the Balanced Scorecard or other performance scorecards (Nielsen and Roslender, 2015) that are at least two decades old. Financial reports do not factor in the type of business model a given company applies, therefore rendering comparisons of value creation difficult. The same goes for comparing KPIs across companies. Taran et al. (2016) suggest to make use of BM configurations to identify relevant KPIs because BMs constitute a natural analytical structure from which to analyze a company. Hence, in the 4th stage of BM research, the "performance" of companies and other organisations, including public and non-profit organisations can be expanded upon and understood from the perspective of business models.

## **Discussion and Conclusions**

The 4th stage of BM research is concerned with the performative notions of BMs. In opposition to an ostensive understanding of BMs that focuses on creating meaning by pointing out examples, the performative understanding of BMs is concerned with creating a basis for action. Thus, research should focus on establishing relationships between BM elements and financial outcomes as well as other measures of performance of both financial and non-financial character. We envisage that the field of BMs still will be driven forth by its practical relevance, as is evident of the last two decades. However, moving forward a critique of the dominant authors is necessary, as is a stronger focus on theory-building. To achieve this, we argue that it is necessary to depict a research program that outlines a set of key hypotheses. These are set out for the 4th stage of BM research below:

### **1) Create empirically validated ontologies**

The 4<sup>th</sup> stage of BM research should support and enhance the connection between BMs, BM innovation

and managerial issues. A starting point for this is to depict the relationships between industries and business models as is proposed by Gassmann *et al.* (2014). Researchers should seek quantifiable validation through large-scale empirical studies. This focus will also support future theory-building in the field.

## 2) Create decision-support structures

Moving on from such an empirically validated ontology, researchers should aim to create decision-support methodologies and systems for BM analyses and for BM innovation trajectories that may assist in avoiding industry-based imitation (see Nielsen *et al.*, 2018; Montemari *et al.*, 2018). Such empirically validated analytical structures might follow the lines of Taran *et al.*'s (2016) mapping ontology or Gassmann *et al.*'s (2014) pattern methodology.

## 3) Connect KPIs to BM configurations

Third, research should to a larger extent address the manageability of BMs. This can be achieved by creating clear structures for KPI identification for each different BM configuration. For example, the ontology provided by Taran *et al.* (2016) forms a platform for alignment between value creation and performance measurement through the mechanism of the business model according to 71 business model configurations. However, at the present, no empirical work has established the connections between business model configurations and performance measures, and this is an important step for future theorising about performance.

## 4) Benchmark value creation

Currently there are multiple types of business models even the same industries. Therefore, benchmarking with a peer group needs to encompass an identification of the applied business model configuration in order to create a meaningful comparative exercise. At present the creation of benchmarking around corporate performance is difficult as no validated or reliable theory of corporate benchmarking exists. Despite a lack of theory, benchmarking, also sometimes denoted as evaluations, assessments or comparative data, is readily viewed as an important source of information for evaluation against the best competitors or peers (Kouzmin *et al.*, 1999) thus providing motivational and managerial effects (Behn, 2012). When research has been able to establish an empirically validated ontology

and identified direct relationships between BM configurations and KPIs, the next step would be to apply this knowledge to devise a performative benchmarking methodology.

## 5) Report on the basis of the business model

Tweedie *et al.* (2017) argue, that despite a seemingly strong link between Integrated Reporting (IIRC, 2013) and business models, this relationship is an uneasy one. Organisations such as the IIRC and standard-setting bodies around the world are currently debating the merits of corporate reporting and disclosures in the light of accelerating industry disruption. Similarly, academia is debating the pros and cons of mandatory versus voluntary reporting. However, the connections between new (and old) forms of value creation and their respective performance measures have yet to be made. Guidelines for reporting on BMs might therefore be improved by including a set of minimal requirements to be addressed in the disclosures, a comparable or at least a unified layout, and a set of stable performance measures in order to track the developments of a company's BM over time. However, these are merely speculations that should be validated by future research.

## Final remarks

This article proposes a research programme that is specifically aimed at the performative notions of business models. Together, the five hypotheses will be able to move the field into a new era in which what is otherwise known as an emerging field, for certain will be perceived as a mature one.

It is often argued that the popularity of business models is largely attributable to its practical relevance. However, the business model field has begun its emancipation from practice into a more developed and theorized one and at the same time also its emancipation from the more traditional disciplines such as strategy, innovation and marketing with which it has typically been intertwined. Building theory is expected to lead to the contours of a coherent set of constructs relating to business models, their subsystems, outcome measures and contextual influences. In the future, such constructs may be used as a basis for analytical, archival and field research.

## References

- Behn, R.D. (2012). Motivating and Steering with Comparative Data. *International Public Management Review*, 13(1), 21-37.
- Christensen, C., & Raynor, M. (2013). *The innovator's solution: Creating and sustaining successful growth*. Harvard Business Review Press.
- Dumay, J. (2013), "The third stage of IC: Towards a new IC future and beyond", *Journal of Intellectual Capital*, Vol. 14 No. 1, pp. 5-9.
- Fielt, E. 2014, *Conceptualising Business Models: Definitions, Frameworks and Classifications*, *Journal of Business Models*, Vol. 1, No. 1, pp. 85-105
- Gassmann, H., Frankenberger, K. and Csik, M. (2014), "The business model navigator", Pearson Education Limited, Harlow.
- IIRC (2013), "The International <IR> Framework", The International Integrated Reporting Council, London, available at: [www.theiirc.org](http://www.theiirc.org).
- Jensen, A.B. 2014, Do we need one business model definition?, *Journal of Business Models*, Vol. 1, No. 1, pp. 61-84.
- Kouzmin, A., Löffler, E, and Klages, H. (1999), "Benchmarking and performance measurement in public sectors", *The International Journal of Public Sector Management*, Vol. 12, No 2, pp. 121-144.
- Lakatos, I. (1969). Criticism and the Methodology of Scientific Research Programmes, *Proceedings of the Aristotelian Society, New Series*, 69 (1968 - 1969), 149-186.
- Lecocq, X., Demil, B., & Ventura, J. (2010). Business models as a research program in strategic management: an appraisal based on Lakatos. *Management*, 13(4), 214-225.
- Lund, M., & Nielsen, C. (2014). The evolution of network-based business models illustrated through the case study of an entrepreneurship project, *Journal of Business Models*, Vol. 2, No. 1., pp. 105-121.
- Michea, A. (2016), *Enacting Business Models*. PhD dissertation, Copenhagen Business School
- Montemari, M. and Nielsen, C. (2013), "The role of causal maps in intellectual capital measurement and management", *Journal of Intellectual Capital*, Vol. 14 No. 4, pp. 522-546.
- Montemari, M., S. Schaper, Y. Taran, C. Nielsen, J. Sort and P. Thomsen (2018). *Business model innovation or business model imitation – that is the question*. Working paper: Business Design Center.
- Montemari, M., M.S. Chiucci and C. Nielsen. (2017). *Designing Performance Measurement Systems Using Business Models*. Working paper: Business Design Center.
- Nielsen, C., & Lund, M. (2018). *Building Scalable Business Models*. *MIT Sloan Management Review*, 59(2), 65-69.
- Nielsen, C. and R. Roslender. (2015). "Enhancing financial reporting: the contribution of business models", *British Accounting Review*, 47(3): 262-274.

Nielsen, C., M. Lund & P. Thomsen (2017), Killing the balanced scorecard to improve internal disclosure, *Journal of Intellectual Capital*, Vol. 18, No. 1, pp. 45-62.

Nielsen, C., M. Lund, M. Montemari, F. Paolone, M. Massaro and J. Dumay (2018). *State-of-the-Art in Business Model Research*. London: Routledge.

Osterwalder, A., Pigneur, Y., and Tucci, L.C. (2004). Clarifying business models: Origins, present, and future of the concept, *Communications of AIS*, Vol. 6, pp. 1-25.

Taran, Y., Nielsen, C., Thomsen, P., Montemari, M., and Paolone, F. (2016), "Business model configurations: a five-V framework to map out potential innovation routes", *European Journal of Innovation Management*, Vol. 19. No. 4, pp. 492-527.

Tweedie, D., Nielsen, C., & Martinov-Bennie, N. (2017). The Business Model in Integrated Reporting: Evaluating Concept and Application. *Australian Accounting Review*.

Varian, H. R. (2010). Computer mediated transactions. *The American Economic Review*, 100(2), 1-10.

Wirtz, B.W., V. Göttel and P. Daiser (2016), Business Model Innovation: Development, Concept and Future Research Directions, *Journal of Business Models*, Vol. 4, No. 2, pp. 1-28

Wirtz, B.W. and P. Daiser (2017), Business Model Innovation: An Integrative Conceptual Framework, *Journal of Business Models*, Vol. 5, No. 1, pp. 14-34.

## Toward Smart City Business Models

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### Abstract

This paper discusses a business model concept in a public smart city context. To date, there is no unified understanding of how smart cities create value for their stakeholders. This study aims to contribute to the research by investigating the content and dynamics of a business model approach for smart cities.

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### Introduction

Since the 1980s there has been enormous growth in networking between companies as businesses – and now also cities – have realized that they have to concentrate on their own core competencies and use external resources to compliment the competencies they have (Pikka, 2007; Nooteboom, 1999). This kind of network thinking assumes synergies, either positive or negative, indicating that the network is the sum of its components (i.e. public governance and businesses) that interact together (Pikka, 2007), paving the way to ecosystem thinking. According to the seminal work by Moore (1996), business ecosystems comprise organizations and individuals interacting in economic communities, creating value for their customers and users. These ecosystems are characterized by high complexity,

cooperation, independence, competition and coevolution (Moore, 1996). Recently, business model research has also started to expand its viewpoint from a networked view towards an ecosystemic view (Iivari, 2016, p. 3). In practice, this means that value creation and capture – the key features of business models – are embedded within the whole ecosystem of players, and innovations are formed together with businesses and public organizations (Pikka, 2007), basically implying that value is co-created and co-captured (Ahokangas *et al.*, 2015).

Thinking about these realities, it is important for businesses and also cities to understand their situations with regard to other players and to chart plans for the

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Keywords: Smart city, business model, business context change

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future. Hence, business networks, and recently ecosystems, have become more and more important in regional and city development – successful business is usually a target of regional development because traditionally it is seen that regional development enables local business, and firms accumulate in those regions where the factors of production are best available (Pikka, 2007). We can say that there is no doubt that the business model has entered the field of city development. Both the business network and ecosystem can act as a basis when researching a smart city business model that benefits both cities and companies within the cities. This paper discusses the business model concept in a public smart city with a view that it is understood as a business ecosystem that includes a diversity of different stakeholders.

The purpose of this paper is to explore *what kind of business model approach could work for smart city organizations*. So far, academic research has not addressed how smart cities could utilize the business model approach in their development (Díaz-Díaz *et al.*, 2017). Agility and speed are common requirements for businesses in smart cities, and to answer these two challenges, both smart cities and businesses have to concentrate on their core competencies and outsource other activities (Pikka, 2007).

## Approach

This conceptual paper builds on a literature review for which we collected a systematic sample of papers about smart cities and business models with combinations of the keywords “smart city” and “business model”. This review was performed between January and February 2018, and it contains outcomes from articles that were published before then. Regional development theories were excluded from this study.

## Smart City

Bollier (1998) proposed the term “smart growth”, which evoked new political practices for better urban planning. Later, a new definition for the smart city was presented by Komninos (2006), who argued that smart cities are constructed as multi-dimensional clusters, combining three dimensions: people, collective intelligence, and artificial intelligence. Parallel to this, a city’s

focus of development has changed from competition to cooperation towards a sharing economy.

Even though there is no widely accepted definition of a smart city, some key terms and characters pop up in the definitions found in the literature: 1) Networked infrastructure is a key factor in the concept. 2) Technology is one political and social enabler for a smart city. 3) There is an emphasis on business-led urban development. 4) The aim of a smart city is to change how services are delivered and how residents are included in them. 5) Finally, the vision of a better future is embedded within it (Albino *et al.*, 2015; Pardo *et al.*, 2011). Also, one of the denominators of (smart) cities is that they attempt to prioritize their innovation ecosystems aiming at social and environmental sustainability via urban planning (Zygiaris, 2012). Almost all well-managed smart cities follow a certain architecture regardless of their size or form (Anthopolous *et al.*, 2016). In the perspective of the city and urban planning, there are four dimensions to consider: actors, priorities, resources, and policies (Schaffers *et al.*, 2011). These factors create the basis of an integrated framework that can be used to research how governments predict initiatives aimed at creating a smart city (Afonso *et al.*, 2015).

For the purposes of this paper, we address the smart city as a business ecosystem where city governance is the key player because in the city’s strategy they define how cities create value for different stakeholders. Business ecosystems in smart cities are constantly changing because different services are changing citizens’ daily life and behaviour, as well as that of businesses in an urban context (Díaz-Díaz *et al.*, 2017, p. 6). This is why it is necessary to design innovative business models for the city (Walravens, 2015). New technologies open up new possibilities for multiple business models applied to public services in smart cities (Díaz-Díaz *et al.*, 2017). According to Lappalainen *et al.* (2015), cities have now started to see the benefits of ecosystemic thinking.

## Business Model

The term business model has dominated in the managerial literature since the 90’s, especially when it comes to the emergence of the Internet (Demil and Lecocq, 2010). Since the 1960s, the business model and value chain have evolved closely together as a concept (Mulligan *et al.*, 2013). Teece and Pisano (1994) identified a shift from

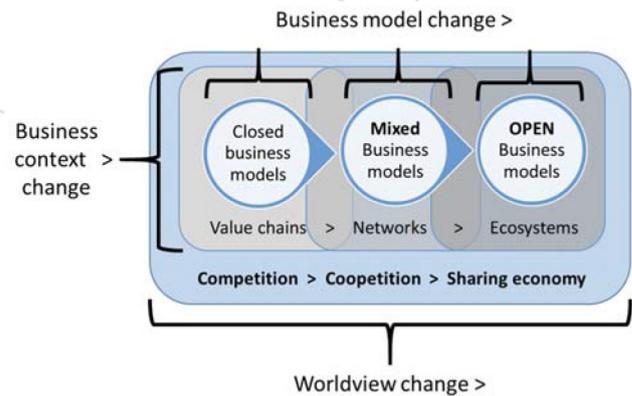
technological development that happened inside the firm towards a view of the effects of technology and its development as being one of the interactions between firms. Accordingly, the competitive landscape could be seen as changing, and markets as having become complex networks of relationships between different actors. Since then, the focus of business modelling has shifted from single-firm, closed business models that make little use of external ideas and technologies, to a mixed, networked model where some services are private and others are public, and again towards an open, ecosystemic business model view that benefits from the large community (Casadesus-Masanell *et al.*, 2011). Thus, the business model has been seen to change over time (worldview change) and due to market pressure (business context change) (Iivari, 2016).

A business model is a key factor when studying smart city development, as the term is commonly used also in (open) innovation ecosystems (Mulligan *et al.*, 2013). Open innovation requires that the organization defines the ways to create, deliver and capture value in cooperation with partners that are part of the open innovation economy (Saebi and Foss, 2015). Thus, we rely on the definition where the business model is defined as the content, structure and governance transactions made inside an organization and between it and its external partners who support the organization's value creation, delivery and capture (e.g. Zott and Amit, 2010). Currently, however, there is no widely accepted definition or conceptualization of the business model for the city context, but we can say that in cities, a particular business model describes the architecture or design of value creation, delivery, and capture mechanisms it employs (Teece, 2010).

## Key Insights

### Smart City Business Model Approach

Based on smart city and business model concepts, we can see that both of them have gained a lot of interest since the 1990s, and the view has shifted towards a networked, and later ecosystemic, focus. Digitalization and technological developments drive both the evolution of smart cities and business models in regional city contexts. We identify three steps in the understanding development of business context change, based on



**Figure 1: Business model evaluation in the city context.**

changes in the competitive landscape and worldview resulting in three different types of business models: closed, mixed and open. Closed business models are rooted to value chain thinking, mixed business models to the network approach, and open business models to the sharing economy. Parallel to this, it can be said that competition characterizes closed business models, coopetition mixed business models, and the sharing economy open business models. This evolution is depicted in Figure 1 above.

According to Schaffers *et al.* (2012), for the smart city concept, ecosystemic thinking is particularly relevant because cities themselves can and should act as innovation drivers. The city may strive for new market creation in the ecosystemic business model approach if the city enables evolution of the innovation ecosystem and adopt the rapid shift of organizational and industrial boundaries that can create new kinds of business opportunities (Hirvonen-Kantola *et al.*, 2016; Iivari, 2016). From an innovation perspective, new markets are created because of the co-creation activities of the ecosystem actors, and the context of the business ecosystem is changing (Hirvonen-Kantola *et al.*, 2016).

Urban areas are able to build a sustainable competitive advantage through the business model approach (Hirvonen-Kantola *et al.*, 2016) and a maturity model is a useful tool in the guidance of regional network development (Pikka, 2007). When we want to study a city's business model, the main factor we should focus on is the maturity of the smart city's ecosystem, which includes e.g. governance, strategy, people, and skills, but also how the different players in the ecosystem see the smart city's opportunities, values, and advantages.

## Practical Implications

The practical implications of this paper relate to alternative business models in the context of the smart city. The aim is to develop an approach to understanding smart cities from the point of view of the business model, but also to bring the smart city concept into the business model discussion.

## Discussion and Conclusions

The worldview change has changed the business context, and thus affected business model evolution.

Networked and ecosystemic thinking is a way to understand modern business in the smart city context where different types of drivers of globalization, and also digitalization, are changing the boundaries of industries, because a diversity of different players (for example, public organizations, small and large companies, and citizens working together) are characterizing the modern ecosystemic context (Iivari, 2016). To work well, the open ecosystemic approach needs to develop its capability to manage the knowledge processes, such as the exploitation, exploration and retention processes that take place between businesses and their environment (e.g. Saebi and Foss, 2015). Business opportunities, which are born via a shift of industrial and organizational boundaries, are the core of the business model in an ecosystemic view.

Smart cities – and also businesses located in the cities – should concentrate on their core competencies and outsource other activities to answer the challenges of the rapidly changing world. The open ecosystemic approach in smart cities creates value for all city entities, including for businesses, when different pieces of knowledge and skills are brought together via lowering the boundaries to different industries working in a city. However, it should be noted that the reality in this research is complex, and it is based on a social network system that is evolving all the time; thus, it is not possible to speak about simple cause-effect relationships.

When cities want to use business models, a new way of thinking and approach to city development is needed. This is not just adding a new tool to the repertoire. It is also noticeable that cities' maturity is an important

denominator when it comes to business model, because cities differ from each other and they can have rather differing stages of development and roles when researching them in the global scale (Iammarino et al., 2018). Hence, for future research, it is important to take a closer look at the maturity of a smart city's ecosystem.

In conclusion, both the smart city and business model concepts are multi-faceted, and this causes some limitations to this research. Both concepts are descriptive in nature, and thus do not provide empirical validity. One limitation – to which this paper aims to contribute – is that there is no ready-made theory for city business models. Thus, several implications for future research are provided. This short paper gives some preliminary thoughts on what a smart city business model could be and what kinds of possibilities there are in the smart city business model approach.

## References

- Afonso, R.A., dos Santos Brito, K. and Alvaro, A. (2015). Brazilian Smart Cities: Using a Maturity Model to Measure and Compare Inequality in Cities. *Proceedings of the 16<sup>th</sup> Annual International Conference on Digital Government Research*, pp. 230-238.
- Ahokangas, P., Ailila, H., Hellaakoski, H., Kyllönen, V., Lehtimäki, T., Peltomaa, I., Seppänen, V. and Tanner, H. (2015). *Collaborative Business Networks of the Future*. VTT Value Network 2.0. VTT Technical Research Centre of Finland.
- Albino, V., Berardi, U. and Dangelico, M. (2015). Smart Cities: Definitions, Dimensions, Performance and Initiatives, *Journal of Urban Technology*, Vol. 22, No. 1, pp.3-21.
- Anthopolous, L.G.; Fitsilis, P. and Ziozias, C. (2016). What is the source of Smart City Value? A Business model analysis, *International Journal of Electronic Government Research (IJEGR)* Vol. 12. No. 2.
- Bollier, D. (1998). *How Smart Growth Can Stop Sprawl*, Essential Books, Washington, DC.
- Casadesus-Masanell, R. and Llanes, G. (2011). Mixed Source. *Management Science*, Vol. 57, No. 7, pp. 1212-1230.
- Demil, B. and Lecocq, X. (2010). Business Model Evolution: In Search of Dynamic Consistency, *Long Range Planning* 43, pp. 227-246.
- Díaz-Díaz, R., Muñoz, L. and Pérez-González, D. (2017). The Business Model Evaluation Tool for Smart Cities: Application to Use Cases, *Energies 2017*, Vol. 10, No. 3, doi:10.3390/en10030262.
- Hirvonen-Kantola, S., Iivari, M. and Ahokangas, P. (2016). New Market Creation in Urban Area Development: An Ecosystemic Business Model Approach, in Saari, A and Huovinen P (Ed.) *WBC Proceedings Volume III Building Up Business Operations and Their Logic Shaping Materials and technologies, Construction Management and Economics Report 18*, Tampere University of Technology, pp. 21-31.
- Iammarino, S., McCann, Ortega-Argiles, R. (2018). International business, cities and competitiveness: recent trends and future challenges. *Competitiveness Review: An International Business Journal*, Vol. 28, No. 3, pp. 263-251.
- Iivari, M. (2016). *Exploring Business Models in Ecosystemic Contexts*. Doctoral dissertation, Acta Universitatis Ouluensis.
- Komninos, N. (2006) *The Architecture of Intelligent Cities*, *Conference Proceedings Intelligent Environments 06*, Institution of Engineering and Technology, pp. 53-61.
- Lappalainen, P., Markkula, M. and Kune, H. (Ed.) (2015). *Orchestrating Regional Innovation Ecosystems: Espoo Innovation Garden*, Aalto University, Laurea University of Applied Sciences and Built Environment Innovations RYJ Ltd.
- Moore, J. (1996) The death of competition. *Fortune*, Vol. 133, No. 7, pp. 142-144.
- Mulligan, C.E.A.; and Olsson, M. (2013). Architectural implications of smart city business models: An evolutionary perspective. *IEEE Commun. Mag.* Vol. 51, pp. 80-85.
- Nooteboom, B. (1999). Innovation and inter-firm linkages: new implications for policy. *Research Policy* 28, pp. 793-805.

- Pardo, T. and Taewoo, N. (2011). Conceptualizing smart city with dimensions of technology, people, and institutions. *Proceedings of the 12th Annual International Conference on Digital Government Research Conference: Digital Government Innovation in Challenging Times*, pp. 282-291.
18. Pikka, V. (2007). A Business Enabling Network: A case study of high-tech network; its concepts, elements and actors. Doctoral dissertation, Acta Universitatis Ouluensis.
- Saebi, T. and Foss, N.J. (2015). Business models for open innovation: Matching heterogeneous open innovation strategies with business model dimensions, *European Management Journal* 33, pp. 201-213.
- Schaffers, H., Komninos, N., Pallot, M., Trousse, B., Nilsson, M. and Oliveira, A. (2011). *Smart Cities and the Future Internet: Towards Cooperation Frameworks for Open Innovation*. J. Domingue et al. (Ed.): Future Internet Assembly, LNCS 6656, pp. 431-446, 2011.
- Teece, D. and Pisano, G. (1994). The Dynamic Capabilities of Firms: An Introduction. *Industrial and Corporate Change*, Vol. 3, No. 3, pp. 537-556.
- Teece, D. (2010). Business Models, Business Strategy and Innovation, *Long Range Planning* Vol. 43, No. 2-3, pp. 172-194.
- Walravens, N. (2015). Qualitative indicators for smart city business models: The case of mobile services and applications, *Telecommunications Policy* 39, pp. 218-240.
- Zott, C. and Amit, R. (2010). Business model design: An activity system perspective. *Long Range Planning*, Vol. 43, No. 2-3, pp. 216-226.
- Zygiaris, S. (2012). Smart City Reference Model: Assisting Planners to Conceptualize the Building Smart City Innovation Ecosystems, *Journal of Knowledge Economy*, Vol. 4, No 2, pp. 217-231.

# Building Business Models around Sustainable Development Goals

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## Abstract

By specifying the UN's sustainable development goals as quantifiable target groups, one can address these targets directly. We develop four generic business model designs based on two fundamental decisions: Should value be created for or with the target group, and should income be generated through market revenues or positive externalities?

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## Introduction

The increasing proliferation and, consequently, societal awareness of global environmental, social, and economic problems has led the United Nations (UN) to officially enact as of January 1, 2016 a collection of 17 Sustainable Development Goals (SDGs) as a common global agenda until the year 2030 (A/Res/ 70/1, 2015). Although not legally binding, the SDGs, agreed upon by 193 UN members, mark a milestone in international policy coordination. The common objectives comprising the biosphere, society, and the economy are fundamental enough to be acceptable by all nations involved, and, with 169 specific targets (A/Res/71/313, 2017), they are instrumental

enough to take action. Moreover, with 232 indicators, fulfillment of individual goals can be measured and compared, thus providing an orientation for dealing with multiple and possibly conflicting objectives in the decisions made by stakeholders, e.g., policy makers, public organizations, firms, and investors.

Yet, in order to avoid paying merely lip service to sustainability, the 17 SDGs have to be operational in order to be approachable by organizations and firms. This raises the question of implementation, which requires new forms of social interaction, economic

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Keywords: sustainable development goals, business model design, generic strategies

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development, and, specifically for firms, business models. With regard to the latter, the traditional approach has been to innovate existing, operating business models by including objectives of social support and environmental protection, thus creating the benchmark of a triple bottom line that firms must exceed to ensure sustainability (Bocken, Short, Rana, and Evans, 2014). While the economic bottom line is intuitively given by the generated income required to maintain the operative business, social and environmental bottom lines are more difficult to conceive. Instead of quantifying specific thresholds, the approach calls for a balance of objectives (Boons and Lüdecke-Freund, 2013). However, if objectives cannot be specified, sustainability efforts threaten to become “business-as-usual augmented by incremental environmental or social initiatives” (Schaefer, Corner, Kearins, 2015: 395), where the focus is mostly on reducing unsustainability (Cohen and Winn, 2007; Dean and McMullen, 2007) rather than creating sustainability (Ehrenfeld, 2012).

In this paper, instead of integrating SDGs into the business model, we proceed in the opposite direction. We take the perspective of a “conscious entrepreneur” (Pavlovich and Corner, 2014), who is committed to sustainability by pursuing a specific environmental or social mission and then strategically formulating an economically sustainable business model around this mission, thereby creating shared value (Porter and Kramer, 2011). As a consequence, only economic sustainability becomes the bottom line to exceed, but corresponding to articulated social or environmental objectives. By specifying sustainability targets upfront in the value proposition, the entrepreneur can also identify the indicators to measure their fulfillment. As we show, the UN’s collection of SDGs as a system of globally shared beliefs and values (Schaefer et al., 2015) together with their specific targets and associated indicators hereby provide an orientation for the organizational implementation of sustainability through the business model (Santos, Pache, and Birkholz, 2015). An economically sustainable business model built around a mission centered on SDGs can then be defined in the traditional sense as a logical process of value creation, value delivery, and value capture that can be maintained in the long run (Osterwalder and Pigneur, 2010; Zott and Amit, 2010; Arend, 2013; Dohrmann, Raith, and Siebold, 2015; Massa, Tucci, and Afuah, 2016).

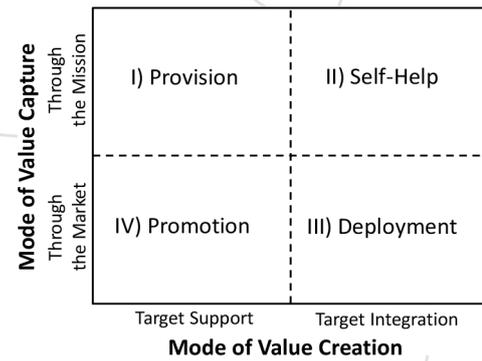
## Approach

In a first step, we need to conceive the sustainability targets in a way that they can be explicitly addressed by a social or environmental mission (Martin and Osberg, 2015). For the purpose of this study on business models, we concentrate on those SDGs that can be addressed directly at the firm level. For the SDGs related to social targets, e.g., no poverty (SDG 1), zero hunger (SDG 2), good health and well-being (SDG 3), quality education (SDG 4), gender equality (SDG 5), or reduced inequalities (SDG 10), the social mission of a venture will typically specify a social target group to which created value is delivered (Santos, 2012; Dees, 2012). A well-identified target group supports value delivery, because one can measure the size of the target group, the number of affected individuals, and the status change of each or the average affected individual accomplished through the mission. The same reasoning can be applied to fauna related environmental targets, e.g., life on land (SDG 15) or life below water (SDG 14). For example, organizations such as the “World Wildlife Fund” or “Greenpeace” focus on specific endangered target groups of animals. A crucial difference between animal and human target groups is that in a non-vegan sustainable society numerous species of animals are used as resources, against their free will and often at the cost of their life to produce consumption goods such as food, clothing, and furniture, or to develop goods such as cosmetics and pharmaceuticals. Other species are held in captivity, e.g., as pets, as resources for services of human pleasure. However, as long as the treatment of these animals is still a matter of social concern, they can be regarded as target groups as well, for which objectives, targets, and indicators can be specified for responsible consumption and production (SDG 12). In terms of formulating sustainability targets, the differences between flora and fauna are not fundamental. Plants are also living entities that can be granted the right simply to exist (SDG 14, 15) and can therefore be focused as target groups. And plants are also regarded as resources for production and consumption (SDG 12). A technical difference between fauna and flora is the method of measurement, where indicators of flora related targets are typically quantified by areas, weights, or other aggregate measures. The final category of sustainability targets that we consider for business model design relates to abiotic targets, e.g., air, water, minerals.

As many important natural resources are distributed throughout the world, their measurement seems most appropriate in geographical categories, such as the air in cities, the water in oceans or lakes (SDG 6, 14), or rare earths, which thereby become specific targets that can be addressed through a mission.

In order to address the sustainability targets at the firm level, we focus explicitly on value delivery to one or more quantifiable target groups. We then consider two fundamental strategic decisions to be made by entrepreneurs in designing their business models around this mission. The first decision relates to the way in which the sustainability target is addressed in the process of value creation. Here we distinguish between a supportive mode of value creation *for* a target and an integrative mode of value creation *with* a target (Dohrmann et al., 2015). The second decision relates to the way in which value is to be captured, i.e., the form of generated income. We distinguish between the *commercial* mode of value capture through the market, i.e., with market revenues, and the *social* mode of value capture through the mission, e.g., with monetary or in-kind donations, where both modes of generated income are means to an end (Porter and Kramer, 2011; Schaefer et al., 2015). With these two strategic decisions, we obtain a typology of four generic business model strategies for addressing sustainability targets, which are determined by the combinations of value creation and value capture, as is shown in Fig. 1. In the following, we characterize each business model strategy and discuss how it addresses the broad variety of SDGs.

**1. Provision:** The mission of a venture in this category is to create social value by directly supporting the fulfillment of a specific sustainability target through the free provision of goods and services. If the target (group) is of sufficient social concern, then its support will create positive externalities that the entrepreneur can try to capture in the form of monetary or in-kind donations, depending on the nature of the target. The firm's revenues are therefore not obtained from but generated through the target (Dohrmann et al., 2015). For social missions, this is the business model strategy adopted by charities, soup kitchens, or homeless shelters. The same design is employed by the "World



**Figure 1: Generic business model strategies for sustainability targets**

Wildlife Fund" to prevent the extinction of endangered animal species or by "Greenpeace" with an even broader scope of environmental targets. The value capture of these organizations is characterized by the monetization of positive externalities (Santos, 2012; Dees, 2012).

**2. Self-Help:** This strategy focuses on the productive integration of a target (group) into the process of value creation. Economic sustainability is supported by capturing resources as productive input from the target for which value is created. The self-help strategy thus substitutes a (missing) market for resources that the target can provide (donate) itself. In societal contexts, self-help value-creation processes help to empower social or physically disadvantaged target groups. In environmental contexts, self-help is typically achieved through natural regeneration processes, which, however, are often endangered by society and therefore need to be supported to succeed, e.g., through the establishment of wild-life reserves. As the "Ocean Clean-up" project demonstrates, even oceans can be "empowered" to clean themselves by using their natural currents to collect the accumulated garbage at focal geographical locations. In many cases, economic sustainability cannot be achieved by self-help alone, in particular when the self-help process requires additional support or a technological infrastructure. However, if the implementation of self-help is appreciated enough to create positive externalities, these can be additionally monetized by the venture through donations (i.e., with the Provision model) to ensure economic sustainability (Dohrmann et al., 2015).

- 3. Deployment:** Sustainability targets may also be productively integrated (deployed) by the venture to create marketable goods or services for commercial target groups. By combining social with commercial value in a hybrid business model, economic sustainability is achieved through market revenues (Haigh, Kennedy, and Walker, 2015; Hockerts, 2015). For example, the social mission of “Work Integration Social Enterprises” (WISE) is to employ disadvantaged target groups, in order to integrate them into the work force. Conceptually, the same design is used by the “Kruger National Park” in Africa, where endangered species of wildlife are protected within their natural environment, thereby generating market venues from wealthy tourists on photo safaris. Again, even the “Ocean Clean-up” Project could fall into this business-model category, if the plastic that is gathered by the oceans is sold on the recycling market. In all of these examples, a target (group) benefits by being deployed as a resource for commercial value creation.
- 4. Promotion:** The final business model strategy, similar to the provision strategy, pursues a supportive mission, but which the venture now uses to promote the sale of a commercial product or service to a customer group from which it can obtain market revenues. This capture of market value is used as a means to finance the social value creation alongside the commercial value creation (Porter and Kramer, 2011). This business model characterizes, for example, “buy-1-give-1” or “buy-1-donate-1” policies, where for every commercial sale of a product a similar product is given to a person in need, or, more generally, a sum of money is given to support a sustainability target in a social or environmental context (Marquis and Park, 2014).

## Key Insights

As our discussion of heterogeneous social and environmental goals revealed, by addressing SDGs through their identified targets, the latter can be specified and addressed as target groups, to which value is delivered. The design of a business model around this social mission to create what Pavlovich and Corner (2014) refer to as a “conscious enterprise” involves two fundamental strategic decisions. The first is related to value creation

and whether it is to occur *for* or *with* the target (group); the second focuses on value capture through the market or through the mission. As we showed, these two decisions determine the business model strategy for the entrepreneur’s mission. The strategic task for the entrepreneur is thus to proactively select the appropriate business model for creating shared value and transformational change, rather than integrating the mission into an existing business model for mainly incremental change (Schaefer et al., 2015). Interestingly, this may be easier for startups in search of a new business model than for established firms with an existing one.

## Discussion and Conclusions

The four generic strategies outlined above cover a broad conceptual variety of business models that can be built around sustainability targets, thus creating new opportunities for business model research (Arend, 2013; Eckhardt, 2013). As we have shown, each chosen strategy combination characterizes one of four distinct business model designs that can be utilized individually or in combination for targets of qualitatively different sustainability development goals. Indeed, the same business model design can be applied to targets of different nature, implying that the implementation of sustainability development goals at the firm level can be strongly supported by the use of analogies from completely different contexts (Martins, Rindova, and Greenbaum, 2015). The four generic strategies also provide a strategic orientation for non-sustainable firms in the process of sustainable business model innovation.

The realization of the UN’s global agenda 2030 requires not only the commitment of policy makers, the implementation of the SDGs requires action being taken at the firm level. Rather than enhancing an economically successful business by additional social and environmental objectives as a form of responsive corporate social responsibility, we propose instead to configure economically sustainable business models around the SDGs for shared value (Porter and Kramer, 2006). With the central focus on quantifiable target groups, our business model approach may also facilitate impact measurement and, with our typology of generic strategies, provide a structured foundation for impact comparison between organizations that create shared value.

In providing a general framework that is suitable for a broad range of SDGs covering social and environment goals, our strategic approach to business model design around sustainability targets unites the two traditionally distinct research fields of sustainability entrepreneurship and social entrepreneurship. We believe that only a unified view will enable us to consider and measure the impact of private or public initiatives that address several SDG's in combination. We hope that our approach contributes to future research along this path.

## References

- A/Res/70/1. 2015. Transforming our world: The 2030 agenda for sustainable development. Resolution adopted by the General Assembly on 25 September 2015.
- A/Res/71/313. 2017. Work of the Statistical Commission pertaining to the 2030 Agenda for Sustainable Development. Resolution adopted by the General Assembly on 6 July 2017.
- Arend RJ. 2013. The business model: Present and future—beyond a skeumorph. *Strategic Organization*, 11(4): 390-402.
- Bocken NMP, Short SW, Rana P, Evans S. 2014. A literature review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65: 42-56.
- Boons F, 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.
- Cohen B, Winn MI. 2007. Market imperfections, opportunity and sustainable entrepreneurship. *Journal of Business Venturing*, 22(1): 29-49.
- Dean TJ, McMullen JS. 2007. Toward a theory of sustainable entrepreneurship: Reducing environmental degradation through entrepreneurial action. *Journal of Business Venturing*, 22(1): 50-76.
- Dees JG. 2012. A tale of two cultures: Charity, problem solving, and the future of social entrepreneurship. *Journal of Business Ethics*, 111(3): 321-334.
- Dohrmann S, Raith MG, Siebold N. 2015. Monetizing social value creation – a business model approach. *Entrepreneurship Research Journal*, 5(2): 127-154.
- Eckhardt JT. 2013. Opportunities in business model research. *Strategic Organization*, 11(4): 412-417.
- Ehrenfeld, JR. 2012. Beyond the brave new world: Business for sustainability. In P Bansal and AJ Hoffman (eds.): *The Oxford Handbook of Business and the Natural Environment*, Oxford University Press, 611-619.
- Haigh N, Kennedy ED, Walker J. 2015. Hybrid organizations as shape-shifters. *California Management Review*, 57(3): 59-82.
- Hockerts K. 2015. How hybrid organizations turn antagonistic assets into complementarities. *California Management Review*, 57(3): 83-106.
- Marquis C, Park A. 2014. Inside the buy-one give-one model. *Stanford Social Innovation Review*, Winter: 28-33.
- Martin RL, Osberg SR. 2015. Two keys to sustainable social enterprise. *Harvard Business Review*, May: 86-94.
- Martins LL, Rindova VP, Greenbaum BE. 2015. Unlocking the hidden value of concepts: a cognitive approach to business model innovation. *Strategic Entrepreneurship Journal*, 9(1): 99-117.
- Massa L, Tucci C, Afuah A. 2016. A critical assessment of business model research. *Academy of Management Annals*, annals-2014.

Osterwalder A, Pigneur Y. 2010. Business model generation. a handbook for visionaries, game changers and challengers. New Jersey: John Wiley & Sons, Inc.

Pavlovich K, Corner PD. 2014. Conscious enterprise emergence: Shared value creation through expanded conscious awareness. Journal of Business Ethics, 121(3): 341-251.

Porter ME, Kramer MR. 2006. Strategy and Societa: The link between competitive advantage and corporate social responsibility. Harvard Business Review, 84(12): 78-92.

Porter ME, Kramer MR. 2011. The big idea: Creating shared value. Harvard Business Review, 89: 62-77.

Santos FM. 2012. A positive theory of social entrepreneurship. Journal of Business Ethics, 111(3): 335-351.

Santos F, Pache AC, Birkholz C. 2015. Making hybrids work: Aligning Business Models and Organizational Design for Social Enterprises. California Management Review, 57(3): 36-58.

Schaefer K, Corner PD, Kearins K. 2015. Social, environmental and sustainable entrepreneurship research: What is needed for sustainability-as-flourishing? Organization & Environment, 28(4): 394-413.

Zott C, Amit R. 2010. Business model design: an activity system perspective. Long Range Planning, 43(2): 216-226.

## Accounting Through the Business Model

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### Abstract

While the business model has become a popular concept in many academic disciplines, it has not been invited into the accounting sphere. A new development, Integrated Reporting, promises to challenge this, but unfortunately its conceptualisation of the concept is flawed. Can the accountancy profession grasp value propositions to customers?

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### Introduction

The business model concept has entered a growing number of academic disciplines during the past decade. Its impact has been impressive, as might be expected of such a fundamental and far-reaching concept. There are exceptions to this general trend, however. The present paper focuses on the comparatively modest reception the business model concept has received in the accounting discipline and argues there is reason to believe this could change given the pivotal role the business model concept is recognised to play within

Integrated Reporting (IR) development. Unfortunately, this does not promise to be a mere formality as current thinking on the business model in relation to IR is partial (Tweedie *et al.*, 2018), and perhaps intentionally so (Roslender and Nielsen, 2018). In our view, this is well understood by those who commend a particular interpretation of IR, one that threatens to emasculate the concept's capacity to radically reconfigure financial reporting in ways that might worry many of those who see themselves as the guardians of this project.

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Keywords: Business models, value propositions, accounting, customers.

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## Approach

This paper discusses the two fields of Integrated Reporting and a new visibility for customers in accounting and reporting.

## Integrated Reporting

For some years IR has been touted as the new generic model for financial reporting. It is envisaged as replacing the now ageing corporate reporting model that emerged in the mid-1970s. Concerns have been expressed about the latter model since the early 1990s but for several reasons these concerns have not prompted significant change. This is not least due to the inherently conservative nature of the global accountancy profession, and particularly its financial reporting constituency. Twenty years ago, corporate reporting seemed likely to be replaced by some form of business reporting model (ICAS, 1999) but the resilience of corporate accounting practices, and its guardians, effected its survival to the present day. IR advocates must recognise the strength and influence of these guardians.

IR originally emerged in South Africa approaching fifteen years ago. At its simplest IR recognises the necessity to account for a wider range of capitals than does corporate reporting and to a similarly wider range of stakeholders. Arguments for a stakeholder emphasis rather than the traditional shareholder emphasis have proliferated in recent years. IR originally emphasised the necessity to account to the environmental lobby (now the sustainability lobby). Consequently, in its early years IR attracted enthusiastic support from these stakeholders, including the environmental accounting community. The admission that it was crucial to take the environment into account was portrayed as a much merited and potentially valuable advance.

The environment was not to be the only additional capital to account for. Both intellectual capital and human capital, together with social and relational capital, are identified as additional capitals to the more traditional emphasis on physical and financial capital. The identification of six capitals was crucial in the framework the International Integrated Reporting Council (IIRC) identified in its 2013 conceptual framework for IR. The IIRC had emerged in 2010 to promote the IR concept, largely as envisaged by its South African creators, as a potentially feasible basis for a new financial reporting

approach. The subsequent commercialisation of the IR concept was not to everyone's liking, however, at the extreme being portrayed as a betrayal of the originally highly desirable admission of the need for a much more integrated approach to financial accounting and reporting. Flower (2015) provides one of the most excoriating critiques of the IIRC's reconfiguration of the initial concept. Such was the opprobrium conveyed in its pages, two stalwarts for a sustainability emphasis, Adams and Thompson, penned a pair of 'let's take a moment to think about this' responses published alongside it.

Leaving aside the debate about the compromised purity of the IR concept in the hands of the IIRC, which debate promises to run for some time yet, of more interest here is the way in which the IIRC has enrolled the business model concept in its IR framework. The business model sits at its very core, something clearly evident in figure 2 (IIRC, 2013:13). The six capitals are identified as inputs to the business model which sees them transformed into (six) outcome capitals. It is this transformation process that IR seeks to account for. This departs significantly from what corporate reporting presently seeks to account for, which might be conceptualised as the growth of the financial value of a business entity during an accounting period, as represented in the balance sheet. This financial value, and any increases (or indeed decreases) in it, is understood to be the rightful reward for those prepared to risk their capital in the venture itself.

The IIRC labels figure 2 the "value creation process", intimating that accounting for the business model is in fact accounting for value creation by the enterprise. This is because the business model is best understood to provide a visualisation of value creation, i.e., how value is created by the business enterprise. From a conventional financial reporting perspective, value is created for *shareholders*, who see an increase (or decrease) in the balance sheet and in turn the market value of their shares, be they individuals or institutional shareholders. Value creation *in relation to* a business model is not understood in this way, at least not in the first instance. Value is now to be understood to be created for, and delivered to, *customers* via appealing value propositions, a core concept in the business model literature and alongside it the strategic management literature. Since the 1980s the latter has reflected the

dominant role customers have in shaping sustained competitive advantage.

Customers: a new visibility in accounting and reporting  
Traditionally financial reporting has been shaped by the need to report on the enterprise to its owners. In recent decades it has been recognised that additional stakeholders have a range of different, and sometimes competing, interests in such financial information, as a result of which financial reporting has evolved in this direction. IR marks a further stage in this evolution, in some part as an effort to take into account the concerns of the broader society in respect of sustainability issues. More significantly, however, despite the suggestion that IR is based in a more inclusive reporting paradigm, continued emphasis on *value capture*, as the principal objective of shareholders, constitutes a major denial of fundamental change. While a business model as the visualisation of value creation and delivery is positioned at the core of the new reporting model, securing and demonstrating continued value capture remains the prime motivation for those charged with reporting enterprise performance.

The intellectual capital literature identifies customers and customer relationships as major constituents of relational capital, together with brands and reputation. Long acknowledged as key assets of enterprises, their importance has escalated in recent decades. The generality of intellectual capital's constituents, and prior to this many aspects of goodwill, have not been incorporated within the balance sheet despite their importance, for reasons widely understood by the accountancy profession, managers and shareholders alike. These reasons make sense within prevailing regulatory framework guiding financial reporting. Although it is possible to identify examples of accounting for customers, these have been pursued within the managerial accounting literature. In some cases, such accounting has been indirect, such as in accounting for quality or target costing. Work at the interface between managerial accounting and marketing management has produced a literature that focuses on documenting (=counting) a variety of customer attributes such as customer retention, customer referral and customer engagement (with a parallel brand-oriented literature). Many accounting practitioners and academics would question whether such developments might

be considered as accounting despite their utility for enterprise managements.

## Key Insights - Accounting Through the Business Model

Given the escalating importance of customers their relative invisibility within financial accounting and reporting is problematic. As long as the pursuit of robust balance sheet valuations prevails there seems little likelihood the impasse can be avoided. For this reason, the emergence of IR is to be welcomed. The reconceptualization of accounting and reporting its signposts is, however, potentially so fundamental it is likely to evince powerful resistance among the accountancy professionals.

Nielsen and Roslender (2015) offered the following characterisation of a business model:

*[A] description of an organisation's concept for earning 'money' [which] identifies the platform that connects value creation and value delivery between the organisation, its stakeholders, and its customers in order to capture value. (p.265).*

This characterisation consciously downplays the significance of accounting for value capture on the grounds that despite its various failings, the prevailing approach to financial reporting fulfils this role satisfactorily. The manner in which the guardians of financial reporting have sought to enrol the business model concept within IR marks a further attempt to refurbish a value capture emphasis, which is understandable and legitimate. In our view, however, this is not the most beneficial use of the business model concept within accounting.

The business model concept promises to facilitate accounting for value creation for and delivery to customers, which constitute generic activities that should now be recognised as posing the principal challenge to the accountancy profession, in tandem with the other management functions. A major dimension of this challenge is that financial values, which have for many generations provided the main preoccupation for those responsible for balance sheet preparation, will not be relevant to this exercise. Equally, the traditional

concern with costs that underpins a major part of income statement construction, and the greater part of cost and management accounting practice, is similarly of little relevance. In this context the 'value for money' aphorism that gained such currency a generation ago and continues to inform common-sense financial thinking, partially captures the transformation that is being signalled here. Its usual meaning is associated with an efficient use of financial resources, *inter alia* the limited spending power of individuals. However, on a daily basis many individuals engage in expenditures that contradict the pursuit of demonstrable financial value, preferring instead to secure a vast range of intangible or emotional value. Why else would so many people willingly exchange five euros for a cup of coffee?

The concept of the value proposition sits at the heart of business model thinking, something clearly evident in the case of Osterwalder and Pigneur's iconic Business Model Canvas (Osterwalder and Pigneur, 2010). Although it is easy to identify a variety of concrete business models explicitly intended to deliver financial as opposed to emotional value for money, Ryanair providing a powerful exemplar, the majority of contemporary business models are consciously (or sometimes not) informed by a recognition that the customer is normally seeking some level of emotional value from what is made available for them by the enterprise. Successful enterprises are those that fashion value propositions that satisfy the demands of their customers, albeit not at any cost. Excessive pricing will normally provide a degree of disincentive to purchase on the one hand and the motivation for competitors, new and old, to enter the market. This said, the margins that are at issue are not as sensitive as those asserted to characterise the competition existing between enterprises offering low cost value propositions, where cost leadership organises the marketplace. After Porter (1985), attractive product differentiation is likely to outweigh potential cost savings, viewed in absolute if not relative terms.

This set of business model related concepts is barely visible within the IR framework. Equally they are not part of the vocabulary of financial accounting and reporting, and as previously suggested are likely to engender discomfort among many within that particular community. From our perspective it is these ideas that should be recognised as constituting what should now be

accounted for in addition to what is presently the focus of financial accounting and reporting. This is quite distinct from what IR is represented as seeking to achieve. IR is touted as a possible successor to the prevailing mode of corporate reporting, a replacement that, as we have identified earlier, continues to privilege the value capture needs of shareholders, albeit not to the exclusion of some other stakeholders, some of whom are already being provided for to a degree. There is a strong argument that IR as presently envisaged by the IIRC and its supporters entails little beyond the provision of a marginally more inclusive balance sheet, based in the six generic capitals that are either enhanced, diminished or transformed in the course of the value creation process, as visualised in the enterprise's business model. There will need to be an increased level of narrative reporting of these latter processes since it seems unlikely that conventional hard numbers will be able to capture what has been accomplished, with significant emphasis on "what has been accomplished". Stripped right down, IR is principally focused on the production of historical information and is thus simply at odds with the future emphases of the business model concept as understood by most of those who commend it.

## Discussion and Conclusions

The phrase *accounting through the business model* is used here to focus attention on the challenge of accounting for value creation for and delivery to customers rather than accounting for value capture for shareholders. In so doing, we are conscious of the objection that we are doing little more than exchanging one privileged stakeholder for another, albeit in the case of customers a very large stakeholder. It is important to affirm that what is envisaged entails something different to accounting for customers, which as was previously noted is already being pursued as a core component of strategic management accounting. What is now to be accounted for is the intangible or emotional value, the pleasure, the positive sensations that customers experience as they embrace and enjoy appealing value propositions, arguably the antithesis of what the accountancy profession has, for generations, based its jurisdiction on. This is not a task that the accountancy profession can accomplish on its own, in much the same way that target cost management was quickly recognised to require inputs from a range

of management functions, none of which was prime despite the importance that value engineering plays in all such exercises.

The objection that, in effect, accounting through the business model demands that accountants quantify the unquantifiable, is likely to spring to the minds of many. To some degree this objection has already been partly rejected by sections of the profession by virtue of their uptake of narrative approaches to reporting and disclosure, something likely to expand further in an era of IR. Accounting through the business model in this way provides an opportunity for further innovation, including the fabrication of customer self-narratives focused on the demand for and supply of appealing value propositions as an exercise in the co-creation of value as recently identified within the marketing management literature.

## References

- Adams, C. A. (2015). "The International Integrated Reporting Council: a call to action", *Critical Perspectives on Accounting*, 47:23-28
- Flower, J. (2015). "The International Integrated Reporting Council: a story of failure", *Critical Perspectives on Accounting*, 47:1-17
- ICAS. (1999). *Business Reporting: The Inevitable Change*, edited by V Beattie, Edinburgh: Institute of Chartered Accountants of Scotland.
- IIRC. (2013). *The International <IR> Framework*, London: International Integrated Reporting Council.
- Nielsen, C. and Roslender, R. (2015). "Enhancing financial reporting: the contribution of business models", *British Accounting Review*, 47(3): 262-274.
- Osterwalder, A. and Pigneur, Y. (2010). *Business Model Generation: A Handbook for Visionaries, Game Changers and Challengers*, Hoboken NJ: John Wiley & Sons.
- Porter, M. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*, New York: The Free Press.
- Roslender, R. and Nielsen, C. (2018). Unlocking customer value: a critical appraisal of Integrated Reporting, *Critical Perspectives on Accounting* (forthcoming).
- Thomson, I. (2015). "But does sustainability need capitalism or an integrated report? a commentary on 'The International Integrated Reporting Council: a story of failure'", *Critical Perspectives on Accounting*, 27:18-22.
- Tweedie, D., C. Nielsen and N. Martinov-Bennie. (2017). "Evolution or abandonment? contextualising the business model in Integrated Reporting", *Australian Accounting Review* (eprint).

# A Review of Sustainable Business Models and Strategic Sustainable Development

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## Abstract

This paper summarizes sustainable business models by addressing definitions, archetypes and assessments. It then summarizes the framework for strategic sustainable development to highlight its systematic, scientific and social strengths. The discussion combines both concepts to conclude with a research approach that may scientifically and socially enhance sustainable business models.

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## Introduction

Sustainability issues will not be resolved by the government alone but require proactive action and innovation from the private sector. Kiron et al. (2017) reported in-depth global research from 2009 to 2016 on how businesses adopt and integrate sustainability into strategies and practices. The report concluded that sustainable business practices are not yet widespread and progress needs to be accelerated. Many business leaders execute strategies aligned with global sustainable development goals but not necessarily in sync with their core businesses. There is still a lack of fully understanding that opportunities can be created by embracing a sustainable

strategy (Kiron et al., 2017). This need for businesses to embrace sustainability spurred research on the use of business models (BMs) to help drive organizational sustainable development but it is still a new focus. In the summary of a special journal issue on business models for sustainability (BMfS), Schaltegger, Hansen and Lüdeke-Freund (2016) proposed that “a business model for sustainability helps describing, analyzing, managing and communicating: i) a company’s sustainable value proposition to its customers, and all other stakeholders, ii) how it creates and delivers this value, iii) and how it captures economic value while maintaining or regenerating

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Keywords: Sustainable business models; strategic sustainable development!

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natural, social and economic capital beyond its organizational boundaries” (p.6). They concluded that further integrative research is needed on using BMs to drive industry transformations. Similarly, the framework for strategic sustainable development (FSSD) has proven that science can help business leaders with sustainability transitions. The FSSD is a systematic, comprehensive and scientific approach that enables multilevel and cross-sectoral understanding and collaboration (Broman and Robert, 2017).

## Approach

This paper summarizes the sustainable business model (SBM) literature by addressing definitions, frameworks, archetypes, tools and assessments. The paper then summarizes the FSSD and discusses the limited literature that has combined both concepts. The body of literature was explored using Scopus to first gather data on ‘sustainable business models’ or ‘business models for sustainability’. Due to limited time, the review was not exhaustive and therefore all concepts may not be included. The second search was for ‘business model’ and ‘FSSD’ and returned four (one was redundant) journal articles published in 2017. Overall, the aim is to summarize the two concepts and propose the increased use of their combination to scientifically and socially enhance the development of SBMs.

## Key Insights

### Sustainable Business Models

Lüdeke-Freund (2010) theoretically examined the interrelations between ecological sustainability, business activities and BM components from a strategic management perspective to define an SBM as “a business model that creates competitive advantage through superior customer value and contributes to the sustainable development of the company and society” (Lüdeke-Freund, 2010, p.23). Morioka et al. (2017) explored the use of SBMs to integrate sustainability into core business decisions and defined an SBM as “a representation of business elements, their interrelations and the systemic context that enable sustainable value exchange with stakeholders towards corporate sustainability performance, translating and providing feedback between corporate strategy and operations” (p. 724).

Beyond definitions, some authors proposed frameworks and tools to develop SBMs and describe required components, functions and interrelationships. Stubbs and Cocklin (2008) generated characteristics and components of an ideal SBM to conclude that “an organization adopting an SBM develops internal structural and cultural capabilities to achieve firm-level sustainability and collaborates with key stakeholders to achieve sustainability for the system that the organization is part of” (p. 123). Joyce and Paquin (2016) expanded the original business model canvas (BMC) developed by Osterwalder & Pigneur (2010) to integrate environmental and societal considerations. This ‘triple layered business model canvas’ includes an environmental layer that adds a life-cycle perspective and a social layer that focuses on stakeholder engagement and management. The life-cycle perspective was also used to create the sustainable value analysis (SVA) tool. The tool analyzes the product lifecycle to systematically identify uncaptured value and convert it to opportunity (Yang, Vladimirova and Evans, 2017). Value uncaptured is an alternative way to think about the value creation and capture component of SBMs where four forms – value surplus, value absence, value missed, and value destroyed- are analyzed to generate ideas for SBM innovation (Yang et al., 2017). On the topic of value, the value proposition of the product-service systems (PSS) concept has linked it to SBM literature. PSS focuses on the customer’s usage and satisfaction for product development and requires thinking beyond the boundaries of existing practices (Tukker and Tischner, 2006).

Moving from theoretical concepts to practical transformation, Bocken et al. (2014) developed eight (subsequently nine in Ritala et al., 2018) SBM archetypes to stimulate innovative thinking for the creation of SBMs. Their research considered the entire value network and created new systems as opposed to only focusing on the existing firm and technologies. Following the logic that practice provides evidence of transitions in society and business, Ritala et al (2018) used the archetypes to create keywords for sustainable activities and quantitatively analyzed them to indicate sustainable efforts. They concluded that the majority of sustainable activities were linked to financial value and there was more focus on environmental than social and organizational efforts. Similarly focusing on ways to assess SBMs, Brehmer, Podoyntsyna and Langerak (2018) used Zott &

Amit's (2010) boundary-spanning systems approach to BM design elements -content, structure and governance- as the framework for the creation of sustainability codes and a performance assessment. Tauscher and Abdelkafi (2018) took a strategic management approach to create a simulation model that determines scalability and robustness of SBMs. They utilized feedback loops based on systems dynamics modeling principles in order to capture the complexity of each scenario.

In the theoretical development of SBMs, it can be seen that researchers have tried to embed sustainability into all processes and expand beyond organizational boundaries, embracing systems thinking and wider stakeholder collaboration (Stubbs and Cocklin, 2008; Lüdeke-Freund, 2010; Bocken et al., 2014; Brehmer, Podoyntsyna and Langerak, 2018; Tauscher and Abdelkafi, 2018). However, the research has not yet matured and there is a lack of agreed theoretical concepts and empirical testing (Dentchev et al., 2016; Evans et al., 2017). There is also a need for sustainability research to be more systematic and unified (Broman and Robert, 2017).

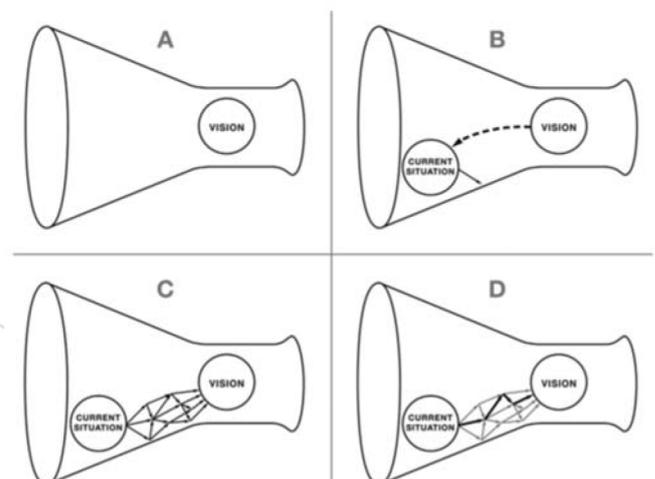
### The Framework for Strategic Sustainable Development

For over 25 years, the FSSD has undergone continuous development through a rigorous, systematic, and iterative process of peer and practitioner reviewing and testing (Broman and Robert, 2017). Best summarized by Missimer (2015), "...the FSSD has been designed to give guidance on strategically moving any region, organization, project or planning endeavor towards social and ecological sustainability in an economically viable way" (p.2). There are several motivations for the development and use of this sustainability framework. The benefits and opportunities of proactive action need to be understood by and illustrated to organizations. Identifying 'root causes' that are often overlooked or underestimated can create possibilities for 'root solutions' and eliminate fundamental unsustainable practices. Unsustainable practices become economically riskier as markets shift to be sustainability-driven and thus their elimination is automatically beneficial. The FSSD aims to identify these 'root causes' (Broman and Robert, 2017).

The FSSD also aims to provide an overarching multi-disciplinary structure that is complimentary to other

supportive tools and frameworks. A key outcome of the framework's development is a science-based definition for sustainability, 'sustainability principles', that is adaptable to various disciplines. It is compliant with available relevant scientific knowledge and allows for well-defined and measurable processes, comparisons and outcomes. This enables the quick elimination of scientifically unachievable visions. Many challenges are also faced when trying to solve current problems across various preferences and values, without potentially creating new problems in the future. Therefore, a unifying definition presents a needed agreement on what is essential for the sustenance of social and ecological systems to prevent unsustainable development (Broman and Robert, 2017).

Another key component is backcasting planning, which is a strategic planning method at the core of this framework. First the vision is defined that follows the 'sustainability principles' and then various scenarios are created in a step-by-step process to reach this vision. The vision must be principle based instead of specific to a scenario because as conditions change, what was previously perceived to be ideal may no longer be relevant and what previously seemed unachievable may become feasible. This is flexible and transferable. Finally the FSSD also includes operational guidelines, 'ABCD-procedure', to guide organizations through strategic sustainable transitions (Figure 1).



**Figure 1. The ABCD-procedure can be described using this funnel metaphor starting with the sustainable vision, highlighting the challenges of the current situation, creating ideas to reach the vision and then structuring these into a strategic plan (Broman and Robert, 2017, pp. 21).**

A critique of the FSSD was the weakness of the social attributes in comparison to the ecological and economic attributes. A similar trend was identified in the SBM literature and this seems to be the general case with sustainability transitions (Adams et al., 2016; Broman and Robert, 2017; Missimer, Robert and Broman, 2017; Ritala et al., 2018). To counter this, over the past 10 years, the FSSD has and continues to be socially enhanced by researchers focused on 'social sustainability principles' (Missimer et al., 2017).

There are several examples globally of FSSD applications that have led to comprehensively aiding organizations with the reduction of social and ecological non-compliance along with developing new opportunities. It was designed to unify various supporting mechanisms for sustainable development. Despite this, the uptake of the FSSD has been slow. This could be due to complexity and sophistication as skilled facilitation and significant effort is required to utilize the framework. For a comprehensive description of the FSSD and the most recent version, see Broman and Robert (2017).

## Discussion and Conclusions

Three journal articles were found that combine the FSSD and BM concepts. In an effort to enhance strategic sustainable development from a business perspective, Franca et al. (2017) combined the FSSD with the BMC through action research that is still ongoing. The BMC blocks were strengthened by the integration of sustainability-driven thinking towards longer-term market requirements. The FSSD was enhanced by thoroughly integrating a business perspective. The most notable business impacts from the combination were BM scalability to global level, risk identification and avoidance, investment strategy, and enhanced partnerships and social integration. Rauter, Jonker and Baumgartner (2017) used the FSSD to investigate how and why companies integrate sustainability into their BMs. They found that the FSSD provided greater clarity where there was a lack of specific sustainability goals. Kurucz et al. (2017) developed a conceptual model of relational leadership for strategic sustainability and incorporated findings from leadership research on two BM development and assessment tools theoretically aligned with the FSSD. The use of the FSSD appears to be a recent and underdeveloped approach to

embedding sustainability into the BM concept. Franca (2013) began research on BM design for strategic sustainable development when there were no other similar tools. Subsequently, as already seen in this paper which is not exhaustive, others have and continue to pursue different ways to embed sustainability in BMs (Joyce and Paquin, 2016; Yang et al., 2017) indicating that this topic warrants wider research and validation.

Given that actions in one location can have an impact on the other side of the world, a systematic view is needed for the complex topic of sustainable development (Stubbs and Cocklin, 2008). The FSSD provides a scientific and methodological multidisciplinary process for defining, implementing and analyzing sustainability. This leads to the question: *How can the FSSD as a theoretical framework support the development of SBMs?* This paper concludes by proposing that exploring the interrelationship between SBMs and the FSSD could lead to a systematic, scientific and strategically robust SBM concept that embeds sustainability in the core of organizations. This is because the FSSD focuses on the elimination of fundamental unsustainable practices which if left unchecked, could actually reverse progress. The research could improve the understanding of sustainability challenges and how they may be turned into opportunities. The research may also highlight whether or not current actions are indeed sustainable based on the FSSD definitions. Further, the socially strengthened FSSD could enhance the integration of social sustainability in SBMs. Overall, the research could be useful for organizations and policy makers in regards to guiding sustainability transitions using SBMs.

## References

- Adams, R. et al. (2016) Sustainability-oriented Innovation: A Systematic Review. *International Journal of Management Reviews*, 18 (2), pp. 180-205.
- Bocken, N. et al. (2014) A literature and practice review to develop sustainable business model archetypes. *Journal of Cleaner Production*, 65, pp. 42-56.
- Brehmer, M., Podoyrnitsyna, K. and Langerak, F. (2018) Sustainable business models as boundary-spanning systems of value transfers. *Journal of Cleaner Production*, 172, pp. 4514-4531.
- Broman, G.I. and Robert, K.H. (2017) A framework for strategic sustainable development. *Journal of Cleaner Production*, 140 (Part 1), pp. 17-31.
- Dentchev, N. et al. (2016) Embracing the variety of sustainable business models: social entrepreneurship, corporate intrapreneurship, creativity, innovation, and other approaches to sustainability challenges. *Journal of Cleaner Production*, 113, pp. 1-4.
- Evans, S. et al. (2017) Business Model Innovation for Sustainability: Towards a Unified Perspective for Creation of Sustainable Business Models. *Business Strategy and the Environment*, 26 (5), pp. 597-608.
- Franca, C.L. et al. (2017) An approach to business model innovation and design for strategic sustainable development. *Journal of Cleaner Production*, 140, pp. 155-166.
- França, C.L. (2013) *Introductory Approach to Business Model Design for Strategic Sustainable Development*, Blekinge Institute of Technology.
- Joyce, A. and Paquin, R.L. (2016) The triple layered business model canvas: A tool to design more sustainable business models. *Journal of Cleaner Production*, 135, pp. 1474-1486.
- Kiron, D. et al. (2017) Corporate Sustainability at a Crossroads: Progress Toward Our Common Future in Uncertain Times. *MIT Sloan Management Review*. May 2017.
- Kurucz, E.C. et al. (2017) Relational leadership for strategic sustainability: practices and capabilities to advance the design and assessment of sustainable business models. *Journal of Cleaner Production*, 140 (Part 1), pp. 189-204.
- Lüdeke-Freund, F. (2010) Towards a Conceptual Framework of 'Business Models for Sustainability. In: *Knowledge Collaboration & Learning for Sustainable Innovation, 2010*. Delft: R. Wever, J. Quist, A. Tukker, J. Woudstra, F. Boons, N. Beute, eds.
- Missimer, M. (2015) *Social sustainability within the framework for strategic sustainable development*, Blekinge Institute of Technology.
- Missimer, M., Robèrt, K. and Broman, G. (2017) A strategic approach to social sustainability – Part 1: exploring the social system. *Journal of Cleaner Production*, 140, pp. 32-41.
- Morioka, S. N. et al. (2017) Transforming sustainability challenges into competitive advantage: Multiple case studies kaleidoscope converging into sustainable business models. *Journal of Cleaner Production*, 167, pp. 723-738.

Osterwalder, A. and Pigneur, Y. (2010) *Business model generation: a handbook for visionaries, game changers, and challengers*. Hoboken, N.J: John Wiley & Sons.

Rauter, R., Jonker, J. and Baumgartner, R.J. (2017) Going one's own way: drivers in developing business models for sustainability. *Journal of Cleaner Production*, 140 (Part 1), pp. 144-154.

Ritala P. et al. (2018) Sustainable business model adoption among S&P 500 firms: A longitudinal content analysis study. *Journal of Cleaner Production*, 170, pp. 216-226.

Schaltegger, S., Hansen, E.G., and Lüdeke-Freund, F. (2016) Business Models for Sustainability: Origins, Current Research, and Future Avenues. *Organization & Environment*, 29 (1), pp. 3-10.

Stubbs, W. and Cocklin, C. (2008) Conceptualizing a "Sustainability Business Model". *Organization & Environment*, 21 (2), pp. 103-127.

Tauscher, K. and Abdelkafi, N. (2018) Scalability and robustness of business models for sustainability: A simulation experiment. *Journal of Cleaner Production*, 170, pp. 654-664.

Tukker, A. and Tischner, U. (2006) Product-services as a research field: past, present and future. Reflections from a decade of research. *Journal of Cleaner Production*, 14 (17), pp. 1552-1556.

Yang, M. et al. (2017) Value uncaptured perspective for sustainable business model innovation. *Journal of Cleaner Production*, 140 (Part 3), pp. 1794-1804.

Yang, M., Vladimirova, D., and Evans, S. (2017) Creating and Capturing Value Through Sustainability: The Sustainable Value Analysis Tool. *Research Technology Management*, 60 (3), pp. 30-37.

Zott, C. and Amit, R. (2010) Business Model Design: An Activity System Perspective. *Long Range Planning*, 43 (2), pp. 216-226.

# Re-Combining Value Chains: Cross-Industry Cooperation for Business Model Innovation

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## Abstract

The interplay between the value chain and business model innovation is a comparatively overlooked topic in business model literature. This paper explores how incumbents create a business model for biodiesel production through the re-combination of established value chains. The case study highlights the importance of ownership and cross-industry cooperation for business model innovation.

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## Introduction

The introduction of the business model into mainstream strategy research meant that the concept had to be contrasted with the existing analytical toolbox (cf. Teece, 2010). One of the key pre-existing concepts that has direct implications for the function of the business model is the external value chain. The importance of the value chain for the development of business models was pointed out in early research (e.g. Timmers, 1998) and the role of the value chain has been highlighted in work on the interaction between network ties and business model innovation (Allee, 2009; Oskam et al., 2018).

Vice versa, it has been noted that business model innovation may influence what role a firm plays in a value chain (Giesen et al., 2007) and that there is potential to use business models to modify or improve value chains (Linder and Cantrell, 2000; Tikkanen et al., 2005). However, the topic is still comparatively poorly understood. There are thus calls for research that explores the role that the value chain plays in relation to business model innovation in general (Zott et al., 2011), and for business model innovation for sustainable innovations, in particular (Boons and Lüdeke-Freund, 2013).

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Keywords: Business model innovation, value chain, governance

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A topic of importance in relation to value chains and business model innovation is the maturity of the firm (cf. Giesen et al., 2007). Incumbents possess resources and knowledge that allow them to scale up operations quickly, even in the more challenging case of sustainable innovations (Hockerts and Wüstenhagen, 2010). They also already have existing value chains in place. However, due to phenomena such as dominant logic and path dependence, incumbents face particular challenges associated with the development and implementation of new business models (Chesbrough, 2010; Massa and Tucci, 2013). Incumbents therefore often choose to experiment with business models externally through for example subsidiaries or joint ventures – options that offer both flexibility and control while limiting the risk exposure of other operations (cf. Markides, 2013; Visnjic Kastalli and Van Looy, 2013). Ventures building on cross-industry cooperation are of particular interest to incumbent firms since such ventures provide access to a wider resources base (financial, physical and intellectual) compared to when the firm is only active in its original business sector (cf. Giesen et al., 2007). Cooperation between enterprises can serve as a mechanism that promotes organizational learning, especially regarding the transfer of tacit knowledge (Tamer Cavusgil et al., 2003). Cooperation thus facilitates the use of complementary assets and expertise between firms. Through cooperation, firms can improve their ability to manage complex relationships and share risks associated with, for example, policy or product development (Schibany et al., 2000). However, cooperation may also entail the establishment of complex production systems, which frequently necessitates substantial investments in new business infrastructure. Moreover, for cooperation to function well, involved parties need to find common goals and incentives while building up trust (Hoejmose et al., 2012). This means that the formation of the business model and the accompanying value chain constitutes a considerable part of the managerial work that goes into the building of a joint venture. Despite enjoying the benefits associated with a more mature resource base, the development and implementation of a business model is still a considerable challenge for established actors (Markides, 2013). Hence, the purpose of this paper is to explore the role that the value chain plays in business model innovation when incumbent firms cooperate to establish joint ventures.

Firms that operate within the field of sustainable innovation are under particular pressure to establish a suitable business model (Boons et al., 2013). Sustainable innovations are often costly to the point where they are not competitive, successful ventures in this sector thus offer the opportunity to study critical success factors. An example of successful cross-industry cooperation is SunPine, a manufacturer of pine-based biodiesel, bio-oil and resin. The main product, pine-based biodiesel, is a sustainable alternative to fossil diesel fuel as it is carbon neutral in the sense that it does not add CO<sub>2</sub> to the atmosphere. SunPine operates from Piteå in northern Sweden. Since starting production in 2010, the company reached a turnover of SEK 950 million in 2016, producing 2 % of all diesel sold in Sweden during that year. SunPine claims that its biodiesel reduced CO<sub>2</sub> emissions from diesel vehicles with more than 1 125 000 tons<sup>1</sup> between 2010 and 2016. The company was founded through a cooperation between Sveaskog (Sweden's largest forestry company, owned by the Swedish state and holder of a 25 % stake in SunPine), Södra (Sweden's largest forestry cooperative, producing mainly timber goods and pulp products, also holding a 25 % stake), Preem (a petroleum corporation, owning oil refineries and a network of petrol stations in Sweden, likewise with a 25 % share) and Kiram (a Swedish biotechnology developer owning a 15 % share). Four years after starting production, a new player got involved. Lawter, a global chemical company specialized in pine-based chemicals, became a partner by acquiring 10 % of SunPine. Together these companies possessed the intellectual and process-related resources necessary to develop the products that are currently offered. Furthermore, they represent the entire value chain from forest-based raw material to the consumer product. Södra provides SunPine with crude pine oil, a residue originating from the production of pulp from forest resources, which in turn are provided by Sveaskog. Kiram represents the interests of the founder and inventor, who developed the initial prototype, whereas Lawter provides technological and process-related know-how as well as strategic insights. Preem processes the pine-based diesel in its refineries, mixing it with ordinary diesel into a blend consisting of at least 50 % renewable pine diesel. Through Preem's network of petrol stations, the final product is then

<sup>1</sup> SunPine public presentation from 2017.

sold to end-consumers all over Sweden. Consequently, the board of SunPine joins representatives from the main suppliers of the raw materials used in the production, the technology inventor, and the distributor of the final product. It is worth noting that even though SunPine is highly successful, much of its success can be attributed to the environmental policies implemented in Sweden with regards fuel taxes (cf. Palgan and McCormick, 2016). Without high taxes on fossil fuels bio-diesel would not be a competitive alternative.

## Approach

The interaction between the supply chain and the business model is a topic linked to managerial sensemaking about strategic issues (cf. Chesbrough, 2010; Tikkanen et al., 2005). Case studies are considered an appropriate approach when exploring, analyzing and describing how individuals, such as managers, make sense of complexity (Woodside and Wilson, 2003), making it a suitable research approach for this study. By allowing the researcher to address “why” and “how” questions in a broad and explorative manner, case studies enable the researcher to map contextual factors and help creating a picture of the logic behind a specific course of events (Yin, 2003). For this paper, we relied on interviews with business representatives involved in the founding and management of SunPine, including its CEO and the inventor that developed the technology around which the firm is built. The interviews were recorded and transcribed with a low level of inference. In addition, secondary material such as annual reports, news and press material was gathered and used both for the formulation of the interview questions and for establishing a better understanding of the case firm’s context and development. The analysis builds on SunPine being a paradigmatic case (Flyvbjerg, 2006) of a successful cooperation between incumbent firms that collectively develop a business model through the pooling of resources.

## Key Insights

As is often the case with innovation processes, the development of SunPine’s business model was neither quick nor simple. Both value creation (i.e. the production processes) and the value offer (i.e. what type of products and what properties those products should possess)

have changed over time. The idea behind the technology that SunPine builds on was originally conceptualized during the late 1990s by the inventor who is still represented in the firm through ownership of Kiram. In 2005, the idea was tested in a small experimental plant with promising results. With the support of a financial service provider, the inventor engaged with several potential investors and established a ‘dream team’ of representatives from the value chain that would become the base of SunPine’s business model. These investors had skills and resources that were used to iron out any remaining problems related to the complex production process, gradually increasing the efficiency of the production line. In 2010, a full-scale commercial production plant was opened and after some fine-tuning, plans were developed to complement operations with new types of production inputs as well as new outputs. The modifications meant that in 2016 SunPine could utilize two variants of the main raw materials and produce not only the two original products, pine-based diesel and bio-oils, but also resins (the result of the cooperation with Lawter) and turpentine. This development was the result of the capacity that the owners brought into SunPine and is tightly linked to the value chains that these firms already had in place. Making SunPine into a node for the value chains of its owners was a strategy pursued by the founder, who had the explicit goal to make SunPine part of a value chain that the owners would want to see grow at a rapid pace. Hence, the business model of SunPine can be said to be the result of an interweaving of the different value chains that the owners already were engaged in.

Analyzing SunPine we found three key lessons related to the success of the firm and the interplay between value chains and business model innovation for new joint ventures. First, the owners showed a common understanding not only of SunPine’s technology, but also of the potential of the resources that SunPine and its owners jointly possessed. This meant that it was possible to develop the business model further while increasing the yield of already existing value chains and introducing new partners without hurting the existing constellation. The common understanding also meant that it was important to the investors to keep key patents within SunPine. This arrangement provided clarity in relation to the management of patent-related issues. Second, the case reveals the importance of

active and smart – both in the sense of being technologically savvy and strategically astute – ownership. For example, Preem possesses expertise in relation to both present and future requirements for diesel fuels, as well as the demands of end-consumers. This is knowledge that could take considerable time and effort to acquire, and especially so for an inventor with no previous experience of the fuel market. Hence, by having all the key players from SunPine's value chain on the board, the strategic management team has an advantage when analyzing up- and downstream trends. Furthermore, it increases the quality of communications between these key stakeholders. Here the inventor's ability to recruit a 'dream team' of dedicated actors that were willing to have 'skin in the game' appears to be a considerable success factor, both in relation to business model development and for the technological development of the product. Third, each of the firms that eventually became owners of SunPine has a long-term dedication to sustainability and sees SunPine as a promising way for them and for society to move to a bio-based economy. SunPine thus represents a good fit both with existing value chains and with the greater strategic scope of each of the owners. The dedication to sustainability is also mirrored in the long-term contracts that the backers have entered. Since the partners needed to be patient during the start-up and development phase, the long-term dedication to both sustainability and to SunPine was portrayed as crucial for the success of the firm. Additionally, the dependence of SunPine on environmental policies meant that there were, and still are, concerns about the political risks associated with the firm's future. Without the dedication to the vision of a future bio-based economy, the constellation behind the firm, as well as its business model, would most likely have been quite different.

## Discussion and Conclusions

Studying the role that the external value chain played in relation to business model innovation for SunPine, we see an interaction that can be characterized as a process of adaptation and mutual strengthening. The initial business model that the inventor brought to the negotiation table was dependent on SunPine purchasing raw materials from existing supply chains dominated by large incumbent actors and selling its products to established industry leaders. This is a situation that, due to SunPine's

anticipated low bargaining power, squeezes profit margins. Furthermore, SunPine would be under constant threat of elimination through encroachment on both the supplier and the customer side. By making suppliers and customers into key stakeholders whose interests are constantly present in the board room, the inventor assured that the growth of SunPine is something that is beneficial for actors located both up- and downstream in the value chain. Consequently, the investors will support the development of SunPine's business model in ways that both capitalize on, as well as strengthen, their own external value chains. The case study thus shows the importance of 'smart capital', i.e. investors that have an interest in contributing with their knowledge and resources in order to make the firm grow (cf. Bjørgum and Sørheim, 2015), as well as the necessity to shape the business model of joint ventures in a way that makes the growth of the firm into something that not only generates revenue in the form of dividends but also strengthens the value chains of the investors. In relation to business model research, this case study thus highlights the importance of ownership and the role that ownership plays in relation to the formation of both business models and new value chains. The case study therefore illustrates the importance of good governance (cf. Chesbrough, 2010; Zott and Amit, 2010) and the weight that this should be given when incumbent actors are involved in business model innovation for joint ventures.

As pointed out in existing literature, the business model perspective on entrepreneurship and management has come to influence research on sustainable innovation to a degree where the commercialization process for sustainable innovations has turned into a matter of finding and establishing a suitable business model (Boons and Lüdeke-Freund, 2013). Hence, concerning sustainable innovation, our case study shows how a shift to a more sustainable technology is facilitated by cooperative business model development. The case not only shows the possibilities and potential pitfalls of cross-industry partnerships conducted by incumbents with quite different scale and scope, but it also indicates that such collaborations may contribute considerably to a more sustainable future. Finally, the study shows that this development can be achieved through a combination of cross-industry cooperation and relatively simple but powerful policy incentives, such as taxes on fossil fuels and tax exemptions for sustainable alternatives.

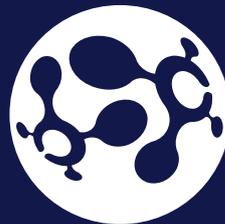
## References

- Allee, V., 2009. Value-creating networks: organizational issues and challenges. *Learn. Organ.* 16, 427–442. <https://doi.org/10.1108/09696470910993918>
- Bjørgum, Ø., Sørheim, R., 2015. The funding of new technology firms in a pre-commercial industry – the role of smart capital. *Technol. Anal. Strateg. Manag.* 27, 249–266. <https://doi.org/10.1080/09537325.2014.971002>
- Boons, F., Lüdeke-Freund, F., 2013. Business models for sustainable innovation: State-of-the-art and steps towards a research agenda. *J. Clean. Prod.* 45, 9–19. <https://doi.org/10.1016/j.jclepro.2012.07.007>
- Boons, F., Montalvo, C., Quist, J., Wagner, M., 2013. Sustainable innovation, business models and economic performance: An overview. *J. Clean. Prod.* 45, 1–8. <https://doi.org/10.1016/j.jclepro.2012.08.013>
- Chesbrough, H., 2010. Business model innovation: Opportunities and barriers. *Long Range Plann.* 43, 354–363. <https://doi.org/10.1016/j.lrp.2009.07.010>
- Flyvbjerg, B., 2006. Five misunderstandings about case-study research. *Qual. Inq.* 12, 219–245. <https://doi.org/10.1177/1077800405284363>
- Giesen, E., Berman, S.J., Bell, R., Blitz, A., 2007. Three ways to successfully innovate your business model. *Strateg. Leadersh.* 35, 27–33. <https://doi.org/10.1108/10878570710833732>
- Hockerts, K., Wüstenhagen, R., 2010. Greening Goliaths versus emerging Davids - Theorizing about the role of incumbents and new entrants in sustainable entrepreneurship. *J. Bus. Ventur.* 25, 481–492. <https://doi.org/10.1016/j.jbusvent.2009.07.005>
- Højmoose, S., Brammer, S., Millington, A., 2012. “Green” supply chain management: The role of trust and top management in B2B and B2C markets. *Ind. Mark. Manag.* 41, 609–620. <https://doi.org/10.1016/j.indmarman.2012.04.008>
- Linder, J., Cantrell, S., 2000. Changing Business Models: Surveying the Landscape. *Accent. Inst. Strateg. Chang.* 1–15. <https://doi.org/10.4018/978-1-59904-939-7.ch249>
- Markides, G.G., 2013. Business model innovation: What can the ambidexterity literature teach us? *Acad. Manag. Perspect.* 27, 313–323.
- Massa, L., Tucci, C.L., 2013. Business model innovation, in: Dodgson, M., Gann, D.M., Phillips, N. (Eds.), *The Oxford Handbook of Innovation Management*. Oxford University Press, Oxford, pp. 420–441.
- Oskam, I., Bossink, B., de Man, A.P., 2018. The interaction between network ties and business modeling: Case studies of sustainability-oriented innovations. *J. Clean. Prod.* 177, 555–566. <https://doi.org/10.1016/j.jclepro.2017.12.202>
- Palgan, Y.V., McCormick, K., 2016. Biorefineries in Sweden: Perspectives on the opportunities, challenges and future. *Biofuels, Bioprod. Biorefining* 10, 523–533. <https://doi.org/10.1002/bbb.1672>
- Schibany, A., Härmäläinen, T.J., Schienstock, G., 2000. *Interfirm Co-operation and Networking: Concepts, Evidence and Policy*.
- Tamer Cavusgil, S., Calantone, R.J., Zhao, Y., 2003. Tacit knowledge transfer and firm innovation capability. *J. Bus. Ind. Mark.* 18, 6–21. <https://doi.org/10.1108/08858620310458615>

- Teece, D.J., 2010. Business models, business strategy and innovation. *Long Range Plann.* 43, 172-194. <https://doi.org/10.1016/j.lrp.2009.07.003>
- Tikkanen, H., Lamberg, J.-A., Parvinen, P., Kallunki, J.-P., 2005. Managerial cognition, action and the business model of the firm. *Manag. Decis.* 43, 789-809. <https://doi.org/10.1108/00251740510603565>
- Timmers, P., 1998. Business Models for Electronic Markets. *J. Electron. Mark.* 8, 3-8. <https://doi.org/10.1080/10196789800000016>
- Visnjic Kastalli, I., Van Looy, B., 2013. Servitization: Disentangling the impact of service business model innovation on manufacturing firm performance. *J. Oper. Manag.* 31, 169-180. <https://doi.org/10.1016/j.jom.2013.02.001>
- Woodside, A.G., Wilson, E.J., 2003. Case study research methods for theory building. *J. Bus. Ind. Mark.* 18, 493-508. <https://doi.org/10.1108/08858620310492374>
- Yin, R., 2003. *Case Study Research: Design and Methods*, Third. ed. Sage, Thousand Oaks.
- Zott, C., Amit, R., 2010. Business model design: An activity system perspective. *Long Range Plann.* 43, 216-226. <https://doi.org/10.1016/j.lrp.2009.07.004>
- Zott, C., Amit, R., Massa, L., 2011. The Business Model: Recent Developments and Future Research. *J. Manage.* 37, 1019-1042. <https://doi.org/10.1177/0149206311406265>



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