

Investigating the Use of the Business Model Concept through Interviews

Alexander Osterwalder, Yves Pigneur

HEC Business School, University of Lausanne, Switzerland
 {Alexander.Osterwalder, Yves.Pigneur}@unil.ch

ABSTRACT

The term *business model* is widely used and is increasingly gaining importance as a business concept and management tool, particularly in e-business. Several authors propose the application of the business model concept in different domains, such as for e-business planning, IS alignment, visualization, innovation, e-business process design or improving communication between stakeholders. Yet, little has been said on the business world's perception of the use of business models, which this paper attempts to investigate through semi-structured interviews with company executives and business consultants.

Keywords: Business Models, Business Model Concept, E-Business, Management, Interviews, Ontology

1. INTRODUCTION

The term and concept of business models is continuously gaining in acceptance and importance after overcoming its passage as a buzzword. A query in Business Source Premier, a leading electronic database for scholarly business journals, shows that in the 1990s a veritable boom of the expression business model has taken place (see Figure 1). The term is found in numerous variations, such as “new business models”, “e-business models” or “internet business models” and has occurred 144 times in an abstract and 29 times in the title of a peer-reviewed article in the above-mentioned database.

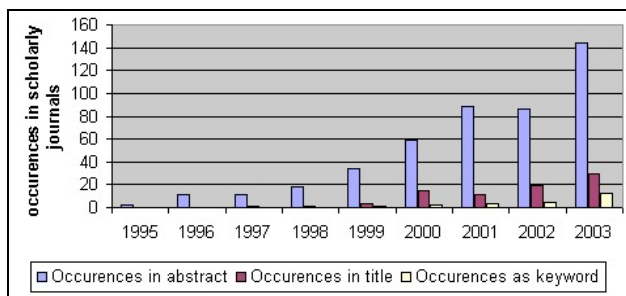


Figure 1 : Occurrences of the term business model in Business Source Premier

Yet, far more interesting than the number of occurrences of the term is the appearance of the business model concept as a management tool as outlined in a number of literature reviews by Stähler [12], Pateli and Giaglis [9], Rentmeister and Klein [10] and Osterwalder [6]. Most promisingly, several authors propose a conceptual approach to business models by describing and modelling a business model's elements and their relationships [1, 2, 4, 6, 13]. Furthermore, they outline a number of possible applications for such a conceptual approach, like business planning, IS alignment, visualization, innovation, process design or improving communication.

This paper aims at taking up the use of conceptual business models by investigating how the business world perceives the use of business models as a management tool. So far, little business model research has attempted to describe the confrontation between concepts and business world, with the exception maybe of Linder [5] and Gordijn [3]. The former has conducted interviews with company executives investigating business model relevance while the latter has applied the e³-value business model framework in consultancy work and published the experiences.

The originality of this paper is that it explores the business world's interest in and perception of different uses of the business model concept. In a dozen semi-structured interviews we captured the opinion of business leaders and consultant and subsequently analyzed the interview transcripts.

The paper is structured as follows. In the next section we explain the business model ontology that has served as the basis of the interviews on the use of business models. The third section outlines the methodology. In section four we describe the interview outcome and analysis before concluding in section five.

2. THE BUSINESS MODEL ONTOLOGY

To explain the interviewees the concept of business models we used Osterwalder and Pigneur's business model ontology as it represents a consolidation and synthesis of ongoing research in the business model domain [7, 8].

The business model ontology captures the money earning logic of a company and consists of nine main components. These so-called business model building blocks are *value proposition*, *customer relationship*, *distribution channel*, *target customer*, *value configuration*, *capability*, *partnership*, *revenue model* and *cost structure* (see Figure 2).

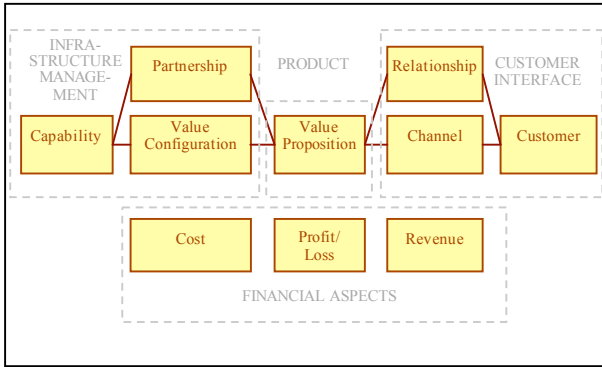


Figure 2 : The Business Model Ontology [6]

The starting point for investigating business model use in the interviews was the presentation of easyJet.com's business model (see Figure 3). The business model building blocks of this bird's eye view were also presented in more detail and in more fine-grained examples.

	PARTNERSHIP	easyJet Business Model (bird's view)	RELATIONSHIP	
	Regional airports UK air traffic control system (NATS)		Personalized e-mail relation Strong easyJet brand name	
CAPABILITIES	VALUE CONFIGURATION	VALUE PROPOSITION	CHANNELS	TARGET CUSTOMERS
Full airplanes (80-85%) Low turnaround times of airplanes	Value Network (Stabel, 1998)	Low fares (44 routes/17 cities) Easy online booking Transparent	Direct sales only Internet (90%) Call center (10%)	Low fare segment Private (40%) Business (60%)
	COST MODEL	PROFIT/LOSS	REVENUE MODEL	
	Low cost through online sales, ticketless flights, no free lunch, cheap airports, paperless office	Turnover 356 mio £ Profit 40 mio £	Yield management (dynamically forecasted prices based on offer and	

Figure 3: easyJet.com business model

3. METHODOLOGY

Between June and October 2003 we conducted a dozen 60 to 90 minutes long interviews with managers and consultants to assess the use of business models in the firm. These were a series of semi-structured interviews that aimed at investigating the relevance of business model research exploring possible uses of the business model concept. The interviews were all transcribed and subsequently compared and analyzed.

We introduced the interviewees to the business model concept by explaining the business model ontology described in section two. The interview itself then focused on the business model concept and its use in general.

The interview was structured into four parts (see Table 1). A first part was composed of questions on the use of models, formal models and business tools in the interviewees' companies. The second part consisted of a short explanation of the business model ontology by presenting a number of examples of business models or parts of a business model, such as easyJet.com, ColorMailer, Barnes&Noble and Nokia. The third part was destined at discussing Osterwalder and Pigneur's business model ontology. The goal of the most extensive fourth part was to investigate in which fields the business model concept could make a contribution.

Table 1: Business Practitioner Interview Structure

Question Domain	Questions
Questions on the use of business concepts & tools	How do you plan the general business objectives of your company? Do you use any conceptual tools to plan your business or to sketch the general direction in which your firm is heading?
	If yes, do you use any specific formalism(s) to do this?
	If yes, do you use any specific software tool to do this? If yes, which one(s)?
Demonstrations & Explanation of the Ontology	easyJet.com, ColorMailer, Barnes & Noble, Nokia
Questions on the fidelity with real word phenomena	In your opinion, what elements are missing in the model presented before?
	In your opinion, what elements should not belong to the model presented before?
	How could such a model help you define business indicators?
	How could such a model help you or a group of managers make better decisions?
	How could such a model improve some parts of strategic planning?
	How could such a model make it easier to chose and design appropriate information systems (e.g. software purchases like Customer Relationship Management or Supply Chain Management...)
	How would it be able to foster innovation in a company with such a model?
	How do you think such a model could improve business process design and engineering?
	How could it be helpful to have such a model to communicate your business model. (when making decisions, to communicate with employees)
Final discussion	Do you have any final comments?

The interviewees were conducted with 8 managers and 3 consultants. The managers represented companies in the domains of transport (1), media (1), services (4), retail (1) and industry (1) (cf. Table 2). All enterprises except the industrial company had a strong Internet component. Company sizes ranged from 3 to 3'315 employees. From the companies addressed and asked to participate in the interviews only one did not take part after initially agreeing. A general impression was that the interviewees were all quite receptive to the topic of business models. One manager of a start-up company mentioned: "I'm already happy that somebody tries to define the term business model. It was one of the most violated terms. Everything was a business model."

Everybody asked me what a business model is. I could never really define it. It is good that somebody is looking at this".

4. INTERVIEW OUTCOME AND ANALYSIS

The first part of the interview aimed at examining if the interviewees and their companies used models, formal models or even more sophisticated business tools in business planning. Of course this was not aimed at giving us such detailed insights to business concept use, as for example the study by Rigby [11], but it can serve as an indicator for companies being comfortable with the use of concepts. Not surprisingly, very few companies, but all the consultants used concepts or

models. One consultant put it very clearly: "I have seen very few managers use concepts or models, but then that is one of the reasons why they bring in us consultants". The CEO of the industrial company that actually used some formal concepts said that "it took quite a lot of work to use these concepts, but it was very helpful. What was not satisfying was that we didn't exploit them sufficiently once the work was done". At another point he mentioned that "at the end of the day there stays very little time for doing prospective business planning". Surprisingly, the smallest company interviewed used a conceptual tool for business planning. In the CEO's opinion the most important aspect of using a concept was consistency. Concepts would only bring advantages when rigorously applied.

Table 2: Interview outcome

	employees	use of concepts	use of tools	trial & error	defining indicators	improving decision making	improving strategic planning	helping in the design of ISS	increasing innovation	improving process design	improving communication
Retail over Internet	3	little	no	yes	q1		q2	q3	q4	q5	
Software in the mobile industry	5	little	no	yes		q6	q7	q8	q9		q10
Service over Internet	15	no	no	yes	q11	q12	q13		q14	q15	
Electronic trading platform in Finance	31	no	no	no		q16		q17			
Internet Industry Platform	80	yes	no	yes		q18		q19	q20	q21	
Industry	400	yes	no	no		q22		q23	q24	q25	q26
Entertainment with Internet component	10-1200	no	no	yes			q27				
Transport with Internet component	3'315	no	no	yes		q28	q29	q30	q31		
Consultant 1		yes	no	-	q32	q33, q34		q35	q36	q37	q38
Consultant 2		yes	no	-	q39	q40	q41		q42		q43
Consultant 3		yes	no	-		q44					

■ positive answers
 ■ negative answers
 ■ neutral answers
 q = quote

The younger companies had all made business plans during their start-up phase. This could also be seen as the use of some sort of concept, as most of them had structured their business plan according to recommendations in books available on the market. One executive compared the business model concept to the business plan approach and saw it as a quite useful checklist, particularly for start-ups.

A surprising finding was that a large number of companies relied deeply on trial and error to introduce new aspects to their business. The planning for this relied essentially on drafting text documents with a Word processor and calculating the financials with a spreadsheet program.

The fourth and major part of the interview aimed at investigating the interviewees' opinion on different business model concept applications. Seven areas were identified and presented to the interviewees, namely the definition of indicators, decision making, strategic planning, designing information systems, innovation, process design and improved communication.

The two most important themes that were isolated from the answers to the seven questions were transparency and communication. They appeared several times as answers to several different questions. Transparency was particularly mentioned by two managers and two consultants. For example to the first question on

business indicators one manager mentioned: *"it is important to make things transparent to show where cost and risks come from. Transparency is very important. [...] Such a framework can be interesting"* (cf. quote q1 in Table 2).

Communication was another recurring theme throughout the answers and explicitly addressed in the last question on communication. Especially in question two on decision making communication was mentioned by four interviewees in combination with transparency: *"it's also about transparency. Somebody puts up the sheet and says this is our company and this is the way it works. Not everybody understands the same thing under the functioning of a company"* (q33). One manager that was less enthusiastic about the business model concept's role in improving decision making acknowledged: *"it helps in communicating, in that sense it may improve decision making. But at least this way people talk about the same thing"* (q12). One CEO of an industrial company said that a business model *"can be very helpful if not too complicated and adapted to specific managerial levels for decision making: employee communication; customer presentations (screened); and training purposes (employees and customers)"* (q26) and that *"it [the business model] is a very useful instrument to initiate discussions with employees, partners or customers about process improvements. The visualization helps also in the internal or external communication of business decisions"* (q25).

Table 2 gives an overview of the interviews depicted in the following sections of the paper, showing the interviewee's economic domain, the number of employees, the company's use of concepts and tools, as well as the use of trial & error, and, the interviewee's position concerning the questions. As outlined above the questions ranged from *"can the business model concept help in defining indicators"* to *"can the business model concept improve communication"*. Favourable answers are indicated in green, reluctant ones in red and neutral ones in grey.

4.1 Defining Indicators

The first question concerned defining indicators in a rapidly changing business environment characterized by ICTs and e-business. While quite a few interviewees seemed favourable to the idea that the use of the business model concept could improve defining business indicators they particularly stressed financial indicators. One interviewee pointed out the importance of transparency regarding costs and risks (q1). A consultant insisted on the financial relationships: *"If I can change parameters in the model and see how this impacts costs, profits, then yes. If you can model cost structure and profitability you have to integrate it with the how and who [infrastructure and customer relationship]. I have to understand how factors influence each other and then I will look at evolutions more closely with my controllers"* (q32). The chief

operating officer (COO) of a company with 15 employees was rather critical and remarked that *"in a company like ours everything is in the heads of the people"*. He saw the value of the business model approach elsewhere: *"Where it can be very important is on the venture capital side or the investor side where you have to map business models quickly"* (q11). Astonishingly, few interviewees bought in on the idea of not only defining financial indicators, but defining indicators throughout the business model pillars. One consultant that understood this asked in what the idea of deriving indicators from the business model was different from the balance scorecard concept (q39).

4.2 Improving Decision making

The reactions to the second question on improved decision making through tools based on the business model approach were mixed. Many of the interviewed saw an indirect influence on decision making through discussing the fundamentals of a business (q34, q40, q18, q28) and through improving communication. The executive from the transport industry saw the force of schematizing in asking fundamental questions: *"You will have to ask yourself in which box [element] I put what - it allows me to look at things from a new angle. It forces you to ask questions. But I see this rather as a tool for start-ups"* (q28). One manager of a start-up company talked about his experience at a large corporation where they used a simple conceptual model to communicate during meetings. As regards the business model concept he noticed that it may help people talk about the same thing and thus improve decision making (q12). Another COO was quite enthusiastic stating *"it would certainly help to make better decisions. Oh yeah, I'd love to see this in my department"* (q16). One of the interviewed consultants acknowledged the value of the business model concept in communication but perceived it as too static to improve decision making (q44). The founder of a software company in the mobile industry felt that the problems he experienced in decision making were much more related to human aspects of the deciders (q6). The CEO of an industrial company was rather favourable, but questioned the availability of business data, *"the framework can help to better set priorities, however, to better support the decision process, the availability of business data needs to be ensured"* (q22). Furthermore, he stressed the importance of having to be able to *"introduce such a business model framework within reasonable means and resources"*.

4.3 Improving strategic planning

The business model concept's possible direct or indirect contribution to improving strategic planning was perceived by all but two interviewees that answered the question. The CEO of the smallest company interviewed saw the business model concept as a way to outline the steps necessary to achieve a strategic goal (q2). Another

manager saw the advantage in taking into account all the elements of a business model (q7). A consultant proposed combining business model and scenario approach in order to have an impact on strategic planning: "*[The business model concept] can indirectly influence direct strategic planning through scenarios and transparency*" (q41). One executive that was reluctant stated: "*We would think what kind of skills we need. We would make a cost model and a revenue model. We would make a prototype and look if it works. If it doesn't work we would stop the test*" (q13). This approach remarkably resembles some of the structures of the business model concept. The executive from the transport industry was also reluctant and thought that the ontology could have an impact on strategic planning if it allowed simulation (q29). Finally, the executive from the entertainment industry observed that looking at his enterprise through the business model lens opened up new perspectives that were not usual to his business (q27).

4.4 Helping in the Design of ISs

The fourth question on improving the design of information systems (IS) was not answered by all the interviewed practitioners because not all of them felt expert enough to reply. The answers that were given were quite mixed and split between three supporters and three opponents of the idea. Noteworthy, the supporters felt very strong about the necessity to describe the business logic of a company to improve IS design. The CEO of the industrial company, the COO of the financial platform and one of the management consultants strongly backed the link between business model and IS design. The first declared "*once business models/processes are clearly defined and evaluated, respective appropriate information systems can be easily defined. There are significant differences in the business processes supported by off-the-shelf information systems. Therefore, a business framework can not only help, but is almost required to identify the information system with the best fit*" (q23). The second proponent mentioned: "*I think you make things much easier here... much, much easier. Well I think what we've done is that [...] it presents it [the business model] in a clear way. So everybody starts in the same place. Picking up on your point about taking it out of a manager's head and putting it on a piece of paper*" (q17). The consultant answered like the CEO: "*You absolutely need a model before you can do anything*" and "*especially if the dependencies and interactions of the different building blocks become clearer. Transparency is important for understanding what we do and how the building blocks interact*" (q35). The CEO of the small Internet retailer felt that the business model concept would probably not improve IS design because of its static nature (q3). Similarly, the co-founder of the small software company remarked that the tools based on the business model approach "*may influence IS design, but will not essentially help to*

improve it" (q8). An executive from an Internet industry platform had the impression that according to his experiences "*engineers would not be favourable to use such a tool as the business model concept*" (q19). Another manager saw the use of the ontology in IS design particularly for new economy companies of a networked type (q30).

4.5 Increasing innovation

With regard to innovation there were two positions, the first accentuated the human capability aspect of innovation (q9, q14, q42) and the second drew attention to the fact that the visualization and transparency created by business models could improve innovation (q4, q36, q31). A proponent of the first view stated: "*What is important is thinking it through. That is what takes time. If we look at the value proposition it is the thinking behind it that is important. If we are in front of investors the important thing is that it is innovative, that there's a prototype, that it was tested and that it comes over technically. And that thinking takes time*" (q14). Similarly, another one mentioned that "*innovation is more about the people*" (q9). A consultant commented that the business model approach may help in innovating but that "*the tool will not generate innovation. You still need the creativity of the people*" (q42). A proponent of the positive effect on innovativeness pointed out that thinking through a business model will automatically stimulate innovation: "*Establishing/elaborating business models and business processes requires thorough and in-depth analyses which leads by itself to innovative ideas and incentives on how to improve key indicators and elements of business models and how to better process steps or phases*", (q24). Similarly, another executive had the impression that structuring the thought process could be an advantage for brainstorming and have an effect on innovation (q20).

4.6 Improving Process Design

The interviewees that answered the question on improving process design were all relatively positive except for one that underlined the model's static nature as he had already done for information systems (q5). They saw the business model's value in its high level business logic description: "*I think something like this model is the foundation. Before you can describe processes you have to have something like this at the generic high level*" (q37). The executive of a start-up, however, emphasized that this is too sophisticated for small companies, "*in a small company this would be overkill*" (q15). The executive from the Internet industry platform had the impression that such a model would help people keep in mind the whole, because they would often forget other parts of the company when designing processes (q21).

4.7 Improving Communication

As explained above its ability to improve communication between different parties was seen as one of the strong points of the business model concept. One consultant saw it as "*a formalism that everybody understands to speak the same language*" (q43). Another one pointed out that it helped people to talk about the same thing: "*First you have to assure that everybody is talking about the same thing. For example in customer relationships you can imagine talking about hundred different things. It's about presenting things in a simple way that is certainly the most important*" (q38). One interviewee saw tools based on the business model concept as a means to communicate with employees, customers and for training purposes (q26). The interviewee opposed to the positive effect on communication felt that "*it's too complicated to represent a business model in 9 elements. It's [a business model] more about how I make my money*" (q10).

5. CONCLUSION

Recapitulating, the interviews have shown a number of different things. The executives of very small companies have mixed opinions concerning the use of the business model concept, particularly in applying it to their firm. Though not completely reluctant to the use of the business model concept they feel that the business model of their company is already sufficiently clear. It also seems that the larger the companies of the interviewees were the more favourable they tended to be regarding the use of the business model concept - with the exception of the executive from the transport industry. The consultants all seemed quite comfortable with the idea of applying the business model concept to a number of different problem domains. The main strengths of the business model concept that came out of the interviews were threefold:

- a) The ability to create a transparent big picture of a business and to externalize the relationships and dependencies of the business elements.
- b) Its use is comparable to the use of a commonly understood language to enable communication.
- c) It can stimulate approaching and understanding the fundamental questions of a business.

Of course the above mentioned strengths are simply impressions of the interviewed business practitioners. Yet, they give a good impression of how business practitioners feel of the use of the business model concept in different applications. However, further research would include applying different business model approaches to different concrete cases and application domains in order to assess their performance in the field.

References

- [1] Afuah, A. and C. Tucci, *Internet Business Models and Strategies*. 2nd edition ed. 2003, Boston: McGraw Hill.
- [2] Gordijn, J., *Value-based Requirements Engineering - Exploring Innovative e-Commerce Ideas*. 2002, Vrije Universiteit: Amsterdam, NL.
- [3] Gordijn, J. and J.M. Akkermans. Does e-Business Modeling Really Help? in 36th Hawaii International Conference On System Sciences. 2003. Hawaii: IEEE.
- [4] Hamel, G., *Leading the revolution*. 2000, Boston: Harvard Business School Press.
- [5] Linder, J. and S. Cantrell, *Changing Business Models: Surveying the Landscape*. 2000, accenture Institute for Strategic Change.
- [6] Osterwalder, A., *The Business Model Ontology - a proposition in a design science approach*, in *Institut d'Informatique et Organisation*. 2004, University of Lausanne, Ecole des Hautes Etudes Commerciales HEC: Lausanne, Switzerland. p. 173.
- [7] Osterwalder, A. and Y. Pigneur. An e-Business Model Ontology for Modeling e-Business. in 15th Bled Electronic Commerce Conference. 2002. Bled, Slovenia.
- [8] Osterwalder, A. and Y. Pigneur, *An ontology for e-business models*, in *Value Creation from E-Business Models*, W. Currie, Editor. 2004, Butterworth-Heinemann.
- [9] Pateli, A. and G. Giaglis. A Framework For Understanding and Analysing e-Business Models. in Bled Electronic Commerce Conference 2003. 2003.
- [10] Rentmeister, J. and S. Klein, *Geschäftsmodelle – ein Modebegriff auf der Waagschale*. Zeitschrift für Betriebswirtschaft, 2003(73): p. 17-30.
- [11] Rigby, D., *Management tools and techniques: A survey*. California Management Review, 2001. 43(2): p. 139-+.
- [12] Stähler, P., *Geschäftsmodelle in der digitalen Ökonomie. Merkmale, Strategien und Auswirkungen*, in MCM. 2001, University of St.Gallen HSG: St.Gallen.
- [13] Tapscott, D., D. Ticoll, and A. Lowy, *Digital Capital – Harnessing the Power of Business Webs*. 2000, Boston: Harvard Business School Press.