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Nielsen, Christian; Lund, Morten; Bukh, Per Nikolaj

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Moving towards maturity in business model definitions

Authors:

Christian Nielsen, Morten Lund and Per Nikolaj Bukh

Corresponding author:

Christian Nielsen, Professor
Business Model Design Center
Aalborg University
Fibigerstræde 11-58, 9220 Aalborg Ø, Denmark

E: chn@business.aau.dk

Web: www.bmdc.aau.dk

SSRN: <http://ssrn.com/author=2361613>

AAU: <http://personprofil.aau.dk/profil/115869>

@Linkedin: dk.linkedin.com/in/christianhnielsen/

#BMBUZZ: <http://bit.ly/bmb2014v>

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1. INTRODUCTION

The field of business models has, as is the case with all emerging fields of practice, slowly matured through the development of frameworks, models, concepts and ideas over the last 15 years. New concepts, theories and models typically transcend a series of maturity phases. For the concept of Business Models, we are at the



Figure 1: The concept maturity line

In figure 1 above, the move from phase 2 to 3 significantly heightens the requirements for methodological coherence and structure and therefore it is also time to converge otherwise separate research streams and attempt to attain a common appreciation of business models. In the wake of this, a number of "business model associations" have emerged in recent years, e.g. around Osterwalder and Pigneur's Business Model Canvas on www.businessmodelgeneration.com and www.businessmodelyou.com. There is also an assembly on non-coupled researchers and practitioners on www.businessmodelcommunity.com.

In an attempt to move the field into new ground 2011 saw the launching of the Business Model Design Center (BMDC) as an interdisciplinary coordination hub for researchers and common research projects. BMDCs aim is to function as a natural hub between the technology-based research environments and the business oriented research environments, thereby conforming interests from different environments. BMDC is therefore a natural partner for coordinating interdisciplinary research projects.

BMDC is primarily a project-based research center with affiliates from numerous professional and geographical backgrounds and interests. This is seen as a key strength, and for BMDC to be able to undertake large scale research projects, it relies to a large extent on ad hoc affiliations leveraged from the existing network. In

verge of moving from phase 2 to 3, after having spent a lot of time during the 1990's and 2000's arguing for the importance of understanding business models properly and discussing the content and potential building blocks of them. Therefore, in terms of maturity - the time for focusing on the more complex and dynamic aspects of business models seems to be right - right now!

other words, BMDC leverages an asset-light business model for business model research!

This debate on attaining maturity is important for the field in the sense that this will be a prerequisite for it to become accepted as a discipline in line with accounting, innovation, entrepreneurship, finance etc. In the remainder of this paper we first discuss business model definitions from the perspective of different typologies, here relating to the breadth and scope of the suggested frameworks. After this we discuss the characteristics of business models as seen in the early literature. By characteristics we do not mean building blocks *per se*, rather the idea is to discuss the roles and affiliations of the business model and how different contributions seek to place the business model in the context of other fields of practice.

2. BUSINESS MODEL TYPOLOGIES

A substantial amount of literature is available on business models, including the components making up a business model (cf. Taran 2011) and frameworks of business models (Osterwalder *et al.* 2010), and still there seems to be a general consensus that no precise definition of a business model exists. According to Porter back in 2001 the definition of a business model was murky at best. Therefore, the theoretical grounding of most such business model definitions is still quite fragile despite the fact that at the pre-

sent a substantial amount of literature is available on business models, including components, frameworks definitions etc. The aim of this paper is to give an overview of existing definitions of a business model,

and to provide frameworks for understandings of business models that are found in the literature. Fiel (2014) compares and categorizes a number of business model definitions below:

George & Bock (2009)	Morris et al. (2005)	Osterwalder et al. (2005)
<ul style="list-style-type: none"> » Organizational design » The resource-based view of the firm » Narrative and sense-making » The nature of innovation » The nature of opportunity » Transactive structures 	<ul style="list-style-type: none"> » Economical level » Operational level » Strategic level 	<ul style="list-style-type: none"> » Activity/role-related approach » Value/customer-oriented approach

Figure 2: Categorizations of business model definitions (Fiel 2014)

According to Osterwalder *et al.* (2004), a business model is a conceptual tool that contains “a set of elements and their relationships and allows expressing a company’s logic of earning money. It is a description of the value a company offers to one or several segments of customers and the architecture of the firm and its network of partners for creating, marketing and delivering this value and relationship capital, in order to generate profitable and sustainable revenue stream”. In this sense Osterwalder *et al.* (2004) here acknowledge that a business model to some extent becomes a mediating mechanism between the inside and the outside of the company.

Business model definitions and frameworks vary significantly according to whether they factor in outside relationships. Although the review here is structured around three types of perceptions of business models, these can only become crude classifications, as a great deal of overlap exists between business models and other concepts such as value chains and strategy. Thus, a clear interpretation of the boundaries of the review is a matter of interpretation. Here we have chosen to classify business model frameworks according to whether they concern generic descriptions of the business or whether they are more specific in their descriptions. The later category is divided according to whether the definitions solely

consider elements inside the company (narrow) or also consider elements outside (broad).

The term generic business models, includes suggestions and definitions concentrating mainly on the elements such models ought to be comprised of in order to qualify as business models. On one hand this will provide an indication of which elements that could be considered necessary for the description of value creation from a business perspective, and on the other hand help differentiate business models from other related concepts and research areas such as supply chain management and organizational theory in general.

Next we focus on specific business models that are characterized by being more detailed than the generic business models, most often incorporating suggestions for specific elements or linkages; and often stating some kind of causality between the elements such as: activities, departments, processes or other. In the review we distinguish between broad specific business models that comprise focus on the whole enterprise system, including how the firm is positioned according to its partners in the value constellation, and narrow specific business models that focus on the specific, often causal, links between organizational activities, processes and the likes, and which do not consider external aspects.

It must also be admitted that the amount of literature referring to the business model concept has been almost exploding within the few years, so an exhaustive review is difficult. Figure 3 below illustrates this graphically, as the development in the number of published academic articles containing the term "business model" is depicted. Both of the article databases Ingenta and Emerald contain similar trends, starting from almost none in the mid-1990's to experiencing solid increases around the year 2000 and an explosion after 2005.

Year	Academic papers
2010	61070
2009	4573
2008	3238
2007	2462
2006	1976
2005	1505
2004	1325
2003	1098
2002	900
2001	659
>2000	598

Figure 3: Application of the term business model.

2.1 Generic business model definitions

Traditionally, business models have been associated with industry models, where certain factors are likely to improve the chance of success for an organization almost in such a way that "[t]he name of the industry served as shorthand for the prevailing business model's approach to market structure, organizational design, capital expenditures, and asset management" as Sandberg (2002, 3) provocatively states.

This is for instance seen in the airline industry, where Hansson *et al.* (2002) illustrate how the traditional airline companies currently find themselves in a competitive situation where they must change their business models in order to remain profitable, and the pharmaceutical industry where Burcham (2000) accentuates that companies must acknowledge that information technology is changing not only their business models but the entire pharmaceutical value chain. Thus, from this perspective, the business model relates to general industry attributes. These industry attributes are at the same time determinative with respect to common organizational aspects, i.e. which components that constitute a profitable business in the respective sectors.

The weakness of an approach focussing mainly on industries is that changes, e.g. new technologies, often give rise to a new or updated version of the traditional business model.

Although of course there is a certain stability in the ways of doing business within specific industries, and despite the fact that industry structure to a great degree dictates which business models become profitable, our aim here is to move beyond a mere listing of industry types and associated business models. In the context of so-called highly turbulent and competitive business environments, Chaharbaghi *et al.* (2003) identify three interrelated strands which form the basis of a meta-model for business models: characteristics of the way of thinking in a company, its operational system, and capacity for value generation. Although being very general notions, three elements are expressible in more concrete terms. For instance, the characteristics of the way of thinking in a company essentially pertain to a strategic conception, while capacity for value generation is very much in line with a resource-based perspective. Finally, the element 'operational system' hints to the inclusion of processes and a value chain perspective.

Hedman & Kalling (2003) propose that a generic business model is composed of the causally related components: customers, competitors, the company offering (generic strategy), activities and organisation (including the value chain), resources (human, physical and organisational), and factor and production inputs. These notions are very much in line with Porter's

(1991) causality chain model, which can be considered an account of a business model. Somewhat related to Porter's ideas are the recent suggestions relating to causal modelling of the service-profit-chain (Heskett *et al.* 1994) as a kind of general business model for the service sector.

Basing his ideas on the service management literature from the 1980's, Normann (2001) distinguishes between three different components of a generic business model: The external environment, the offering of the company and the internal factors such as organisational structure, resources, knowledge and capabilities. The first component is the external environment, its needs and what it is valuing. These characteristics are in turn prerequisites for the offering of the company, which is the second component. Finally we have internal factors such as organisational structure, resources, knowledge and capabilities, equipment, systems, leadership, and values which are necessary for the company to deliver its offering. In comparison to Hedman & Kalling, Normann goes one step further by implicating that the concept is systemic in nature, and that the relationship to the external environment depends on the offering, which in turn is dependent upon firm-internal factors.

In this manner, the generic typology constitutes a meta model or ontology for business models. According to Chaharbaghi *et al.* (2003), there are three interrelated strands forming the basis of such a meta-model for business models: characteristics of the way of thinking in the company, its operational system, and capacity

for value generation. For instance, the characteristics of the way of thinking in the company essentially pertain to a strategic conception, while capacity for value generation is very much in line with a resource-based perspective.

Another terminology is chosen by Osterwalder & Pigneur (2003), who propose a business model 'ontology' which consists of four main pillars: product innovation, customer relationships, infrastructure management, and financial aspects. These can be further decomposed into their elements. This definition is very similar to the ideas spawned from Kraemer *et al.*'s study (1999), where the four building blocks of Dell's business model are identified as direct sales, direct customer relationships, customer segmentation for sales and service, and build-to-order production, as is also confirmed by Alt & Zimmermann (2001), who distinguish between six generic elements of a business model. The first three elements of Alt & Zimmermann's suggestion are recognizable: mission (including vision, strategic goals and value proposition), structure (value chain), and processes (activities, value creation processes). However, the latter three elements: revenues (bottom line), legal issues (e.g. regulation), and technology (impact on business model design) are new in this context. Betz (2002) also acknowledges the element of linking the various ideas of value offering, value creation etc. to the bottom line. He argues for the construction of a generic business model incorporating the four elements: resources, sales, profits and capital (See figure 4).

Resources Input: Supplies Output: Innovation	Profits Input: Efficiency Output: Earnings
Sales Input: Revenue Output: Sales volume	Capital Input: Investment Output: Share price

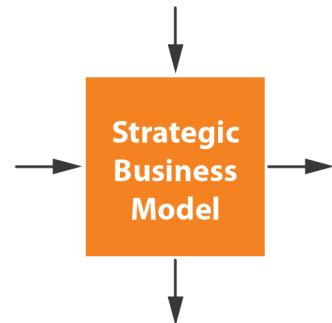


Figure 4: Constructing a generic business model (Betz 2002, 22)

As can be seen from this brief review of the kind of business models that we here term generic business models, the characteristics are quite similar. However, the characteristics focussed on in the generic business models are, as could be expected, rather general and often encompassing the whole enterprise or value creating system (chain, network etc.).

2.2 Broad business model definitions

The first category of the specific business model definitions, i.e. business models that incorporate more precise suggestions with respect to the elements and linkages that enable value creation, is termed "broad" business models. In our terminology, this means that their focus is on the whole enterprise system, including how the firm is positioned according to its partners in the value constellation. As a general characteristic the broad models typically take a value chain perspective and include relationships to suppliers and customers while also taking external forces into account. Thereby in a sense also the concept of strategy.

A typical example of a broad business model understanding is Lev's (2001, 110) company 'fundamentals'. Drawing attention to Tasker's (1998) analysis of technology company conference calls, Lev emphasizes that the "information most relevant to decision making in the current economic environment concern the value chain of the enterprise (business model, in analysts' parlance)" (Lev 2001, 110; original emphasized).

However, Lev's definition of a business model takes its point of departure in Porter's (1985) classical notion of the value chain. Particularly, Lev states that by value chain he means "The fundamental economic process of innovation [...] that starts with the discovery of new products or services or processes [...] and culminates in the commercialization" (Lev 2001, 110). In a sense, this is a description of the architecture of the company for generating value, a notion quite similar to Afuah & Tucci (2001, 2) designating that a business model describes "how [the firm] plans to make money long-term".

According to Timmers (1998), a business model should be seen as "the architecture for the product, service and information flows, including a description of the various business actors and their roles; a description of the potential benefits for the various business actors;

and a description of the sources of revenues." Timmers' definition is not very detailed and could probably also be categorized as a generic business model as the ones in the previous section. However, as it includes notions of visualizing how the business functions and a focus on the offering from the company to its customers, it relates as so more to the specific definitions.

A similar definition, in that it also has a focus on representation and value proposition is suggested by Weill & Vitale's (2001) who define a business model as, "a description of the roles and relationships among a firm's consumers, customers, allies and suppliers that identifies the major flows of product, information, and money, and the major benefits to participants". This too is a very broad definition, in essence covering all possible aspects of doing business.

A number of the definitions within this category have explicit reference to the term sustainable development. Sustainable development is in essence, the ability of the company to create revenue in the long-term, especially with consideration to the external stakeholders interests. Thus, there is a weak linkage to the generic definitions that often focus more narrowly on profits and revenue, implicitly meaning a shorter-term perspective.

Further, this way of conceptualizing the business model focuses on describing the method of doing business in a specific company. This is also in accordance with KPMG's definition of a business model as "The fundamental logic by which the enterprise creates sustained economic value – the organizations "business model" (KPMG 2001, 3, 11). The terms 'fundamental logic' and 'value configuration' resemble Stabell & Fjeldstad's value configuration logics (1998), and again these definitions cover all possible aspects of doing business.

Similarly, Rappa's definition (2001) states that "a business model is the method of doing business by which a company can sustain itself – that is, generate revenue. The business model spells-out how a company makes money by specifying its position in the value chain." As well as departing in the notion of sustainable development, it also incorporates a more specific notion of the position of the firm in the value chain.

Another suggestion that we will pay special attention to, is offered by Chesbrough & Rosenbloom (2002), who sees the business model as integrating a series of perspectives including strategy (Seddon *et al.* 2004), management (Magretta 2002), innovation (Gaarder 2003), and e-business enabled distribution models among others, into "a coherent framework that takes technological characteristics and potentials as inputs, and converts them through customers and markets into economic outputs. The business model is thus conceived as a focusing device that mediates between technology development and economic value creation" (Chesbrough & Rosenbloom 2002, 5).

Although this understanding is developed specifically in relation to evidence from Xerox Corporations spin-off companies, the insights provided have a broader application and the authors also explicitly acknowledge "that firms need to understand the cognitive role of the business model, in order to commercialize technology in ways that will allow firms to capture value from their technology investments" (Chesbrough & Rosenbloom (2002, 5).

These elements are representative for many authors' view on business models. According to Marrs & Mundt (2001), a business model is designed to compile, integrate, and convey information about the business and industry of an organization. Further, in the context of the so-called Strategic-Systems Auditing framework, Bell *et al.* (1997) identified six components of a business model: external forces, markets/formats, business processes, alliances, core products and services, and customers. In essence this framework focuses on describing "the interlinking activities carried out within a business entity, the external forces that bear upon the entity and the business relationships with persons and other organizations outside of the entity" (Bell *et al.* 1997, pp. 37-39).

Later Bell *et al.* (2002) developed these ideas in the direction of a value driver focus, which is one of the characteristics dealt with in the next section. The notion of describing links and activities and processes is likewise emphasized by Weill & Vitale (2001), who define a business model as, "a description of the roles and relationships among a firm's consumers, customers, allies and suppliers that identifies the major flows

of product, information, and money, and the major benefits to participants".

In comparison to the generic typology of business models, this broad specific understanding comes closer to treating 'how' the relationships are than merely 'what' objects should be included. Furthermore, the broad business models act as representation of the central roles and relationships of the firm, whereas the generic definitions were more focused on resources necessary for value creation.

2.3 Narrow business model definitions

In comparison to the category above, the narrow business model definitions are characterized by focusing only on internal aspects of the organization. As exponents of this view of the business model, Petrovic *et al.* (2001) argue that a business model ought not to be a description of a complex social system with all its actors, relations and processes, like the broad definitions imply. Instead, they contend, it should describe the value creating logic of a company (see also Linder & Cantrell 2002), the processes that enable this, i.e. the infrastructure for generating value, and constitute the foundation for conceptualizing the business strategy.

Similarly, Boulton *et al.* (2000) emphasize the need to create a business model that links combinations of assets to value creation. Having defined a business model as "[t]he unique combination of tangible and intangible assets that drives the ability of an organization to create or destroy value" (Boulton *et al.* 1997, 244), these authors' definitions can be seen as a detailed account of the internal prerequisites for value creation. Their focus on key measures of the value creation process, i.e. the value drivers, shows the uniqueness of internal aspects.

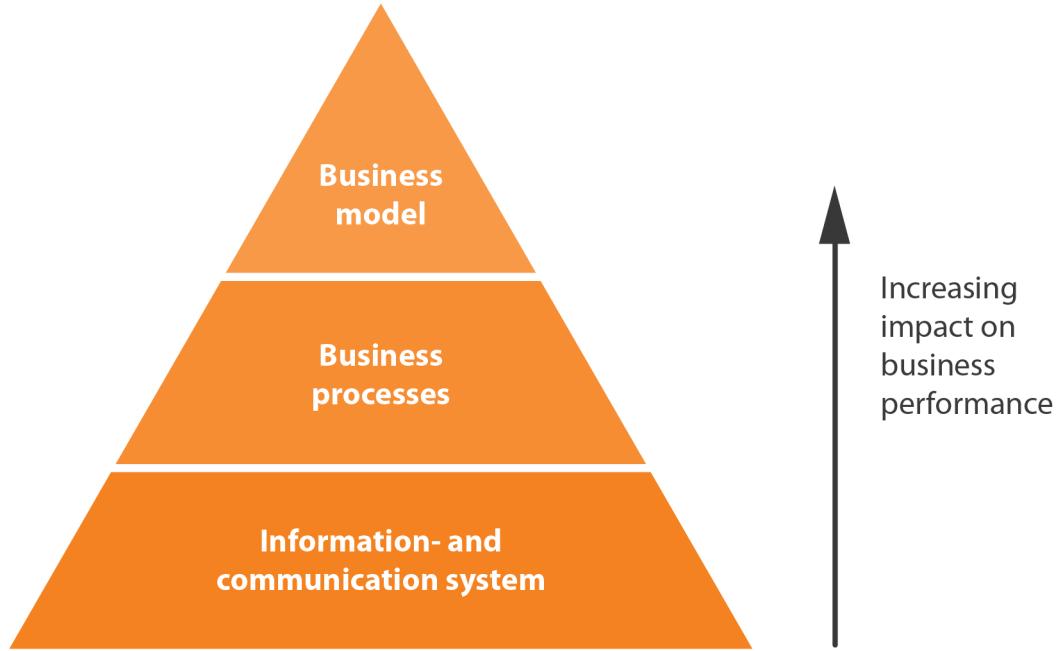


Figure 5: Hierarchical structure of business logic (Petrovic *et al.* 2001, 2)

Even more focused on value drivers and processes is Bray's view where "The business model is defined by the performance drivers, business processes, people and the infrastructure put in place to achieve the company's business objectives" (2002, 13). Bray's explicit link to business objectives is at the same a link to strategy and – especially – value creation, although this is not specifically stated. Value creation is, however, somewhat more explicitly mentioned in Linder & Cantrell's business model definition: "A real business model is the organization's core logic for creating value" (2002) as it more specifically

- The set of value propositions an organization offers to its stakeholders,
- Along with the operating processes to deliver on these,
- Arranged as a coherent system,
- That both relies on and builds assets, capabilities and relationships in order to create value.

Another central tool when describing a company's value creation story is to support narratives with non-financial performance measures. One thing is to state that one's business model is based on mobilizing customer feedback in the innovation process, another thing is to explain by what means this will be done, and even

more demanding is proving the effort by indicating: 1) how many resources the company devotes to this effort; 2) how active the company is in this matter, and whether it stays as focussed on the matter as initially announced; and 3) whether the effort has had any effect, e.g. on customer satisfaction, innovation output etc. According to Bray (2010, 6), "relevant KPIs measure progress towards the desired strategic outcomes and the performance of the business model. They comprise a balance of financial and non-financial measures across the whole business model".

From this we can deduct that the business model should explain how the organization offers unique value, be hard to imitate, be grounded in reality (economics), and can help to ensure that different stakeholders are speaking the same language.

Competitive strategy is about being different, and the business model in this respect is the vehicle for operationalizing such differences. Thus, a well-constructed business model facilitates an understanding of the activities that really add value. A business model is thus an account of the links, processes, and networks of causes and effects that create value. Sandberg 2002 argues that a business model must identify the customers you want to serve, spell out how your

business is different from all the others - its unique value proposition, explain how you will implement the value proposition, and finally also describe the profit patterns, the associated cash flows, and the attendant risks within the company.

In summary, the narrow definitions predominately focus on details regarding the internal prerequisites

for profitability and business models as systems of representation. Some of the suggestions found in the literature also incorporate elements of value proposition and uniqueness. To conclude on this review of the different types of business model frameworks, the attributes of the three typologies of business model definitions along with possible strengths and weaknesses are listed in table 1 below.

Table 1: Attributes, strengths and weaknesses across the three typologies of business model definitions

TYPOLOGI	ATTRIBUTES	POSSIBLE STRENGTHS	POSSIBLE WEAKNESSES
GENERIC BUSINESS MODEL DEFINITIONS	<ul style="list-style-type: none"> Components that constitute the business General industry attributes A meta model or ontology for business models 	<ul style="list-style-type: none"> The advantages of aggregation, i.e. gaining an understanding of the basics of the value creation in the company 	<ul style="list-style-type: none"> Picture conveyed becomes too general to convey anything relevant about the specific business
BROAD BUSINESS MODEL DEFINITIONS	<ul style="list-style-type: none"> The method of doing business Focus on the whole enterprise system The architecture for generating value Description of roles and relationships 	<ul style="list-style-type: none"> Value creation must be understood across the whole value chain in which the company participates 	<ul style="list-style-type: none"> Not sufficiently focused on the core value creating processes Includes factors not completely controlled by the company
NARROW BUSINESS MODEL DEFINITIONS	<ul style="list-style-type: none"> Describe the uniqueness of internal aspects Infrastructure for generating value Detailed accounts of links, processes, and networks of causes and effects 	<ul style="list-style-type: none"> The level of detail regards the functioning of the specific firm Precise and relevant descriptions 	<ul style="list-style-type: none"> Accounts may become too specific to make sense Loss of overall understanding

3. BUSINESS MODEL CHARACTERISTICS

The act of representing an object is equivalent to making it visible and thus manageable as when making activities auditable by representing accounting for them and when mechanisms are created to capture the essence of a phenomenon, e.g. in the representation of intellectual capital and value creation. Therefore, representation lies in the conception of the term business model itself. The business model – being a model of the business – is exactly such a representation, whether acknowledged explicitly or not. Focusing at the 'level of organizations', characterized by communication, interrelations, roles and division of labor etc., the system becomes as already Boulding (1956, 205) stated difficult to comprehend.

Simplifications needed because we as humans have limited cognitive abilities (Simon 1959). Representation is derivable as a question of how we transcribe the world around us for the sake of being able to comprehend it; in a sense perceiving representations as common-sense explanations of how objects are connected. Thus, we can perceive business models as representations of a business system where the specific business model in a company represents a choice between feasible alternatives (Chaharbaghi, Fendt & Willis, 2003) and essentially summarizes these choices that prepare the business to perform in the future (Betz 2002). Bell & Solomon (2002) enhance this perspective of the business model as a representation of the business system, in that it is a "simplified representation of the network of causes and effects that determine the extent to which the entity creates value", thereby underlining the business models role in illuminating the critical value drivers of the company.

Among the underlying notions of representation are concerns of objectivity, power, and description vs. transformation. As we, in this context, are interested in understanding how management can grasp the organization, i.e. conceptualize it and manage it, objectivity becomes a question of representational faithfulness (cf. Napier 1993).

As the first characteristic within this group we find perceptions of business models where the business model

is seen as a representation of the business. Representation has several objectives and not just the obvious one of enabling conceptualization by creating a simplistic model of reality. As accentuated by Bell & Solomon (2002), management's ability to disperse their mental models through the organization and thereby create a common understanding of strategic direction, corporate culture etc. of the company is also a tool of power. This has some indications of a controlling-at-a-distance perspective (Cooper 1992). Chaharbaghi, Fendt & Willis (2003) accentuate this view and define business models as a representation of management thinking and practices that help businesses see, understand and run their activities in a distinct and specific way. Representation thus becomes a communicative tool in the sense of projection as the power to get ones projection out enables control from a distance.

When perceiving business models as simplified versions of reality, representation becomes an abstraction of the business, identifying how that business makes money. Business models are abstracts about how inputs to an organization are transformed to value-adding outputs (Betz 2002). Along these lines of thoughts, the business model functions as a construct (Chesbrough & Rosenbloom 2002), describing the relationships between the elements of the value creation system (Weill & Vitale 2001), illustrating e.g. the architecture of product, service and information flows (Timmers 1998).

Secondly, from a narrative perspective business models can be a support mechanism for projection of management's view to the organization through e.g. storytelling. The narrative perspective resembles a transformation/abbreviation perspective, which in the end leads to the ability of remote control. Representation of the business through a description, i.e. a story of how it works (Magretta 2002) and the relationships it is engaged in. Very much in line with Hamel's (2000) ideas, Morris (2014) conceptualizes the business model as a "comprehensive description of business." A business model, according to Morris, is therefore a description of a whole system, including how the experiences of creating and delivering value may evolve along with the changing needs and preferences of customers (Morris 2014, 17).

Key aspects of narrative-focused business model definitions are: description, stories, expression and explanation, like e.g. Sandberg states, "business models describe and explain" (2002, 4) or "stories that explain how enterprises work" (Magretta 2002, 4). For example, they can explain how you will implement the value proposition like the knowledge narrative of an intellectual capital statement (Mouritsen *et al.* 2003).

Finally, the business model can be seen as facilitating understanding accentuates the business model as a management technology, which can help management in explaining and comprehending aspects of how the company functions. Being able to speak the same 'language' throughout the entire organization is an enormous feat to achieve. "Imagine a world where employees understood what it takes for their company to make money" as Linder & Cantrell (2002) say. Facilitating understanding therefore works through abbreviation, i.e. as a simplification-mechanism, enhancing the bounded rationality perspective on human action.

The use of a business model approach to helps management communicate and share their understanding of the business logic to stakeholders, i.e. capital market agents such as analysts and investors. The external reporting of the value creation logic of the business provides a way of analyzing the prospects of the firm by creating a mutual understanding, in a sense advocating for business models being able to serve as a new unit of analysis.

Among the key aspects addressed in connection with business models from the perspective of facilitating understanding is creating a mutual understanding, e.g. between company management and capital market agents, but also to create a common understanding of a business model for all actors involved, and to assess the potential profitability of a business model. Modeling the business also offers the capabil-

ity to map out new business ideas graphically in a clear and communicable fashion, so that the conceptualization will allow the understanding of, and reasoning behind the underlying business idea. This can be achieved by using one or more of the frameworks presented in chapter 1 of Business Model Design: Networking, Innovation and Globalizing.

Business models are perhaps a more comprehensive way of understanding the focus of competition merely trying to conceptualize strategy. The notion here is to explain the company's unique value proposition to external parties, as Sandberg (2002) states: "Spell out how your business is different from all the others." Finally, the facilitating understanding perspective is not solely to be thought of as an external communication aspect. The mere process of modeling the business helps management in identifying and understanding the relevant elements of their business (Osterwalder & Pigneur 2003), like e.g. value drivers and other causal relationships.

This section reviews the parts of the literature that have been found representative or most relevant in developing the frameworks of a business model. Table 2 below illustrates the structure chosen for the review. In the literature reviewed, 9 subunits of characteristics that are emphasized as integral parts of a business model are discussed. These areas, which are termed 'characteristics of business models' have, for simplicity, been grouped into three archetypes of categories: (1) what the overall purpose of the firm or the criteria for success is, (2) what kind of elements are important and (3) how these elements interrelate.

Table 2: Overview of business model characteristics

1	The overall criteria for performance	Sustainable development Strategy Improving the business and innovation
2	The elements of the business model	Resource-base Value chain Value proposition
3	Relationships between elements	Value drivers Value creation Causal relationships

3.1 The overall criteria for performance

While the ultimate goal of a company from a shareholder perspective is to create profits, business models sometimes address broader criteria such as sustainable development, which implies that focus is shifted from mere profit orientation towards sustainable enterprises and an economic reality that connects industry, society and the environment. This need for linking sustainable development to business strategy is, for instance, acknowledged by Funk (2003, 65), who characterizes the sustainable organization as “one whose characteristics and actions are designed to lead to a ‘desirable future state’ for all stakeholders”, and by Afuah & Tucci (2001), who argue that the business model concerns sustainable development through the firm’s unique value configuration which is synonymous with KPMG’s definition of the business model as: “The fundamental logic by which the enterprise creates sustained economic value – the organization’s business model” (KPMG 2001, 11).

In recent years there has been increased attention to reporting on sustainable development within the business reporting debate, e.g. triple bottom line reporting (Elkington 1997) and the Global Reporting Initiative (GRI 2010). Non-accounting information such as forward-looking sustainability indicators are, in line with intangibles becoming a greater part of wealth creation, becoming more relevant to the overall value proposition of a business. In this sense the business model becomes a central notion, as it is the method of

doing business by which a company can sustain itself, that is, generate revenue.

In using the notion of a business model as our key concept, we therefore implicitly assume that it comprehends something more than strategy and more than profits, or at least is a concept different from merely treating strategy and profits. In this sense Magretta (2002, 6) is clear when she states that “business models describe, as a system, how the pieces of a business fit together. But they don’t factor in one critical dimension: competition”, which implies that she finds the competitive basis of the companies to be completely outside the business model.

Another perspective is offered by Czuchry & Yasen (2003), who argue that a business model is not necessarily successful by itself, because firms must integrate and align strategic and operational efforts, activities, resources and decisions into a systematic organizational strategy, thus indicating that strategy is an integrated component of a business model. A different angle to this discussion comes from Chesbrough & Rosenbloom (2002, 535), who argue that while business models are more oriented towards value creation and sustainable development from a bounded rationality perspective, strategy theory is more apt to consider value creation from a shareholder perspective and to suppose full analytical rationality of decision-makers.

Also Seddon *et al.* (2004) studies the relationship between strategy and business models and conclude that strategies are grounded in the real world, whereas business models are abstractions of the real-world strategies of the companies. Likewise, with regard to improving corporate performance measures to drive results and very much in line with Kaplan & Norton's thoughts of the balanced scorecard (1992; cf. Eccles 1991). Also, Miller, Eisenstat & Foote (2002) perceives the business model as a means of linking measurements to strategies. Actually, Sandberg (2002), referring to Porter's (1996) articulations on competitive strategy about being different, argues that the business model is the vehicle for operationalizing those differences. Therefore, although not the same, there is a positive mutually supporting interrelation between business models and strategy (Heinrichs & Lim 2003).

Finally, business models have, as our third characteristic, also been associated with the efforts of companies to improve the business and innovate. Much early literature (cf. Kodama 1999) takes its point of departure in how new technology, most notably the Internet, has revolutionized certain industries and changed the feasibility of existing business models. This is, for instance, illustrated by Gallagher (2002), who shows how e-commerce has enabled the emergence of new business models.

Following Hamel & Skarzynski (2001), innovation can be perceived as the route to wealth creation but is also a prerequisite for sustainable development because today's competitive advantage becomes tomorrow's albatross as Christensen (2001) has expressed it. Having the right business model at the present doesn't necessarily guarantee success for years on end. Causes can be new technology but also changes in the environment and the customer base can play a role (Delmar 2003) as is illustrated by the European airline Ryanair, which has with great success significantly restructured the business model of the airline industry. As the air transport markets have matured, incumbent companies that have developed sophisticated and complex business models now face tremendous pressure to find less costly approaches that meet broad customer needs with minimal complexity in products and processes (Hansson, Ringbeck & Franke 2002).

Other authors that draw attention to need for business model innovation and renewal are Sull (1999, 42) and De Carolis (2003, 44) who ask the dire question of what happens when companies fail to renew their business model as well as Ross, Weill & Vitale (2001) who pose the question of how to ensure that management will acknowledge that the existing business model is not profitable and change it.

Very often radical strategy changes means changing the entire business model (Upton & McAfee, 2000). Thus Govindarajan & Gupta (2001) link the business model with innovation by applying a business model perspective to strategic innovation. They identify three areas for changing the existing business: redesigning the architecture of the value chain, reinventing the concept of customer value, or redefining the customer base. This is basically strategic positioning in terms of value creation; what, how, and to whom (Markides 1997).

Kartseva, Gordijn & Akkermans (2003) suggest applying a business model as the basis for strategic analysis since this offers the possibility for mapping new business ideas graphically in a clear and communicable fashion. In this way business models facilitate change because of their building-block-like approach to formulating the business logic of a company (Petrovic *et al.* 2001). Chaharbaghi, Fendt & Willis accentuate this by stating that "the context-dependency of the specific business models provides the power of description and prescription, helping businesses see, understand and run their activities in a distinct way" (2003, 381) and Morris (2014, 25) confides that since business models are a more comprehensive way of understanding the focus of competition, they must also be the focus of innovation. Relentlessly changing conditions means that business models evolve rapidly and business model innovation is therefore not optional, rather it becomes mandatory. While innovations in any area within an organization may be important, innovations that pertain broadly and directly to the business model will be life-sustaining. Even the best-designed business model cannot last forever but must keep pace with shifting customer needs, markets and competitive threats (Linder & Cantrell 2002).

3.2 Performance related elements

In this section we take a closer look at how business models describe elements of the organization, which are a part of the performance of the company. Performance related elements are elements that relate to the actual structure of the company. We distinguish between three characteristics that are labeled 'resource-base', 'value-chain' and 'value proposition'. The resource-base in the company is important, as there has been a lot of focus on which resources actually drive company value creation. For example, in the knowledge society it is stated that primarily knowledge drives value creation. Along these lines, Miller, Eisenstat & Foote (2002) argue that capabilities are the backbone of the competitive advantage of a company, because such resources constitute a more stable element on which to base sustainable development than competitive strategy in a highly volatile business environment. Confirming this, De Carolis (2003) finds that imitability of firm knowledge resources has a significant negative effect on firm performance. In a business environment characterized by rapid and discontinuous nature of change a framework that can facilitate business model innovation becomes necessary for sustainable competitive advantage (Malhotra 1999).

As resources are central aspects of a generic business model framework (Betz 2002) the resource-based view is appropriate in connection with business models (Hedman & Kalling 2003). Klaila (2000) explains how the business model helps to identify the critical behaviors, competencies, and market conditions and account for the resources of intellectual capital in the company. From the resource-based perspective we must perceive resources in the sense of being assets (Boulton *et al.* 1997) and inputs to the value creation process of the company. As it is difficult for organizations to understand the role of knowledge resources in their value creation (Covin & Stivers, 1997) the business model approach becomes advantageous by visualizing the capability configurations of the company, which are the cohesive combination of resources and capabilities embedded within its infrastructure that generate value (Miller, Eisenstat & Foote, 2002).

Porter defines the value chain as a basic tool for analyzing the sources of competitive advantage of the firm.

The value chain enables a systematic examination of all the activities a firm performs and how these activities interact (1985, 33). Every firm is essentially a collection of interdependent activities that are performed to create value. According to Shank and Govindarajan (1992), the value chain can also be perceived as a generic concept for organizing our thinking about strategic positioning. They define the value chain as "the linked set of value-creating activities all the way from basic raw materials to the ultimate end-use product delivered into the final consumers' hands" (ibid., 179).

Within the notions of business models, the value chain comprises the activities and organization of the company (Hedman & Kalling 2003) and the structure of the company (Alt & Zimmermann 2001). In Bell *et al.*'s (1997) framework, core business processes and activities, and the analysis hereof, are viewed in the light of a value chain perspective. Likewise, Chesbrough & Rosenbloom (2002) imply that the value chain perspective leads to identification of the activities and assets (inputs) that are necessary to deliver the value proposition of the company (outputs). In this sense the business model spells out how a company makes money by specifying where it is positioned in the value chain (Rappa 2001).

However, there are alternative value configuration models to that of the value chain. Stabell & Fjeldstad (1998, 414) suggest that the value chain is but one of three generic value configuration models. Based on Thompson's (1967) typology of long-linked, intensive and mediating technologies, they define the value chain as a value configuration that models the activities of long-linked technology. Stabell & Fjeldstad (1998), in distinguishing between these three distinct generic value configuration models, argue that such a distinction is required in order to create an understanding and ultimately facilitate the analysis of firm-level value creation across a broad range of industries and firms.

The first of the two alternative generic value configuration models proposed by Stabell & Fjeldstad (1998) is the value shop logic. It concerns firms where value is created by mobilizing resources and activities to resolve a particular customer problem. The second alternative to the value chain is the value network

logic. It models firms that create value by facilitating a network relationship between their customers using a mediating technology, e.g. like an infomediary or innomediary, as Sawhney *et al.* (2003) explicates.

According to Giertz (2000), each type of business is based on such unique value creation logic. Understanding and managing companies, he argues, thus requires a simulation that will test the business model and its strategy. Referring to Stabell & Fjeldstad, this would incorporate identifying the applied value configuration or business logic, and development of appropriate performance measures, as accentuated by Eccles (1991) and Kaplan & Norton (2008).

Along these lines, Allee (2000) contends that in order to facilitate the analysis of the value of such networks, knowledge and intangible value exchanges must become an integrated part of the business models applied in visualizing these new value configurations. In this connection, Hamel (2000) talks of competing value networks – a synonym for the inter-corporate value chain and Porter's value system – which, as we will see later on is an important aspect of distinguishing between different types of business models (2000, 88).

Sweet (2001) identifies four strategic value configuration logics: value-adding, -extracting, -capturing, and -creating, that exist no matter the prevailing macroeconomic paradigm.

Sweet argues that it is the ability to manage these logics well that creates success rather than new business models. By stating this, he confirms the necessity of understanding how the business model and its value creating elements work, as a prerequisite for managing the company. Ramirez (1999) too, offers an alternative view to that associated with value creation in industrial production, arguing that technical breakthroughs and social innovations in actual value creation render the alternative, a so-called value co-production framework. This is also an alternative value configuration in line with the notions presented above by Stabell & Fjeldstad (1998) and Sweet (2001).

The value proposition or offering of the company depicts which value it intends to deliver to its customers. "A 'business model' is [...] a precise definition of

who customers are, and how the company intends to satisfy their needs both today and tomorrow" (Morris 2014, 19). Morris' definition, which takes its point of departure in the value of the offering to the end users by the company, is very close to the definition of the knowledge narrative from the Danish guideline for intellectual capital statements. The knowledge narrative "expresses the company's ambition to increase the value a user receives from a company's goods or services" (Mouritsen *et al.* 2003a, 12).

Chesbrough & Rosenbloom (2002) similarly define the value proposition as the value created for the user of the offering from the company. Webb & Gile (2001) reject the notion of customer needs being the only true strategic approach and thereby argue against the previous literature, which state that the resources of the company ought to be the starting point of strategy formulation. For Hedman & Kalling (2003) the value proposition of the company is equivalent to the generic strategy of the company. In a likewise manner, Alt & Zimmermann (2001) define the value proposition as a part of the mission statement of the company together with its vision and strategic goals. Each type of business has its unique value proposition logic (Giertz 2000) as the value proposition is closely linked to the products and services delivered. Osterwalder & Pigneur (2003) equivocate the value proposition with product innovation. Therefore it is a dire necessity to spell out how your business is different from all the others, i.e. your unique value proposition, and explain how you intend to implement the value proposition (Sandberg 2002).

3.3 Relationships between elements

The final category of business model characteristics concerns descriptions of internal linkages in the company related to performance and creating value. By relationships between elements we mean aspects such as value drivers, value creation processes and causality between e.g. activities, resources, and processes. These three categories regard the internal aspects of the business model of a company because they all are concerned with value creation. Value drivers will vary significantly by industry, or should we say by business model. Regardless of industry, it is of vital importance for a company to understand the drivers behind its value creation (Fenigstein 2003), i.e. which aspects

deliver value-added? However, value drivers will vary significantly by industry, or should we say by business model. Value drivers are typically performance measurements with regard to core processes.

Understanding the value drivers of a company leads to the identification of key performance indicators. Bray (2002) perceives value drivers as the link between key performance indicators and business objectives, at the same time underlining that value drivers are not outcome-oriented key performance indicators, rather they are forward oriented performance measures. Hedman & Kalling (2003) propose value drivers as measurements of actual activity, which they state is an intermediary level separating the resources and the offering of the company. As value drivers imply causal relationships, they are more clearly visualized in a business model.

In Bell *et al.*'s framework (1997), value drivers are not explicitly mentioned, but can be viewed as the inter-linking of specific activities performed in the core business processes of the company. As depicted above, key performance indicators are, according to Bray (2002), linked to business objectives via identification of the key drivers of value, which in turn can be interpreted as key success factors. Value drivers are not static performance measures, they will vary over time, both within a business cycle and from business cycle to business cycle (Wahlström 2003), and eventually the present value-drivers of the company will be replaced. This may be a result of the company changing its strategy or business model, which must have an effect on the drivers involved in the value chain and value creation process, or it could be an effect of the changing external environment.

A business model is inevitably a representation of how the company creates value, and value creation, therefore, is a cornerstone of the business model concept. The external prerequisite, the value proposition, is a central notion when referring to the internal prerequisite value creation, as the offering of the firm affects the value it must create and deliver to its customers and the users of its products or services. A business model thus depicts the design of transaction content, structure, and governance so as to create value through the exploitation of business opportunities (Amit & Zott 2001).

According to Linder & Cantrell (2002, 1), "a real business model is the organization's core logic for creating value". In fact the entire enterprise is a value creation system within which assets tangible as well as intangible are utilized and created. In this process, it is important to develop a strategy for bundling all the sources of value creation potential in a company into a single "recipe for adding value" (Daum 2002), i.e. a business model. Alt & Zimmermann (2001) also link the business model to value creation, by stating that it describes the logic that lies behind the actual processes of a 'business system' for creating value.

The ability of establishing precise connections and causal links and relationships between knowledge resources, competences, intellectual capital etc. and the value creation of an organization has been in the interest of the business and academic communities for a long time. Furthermore, it is an important element of the business model approach (Hedman & Kalling 2003). However, this relationship may be an unsettled one. Hermans' (2002) research within the context of Finnish biotechnology firms provides an exception. He tests and analyzes empirically how intellectual capital is connected to the market potential of Finnish biotechnology firms, finding among other things that management experience, research and patent application intensities, and the public financing of R&D activities have significant influence on growth prospects of the enterprises.

The ability to establish causal links between resources, activities, processes and their outcomes, i.e. value, is a prime deliverable of applying a business model perspective. It ensures that what is being measured is relevant, an argument that has been aired previously by the likes of Kaplan & Norton (2001) and Ittner & Larcker (1998). According to Dikolli & Kulp (2003), this business model approach to performance measurement helps identify and focus on the causal links between managerial actions, intermediate performance measures, and overall firm performance. Via a business model approach it is possible to identify causal loops that depict linkages between key performance measures and financial results (Bell *et al.* 1997) and which link combinations of assets to value creation (Boulton *et al.* 1997).

In relation to the overall perspective of the book, the characteristics and elements making up a business model, as identified above, can be viewed as proxies for the characteristics that constitute the fundamental mosaic of the market for information participants. In that respect, these aspects and elements indicate which types of information further studies should focus on in relation to gaining a better understanding of this mystery mosaic that informs financial numbers and the valuation of companies.

4. TOWARDS BUSINESS MODEL BUILDING BLOCKS

Several recent studies conduct comparisons of business model building blocks. While Fielt (2014) focuses

on the building blocks of e-business models, Taran (2011) looks at a broader selection of texts. Table 3 below illustrates Taran's analysis from the perspective of Osterwalder & Pigneur (2010) Business Model Canvas. It conveys a comparison between Osterwalder & Pigneur's nine building blocks and Chesbrough's (2006) and Morris's (2014) six components. This table illustrates neatly the overlap between the models and the blanks. Taran concludes his review by using the 5 building blocks in the left hand column as a basis for suggesting a slightly rearranged model with seven building blocks. See chapter 4 in *Business Model Design: Networking, Innovation and Globalizing* for more detail on this split.

Table 3: Break-down of business model building blocks (Taran 2011)

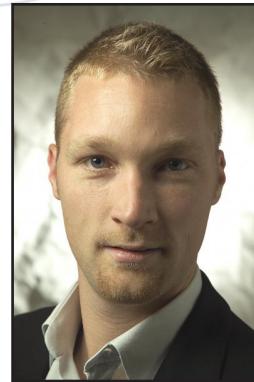
	Building Block	Description	Chesbrough 2006	Morris et al. 2003
Product	Value proposition	Gives an overall view of a company's bundle of products and services	Component 1: Articulate the value of the proposed offering	Component 1: Factors related to offering
Customer Interface	Target Customer	Describes the segments of customer's means of getting in touch with its different customer segments	Component 2: Identify the market segment	Component 2: Market factors
	Distribution Channel	Describes the company's various means of getting in touch with its customers	Component 3: Define the value chain to deliver that offering	-
	Relationship	Explains the kind of links a company establishes between itself and its different customer segments	-	-

Table 3: Break-down of business model building blocks (Taran 2011)

	Building Block	Description	Chesbrough 2006	Morris et al. 2003
Infrastructure Management	Value Configuration	Describes the arrangement of activities and resources	Component 3: Define the value chain to deliver that offering	Component 3: Internal capability factors
	Core Competence	Outlines the competences necessary to execute the company's business model	-	Component 3: Internal capability factors
	Partner Network	Portrays the network of cooperative agreements with other companies necessary to efficiently offer and commercialize value	Component 3: Define the value chain to deliver that offering Component 5: Describe the position of the firm within the value network	-
Financial Aspects	Cost Structure	sums up the monetary consequences of the means employed in the business model	Component 4: Establish cost structure and profit potential	Component 5: Economic factors
	Revenue Model	Describes the way a company makes money through a variety of revenue stream	Component 4: Establish cost structure and profit potential	Component 5: Economic factors
Strategy Aspects	Competitive Factor		Component 6: Formulate a competitive strategy	Component 4: Competitive strategy factor Component 5: Growth/exit factors

About the authors

Christian Nielsen is Professor at Aalborg University, Denmark and Visiting Professor at Macquarie University, Australia. Christian heads the Business Model Design Centre (www.bmdc.aau.dk), one of the worlds leading interdisciplinary centres of excellence in business model research. Christian has worked with the field of analysing and valuing business models since 2001 both as a researcher and as a buy-side analyst, portfolio manager, consultant and board member and is also Joint-Editor of the Journal of Business Models.



Morten Lund, Assistant Professor at Aalborg University, Denmark and the Business Model Design Centre, was Lab manager at the International Centre for Innovation for 5 years and has led a USD 11.0 mio. project to develop 10 international network-based business models. His PhD dissertation from 2014 focused on the DNA of successful business models and how to innovate them using narratives.



Per Nikolaj Bukh is Professor at the Department of Business Studies at Aalborg University, Denmark (<http://www.pnbukh.com>). He has published about 200 articles, book chapters, reports and books on a number of subjects including Knowledge management, Intellectual Capital reporting, Benchmarking and management accounting. In addition to his research activities, Per Nikolaj Bukh often contributes to postgraduate programs and conferences.



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