Business Models as an Unit of Analysis for Strategizing[1]

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1 The Rise of the Business Model to Prominence

In the 1990s with the advent of IT-centered businesses the term *Business Model* rose to prominence.[2] The rise of the term is closely related to the emergence and diffusion of commercial activities on the internet. Internet start-ups used the term to differentiate themselves from the incumbents and to explain their competitive position.

The term appeared first in 1970s in computer science journals, after 1995 also in popular business and computer magazines like *Business Week* or *Wired* before it gained access into peer-reviewed journals focusing on the emerging field of e-commerce and e-business (cp. Timmers 1998; Kotha 1998). Today the term is frequently used also in other management journals like Harvard Business Review (cp. Porter 2001; Magaretta 2002).

In business as well as in academia the term is largely sloppily used, seldom defined, meaning very different things and often confused with "strategy". People use the terms "strategy" and "business model" interchangeably to refer to everything they believe gives them a competitive advantage. Typical headlines in the business press are *Killer Business Models* (Goldberg 2000) or *Battle of the New Business Models* (Stahl 2000).

The aim of this paper is to bring clarity to the term business model and its relationship to strategy.

2 Business Models as a Unit of Analysis

In strategic management the classical unit of research are the *business unit*, the *industry* in which a business unit is competing and the *corporation* which is the legal entity of most business units (Bettis 1998: 357). On the basis of these units

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[1] This paper is based on Stähler (2001).

[2] cp. Stähler (2001:pp. 37-40) for a brief history on the diffusion of the term Business model in academic journals.

of analysis researchers try to evaluate why certain companies have higher profits than other, comparable companies.

Proponents of the market-based view the decisive unit of analyses to be the industry in with a corporation is active (cp. Mason 1939; Bain 1956; Bain 1968; Caves & Porter 1977; Porter 1980). They argue that the structure of the industry is crucial for higher profits. Companies can decide (i) in which industry they want to operate (ii) what position they want to have in that industry and (iii) they can change the structure of the industry to obtain a more favorable industry structure e.g. by creating barriers of entry for newcomers. An industry is defined as a group of companies that produce goods or services that act as substitutes for each other.

As a reaction to this external view of competitive advantages, other researchers tried to explain the higher profitability of certain corporations from within the firms. Better, scare internal resources are seen as the crucial factor for higher profitability (cp. Wernerfelt 1984; Barney 1986; Prahalad & Hamel 1990; Barney 1991).

2.1 Criticism of the Usual Suspects

The traditional units of analysis have almost got the status of axioms for research in business administration and economics. They determine what research questions are being asked and what research methods are being used. Seldom they are scrutinized.

Table 1: Strategic Management: traditional units of analysis

Unit in competition
- The business unit is the primary focus of competition and the strategy within an industry

Unit of environmental analysis
- The industry as business units that supply substitutes

Unit of organization
- The corporation defined as the border between internal organization and the external market. The border is drawn by minimizing transaction costs for coordinating all economic activities

Source: (cp. Bettis 1998: 358)

Since the mid 1990s due to increasing rate of innovation and the faster diffusion of technology researchers in strategic management talk about a new competitive landscape (Bettis & Hitt 1995). Part of this new competition is the increasing unpredictability and the vagueness what an industry actually is.

Bettis (1998: 359) phrases carefully, that the traditional units of analysis "may be largely out of touch with the evolution of modern competition in a technology-driven, global world that has seen a huge and rapid level of change." "The new competitive landscape is currently being shaped. Thus, no definitive view of the landscape is possible. It may be several years or decades before an accurate picture can be developed." (Bettis & Hitt 1995: 8).

A number of researchers have proposed alternative units of analysis. Gulati et al. (2000) call *strategic networks* like strategic alliances, joint-ventures or long-term supplier relationships as a potential source of higher profitability. Selz (1999) proposes *value webs* to explain commercial activities on the internet. For Dyer and Singh (1998) the *relationships a firm* has inside its network of surrounding firms are a source of competitive advantages. Klein (1996) takes *inter-organizational-systems* as his unit of analysis. Brandenburger and Nalebuff (1997) introduce the concept of a *value net*, in which a firm operates. The value net comprises of customers, suppliers, competitors, and also of complementors. A complementor is "[a] player ... if customers value your product more when they have the other player's product than when they have your product alone" (Brandenburger & Nalebuff 1997: 18).

The strategic network perspective is suited for the analysis of the new commercial activities we find on the internet but it is too narrow to capture all value creation. B2B applications can be well explained but not the creation of new products which use the new idiosyncrasies of the new medium. Information and communication technology (ICT) enables new value creation and new configuration of values chains to satisfy customer needs (Schmid 2000). Of importance is also to include the customers in the new unit of analysis since value can be created for customers by other customers.

2.2 The Business as the Locus of Innovation

ICT as a general purpose technology changes fundamentally the way value is created for customers. ICT does not only allow an increase of efficiency of existing industries but also creates new or different business that have little in common with traditional economic activities. So the traditional units of analysis are too broad to capture the changes occurring since the very fundamentals of value creation are being changed by ICT. A business is the fundamental of any value creation and therefore the business should be the unit of analysis for any fundamental change in value creation. The more aggregated units of analysis like the industry or the business unit are well suited as soon as the fundamentals of a business are understood. But to gain the understanding one has to investigate first what a business is.

Interestingly, very seldom the term business is being defined. Even Porter (1985: 58) does not define a business. He defines only a business unit. He gives advise how to optimally segment a corporation into business units but does not write about what a business is. In this seminal work he mentioned several key parts of a business like the value chain, the customers, the suppliers and the competitors but other parts like the source of revenue he mentions only on the sideline. His focus is on the industry and how a company can obtain superior profits by finding a profitable and defendable position in that industry.

Peter Drucker[3] is one of the few who answers what a business is by asking several questions about the fundamentals of a business: Who is your customer? And what does the customer value?

2.3 Origin of the Term Business Model

Among the first who used the term business models were Konczal (1975) and Dottore (1977). They used it in the context of data and process modeling. In information management business models were used to model a firm with all its processes, tasks, data and communication links to build an IT system to support the firm in its daily work. The business plan was the master plan for the information system. In this context several methods like ARIS (Scheer 1992) or PROMET (Österle 1994) have been established to describe business in order to build information systems.

Closely related to the term business model is in information management the term of an architecture of an information system. A information system architecture is the master plan of an information systems with all its components and relationships among the components (Sinz 1999: 1035).

Starting from its origin in information management the term changed its meaning. Besides being the basis for an information system Eriksson and Penker (2000: 7f) list five purpose of a business model:

a) "To better understand the key mechanisms of an existing business. ...
b) To act as a basis for improving the current business structure and operations.
c) To show the structure of an innovated business.
d) To experiment with a new business concept or to copy or study a concept used by a competitive company (e.g. benchmarking on the model level).
e) To identify outsourcing opportunities."

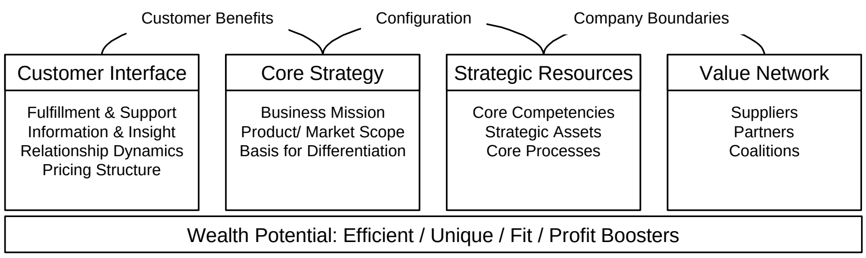
This wider use of business model is widespread today. While in information management the term refers to the model of an existing business, a business model can be also a plan to design a new business. The early connotation that a business model is related to ICT is lost today.

2.4 Definition of a Business Model

Several researchers in business science have defined what a business model is. The following table gives a summary of their definition.

[3] Cited in (Magretta 1998: 4)

Table 2: Selected Definitions of Business Model

Timmers (1998: 4)	*Definition of a business model* • *An architecture for the product, service and information flow, including a description of various business actors and their roles; and* • *A description of the potential benefits for the various business actors; and* • *A description of the sources of revenues.*
Venkatraman and Henderson (1998)	The authors define business model as an architecture of an virtual organization along three vectors: customer interaction, asset configuration and knowledge leverage.
Selz (1999: 106)	*… [A] business model is understood to be an architecture for the product, service and information flows, which includes a description of the various economic agents and their roles. Furthermore, a business model describes the potential benefits for the various agents and provides a description of the potential revenue flow.*
Amit und Zott (2000)	*A **business model** is the architectural configuration of the components of transactions designed to exploit business opportunities. …**A transaction component** refers to (1) the specific information, service, or product that is exchanged and/or (2) the parties that engage in the exchange. … The **architectural configuration** depicts and characterizes the linkages among the components of transactions and describes their sequencing.*
Hamel (2000: 65-112)	Components of a business model  *[A] **business model** is simply a business concept that has been put into practice. A **business concept** comprises four major components: Core Strategy, Strategic Resources, Customer Interface, Value Network. … Elements of the **core strategy** include business mission, product/market scope, and basis for differentiation. **Strategic resources** include core competencies, strategic assets, and core processes. … Intermediating between a company's core strategy and its strategic resources is a bridge component I'll call configuration. **Configuration** refers to the unique way in which competencies, assets, and processes are combined and interrelated in support of a particular strategy. … **Customer interface** has four elements: fulfillment and support, information and insight, relationship dynamics, and pricing structure. … Intermediating between the core strategy and the customer interface is another bridge component – the particular bundle of **benefits** that is actually being offered to the customer. … [T]he **value network** … surrounds the firm, and which complements and amplifies the firm's own resources. … Intermediating between a company's strategic resources and its value network are the firm's **boundaries**. This bridge component refers to the decisions that have been made about what the firm does and what it contracts out to the value network. There are four factors to consider in determining the **wealth potential** of any business concept: … efficient … unique … fit of the elements of the business concept … [and] profit boosters.*

Tapscott et al. (2000: 4f)	The authors do not directly define business model but business webs. A business web is a business on the internet: *[D]efinition of a business web (b-web): a distinct system of suppliers, distributors, commerce service providers, infrastructure providers, and customers that use the Internet for their primary business communication and transactions.*
Magretta (1998: 4)	A good business model has to resists two test: *1. The narrative test: The business model tells a logical story explaining* ***who your customers are****,* ***what they value****, and* ***how you'll make money*** *providing them that value. 2. the number test: A business model's story holds up only if you tie assumptions about customers to sound economics – your P&L must add up*.

accentuation by the author

Interestingly, there is not a common understanding what a business model is among the authors. Very often the authors choose a normative definition of how a business should look like to be successful.

A business model is something very simple. It is a model of an existing business or a planed future business. A model is always a simplification of the complex reality. It helps to understand the fundamentals of a business or to plan how a future business should look like.

1. A business model comprises of a description what value a customer or a partner like a supplier receives from the business. It is the *value proposition*. It answers the question: *What value the business creates for its stakeholders?*
2. The link between the firm and the customer is the product. A business model contains also a description of the *product or services* the firm is providing the market. It answers the question: *What does the firm sell?*
3. The business model contains also the description of the architecture of value creation. The *value architecture* delineates the value chain, the economic agents that participate in the value creation and their roles. The value architecture answers the question: *How is the value in what configuration being created?*
4. After the *What* and *How* the business model describes the basis and the sources of income for the firm. The value and the sustainability of the business is being determined by its *revenue model*. It answers the question: *With what do we earn money?*

The business model is always a deliberately abstraction of a real business or a future business.

The term business model refers in the true sense of the word only to a business. But particularly in mature industries the business models of the competitors have converged so one can use the term business model also for an industry. This very convergence of business models is a defining characteristic of a mature industry.

In the next paragraphs I will elaborate on the four components of a business model: the Value Proposition, the Product or Service, the Value Architecture and the Revenue Model.

2.4.1 Value Proposition

The value proposition describes the benefits and therefore the vale a customer or a value partner gains from the business model. The value proposition addresses two different stakeholders:

- *Customers:* A business model defines itself not via an existing product, but via the value creation to its customers. Value is being created by fulfilling a customer need. With the determination what value the firm wants to create the value proposition implies also what the firm does *not* offer to its customers.
- *Value Partners:* A business model also contains a value proposition for partners that are required to fulfill the value propositon to the customer. The value proposition to the partners must be strong enough to motivate them to participate in the business.

2.4.2 Product or Service

The product or service is the link between the firm and the customer. The product or service fulfills the value proposition and generates the promised benefit to the customer. In the decision what product to supply the firm also decides implicitly what not to produce.

2.4.3 Value Architecture

Third component of a business model is the architecture of value creation. It comprises out of three modules. The *Market Design*, the *Internal* and *External Architecture*. The aim of the value architecture is to create the promised benefit to the customer in an efficient way. With the choice of the architecture the firm also decides what degree of stability it wants to have in its value architecture.

2.4.3.1 Market Design

In its business model the firm designs what markets it wants to serve. The market can be segmented by geography or customer characteristics like demographics or kind of customers (B2B, B2C). With its positive formulation what markets to serve the market design also implies which markets not to serve.

2.4.3.2 Internal Value Architecture

The internal and external value architecture secures the production and delivery of the product to the customer. The value architecture consists of the *Resources*, the firm can use as its building blocks, a plan how it wants to configure its value creating activities (*Value Steps*), the *Communication Channels and Coordination Mechanisms* between the value steps and finally the decision which value steps are sourced from external value partners and which are conducted internally.

Resources

The internal resources of the firm are its *Core Competencies* and its S*trategic Assets*. The core competencies comprise what the firm knows; the strategic assets are what the firm owns like brands, patents, or customer relationships (Hamel 2000: 75f).

Value Steps

Besides describing the value steps and their sequence the business model contains the economic agents and their roles in each value step.

Communication Channels and Coordination Mechanism

Part of the value architecture are the communication channels and coordination mechanism between the value steps and the executing agents. The communication channels connect the agents, with the coordination mechanism the firm determines how the agents coordinate their activities.

The combination of the value steps, agents and their roles, of the communication channels and of the coordination mechanism is the *value chain* of the business model.

Demarcation toward the External Value Architecture

Part of a business model is the deliberate decision which value steps the firm sources from external partners and which are conducted internally. The decisive factor is who controls the necessary resources to fulfill the given value proposition.

2.4.3.3 External Value Architecture

The external value architecture comprises of two building blocks, the *interface* between the firm and its *customers* and the *value partners* that complements and reinforces the resource basis of the firm in order to fulfill the value proposition.

Customer Interface

The customer interface are the *distribution channel*, the *information*, a firm has *about its customers* that are used in the value creation, the *communication channels* between the firm and its customers, between the customers and the firm, and among the customers themselves.

The link between the value architecture and the revenue model is made up by the pricing mechanism. The pricing mechanism defines how a price for a product is being determined.

Ultimately, the customer interface is a description of relationship between the firm and its customers.

Value Partners (Building Blocks of the External Architecture)

The business model contains the external value partner that create value along the value chain to fulfill the value proposition. Potential value partners are suppliers, complementors, customers, competitors, or any other stakeholder.

Not all value partners have to actively participate in the business model. So called *passive value partners* create value for the business without being directly rewarded for their participation. Frequently, the passive value partners are complementors that are rewarded for their value creation in other businesses.

Communication Channels and Coordination Mechanism

Another component of the external architecture are the communication channels and the coordination mechanism between the value partners and the internal value architecture. The coordination mechanism governs the rules between the value partners.

2.4.4 Revenue Model

While the value proposition and the chosen value architecture define the costs of a business model, the revenue model contains a description from what sources in what ways the firm generates its revenues. The business can have different sources of revenue. All sources together make up the revenue mix of the firm.

From the revenue model and the costs the margin structure of the business is derived which determines the value of the business to the owner. The revenue model rules if the business model is sustainable.

The following table summarizes the components of a business model.

Table 3: Components of a Business Model

I) Value Proposition
- a) for customers
- b) for value partners

II) Product or Service

III) Value Architecture
- **1) Market Design**
- **2) Internal Architecture**
  - a) Resources as Building Blocks
    - (i) Core Competencies
    - (ii) Strategic Assets

b) Value Steps
c) Communication Channels and Coordination Mechanism
d) Demarcation to External Value Architecture

3) External Value Architecture

a) Customer Interface
   (i) Distribution Channels
   (ii) Information about customers
   (iii) Pricing Mechanism
   (iv) Communication Channel
b) Value Partners
   (i) Active Value Partners
   (ii) Passive Value Partners
c) Communication Channels and Coordination Mechanisms

III) Revenue Model

3 Business Model and Strategy

To come

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