

# Theoretical Foundation of Business Model and Their Building Blocks

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## **Abstract**

Business model literature reviewed in multifaceted in which author example the business model concept through multidisciplinary and review reveals that scholars do not agree on the unified concept of business model that is why literature on business model dissects into multi-stream and become victim of abstruseness. The ambiguity on business model concept eradicate through providing theoretical ground, not on the empirical basis, therefore discussed variety of business definitions from 1998-2010 to come on the point of unified concept. Review the literature from 1996–2010 in sequential manners for building strong theoretical ground on building blocks, in this milieu found 28 blocks used in construction of business model. Companies often make substantial efforts to innovate their processes and products to achieve revenue growth that is why managers have well informed about the business model blocks. The study creates conceptual tools for both academic researcher and manager to develop future business model.

**Keywords:** Abstruseness, Activity, Conceptualization, Multidisciplinary, Origin

## 1. Introduction

Business model (BM) term used as fashion in the era of dotcom boom and this increase the academic interest (Magretta, 2002; Shafer, Smith and Linder, 2005) some speak about business model for internet and other articulate about web business model. Massive literature on business model proposed (Morris, Schidehutte, and Allen, 2005; Johnson, Christensen, and Kagermann, 2008; Teece, 2010) and same case with business model building blocks (Osterwalder, 2004; Brousseau and Penard, 2006). Business model's description has been discussed in multidiscipline is including economics, innovation, management, strategy, e-business, and entrepreneurship (Amit and Zott, 2001; Hedman and Kalling, 2003; Teece, 2010) that is why business model concept has victim of complexity (Weill, Malone, and Apel, 2011).

Preceding researches have shown that citation of term business model in the papers increased (Osterwalder, Pigneur, & Tucci, 2005; Makinen & Seppanen, 2007). The publications on the business model escalation have confirmed through Google Trend<sup>1</sup> which shown business model term searches on the Google from 2004 to 2012. This study does not depict the downloading trend but confirm the above discussion that concept of business model has not still explicitly defined and business model term is victim of vague.



Fig. 1.1 Download trend of term business model

Business model has received lot of attention from managers, entrepreneur, investors, consultant, and academic. Every company has a business model whether that model is explicitly articulate or not. Business model made possible for organization to enact commercial opportunities and gives opportunity to the managers to create, deliver, and capture values in efficient way and can be explore for future development. This study based on previous literature and will identify building blocks from different studies, due to the

<sup>1</sup> www.google.com/trend

variation in use of term business model and time limitation, therefore study bounded with habitual use of building blocks. This study will enhance the understanding of business model by presenting the early definitions and providing comprehensive discussion on the each stream of business model definition for generation of unified concept.

## **2. Literature Review**

### *2.1 Business Model Roots*

Business model has to answer a series of questions essential to any business. Business model concept is drawn from the Peter Drucker's questions; who is customer, what does value and how does intend to earn wealth (Drucker, 1954; Magretta, 2002). Chesbrough and Rosenbloom (2002) elucidate the premises for the business model concept and found that origin of business model concept found in the literature of strategy from Chandler (1962) book of strategy and structure. In the same vein Amit and Zott (2001) and Hedman & Kalling (2003) make clear in their research, that business model concept has originated in strategy literature. Preliminary study of (Makinen & Seppanen, 2007) on business model with taxonomical research found that business model concept has been act as bridge between the strategy and operations. Welge and Al-Laham (2008) distinguished way of strategically thinking in an organization into four phases: financial planning phase, long-term planning, strategic planning phase, and strategic management. These evidences confirm that business model research originated in strategic management.

### *2.2 Early Views on Business Model*

The early authors have mainly written about the classification of models in different categories; Business model classification based on the value proposition and revenue generation mode. First popular concept of business model is architecture of the product or service and information flow including description of actors, benefits, and revenue given by Timmers (1998). The method that provide sustainability to the company be considered right method while company clear about their revenue generation ways and made right position in the value chain (Rappa, 2001). Business model proposed by Tapscott, Lowy, and Ticoll (2000) based on business webs that depict how value exchange among the participants (partner, customer, and supplier) while different in their degree of economic control and value integration. Both authors (Tapscott, Ticoll, & Lowy, Digital captial: Harnessing the power of business webs, 2000; Rappa, 2001) made more elucidation of revenue and product aspects rather than elucidation of business model elements. There are different actors involved in business model but based on three basic element including participants, relationship and flows (Weill & Vitale, 2002) and also proposed eight atomic e-business models, each if which can be implemented as a pure business model or combined to create a hybrid model. Revenue generation and network aspect combined to define the business model (Osterwalder & Pigneur, 2002; Morris, Schidehutte, & Allen, 2005) for the focal organizations. Magretta (2002) and Afuah, A. (2004) have discussed the relationship between the strategy and business models. In the same vein, Seddon, Lewis, Freeman, & Shanks, (2004) explore relationship of strategy with the business model. The research in business model address different aspects including definitions, conceptual business model, modules,

taxonomies, tools for designing a model, and evaluation models (Pateli & Giaglis, 2003). The business model researches shifted from the definitions and taxonomies toward building blocks, framework, and practical implementation. Osterwalder, Pigneur, and Tucci (2005), business oriented people have different concept of business model from the technology oriented. Diverse definition of business model from 1998 to 2010 has given in appendix I.

Osterwalder Pigneur and Tucci, (2005) group the definition of business model into activity related and value oriented approaches. In the same line, (George & Bock, 2011) categorized the business model definition into organizational designing, resources based, sense making, nature of innovation and opportunity. Zott, Amit, & Massa (2010) divided the business model stream of thoughts into three main schools of thoughts: e-commerce school of thoughts, strategy school of thoughts and technology, & innovation management school of thoughts for better understanding of business model concept. First school of thought is e-commerce that gives explanation on business model in context of internet-based businesses and firm's role in their own ecosystem. Next one is strategy school of thoughts in which business model used to explain value creation process and which sources used to gain sustainable competitive advantage. Technology & innovation management school of thoughts see a business model as commercialization aspects of technology and innovation. These schools of thought give the opportunity to researcher and reader study the business model concept in their domain. Classically, business model definitions revolved around the value creation, capturing, and delivering (Osterwalder & Pigneur, 2010; Teece, 2010). For example Chesbrough (2006) affirm that value creation and value capturing are main functions of the business model. Osterwalder and Pigneur (2010) state that business model describe as how value is created, captured and delivered by an organization. Teece (2010) made description of business model as how firm create and deliver the value to customer and in return gain profit. Ghaziani and Ventresca (2005) concluded that most discussed frame of business model is value. In the same vein Zott, Amit and Massa (2010) come to point that typically authors discussed value aspect in defining the business model. While meaning of value perceived in different respects for example customer value aspect discussed by (Tapscott, 2001; Dubosson-Torbay, Osterwalder, & Pigneur, 2002; Osterwalder & Pigneur, 2010; Teece, 2010) both customer value and company value consider by (Bouwman, Vos, & Haaker, 2008; Johnson, Christensen, & Kagermann, 2008) and economic value describe by (Gordijn & Akkermans, 2001).

### *2.3 Business Model Building Blocks*

Internet boom period gave opportunity of creating values in variety of ways for customer (Amit and Zott, 2001). The research on e-commerce business model perspective has been classified in multiplicity of ways for example Timmer (1998) differentiate among 11 models, Weill and Vitale (2001) presented another classification of business model based service, content provider, direct to customer, intermediary, virtual communication, value integration and share infrastructure. Mahadevan (2000) presented value, revenue, and logistic stream for business model construction. This perception extended by Osterwalder (2004) through presenting framework of value proposition, network of actors, distribution channels, customer segment and revenue generation. Pauwels and Weiss (2008) present a survey of

customer shifting from free to paid services through marketing. Casadesus-Masanell and Ricart (2010) highlight the business perspective for firm as realization of strategy. Researches on business model regarding technology perspective divided into two main streams; commercially enact of innovation and new dimension of innovation. Chesbrough (2010) emphasized on the removal of complexity to adjust with existing resources and inability to see new idea. Giesen, Berman, Bell, and Blitz (2007) proposed three business model type, supply chain, revenue generation and innovation position.

Business model has break down into various parts such as Osterwalder, Pigneur, and Tucci, (2005) suggest nine modules, Mason and Spring (2010) offer three components, Johnson, Christensen, and Kagermann (2008) supply four parts of business model. However, various other researchers presented different dimension / modules of business model. For example Weil and Vitale (2001) offer business model schematics with four characteristics; required competencies, success factors, revenue generation and strategic and value proposition. Chesbrough and Rosenbloom (2002) discussed the business model as mediating role between the technology and economic value. Morris, Schidehutte, and Allen, (2005) developed business model for entrepreneurship with intruding three level; foundation, proprietary and rules. E3-value ontology developed by Gordijn (2002) for e-business model through discussing actor role, exchange value, value port, group the value, value objects, market segment and value activity.

Diverse researches have conducted for exploration of business model elements. Shafer, Smith, and Linder (2005) found 42 different building blocks and proposed four major block; strategic choice, value network, create value and capture value. Same work has been extended (Krcmar, Bohm, Friesike, & Schildhauer, 2011) by presenting 27 elements of business model through consulting 28 different authors from 1996-2010. The early authors have mainly written about the frameworks in different categories; Business model frameworks classification based on the value proposition and revenue generation mode. Business model compiled with elements/ modules, and referred as building blocks. Palo & Tahtinen (2011) differentiate the literature of business model based on single firm and business net.

### **3. Research Method**

The research program has developed comprising of three steps strategy to meet with the objective of the study. First, design a research schema for reviewing the literature or accessing the secondary data sources for building strong theoretical grounding on business model concept. Second step involve identification of business model building blocks in chronological order. For this purpose, arrange the building block with researcher's name in an excel sheet. Third strategy involve habitual exploitation of each building block usage from 1996-2010. This study laced the manager with knowledge of different building blocks which components are most important for the business because success of firm depends on the adaptation of right business model and fill the gap between the academics and practitioners.

#### *3.1 Research Schema*

For reviewing the literature in sequential manner, adopt road map of business model research work which is extension of Weiner, Renner, and Kett (2010) research. The research map

contains 55 authors studies in which 30 authors highlight different modules of business model. Figures comprises with different line colors, where each color line indicate road of research regarding business model. Authors address definitions on green line, business model component on orange line, business model classification depict with red color line, transformation approaches of business model in brown line, business model design, methods and tool have given in turquoise color, and business model evaluation lay on blue line.

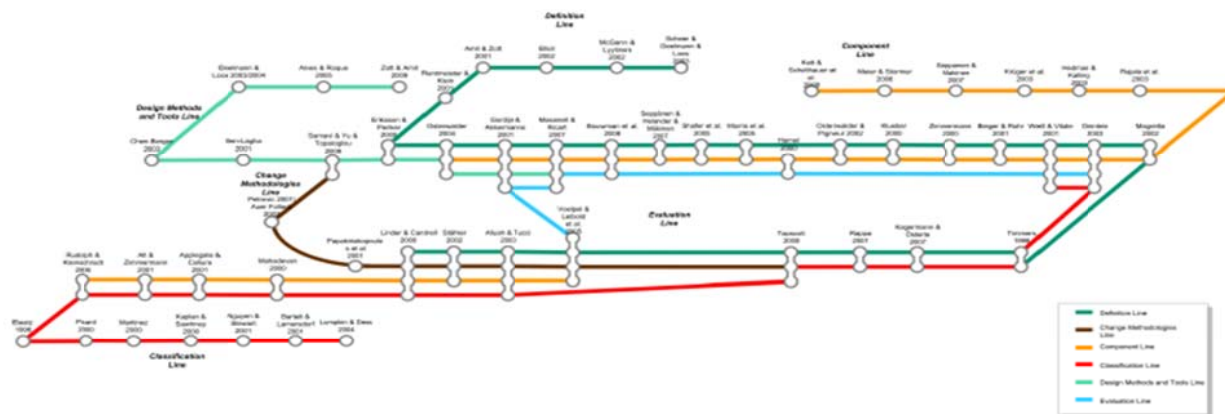


Figure 1: Business Model Research Map

Source: Weiner et al. (2010)

Fraunhofer Institute of Industrial Engineering (IAO); Competence Centre Electronic Business (sponsor by German THUSEUS program) build a website<sup>2</sup> that makes available information on the business model for information technology. Publications on the business model concept around the world have consolidated so that numerous articles regarding the business model available on the website. Another online community<sup>3</sup> has established for development of research, that share the theoretical grounding and empirical researches on the business model to create knowledge.

Ghaziani and Ventresca (2005) consult 1729 publication regarding the business model; Zott, Amit, and Massa (2010) review more than 1300 business journals and presented more complete source of literature on business model roots and its development. In the same vein (Krcmar, Bohm, Friesike, and Schildhauer, 2011) presented road map of business model research work; Palo and Tahtinen (2011) differentiate the literature of business model on the basis of single firm and business net. Kim and Im (2012) present the classification of business model ontology through K-means algorithm and analyze business model components of patent data. However, examined business model concept through multiple disciplinary but reveal that scholars do not agree on what building blocks of business model shown in appendix II.

<sup>2</sup> [www.itbusinessmodels.org](http://www.itbusinessmodels.org)

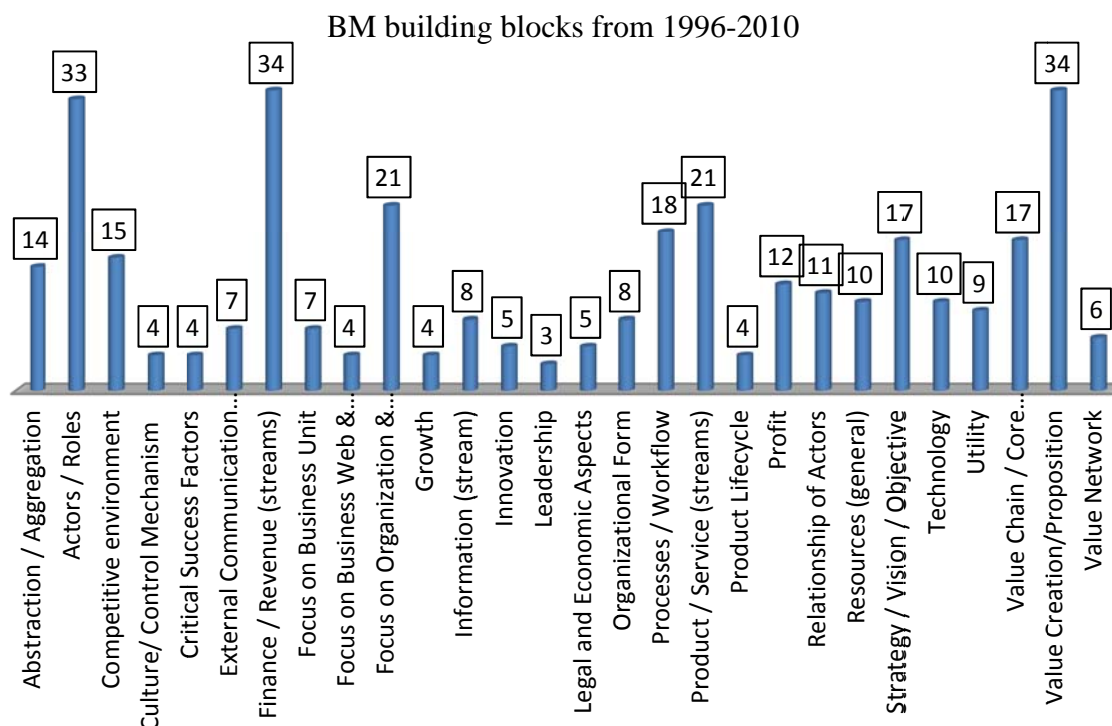
<sup>3</sup> <http://www.businessmodelcommunity.com>

### 3.2 Identification of Building Blocks

The study on business model building block conduct through reviewing the literature in chronological order and found various researches on business model while all used elements present in table form in appendix III with description of researchers and their blocks. However, 28 business model building blocks has identified through reviewing the 62 authors' literature on business model building blocks from 1996-2010.

### 3.3 Habitual Exploitation of Building Blocks

Reviewing the recent literature on business model (Ghaziani and Ventresca, 2005; Zott, Amit, and Massa, 2010; Krcmar, Bohm, Friesike, and Schildhauer, 2011; Palo and Tahtinen, 2011; Kim and Im, 2012) and other various publications of indexed journals. However, supply a table of building block of business model in appendix II from 1996 to 2010 and from this, identified statistics on the business model building blocks exploitation. Use the tally marks for determining the each building block number of observations. A tabular arrangement of business model modules has made into different classes with corresponding class frequency has given in appendix IV based on appendix III.



## 5. Conclusion

Business model knowledge impart through adopting diverse unit of analysis such as organization, business, company, organizational level, organizational entity and some time

network level. Purpose of business model is different in dissimilar context for instance starting phase and growth phase of a company, variety of innovation and technology, profit, and not-for-profit organizations, and importance of technology, innovation vary from organization to organization. These make the harder to build the well-defined and strong conceptualization grounding for business model concept. Classically, business model concept revolved around the value creation, capturing, and delivering (Osterwalder & Pigneur, 2010; Teece, 2010). For example Chesbrough (2006) affirm that value creation and value capturing are main functions of the business model. Osterwalder and Pigneur (2010) state that business model describe as how value is created, captured and delivered by an organization. Teece (2010) made description of business model as how firm create and deliver the value to customer and in return gain profit. Ghaziani and Ventresca (2005) concluded that most discussed frame of business model is value. In the same vein Zott, Amit and Massa (2010) come to point that typically authors discussed value aspect in defining the business model. While meaning of value perceived in different respects for example customer value aspect discussed by (Osterwalder & Pigneur, 2010; Teece, 2010) both customer value and company value consider by (Bouwman, Vos, & Haaker, 2008; Johnson, Christensen, & Kagermann, 2008) and economic value describe by (Gordijn & Akkermans, 2001). However, Business model can be too abstract because there are various opinions on the concept of the model, and therefore, can cause confusion. For unified concept, drawing from the above discussion that business model as a system of interconnect and interdependent activities that determines the way the company does business with its customer, partner and vendors. Business model is unified as a set of specific activities conducted to satisfy the perceived needs of the market and how these activities linked with each other. Business model constructed with 28 diverse blocks used by 62 authors in different time. Diverse blocks used in previous researches for building the business model, but now researcher can identified in glance frequently used and imperative blocks of the business model. This compilation offer glimpse over the business model blocks and act as complete source of literature on business model. Business model determine the success or failure of strategies that is why organizations need innovation encouraging environment; in this context, companies often make substantial efforts to innovate their processes and products to achieve revenue growth and to maintain or improve profit margins that is why need to further explore these habitual blocks in business model practices.

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#### Appendix I (Variety of business model definitions from 1998 to 2010)

Author's Name	Year	Description
Timmers	1998	Business model is architecture of the product or service and information flow including description of actors, benefits, and revenue.
Rappa	2000	Business model describe the revenue generation perspective and positioning in the value chain
Mahadevan	2000	Business model based on the main three stream including players, revenue and logistics
Tapscott	2001	Business model elucidate the firm architecture for creation of customer value.
Amit & Zott	2001	Business model based on innovation in which business opportunities captured through value creation
Gordijn & Akkermans	2001	Design e3- value that describes exchange of economic value with network.
Afuah and Tucci	2001	Firm utilize their resource to provide better value to customer and in

		return gain profit, therefore firms have to perform better than their competitors do.
<b>Weill and Vitale</b>	2001	Business model provide description of different actors role, which influence the flows including product, information, and money in the network.
<b>Chesbrough &amp; Rosenbloom</b>	2002	Business model transfer the technology into economic values
<b>Osterwalder et al.</b>	2002	Business model only provide description of firm architecture and its network for creation and delivery of value to one or group of customers.
<b>Magretta</b>	2002	Business model is a framework which give answer the question of who, what, how (Peter Drucker's age old questions)
<b>Hedman &amp; Kalling</b>	2003	Describe the key elements of business and also enlighten culture constraints
<b>Osterwalder</b>	2004	Business model is a conceptual tool that describes the company logic through group of elements and their relationship.
<b>Morris et al.</b>	2005	Present decision variable group which interrelated the strategy, architecture and economics for sustainability
<b>Osterwalder et al.</b>	2005	Business model describe the value of company offer through set of elements and their relationship
<b>Shafer et al.</b>	2005	Explain how values create and capture in a value network
<b>Chesbrough</b>	2006	Value creation and value capturing are two main functions of business model.
<b>Bouwman, De Vos and Haaker</b>	2008	In service industry, business model describe the value of targeted group, which act as source of revenue and architecture of delivering service.
<b>Westerlund et al.</b>	2008	Business generates revenue through specifying the relationship in network is called business model.
<b>Johson, Christensen and Kagermann</b>	2008	Business model build up with four elements including value proposition, profit formula, processes and resources.
<b>Mullins and Komisar</b>	2009	Business model refer to the economic activities of business.
<b>Osterwalder and Pigneur</b>	2010	Business model describe the how create, delivers and capture the value by organization.
<b>Casadesus-Masanell et al.</b>	2010	Business model describe the firm realized strategy
<b>Amit and Zott</b>	2010	Business model is description of activity systems how firm deliver value to different players and how connect with product markets.
<b>Demil and Lecocq</b>	2010	Business model used to produce proposition that generate the value for customer and organization.
<b>Teece</b>	2010	Articulation of logic and evidence for value proposition

**Appendix II (Diverse business model components from 1998-2010)**

Timmer, 1998 <ul style="list-style-type: none"> <li>• Architecture</li> <li>• Information flow</li> <li>• Benefits to actors</li> <li>• Revenue</li> </ul>	Wirtz, 2000 <ul style="list-style-type: none"> <li>• Market</li> <li>• Procurement</li> <li>• Performance creation</li> <li>• Distribution</li> <li>• Capital</li> </ul>	Mahadevan, 2000 <ul style="list-style-type: none"> <li>• Value stream</li> <li>• Revenue stream</li> <li>• Logistical stream</li> </ul>
Hamel, 2000 <ul style="list-style-type: none"> <li>• Customer interface</li> <li>• Core strategy</li> <li>• Strategic Resources</li> <li>• Value network</li> <li>• Wealth potential</li> </ul>	H. D. Zimmerman, 2000 <ul style="list-style-type: none"> <li>• Product</li> <li>• Process</li> <li>• Structure</li> </ul>	Stewart, Zhao, 2000 <ul style="list-style-type: none"> <li>• Customer selection</li> <li>• Value capture</li> <li>• Differentiation and strategies control</li> <li>• Scope</li> </ul>
Buchholz & Bech, 2001 <ul style="list-style-type: none"> <li>• Processes</li> <li>• Transaction</li> <li>• Participants</li> <li>• Proceeds</li> </ul>	Staehler, 2001 <ul style="list-style-type: none"> <li>• Value proposition</li> <li>• Architecture</li> <li>• Creation yield</li> </ul>	Afuah & Tucci, 2001 <ul style="list-style-type: none"> <li>• Linkage</li> <li>• Customer value</li> <li>• Revenue</li> </ul>
Rapp, 2001 <ul style="list-style-type: none"> <li>• Sustainability</li> <li>• Revenue stream</li> <li>• Cost structure</li> <li>• Value chain positioning</li> </ul>	Applegate, 2001 <ul style="list-style-type: none"> <li>• Concept (strategic)</li> <li>• Capabilities (people)</li> <li>• Value (benefits return to firm)</li> </ul>	Alt & Zimmerman, 2001 <ul style="list-style-type: none"> <li>• Mission (values)</li> <li>• Structure (actors)</li> <li>• Processes (customers)</li> <li>• Revenue</li> <li>• Legal Issue</li> <li>• Technology</li> </ul>
Osterwalder, 2004 <ul style="list-style-type: none"> <li>• Value proposition</li> <li>• Customer segment</li> <li>• Partner network</li> <li>• Delivery channel</li> <li>• Revenue stream</li> </ul>	Shafer et al., 2005 <ul style="list-style-type: none"> <li>• Strategic Choice</li> <li>• Creating Value</li> <li>• Capturing Value</li> <li>• Value Network</li> </ul>	Morris et al., 2005 <ul style="list-style-type: none"> <li>• Economics</li> <li>• Operational</li> <li>• Strategic Model</li> </ul>
Osterwalder et al., 2005 <ul style="list-style-type: none"> <li>• Value proposition</li> <li>• Target Customer</li> <li>• Distribution channels</li> <li>• Relationship</li> <li>• Value configuration</li> <li>• Core competencies</li> <li>• Partner network</li> <li>• Cost structure</li> <li>• Revenue model</li> </ul>	Brousseau & Penard, 2006 <ul style="list-style-type: none"> <li>• Cost Structure</li> <li>• Revenue stream</li> <li>• Sustainable income generation</li> <li>• Good/ service production and exchange</li> </ul>	Bonaccorsi et al., 2006 <ul style="list-style-type: none"> <li>• Product/Service delivery</li> <li>• Customers</li> <li>• Cost structure</li> <li>• Income</li> <li>•</li> </ul>
Johnson et al., 2008	Pieter Ballon, 2007	Chesbrough et al., 2009

<ul style="list-style-type: none"> <li>• Customer value proposition</li> <li>• Profit formula</li> <li>• Key resources</li> <li>• Key processes</li> </ul>	<ul style="list-style-type: none"> <li>• Product/ service that firm offer</li> <li>• Relationship that firm create and maintain with customer</li> <li>• Infrastructure and Network partner</li> <li>• Financial aspects</li> </ul>	<ul style="list-style-type: none"> <li>• Infrastructure (key partner, activities, resources)</li> <li>• Value proposition</li> <li>• Customer (relationship, channels, segment)</li> <li>• Financials (cost &amp; revenue structure)</li> </ul>
<p>Doganova et al., 2009</p> <ul style="list-style-type: none"> <li>• Value proposition</li> <li>• Architecture of value</li> <li>Revenue model</li> </ul>	<p>Mason &amp; Spring, 2010</p> <ul style="list-style-type: none"> <li>• Technology</li> <li>• Network architecture</li> <li>• Market Offering</li> </ul>	

**Appendix III (Chronological business model building blocks from 1996-2010)**

Chronological Author's Name	Aggregation	Actors / Roles	Unit	organization	web	Actor	concept	(Stream)	Profit	Stream	Information Flow	mechanism	factors	Utility	Organization Form	Product Life Cycle	Workflow	Legal Aspect	(General)	Objective	Technology	Growth	Competencies	Proposition	Environment	Leadership	Innovation	Value Network
Baatz (1996)									1																			
Osterle (1996)													1									1						
Carroll und Trebnick (1997)				1																								
Timmers (1998)		1						1		1	1			1														
Lindstrom (1999)	1																			1								
Nilsson, Tolis und Nellborn (1999)	1		1	1													1				1							
Willars (1999)	1			1																					1			
Bartelt und Lamersdorf (2000)		1						1		1	1						1											
Eriksson, Penker (2000)	1														1		1			1	1						1	
Heinrich und Leist (2000)		1		1			1								1					1			1		1			
Wirtz (2000)	1						1	1	1				1															
Hamel (2000)		1	1					1					1			1		1					1	1				
Clueber (2000)	1	1		1	1			1		1	1			1							1			1	1			
Stewart et.												1		1									1	1				

al.(2000)																					
Mahadevan (2000)		1						1		1										1	
Martinez (2000)								1		1											
Zimmermann (2000)		1			1			1		1			1								
Rappa (2001)								1		1								1		1	
Gordijn und Akkermans (2001)	1	1		1			1							1						1	
Applegate (2001)				1										1				1			
Buchholz and Bech (2001)		1								1				1					1		
Afuah and Tucci (2001)		1				1		1					1	1				1		1	1
Alt und Zimmermann (2001)		1						1		1				1		1				1	1
Amit und Zott (2001)		1		1			1			1		1		1		1				1	
Gordijn und Akkermans (2001)	1	1								1				1						1	1
Porter (2001)																		1		1	1
Rentmeister und Klein (2001)	1	1		1				1		1		1					1			1	
Robert und		1		1																	



Racine (2001)																											
Weill und Vitale (2001)	1	1	1	1		1		1		1	1							1				1					
Bieger, et al. (2002)	1	1		1			1	1	1	1									1			1	1		1		
Bieger, Ruegg- Sturm und Rohr (2002)		1	1	1	1	1	1	1					1									1	1	1			
Ray Poot (2002)		1					1	1		1														1			
Dubosso nett (2002)		1	1	1		1		1						1	1								1	1	1		1
Chesbro ugh, Rosenblo om (2002)																							1		1		1
Hoque (2002)		1		1			1	1		1													1	1	1		1
Magretta (2002)		1		1					1															1	1		
Mercer (2002)									1	1					1				1	1					1		
Osterwal der und Pigneur (2002)		1		1		1		1		1					1								1		1		
Schogel (2002)	1			1				1		1						1	1	1	1	1	1				1	1	
Servatius (2002)		1	1						1	1						1									1		
Stahler (2002)		1		1					1							1									1	1	
Chesbro ugh 2003		1																						1		1	
Van		1		1																			1	1			

D.etal (2003)																				
Scheer (2003)	1						1	1		1		1		1						
Ostoswal tes (2004)		1				1		1										1		
Osterwal der et. al. (2005)					1	1		1						1			1	1		1
Morris et al. (2005)		1				1						1		1		1		1	1	1
Shafer et al. (2005)				1	1									1		1	1			
Voelpel et al. (2005)		1															1	1		1
Bronssea u and Penord (2006)							1	1	1											
Bonacors i et. at. (2006)							1	1					1							
Pieter Ballon (2007)					1	1								1						1
Kagerma nn, Osterle (2007)		1				1	1		1					1						1
Seppane n et al. (2007)		1															1		1	1
Bouwma n (2008)		1					1		1					1					1	
Johnson et al. (2008)								1						1		1			1	
Chesbro ugh et.		1				1	1												1	

al. (2009)																			
Doganov a et. al. (2009)							1										1	1	
Masan Spring (2010)			1											1					1
Casadesu s- Masanell , Ricart (2010)												1		1			1	1	
Osterwal der und Pigneur (2010)												1						1	
Teece (2010)							1	1							1			1	

**Appendix IV (Tally Marks and Frequency Distribution of Business Model Components)**

<b>Building Blocks</b>	<b>Tally</b>	<b>Frequency</b>
Abstraction / Aggregation	III III III	14
Actors / Roles	III III III III III III III	33
Competitive environment	III III III	15
Culture/ Control Mechanism	III	4
Critical Success Factors	III	4
External Communication Concept	III III	7
Finance / Revenue (streams)	III III III III III III III	34
Focus on Business Unit	III III	7
Focus on Business Web & Identity	III	4
Focus on Organization & reputation	III III III III I	21
Growth	III	4
Information (stream)	III III	8
Innovation	III	5
Leadership	III	3
Legal and Economic Aspects	III	5
Organizational Form	III III	8
Processes / Workflow	III III III III	18
Product / Service (streams)	III III III III I	21
Product Lifecycle	III	4
Profit	III III II	12
Relationship of Actors	III III I	11
Resources (general)	III III	10
Strategy / Vision / Objective	III III III II	17
Technology	III III	10
Utility	III III	9
Value Chain / Core Competences	III III III II	17
Value Creation/Proposition	III III III III III III III	34
Value Network	III I	6