

An Extensive Review of the Frameworks used for the Change and Development of Business Models

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Abstract

This paper provides the findings of an extensive review of the *Business Modelling* research and practice i.e. of the frameworks designed for the development of a business model for e-commerce. This comprehensive study reveals that traditional solutions do not provide full and complete support (at not enough level of detail), but only provide general guidelines or steps described in quite brief terms. Also, it concludes that now days

2.0 Theoretical Foundation

The Business Modelling literature can be seen as having progressed through various phases [8]:

Phase 1: Selection of an E-business Model

Early works on business modelling research simply concentrated on either providing criteria for the selection of an e-business model [2, 9] or providing guidelines for extending one or more of the dimensions of the existing business model [1w 0 3u. 56006an 002 T(h)12J 0.002 Tc 0.411 Tw Tw Tw(pl)-TaJ -0.001 gl3(a ,.411 T.41-4()-4(g)128c

success. In short these works aim to interpret the critical factors and to facilitate the decision making process without recommending ways for changing or development of a business model.

Similarly Petrovic, et al. [3] adapt and modify a problem solving approach in order to a) identify the problem of the current business model and its factors, and b) identify the possibilities for changing the problem situation developing an action plan. The aim is restricted to the process of formulating an action plan considering the analysis of the micro and macro business environment, and to clarify some possibilities for changing a business model rather than to guide the real change. Papakiriakopoulos, et al. [4] also concentrate on the analysis of several issues associated with the business environment.

In summary, the above proposed works are aligned with the strategic aspect of business model change. Papers typically presented what is believed to be the critical factors about what makes business model change possible - in some cases they focus so much that they are

Phase 5: Organisational, Operational, Technological aspect

During the last phase, the business modelling works have evolved from the focus on the value creating processes to the focus on other aspects of the business model like organisational, operational, and technological. Researchers recognise that the business model is not for a single company as it was in the past, but it is for the network of suppliers, manufactures, partners, investors and customers that ingrate using new technologies and information systems [25, 26].

Thus, Braet & Ballon [27] develop a business modelling process for a remote management system categorising the actors and roles that are active within a given value network. They proposed four business modelling design phases giving equal emphasis to the organisational, technological, service, and finance aspect of a business model; and they use business model scenarios to describe each aspect. Also, Wirtz [28] defines four business model levels i.e. the *industry level*, *corporate (company) level*, *business unit level* and *product level*. In this work, Wirtz focuses on design process related to business model innovation and includes a strategic aspect that is developed during the process. This means that this process assumes that a business model designing is related to strategy.

Some authors like Sandstrom & Osborne [29] describe only one aspect of the business modelling process, namely on how to handle a product innovation process involving a business model renewal and multiple actors working as a network. Similarly, Heikkila et al. [30] focus more on product/service understanding, adopting an agile way of developing business models. They argue that business model design needs to start in the early phases of ideation of new products and services. Bouwman et al. [31] suggest that the principles of agile software development can lead to fast iterations. In most recent research, scholars recognise that the role of technology innovation and its relationship to the businesses has

objective, the *technique(s)* used by each framework, the *output delivered* by each framework, the *component(s)* proposed by each work.

Table 1: Summary of the Business Modelling Frameworks

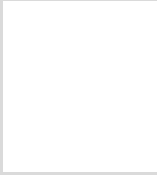
Author(s)/ Year	Philosophy	Scope	Objective	Approach	Technique	Output	Component(s)
Tapscott et al. (2000)	The new business 						

Table 1 (continue): Summary of the Business Modelling Frameworks

Author(s)/ Year	Philosophy	Scope	Objective	Approach	Technique	Output	Component(s)
Papakiriakopoulos & Poulymenakou (2001)	Examine and collect information resources that could help and empower processes placed on the value chain						

Table 1 (continue): Summary of the Business Modelling Frameworks

Author(s)/ Year	Philosophy	Scope	Objective	Approach	Technique	Output	Component(s)
Gordijn & Akkermans (2003)	Analyse whether the business model is viable or not	Conceptualise the business model	Define how economic value is created, interpreted and exchanged within a multi-actor stakeholder network of enterprises and customers	List of Components	Conceptualisation, Graphical Presentation and Scenario (inspired by UML Notation), Scenarios	Visualisation of the value model	Actors Value Objects Market Segment Value Port Value Interface Value Exchange Value Activity
Osterwalder (2004)	Depict company's strategy and business opportunities. It can be used to describe the current state and the „where state	Conceptualise the business model	Capture, understand, communicate, design, analyse, and change the business logic of a company	Categorised components decomposed into a set of defined sub-components	Business Modelling Canvas to present the business components	Conceptualisation of the value model	Value Proposition Offering Target Customer Criterion Distribution Channel Link Relationship Mechanism Value Configuration Activity Capability Resource Partnership Agreement Cost Structure Revenue Model Pricing Actor

Table 1 (continue): Summary of the Business Modelling Frameworks

Author(s)/ Year	Philosophy	Scope	Objective	Approach	Technique	Output	Component(s)
Sandstrom & Osborne (2010)	Business model renewal and multiple actors working as a network	Product Innovation	Provide guidelines to managers to handle a product innovation process	Sequence of steps	No	Guidelines to manage product innovation	Actor Resources Product



Summarising the extensive literature review of the business modelling frameworks the following findings are revealed:

Early works of business modelling research:

- focus on selecting one of the existing possible e-business models, not on changing the current business model, or developing a new business model;
- address the business logic of a company taking

4.0 Conclusions and Further Research

The findings reveal that a complete and appropriate solution for the transition from the current to a future business model need to

5.0 References

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