

# Chapter 25

## A Visual Approach to Business IT Alignment Between Business Model and Enterprise Architecture

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### ABSTRACT

*In this paper, the authors put forward an intermediary model that can support the transition between a business model and an IT infrastructure, then provide an example of how the approach can be used. The model is based on a combination of existing models: enterprise architecture and the Business Model Canvas. The authors show how the proposed intermediary model, which has a strong focus on a business model strategy, can help IT alignment. The intermediary model can help alignment from either a business model focus or an IT infrastructure focus because of the correspondence between the two paradigms. The focus on visualization within the intermediary model aids in quickly illustrating the common ground held by the parties involved in the alignment.*

### INTRODUCTION

Information technology (IT) is becoming ubiquitous, changing the way people exchange information and extending the realm of possibilities. Changes are occurring not only in information technology itself but also in all the domains that interact with it. Faster computation, together with increased storage capability and bandwidth, make it possible for new services to be introduced; in turn, this offers the potential for new business models, lower barriers of entry, and more competition. Whether dealing with an existing business or a start-up, the key is to design and iterate around its business model so as to not only outperform competitors but also create new markets by offering differentiated products. New services, such as

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cloud computing, offer opportunities to experiment with new business models without having to make huge investments in IT infrastructure, but a business model strategy still must be aligned with its processes and any supporting IT applications, regardless of whether IT infrastructure is virtual or physical.

As stated by Van Buuren et al. (2005):

*Enterprise architecture and business modeling methodologies meet in service offering and realization. In general, business models focus on the service value generated by a business, whereas enterprise architecture models show how a business realizes these services. Linking these approaches results in a powerful modeling tool that couples the value exchange between businesses and the costs that are required to realize these services. (p .2)*

A number of studies have shown that strategic alignment between IT and the business strategy plays a significant role in explaining business performance (Chan & Reich, 2007a). These studies define alignment as the extent to which IT activities and capabilities support business strategy (Chan & Reich, 2007b). From the different points of view on alignment, we agree most closely with Chan and Reich (2007b), and we take as given the view that alignment is inherently of value and contributes to organizational success. Like them, we do not take a position regarding whether alignment is a static end goal or instead a dynamic process occurring over time. We believe that alignment should be a joint responsibility of IT and business executives. With that in mind, it is essential that business executives and IT managers communicate on common ground.

Connecting IT activities to a firm's business model not only provides the potential for linking costs to the strategic objectives but also offers a means of identifying key activities and resources that support the business model strategy in question. It also can highlight underutilization of assets, which in turn can provide opportunities for adopting a new business model strategy.

This paper proposes an intermediary model that will assist in transitioning between a business model and an enterprise architecture model. This intermediary model is based on shared knowledge from business model modeling and enterprise architecture. We suggest that for the transition between models to be as clear as possible, it should have a clearly defined visual representation. Our research question therefore is this:

*Could a visual intermediary model support IT alignment by helping to transition between a business model and an enterprise architecture?*

This paper is structured according to the guidelines of design science research proposed by Gregor and Jones (2007). In the following section, we describe related studies on transitioning between business models and enterprise architecture. We then describe how our research fits into design science methodology. After that, we describe how we constructed the visual intermediary model, which is based on a combination of different models proposed in the literature. We then describe a case study and show how the model can support a discussion on alignment. That description is followed by our observations concerning an evaluation done with students. We conclude with a discussion of how the proposed model could be used in practice and how it could be extended.

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