

# Towards a Framework for Assisting Decision-Makers Assess the Potential of E-Business Models

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## INTRODUCTION

The electronic business landscape is confusing for many new entrants, and many of them face the paradox that hesitation would run the risk of being left behind, but rushing in and making an incorrect choice regarding e-business initiatives could have dire consequences for organisations (Wise & Morrison, 2000). E-business poses significant challenges for organisations as it affects both how organisations relate to external parties, and how they operate internally in managing activities, processes, and systems (Rayport & Jaworski, 2001). Porter (2001) argues that the companies that succeed with e-business will be those that use the Internet in conjunction with their traditional business models and activities. Osterwalder, Ben Lagha, and Pigneur (2002) and Osterwalder, Pigneur, and Tucci (2005) argue that “after an initial phase of euphoria and the following disillusionment” (in relation to e-business) it is important to understand fully how business models function. Linder and Cantrell (2000) argue that existing frameworks are not sufficient to describe the rich array of business model choices facing managers in e-business environments. In particular, decision-makers have a difficult task in assessing the range of proposed models in order to determine those that are most suitable.

The objective of this research is to develop a ‘pre-requisites framework’ for assisting decision-makers assess the suitability of e-business models during the intelligence phase of the decision-making process. Following this introduction, the business model concept is discussed and the range of models proposed by researchers explored. The issue of deciding on appropriate business models is then outlined. This is followed by an explanation of the theoretical ground-

ing for the proposed framework, and a discussion of its operationalisation as a series of Likert scales. The research concludes with thoughts on refining and testing the framework.

## BACKGROUND

Business models are possibly the most discussed, yet least understood area of e-business (Alt and Zimmerman, 2001; Rappa, 2003). Osterwalder et al. (2002) make the point that consultants, executives, researchers, and journalists have “abusively” used the phrase “business model” but have “rarely given a precise definition of what they exactly meant by using it,” and that this has led to the a loss of credibility of the concept.

Timmers (1999) defines a business model as “an architecture for product, service, and information flows,” incorporating a description of the sources of revenue, the actors involved, their roles, and the benefits to them. Rappa (2003) defines a business model as a definition of where a company is positioned in the value-chain and how it makes money. Osterwalder et

*Table 1. Business model building blocks (Osterwalder et al., 2005)*

Product	<ul style="list-style-type: none"> <li>• Value Proposition</li> </ul>
Customer Interface	<ul style="list-style-type: none"> <li>• Target Customer</li> <li>• Distribution Channel</li> <li>• Relationship</li> </ul>
Infrastructure management	<ul style="list-style-type: none"> <li>• Core Competency</li> <li>• Value Configuration</li> <li>• Partner Network</li> </ul>
Financials	<ul style="list-style-type: none"> <li>• Revenue Model</li> <li>• Cost Structure</li> </ul>

al. (2005) take a meticulous approach to the discussion of e-business models, proposing an **e-business model** ontology, which they define as a “rigorous definition of the e-business issues and their interdependencies in a company’s business model.” The e-business model ontology focuses on four aspects of the organisation, product, infrastructure management, customer relationship, and financials as shown in Table 1.

Timmers (1999) has argued that architectures for business models can be identified through the deconstruction and reconstruction of the value-chain. Value-chain elements are identified as well as the possible ways that information can be integrated along the value-chain and between the respective value-chains of the parties that are interacting. Thus, it is possible to conceive a large number of business models, although, as Timmers (1999) argues, this does not mean that a given model will be commercially viable.

Rappa (2003) proposes eight categories of e-business model and identifies 36 models. Ticoll, Lowy,

and Kalakota (1998) propose four different types of models, and Timmers (1999) identified 11 e-business models for business-to-business (B2B) trading. It is clear that there is overlap between models proposed by different researchers. In an attempt to reconcile some overlap, Table 2 presents four classifications of models and arranges them in a manner that illustrates commonality.

**MAIN BODY**

Dynamic environments can cause huge unpredictability in the operation of an organisation (Mintzberg, 1979). When an organisation is faced with an uncertain supply-chain, rapidly changing technology, repeated product evolution, or high internal growth, the organisation is unable to predict future conditions and cannot use standardisation mechanisms to coordinate the activities of the organisation (Mintzberg, 1979). There seems

*Table 2. A synthesis of proposed business models*

Timmers (1999)	Ticoll et al. (1998)	Kaplan and Sawhney (2000)	Rappa (2003)
E-shop			Click and Mortar Merchant Model, Virtual Merchant, Catalogue Merchant
E-mall			Virtual Mall, Metamediary
E-procurement		Catalogue Hubs, MRO Hubs, Yield Managers, Exchanges	Distributor, Manufacturer Model
Third-party Marketplace	Aggregation	Forward Aggregator, Reverse Aggregator	Buy/sell Fulfilment, Market Exchange, Bounty Broker
E-auction	Agora/Open Market		Auction Broker, Reverse Auction
Virtual Community	Alliance		Vertical Web community, Specialised Portal/Vortal, Knowledge Networks, Open Source Model
Collaboration Platform			
Value-chain service provider			
	Value-chain		
Value-chain integration			
Information Brokerage			Content Services
Trust Services			Trust Services, Transaction Broker

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