

# E-Markets as Meta-Enterprise Information Systems



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## INTRODUCTION

Electronic marketplaces are inter-organizational information sharing systems that enable virtual business transactions and allow the exchange of price and product information between buyers and sellers (Kollmann, 2000). For many decades, such information systems were solely utilized for buying and selling of goods under “market conditions.” With the emergence of advanced IT, academia, and also businesses have begun to use electronic marketplaces for information sharing system and it is no longer only a medium for electronic buying and selling processes. In addition, electronic marketplaces are predicted to be a key-stone for integrating the information flows within inter-organizational systems such as supply chains (Grieger, 2004) where borderless organizational structures occur (see Picot, Reichwald, R., Wigand, 2001).

## BACKGROUND

The term “electronic marketplace” is a widely accepted name for information systems that cross-organizational boundaries, link one or more companies to their customers and/or suppliers, and involve resources shared between these organizations such as the exchange of information about prices and product offerings. A firm that utilizes an electronic market place is known as the intermediary. This can be either one of the market participants such as a buyer or a seller, an independent third party, or a multi-firm consortium (Bakos, 1991, p. 296).

The application of the Internet technology allowed further differentiations in this approach and electronic marketplaces became Internet-based electronic market-

places (IEMPs). Such marketplaces are also labeled as online exchanges, e-hubs, electronic exchanges, online marketplaces, net-markets, e-auctions, or e-markets interchangeably (see Lipis, Villars, Byron, & Turner, 2002).

Electronic markets can be virtual, public, digital, neutral, or open (see Grieger, 2003). Our definition however shows that the phenomenon can be examined from a broader perspective as the following comparison between traditional and internet-based electronic markets emphasizes (see Table 1).

In an IEMP-setting, “buyers and sellers” become “members” and/or large communities. The markets can be located anywhere in the world, and the new medium also brings new trading partners together. Not only buying and selling related information is exchanged, but also prior and later transaction phases such as bringing the trading partners together, negotiations, settlement, and after sales are covered by the IEMP. And not only trading transactions are offered, but also not buying/selling related functions.

## THE 6C BUSINESS MODEL

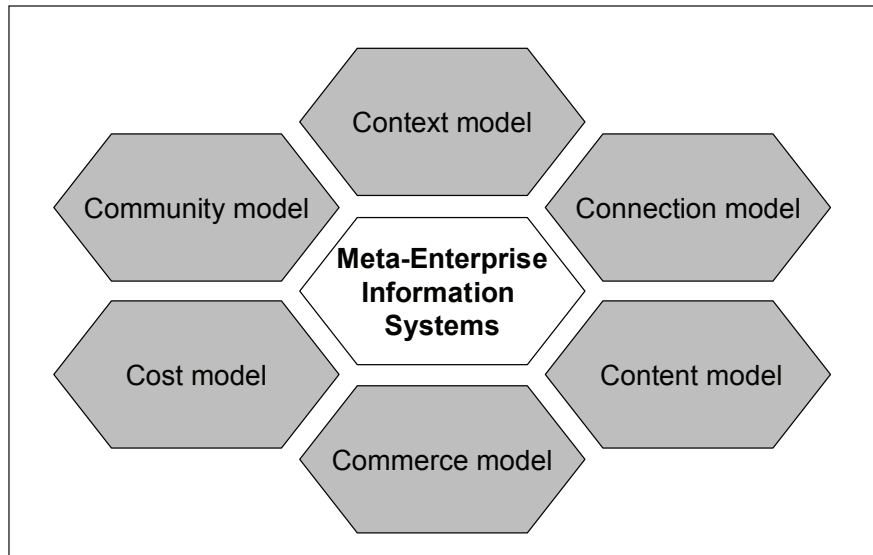
Figure 1 illustrates the “6 Cs” business models that can be applied to meta-enterprise information in order to characterize those systems.

The “content” model covers the selection, systematizing, and preparation of data according to the user’s needs. It includes all information necessary for the commerce transaction, for example the electronic catalogue containing product specifications, supplier data, and customer data (e.g., credit history). Content is the foundation for context and commerce business models.

*Table 1. Comparison between traditional electronic marketplaces and IEMPs*

	Bakos' (1991) electronic market definition	IEMP-specific extensions/variations
Participants	Buyers and sellers	Members Large communities Firms anywhere in the world New trading partners
Functions	Information exchange related to price and product offerings	Focus on industry verticals or specific business functions Buying and selling Meeting and trading Conducting transactions Various mechanism (matching, auctioning, RFQ, exchange, catalog aggregation) Additional functions
Other features available through the Internet		Virtual place or forum Global Public Online, open 24 hr a day, 7 days a week

*Figure 1. The six Cs business models for meta-enterprise information system*



The “context” business model copes with finding, organizing, and systematizing information sources. On the Internet, browser platforms (also called “navigation systems”) such as Google, Lycos, or Altavista have adopted the “context” business model. By using the context business models, firms can easily scan their environment for all relevant information (Liu, 1998).

The “commerce” model deals with enabling and supporting business transactions by facilitating the

commercial frame. In most cases, commerce models are supplemented by value-added services (see Essig & Arnold, 2001). eBay, Let’s buy it, and Amazon are examples of firms that have built their business around the commerce model.

The “community” models focus on bringing people together with common interests in a virtual place or forum. Shared interests have made it possible to build communities that generate a certain level of trust among

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