Portal Models and Applications in Commodity-Based Environments

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INTRODUCTION

Businesses use many portals and for a variety of reasons. Some portals are used for inter-organisational collaboration between suppliers, buyers, and customers or as electronic marketplaces for users to browse and search for genuine savings in the purchase of goods or services. Portals support interorganisational networks by defining function and content on the basis of the customer process, and provides availability to the user via role-based and personalised interface while e-markets offer to the user a restricted or open view of the products and services on offer. Each profile is determined by the participant or its administrator. Today's portal technology, paired tightly with tools and services, support user activity in an integrated way. The use of portals is still in its infancy among a number of organisations while early adopters are at the point of experiencing some genuine rewards. Portal technology provides a modular service-oriented architecture for integrating content and services and for managing user profiles and security settings from other systems. Portal technology provides customers the basis for constructing, building, and deploying a variety of Web applications designed to meet the changing business requirements.

BACKGROUND

Modern Portal technology, combined with tools and services, supports human activity in an integrated way. As each interaction occurs, an underlying system triggers a series of adhoc activities generally not assisted by software on the Web. It allows organisations to create Web applications specifically geared to support the needs of employees, partners, and customers. Examples of these are outlined throughout this chapter, demonstrating how portal technology can transform complex business processes and activities that span both system and business boundaries by adding new efficiencies in existing processes and improving the performance of the user. A portal changes the way a business interacts with itself, its customers, and its partners. This is the essence to success and the difference between a business surviving and a business thriving.

EXAMPLES OF COMMODITY-BASED PORTALS

Portals that have or are operating as *e-marketplaces* within the Australian and Asian-Pacific area include corProcure, Optus Marketsite, Quadrem, Ariba, Freemarkets, and Marketboomer. Some of these e-marketplaces are providing specialist portal facilities in the following areas.

Express Courier Portal

Through an online auction, bidding for courier jobs is available from an e-marketplace for a group, or cluster, of courier companies. A marketplace via a logistic portal or *portlet* may offer a Web booking service for each of the courier companies. The customer may be able to access the Web portal and enter their identification via a log-on, and only the courier that they have a prior relationship with is accessed. Their jobs logged by the customer are charged via a central billing facility and billed on a monthly basis or payment may be made immediately via EFT or credit card. Track and trace capability allows the customer to check on the status of a particular dispatch. All these services are made available via an electronic marketplace.

Local Transport

An electronic marketplace may also facilitate the physical logistical services (refer to Figure 1) for local carriers performing their physical activities in the pickup, linehaul, and delivery chain. The requirements for an e-logistics solution may include: multimodality, geographic service coverage, and service performance quality and reliability across the chain of the transportation services.

Figure 1. Actions processes in e-Fulfillment (Source: Ranier Alt and Stefan Zbornik, 2003, Variant)

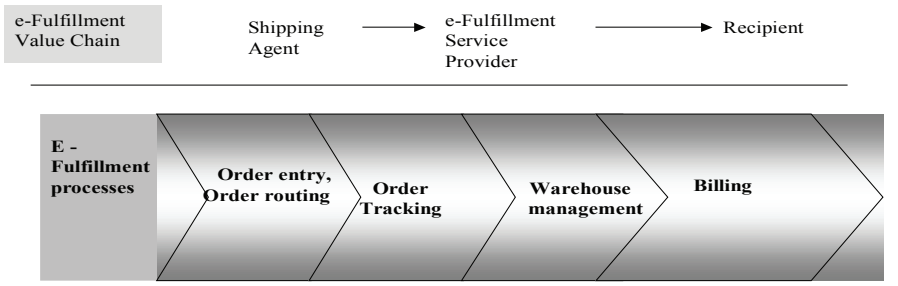

Figure 2. Actions processes in e-Logistics (Source: Rainer Alt and Stefan Zbornik, 2003, Variant)

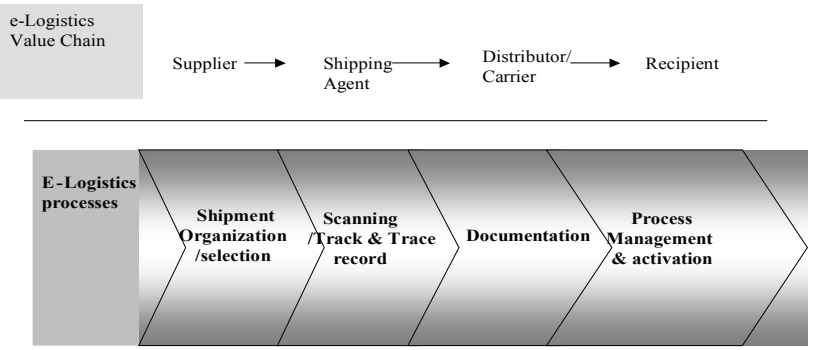

Figure 3. Actions processes in e-Payments (Source: Rainer Alt and Stefan Zbornik, 2003, Variant)