Chapter XXII
Misaligned Market:
The Importance of Industry Context in Technology-Mediated Exchanges

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ABSTRACT

This article examines e-marketplace adoption difficulties from a contextualist perspective. The analysis of industrial characteristics will unearth the adopter's supply chain practices and the contextual features which are unfavorable for e-marketplace deployment. To gain a deeper understanding, this research examines an unsuccessful e-marketplace adoption for agricultural industry in China. The tension created by the these two incongruent contexts results in a misaligned market, as a free-market principle (assumed to be an integral part of the e-marketplace) is imposed on an agricultural market exchange which is characterized by a regulated business environment and a monopolistic market, and which emphasizes variances in product quality, tacit product specification, exclusive suppliers, and spotty purchasing. Practical and theoretical implications of the findings are discussed with reference to technology adoption and technology-organization alignment literature.

INTRODUCTION

Rapid economic development in Asia has heightened the need for entrepreneurs to adopt proven innovations in the hope of catching up with their Western counterparts (Avgerou, 2002; Walsham, 2001). This is especially true in the case of modern China, and in the use of the e-marketplace to streamline the supply chain for productivity gains. Hitherto, more of the e-marketplace initiatives have sadly been disappointing ventures, rather than satisfactory endeavors. Many in the industry speculate that the unfulfilling technology initiatives have been caused by various adoption barriers (Ranganathan, Teo, Dhaliwal, Ang, & Hyde, 2001; Tan & Wu, 2002; Zhu, Kraemer, &

Xu, 2002). Moreover, in developing countries, ineffective technical and social infrastructures, particularly with regard to Internet connections and payment gateways, have significantly prevented the productive use of e-marketplace (Farhoomand, Tuunainen, & Yee, 2000; Markus & Soh, 2002). Current literature provides informative insights into these roadblocks.

Awareness of the roadblocks enables policy-makers to improve the conditions that facilitate technology adoption. Nonetheless, most of the previous analyses did not give much consideration to the role of local context in technology adoption. This gives rise to those context-related studies which suggest that the ineffective adoption of e-marketplace is moderated by national cultural patterns (Bagchi, Hart & Peterson, 2004; Heeks, 2002; Shore & Venkatachalam, 1996) and social context (Avgerou, 2001; Kumar, van Dissel, & Bielli, 1998; Riggins & Mukhopadhyay, 1994). However, the main thrust of these studies has been the examination of the generic cultural traits. They have not yet had an opportunity to examine the contextual characteristics in a specific industry. Thus far, relatively little is known about whether an e-marketplace is suitable for an organization situated in a particular business environment. It is foreseeable that adoption difficulties seen in the computer industry (emphasizing mass production and cost advantage) may vary significantly from those identified in the pharmaceutical industry (with a focus on product liability). Inevitably, such insensitivity to industry context may lead to the implementation of a proven e-marketplace for the wrong industry, thereby creating a "misaligned market".

This article aims to address this misaligned market issue and is organized as follows. The next section explains how a contextualist perspective is used. This is followed by a description of how data are gathered and analyzed. Next, an e-marketplace adopted for an agricultural company in China is examined. The findings elaborate on the "misaligned market" by examining the unfavorable contexts at both industry and supply chain level. On this basis, this study examines why the online market has been perceived as unsuitable for the agricultural sector. Finally, the implications of the research are discussed.

THEORETICAL BASIS

Business-to-business (B2B) e-commerce, better known as the e-marketplace, has recently captured the growing interest of executives (Ash & Burn, 2006; Kambil & van Heck, 1998; Johnston & Vitale, 1988). An e-marketplace is a technological platform from where buyers and suppliers participate in the exchange of products or services, and negotiate business transactions over the Internet (Kaplan & Sawhney, 2000). In an e-marketplace, suppliers can renew product categories in a real-time manner and engage in online exchanges with buyers. Buyers can also engage in online bidding to facilitate supply chain collaboration, thus reducing purchasing costs and improving transaction efficiency (Malone, Yates, & Benjamin, 1987). The case study of Li and Fung provides an excellent example of how the e-marketplace can be used to integrate a sophisticated global supply chain (McFarlan & Young, 2000).

Nonetheless, most of these e-marketplace initiatives have not been successful outside the U.S. context (Avgerou, 2001; Dhawan, Mangaleswaran, Padhi, Sankhe, Schween, & Vaish, 2000; Kendall, Tung, Chuan, Hong, Ng, & Tan, 2001; Scupola, 2003). Two streams of investigation have attempted to address this issue. The first stream of studies examines adoption barriers in terms of the lack of resources for adopting innovations, low perceived benefits, lack of champions in the organization, low absorptive capacity of the recipient organization, and lack of security mechanism and environmental constraints (Farhoomand et al., 2000; Pavlou, 2002; Ranganathan et al., 2001; Tan & Wu, 2002;