Chapter XIII

Corporate Intranet Infusion

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Using intranets to connect heterogeneous systems enables information sharing between existing information systems without major changes to existing applications. Corporate intranets provide the supporting infrastructure for Web publishing, collaborative applications, and line of business applications. This study examined organizational, contextual, and technical variables that are associated with intranet infusion in organizations. A survey was mailed to 1,000 senior-level computer executives in the United States. Six independent variables were examined using an ordered probit analysis to explain the likelihood of occurrence for different levels of intranet infusion. Results indicate that top management support, IT infrastructure, and competition positively influence high levels of intranet infusion. Organizational size is negatively associated with high levels of intranet infusion. Implications and areas for further research are discussed.

INTRODUCTION

Intranets provide heterogeneous system connectivity, multi-platform access to multimedia information, and a single, common user interface to many different applications. Corporate intranets provide the supporting infrastructure for Web publishing, collaborative applications, and line of business applications. Reports indicate that corporate intranets provide quantifiable benefits including immediate access to information that is cost-effective, up-to-date, as well as versatile (Baker, 2000). By the year 2000, intranets were installed in more than 95% of early technology adopter organizations, 80% of the mainstream technology adopter organizations, and 60% of the conservative technology adopter organizations (Claps & Phifer, 1999). Corporate spending on intranets worldwide reached $64 billion in 2001 and is expected to reach $200 billion annually by 2010 (McCarty, 2001).
Intranet deployments can be categorized into three levels of integration with organizational processes. The Gartner Group (1996) defines three intranet platforms that are useful to categorize these levels of deployment. These platforms are the enterprise-wide Web (EWW), the interactive collaboration platform (ICP), and the interactive application platform (IAP). Each platform is based on the complexity of its applications. EWW is the easiest form of intranet to deploy because it involves very little technical knowledge to implement. Using basic HTML-based Web pages, existing “islands of information” can be seamlessly connected for enterprise-wide access. ICP extends the publishing model by adding an on-line medium for collaboration and group work. The third level of intranet deployment, IAP, provides interactive access to line of business (LOB) applications and databases. Existing legacy applications and data warehouses are accessed seamlessly through a Web browser, providing a single common user interface. As can be seen in Figure 1, intranets have the potential to support enterprise applications such as transaction processing, decision support systems and highly distributed multimedia applications. As intranets progress through the levels of integration defined above, the requirements increase enormously for incorporating enterprise systems’ attributes (Claps & Phifer, 1999).

The present research views an intranet as a technological innovation (Zmud & Apple, 1992) that has been adopted and implemented by an organization. The study draws from the IS implementation literature (Kwon & Zmud, 1987) to explain the relationship between the organization and the implementation process of a new IT or technological innovation. Its objective is to explore which organizational, contextual and technical factors contribute to or detract from intranet infusion in organizations.

Figure 1: Evolution of intranet deployment (source: Gartner Group)
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