Chapter 8.5
The Impact of New Trends in the Delivery and Utilization of Enterprise ICT on Supplier and User Organizations

Jiri Vorisek
University of Economics Prague, Czech Republic

George Feuerlicht
University of Economics Prague, Czech Republic

ABSTRACT

Enterprise information systems have rapidly evolved over the last decade. We expect these changes to accelerate during this decade as a result of new trends in enterprise computing. We argue in this chapter that information and communication technology (ICT) remains strategically important to organizations in the 21st century despite the prevailing trend to outsource ICT and related business processes. We have identified a number of important trends that include the move towards the software as a service (SaaS) model for enterprise applications, increased commitment to process orientation, and emphasis on managing the relationship between business and ICT using services. These trends lead to more effective management of ICT and closer integration of ICT with entrepreneurial activities and business processes in organizations, resulting in improvements in return on investment. These trends will have dramatic impact on both the suppliers and users of ICT, and will necessitate the reevaluation of the approach to ICT education as both the composition and qualifications of ICT workforce will undergo a fundamental change.

INTRODUCTION

The high cost of information and communication technology (ICT) solutions combined with the

fast evolution of hardware and software necessitating frequent and costly upgrades has led some observers to conclude that investment in IT does not provide a competitive advantage to organizations and in some cases can detract from the core business in which the organization is engaged. Nicolas Carr (2003), in his controversial article titled "IT Doesn't Matter," sparked a wide-ranging discussion about the benefits of IT in the context of enterprise computing, and in his follow up paper titled "The End of Corporate Computing" (Carr, 2005) he further argues that "IT is shifting from being an asset companies own to a service they purchase." Carr predicts a momentous shift from the present enterprise computing environment based on ownership of ICT infrastructure and licensed software to the world of utility computing where software services are delivered to organizations from a remote data center in much the same way as electricity.

There is little doubt that enterprise computing is undergoing a dramatic transition driven by organizations looking for ways to reduce the cost of ICT solutions and at the same time to increase the effectives of ICT in supporting their business goals. Among the alternatives that are becoming increasingly more popular are various forms of outsourcing, including the software as a service (SaaS) model with enterprise applications and the corresponding infrastructure hosted by an external application service provider (ASP). Enterprise computing is being transformed from the traditional model based on licensed and on-site installed software towards subscription-based models with software delivered as a service by external providers. We have previously analyzed these trends (Feuerlicht & Voříšek, 2003, 2004) and concluded that the SaaS model will become a dominant form of delivering enterprise applications in the near future and that the use of externally provided information services will shape the ICT market and determine management decisions about deployment of enterprise ICT. This conclusion was supported by leading ICT professionals in recent interviews conducted in the Czech Republic (M. Bednár, personal communication, May 2005; R. Hradílek, personal communication, April 2005; J. Kameníček, personal communication, May 2005; J. Polák, personal communication, June 2005). These experts confirm that the changes currently taking place will have dramatic impact on both user organizations and organizations supplying ICT products and services. Our analysis in this chapter is based on these interviews and other relevant literature sources. We first identify the main enterprise computing trends, and then discuss the impact of these trends on ICT user and supplier organizations, and finally comment on the resulting changes in university-level ICT education.

KEY ENTERPRISE COMPUTING TRENDS

The claims about waning importance of ICT in the context of enterprise computing and the commoditization of enterprise applications (Carr, 2003, 2005) leading to the wide-spread adoption of the utility computing model requires a closer analysis in the context of the dominant ICT trends.

Strategic Importance of ICT

Direct comparison of ICT services with the supply of electricity by utilities ignores the rather complex relationship between software applications and business processes that these applications support or implement, treating ICT in isolation from entrepreneurial activities and company culture. In general, ICT has an important influence over the effectiveness of business processes and the success of the business model. Competitive advantage arises from close integration of ICT with business processes and entrepreneurial activities within the organization. The unique character of the combination of a product or a service with the supporting ICT infrastructure and business

13 more pages are available in the full version of this document, which may
be purchased using the "Add to Cart" button on the publisher's webpage:
www.igi-global.com/chapter/impact-new-trends-delivery-utilization/36279

Related Content

The Journey to new Lands: Utilizing the Global IT Workforce through Offshore-Insourcing
Subrata Chakrabarty (2010). *IT Outsourcing: Concepts, Methodologies, Tools, and Applications (pp. 488-517).*
www.irma-international.org/chapter/journey-new-lands/36163

Outsourcing and Multi-Party Business Collaborations Modeling
Lai Xu (2010). *IT Outsourcing: Concepts, Methodologies, Tools, and Applications (pp. 558-577).*
www.irma-international.org/chapter/outsourcing-multi-party-business-collaborations/36166

Information Technology as a Service
Robin Qiu (2010). *IT Outsourcing: Concepts, Methodologies, Tools, and Applications (pp. 71-88).*
www.irma-international.org/chapter/information-technology-service/36138

Outsouring Non-Core Business Processes: An Exploratory Study
Adriana Romanielloand B. Dawn Medlin (2010). *IT Outsourcing: Concepts, Methodologies, Tools, and Applications (pp. 1790-1806).*
www.irma-international.org/chapter/outsouring-non-core-business-processes/36246

Outsourcing and Offshoring: Issues and Impacts on Venture Capital
Alev M. Efendioglu (2006). *Outsourcing and Offshoring in the 21st Century: A Socio-Economic Perspective (pp. 197-208).*
www.irma-international.org/chapter/outsourcing-offshoring-issues-impacts-venture/27947