This chapter appears in the book, *Internet Strategy: The Road to Web Services Solutions* by Matthew W. Guah. © 2006, Idea Group Inc.

Chapter XII

A 21st-Century Tool for Intelligent Enterprises

Matthew W. Guah, Warwick University, UK

Abstract

This chapter suitably summarizes all the points covered in this book by applying them to 21st-century intelligent enterprises. By addressing the business issues and management concerns of a 21st-century intelligent enterprise, we hope this chapter points medium- and large-sized businesses in the proper direction, to manage application service provider (ASP) resources and strategies to their competitive advantage. With the phenomenon of ASP in its infancy, we draw from works of IS pioneers Markus, Porter, Checkland, and others. Their intellectual contributions, plus findings from research work at CSIS, provide a framework for discussion. ASP delivers personal productivity software and professional support systems, assisting an intelligent enterprise in processing information, solving business problems, developing new products, and creating new knowledge. The need to exploit ASP capabilities to preserve and enhance organizational knowledge is clearly defined by this chapter.

Copyright © 2006, Idea Group Inc. Copying or distributing in print or electronic forms without written permission of Idea Group Inc. is prohibited.

Introduction

To deal with this complex topic we have structured this chapter into four main areas: Background, Concerns, Recommendations, and Future Trends.

Background presents the central theme of the historical shifts from a mainframe to a client-server, and now to an ASP strategy for intelligent enterprises. An observer of the client-server technology would have found the task of accurately discerning the path of that technology during the last decade of the 20th century very difficult. Similarly, the reality of the ASP technology has not fully burst on the business scene, but has evolved over some 5 to 10 years. Moreover, statistical evidence to define this emerging social and economic reality has lagged behind the writers and commentators who have identified the important features of this significant change.

Next, **Concerns** discusses the engine that is driving the ASP industry. Just as the steam, electric, and gasoline engines became the driving forces behind the Industrial Revolution of the early 1900s, so the Internet and high-speed telecommunications infrastructure are making the ASP a reality today. A resulting "information processing" industry is the business sector that is providing the impetus for this revolution, with its increasingly improving array of hardware, software, and information products and services. These technologies, in turn, are having and will continue to have profound impacts on business management, competitive advantage, and productivity.

Having set the stage by describing the changing business environment of the intelligent enterprise, **Recommendations** then move to the need for each enterprise to fundamentally think its corporate strategy. For ASP vendors, it is not just a question of selling a product, but of selling a solution to a customer's problem. This is where the lines between delivering the services and between traditional versus emerging markets are blurring and changing.

The qualitative dimension is as important in an ASP industry as the quantitative dimension. Quality control must be built into the front end of the service delivery cycle, not viewed as a last-minute check to be done just before contracts are reviewed. Here is where the human factor is introduced into our discussion. In essence the intelligent enterprise is a distributed network of human talent. Within the individual enterprise, outmoded human resources management philosophies must be replaced by modern approaches that maximize the brain contribution to the products and services, not just the brawn contribution. The emphasis of ASP in intelligent enterprises is on working smarter, not just

40 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/21st-century-tool-intelligent-enterprises/24669

Related Content

Traffic Management of SDN/NFV-Based Smart 5G Networks Using Time Series Analysis

Deva Priya Isravel, Salaja Silasand Elijah Blessing Rajsingh (2023). *Handbook of Research on Network-Enabled IoT Applications for Smart City Services (pp. 151-173).*

www.irma-international.org/chapter/traffic-management-of-sdnnfv-based-smart-5g-networks-using-time-series-analysis/331331

SEMDPA: A Semantic Web Crossroad Architecture for WSNs in the Internet of Things Eliot Bytyçi, Besmir Sejdiu, Arten Avdiuand Lule Ahmedi (2020). Securing the Internet of Things: Concepts, Methodologies, Tools, and Applications (pp. 977-998).

www.irma-international.org/chapter/semdpa/234977

The Unintended Consequence: The Symbiotic Relationship between ICT and a National Transition

Hamid Nematiand Amna Latif (2012). *E-Politics and Organizational Implications of the Internet: Power, Influence, and Social Change (pp. 350-363).*

www.irma-international.org/chapter/unintended-consequence-symbiotic-relationship-between/65224

IoT Resources and IoT Services

(2019). *Integrating and Streamlining Event-Driven IoT Services (pp. 1-37)*. www.irma-international.org/chapter/iot-resources-and-iot-services/216258

An Overview of Narrowband Internet of Things (NB-IoT) in the Modern Era

Reinaldo Padilha França, Ana Carolina Borges Monteiro, Rangel Arthurand Yuzo Iano (2021). Principles and Applications of Narrowband Internet of Things (NBIoT) (pp. 26-45). www.irma-international.org/chapter/an-overview-of-narrowband-internet-of-things-nb-iot-in-the-modern-

era/268944