

ERP Response to E-Business Challenges. Peoplesoft Case

Senior lect. Doina FOTACHE, PhD., Senior lect. Luminita FÎNARU, PhD.
Department of Informatics, "Al. I. Cuza" University, Iasi

ERP is becoming the e-business backbone for organizations doing on-line business transactions over the Internet. Internet-based solutions are destined to improve customer satisfaction, increase marketing and sales opportunities, expand distribution channels and provide more cost-effective billing and payment methods. The extension to SCM and CRM enables effective tri-party business relationships between the organization suppliers and the customers. The ERP vendors responded the e-business challenges by rewriting their systems to take advantage of Internet technologies. In 2000, most of them introduced e-business suite of applications that would significantly expand the functionality of their ERP systems.

One of the most representative is PeopleSoft 8, delivered in September 2000. The product is an Internet-based collection of 160 applications that span well beyond PeopleSoft's back-office suite, stronghold into e-business collaborative applications, CRM, SCM, professional service automation (PSA) and analytics. PeopleSoft pure internet architecture and software enable organizations to reduce costs and increase productivity through collaboration with their customers, suppliers and employees.

Keywords: ERP, e-business, Internet architecture.

In 2001, more than 60% of Fortune 1000 companies have installed or are in process of implementing packaged ERP systems to support their back-end business activities, wondering about the e-business impact on their activity. Why is e-business a challenge for ERP vendors? Companies use ERP software to enable processes that confer competitive advantage, but these complex processes do not often operate well out in the open over Internet. That's why e-business forces ERP vendors to rethink their suites role within the enterprise. The ERP functionality extends in order to incorporate front-end technology, to create trading communities through portals, and to joint venture with Web based technology and other vendors.

Many recent B2B initiatives focus on extending legacy ERP systems, such as purchasing and order entry, to wider audiences inside the enterprise (such as e-procurement) or outside the enterprise (such as digital storefronts). These technologies are a natural evolution of ERP solutions (purchasing and order entry) and much of the value in these B2B systems lies in unlocking and extending the value

in existing ERP implementations. E-business has reconfigured the architecture of enterprise applications.

We consider that until now ERP was an evolution, not a revolution, a tactical rather than a strategic initiative. No doubt that it solved a number of critical problems with traditional business management systems, but traditional ERP is simply another foundation layer that sits above the database, operating system and hardware. Even though, we can not agree with some pundits who were quite swift to write ERP off as an obsolete technology. We are witnessing the migration on Internet of the business processes, as Internet proved to be a viable platform for Business-To-Business e-commerce transactions. We can name it the **post-ERP** era, where the foundation layer is leveraged by the new CRM, SCM, e-Procurement, BI and other front-offices applications.

The efforts were directed mostly into the sales and customers management area, so existing ERP modules, such as order entry or accounts receivables, were integrated to SFA (Sales Force Automation) and CRM (Customer Relationship Management).

Another direction broadens the analytical tools used by managers and business analysts to provide information about how the business is performing – we talk here about business intelligence applications.

All these add-on applications are adding the value to and creating the real return on investment from ERP technology, as the ERP systems are used by more people and businesses. The e-business applications transform ERP into a support for providing better organizational data and information visibility to employees, managers, customers, and suppliers, as follows:

- CRM applications provide a face to customers.
- E-procurement applications provide a face to suppliers.
- Analytical (BI) applications provide a face to managers.
- Workforce automation applications provide a face to employees.

The top five ERP vendors *SAP America*, *Oracle Corporation*, *Peoplesoft Inc.*, *JD Edwards&Company* and *Baan International (Invensys)* account for 64 percent of total ERP market revenue. These vendors continue to play a major role in shaping the landscape of new target markets, with expanded product functionality, and higher penetration rates. The ERP vendors had been preparing for aspects of e-business for several years. By 1999, these big companies were rewriting their systems to take advantage of Internet technologies to deliver new functionality by the Internet. In 2000, most of them introduced e-business suite of applications that would significantly expand the functionality of their ERP systems. Initiatives such as Oracle Exchange, PeopleSoft Marketplace, and SAP's mySAP.com also indicate a future direction for ERP in the business world – as the plumbing connecting a network of Web-based application and service providers. While today these initiatives are still in their infancy, they could become the ERP systems of tomorrow.

PeopleSoft has introduced the first and only set of pure internet collaborative applications for integrating the business processes of company employees with their suppliers and customers to achieve more effective supply chain. PeopleSoft is a world leader in providing e-Business applications that enable people-customers, suppliers and employees – to power the internet.

PeopleSoft is one of the leading developers of enterprise business applications which helps governments, higher education, institutions and large-to-medium sized corporations manage human resources (HR), financials, supply chain management (SCM), customer relationship management (CRM), e-Business and business intelligence data from a wide range of operating systems and hardware platforms.

PeopleSoft Internet architecture is the foundation for a new generation of software that creates an open, connected enterprise of people – customers, suppliers, and employees – resulting in loyal and profitable customer relationships, collaborative supply chains, and an empowered workforce. PeopleSoft Internet architecture delivers these e-Business applications using internet technology. *Key drivers are:*

- browser access and web user interface,
- low cost of deployment,
- portal friendly,
- flexible integration,
- a wide variety of clients,
- simplified server architecture.

From its founding in 1987, PeopleSoft remains a complex application supporting complex enterprise processes and offers well-integrated applications for almost every business function. It also exhibits a set of analytic programs that allow an enterprise to constantly monitor its overall performance. 1999 and 2000 were years of changes and adjustment culminating in a company with a pure Internet platform, a new set of products and a new assertive attitude.

The most prominent event and the turning point for the company was the delivery of

PeopleSoft 8 in September 2000. The product is an Internet-based collection of 160 applications with 59 new applications in the 8 release, that span well beyond PeopleSoft's HR stronghold into e-business collaborative applications, CRM, SCM, professional service automation (PSA) and analytics. PeopleSoft pure

internet software enables organizations to reduce costs and increase productivity through collaboration with their customers, suppliers and employees. The solution reduces the risk of human error by eliminating repetitive data entry required at every step of the traditional, pen-based procurement process.

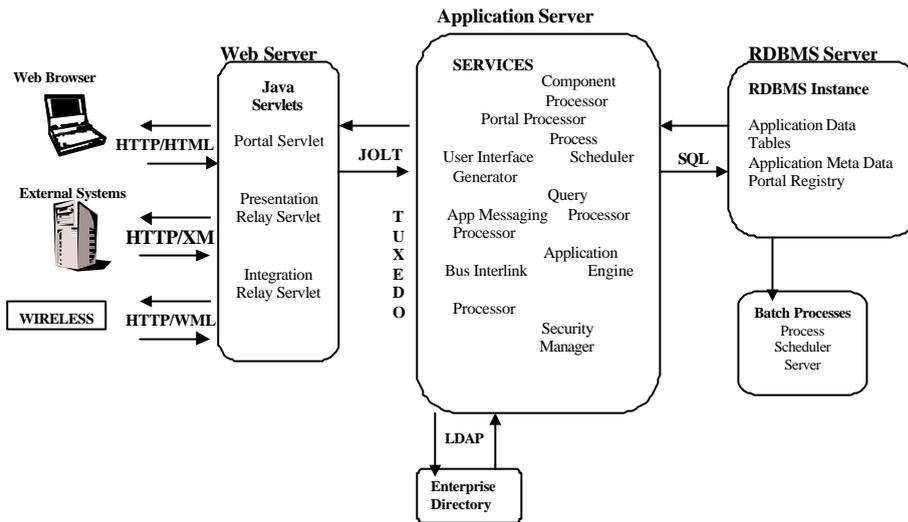


Fig.1. PeopleSoft Internet Architecture

The PeopleSoft suite of products adds value to enterprises. PeopleSoft Portals delivers a personalized interface to product, account and service information, optimizes self-service and delivers the right information, at the right time, to the right people. For an e-business, ERP is just another set of services that are required to support the real focus of the business, which might be profitable e-tailing, efficient supply chain participation, or delivering superior customer service.

PeopleSoft 8 Customer Relationship Management is the first CRM solution to provide immediate, seamless integration among customer, financial, supply chain, and human resources management systems. In addition has built-in analytics to constantly monitor all enterprise data, revealing the relationships between customers, products, channels and profitability. In summary the benefits are:

- more effective customer acquisition and retention,

- comprehensive view of all customer interactions through all access channels,
- optimization of each customer interaction for increased business opportunities,
- effective use of employee resources,
- increased responsiveness to customers,
- greater operational across your entire enterprise.

PeopleSoft Enterprise Service Automation is the only pure internet, integrated, end-to-end solution for managing services spend – the largest uncontrolled cost for any enterprise – and for maximizing the value from services.

PeopleSoft Financials applies advanced business theories to strategic and financial measures to deliver the business intelligence required to drive the success of a business strategy.

PeopleSoft Supply Chain Management solutions deliver:

- low cost of ownership due to ease of deployment: the only thing required for access is a browser,

- efficiency through self-service portals where transactions are performed at the source, one time, for better accountability of information,
- increased return on relationships by enabling enterprise and his partner to engage in true collaborative commerce over the internet,
- effectiveness through standardized con

- nections (XML) that enable high-volume, direct B2B collaboration for demand management and fulfillment logistics,
- increased revenue and market share due to greater flexibility in the supply chain, ability for the enterprise to respond to new sales geographies, customer segments and channels and selling programs through internet technology.

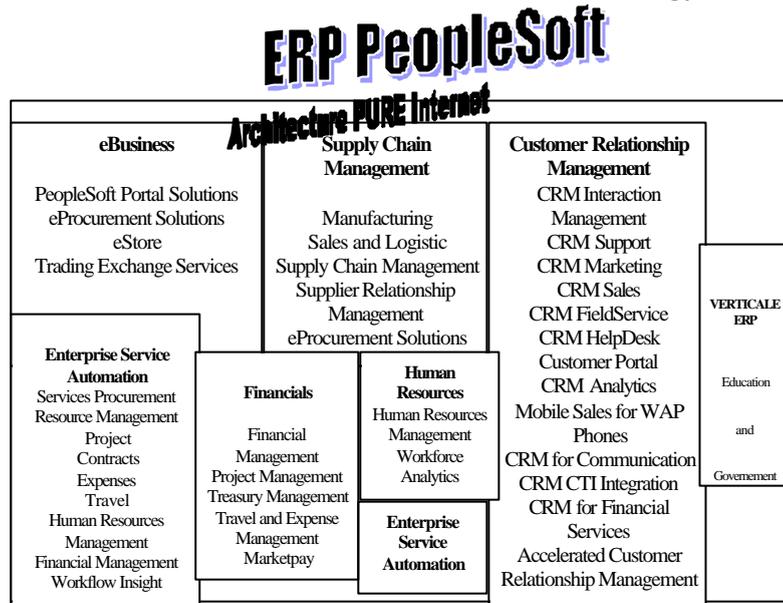


Fig.2. PeopleSoft&ERP

In conclusion, *PeopleSoft* has introduced the first and only set of pure internet collaborative applications for integrating the business processes of company employees with their suppliers and customers to achieve more effective supply chain. *PeopleSoft* is a world leader in providing *e-Business* applications that enable people customers, suppliers and employees – to power the internet.

Just like Peoplesoft, other ERP vendors add e-business functionality to their products or make their products more compatible with third-party front-end e-business products (Commerce One, Ariba, Siebel, i2).

In our belief, enterprises that properly implement e-business and ERP technologies in harmony create a situation where one plus one equals more than two. Web-based technology puts life and breath into ERP technology and reveals its value. At the

same time, ERP allows e-business to come into full flower, putting real substance behind the flashy web pages. While ERP organizes information within the enterprise, e-business disseminates information wide and as far as necessary. ERP and e-business technologies supercharge each other.

References

1. Dickson, G., DeSanctis, G., *Information Technology and the future enterprise*, Prentice-Hall, New Jersey, 2001
2. Hossain, L., Patrick, J.D., Rashid, M.A., *Enterprise Resource Planning: Global Opportunities & Challenges*, Idea Group Publishing, 2002
3. McKie, S., *E-Business. Best practices. Leveraging technology for business advantage*, John Wiley & Sons, Canada, 2001
4. www.peoplesoft.com
5. www.technologyevaluation.com

