

---

## E-BUSINESS REQUIREMENTS FOR FLEXIBILITY AND IMPLEMENTATION ENTERPRISE SYSTEM: A REVIEW

Chanchal Chawla\*

\*Teerthanker Mahaveer Institute of Management and Technology,  
Teerthanker Mahaveer University, Moradabad, Uttar Pradesh, INDIA

Email id: [chanchal.management@tmu.ac.in](mailto:chanchal.management@tmu.ac.in)

DOI: [10.5958/2249-7307.2021.00087.6](https://doi.org/10.5958/2249-7307.2021.00087.6)

---

### ABSTRACT

*Enterprise processes, particularly e-business systems, play a critical role in today's market processes. With the advancement of technology, many new techniques have evolved that can support the e-business trend, such as the Internet of Things (IoT), cloud computing, and virtual marketplace engineering, which facilitate general enterprise system e-business and e-commerce. These businesses must react to these unpredictably changing conditions as well as provide appropriate services to customers with the least amount of cost and time possible, without having to rebuild the entire system from the ground up, which can result in more time and money being spent to rebuild the system to meet the demands/requirements of the environment. As a result, companies should consider the flexibility aspect while implementing their system, since different customer requests should not be delayed or postponed. The purpose of this article is to provide the requirements for an e-business system. As a result, in order to adopt a flexible business system model, companies must consider them in order to achieve an adaptable system. such that time and cost are minimized at the same time, and enterprise resource planning systems may compete effectively in terms of cost and time.*

**KEYWORDS:** *Cloud Computing, E-business, Enterprise System, Internet of Things, Management System, Performance Measurement.*

---

### 1. INTRODUCTION

E-Business (electronic business) is a word used to define or characterize a way of doing business via the Internet utilizing a collection of tools and information technology. E-government, e-society, e-learning, ecommerce, and e-enterprise are all examples of e-business(1)(2)(3)(4). These digital enterprises make it easier for companies to purchase and sell goods, use internet services, share information, advertise online, and more [ . E-Company is described as any business that uses Internet technology to increase productivity. IBM invented the phrase "e-business" in October 1996. It has gained popularity as a result of the increasing and widespread use of internet and communication technologies (ICT), which have a significant impact on enterprises' leaderships, corporate entities, and operations due to the ease with which kinds of goods and services can be delivered to customers digital format. It helps businesses by allowing them to compete and respond to changing market conditions, and it plays a key role in the global economy by allowing businesses to be more flexible and efficient, allowing them to improve their competitiveness(5)(6).

Short-term and long-term e-business models The dynamic connections between customers and suppliers are the most important. In general, the term "enterprise system" refers to a variety of business systems. Supply chain management (SCM), enterprise resource planning (ERP), and customer relationship management (CRM) are the most popular solutions. Integration of such systems allows for the flow of processes and information across corporate functions. Manufacturing, finance, inventory, procurement, sales, and human resources are all available as

modules(7). E-business combines ICT and the World Wide Web to enhance a wide range of activities, including business operations. Production processes (payments), client processes (consumer requests processing), and administrative processes are the three major types of processes (video-conferencing, sharing information)(8)(9)(10)(11).

Business to client (B2C), client to client (C2C), client to business (C2B), business to business (B2B), government to government (G2G), citizen to government (C2G), government to citizen (G2C), intra-business (which is organization unit to organization unit), and exchange to exchange (E2E) are some of the different types of E-Business(12). When industries plan to invest in enterprise resource planning (EIS), some considerations should be made, such as the implementation cost, the time required for general EIS data and processes, the capabilities required for configuring and implementing systems, and the risks associated with deployment(13)(14)(15). The way businesses handle EIS implementation process risks is a major factor in whether or not a project succeeds. Despite their focus in design processes and economic models, e-business engineering academics are equally concerned with IT(16). With technical advancements, new technologies such as the Internet of Things (IoT), cloud computing, and virtual marketplaces engineering have emerged to support the ebusiness movement(17). Researchers have been interested in developing Service-oriented computing (SOC) over the last two decades, which has resulted in advancements in IoT and cloud computing. As a result, it is regarded as the most important support for e-business growth(18). If an enterprise system can reorganize its subsystems or if its subsystems can self-organize in a modular framework where the subsystems are actively capable of communicating with one other, it may be adaptive(19).

#### *1.1 Perspectives on e-commerce and supply chain management:*

In the literature, a variety of words are used to characterize actions involving the use of ICT between organizations and their surroundings, including suppliers and consumers. In most instances, the words are not solely defined. According to a study of 903 businesses in the Netherlands, almost 75% consider e-business to be strategically essential. When asked to define e-business, 44.8 percent said it meant having a website and 44.6 percent said it meant having an e-mail link with supply chain partnerso.

It demonstrates that the core of e-business is information interchange through the Internet for the purpose of optimizing business operations across the value chain. As a result, it extends well beyond having a home page (also known as e-marketing), online catalogues, or order captures (e-commerce). E-business is not a new concept; EDI has been in use for over two decades. The possibilities offered by e-business, as well as the possibility for change as a result of the distinctions between Internet-based e-business and EDI, are novel. The term "e-business" refers to a kind of electronic commerce that is conducted via the internet. In the literature, a variety of words are used to characterize actions involving the use of ICT between organizations and their surroundings, including suppliers and consumers. In most instances, the words are not solely defined. According to a study of 903 businesses in the Netherlands, almost 75% consider e-business to be strategically essential. When asked to define e-business, 44.8 percent said it meant having a website and 44.6 percent said it meant having an e-mail link with supply chain partnerso(20)(21)(22)(23).

It demonstrates that the core of e-business is information interchange through the Internet for the purpose of optimizing business operations across the value chain. As a result, it extends well beyond having a home page (also known as e-marketing), online catalogues, or order captures (e-commerce). E-business is not a new concept; EDI has been in use for over two decades. The possibilities offered by e-business, as well as the possibility for change as a result of the distinctions between Internet-based e-business and EDI, are novel. The term "e-business" refers to a kind of electronic commerce that is conducted via the internet(24).

Producing high-quality goods at the lowest feasible cost is insufficient; since businesses must adapt to unknown future needs, enterprise systems must be flexible with conceptual design in order to adjust to the dynamic market. Brzozowska and Bubel provided e-business tools that may be used to create e-business strategies, suggesting that the selection of e-business tools that can be utilized by an entrepreneur be done based on the uniqueness of a given e-business. Creating a strategy that may be an acceptable strategy to support the enterprise's competition, as well as to attract as many consumers as possible and earn profit, businesses that use the internet must maintain a business plan targeted. The website is currently the quickest and most effective tool for a business to offer services to consumers, and it is a simple tool that is utilized by the majority of businesses today. Another instrument that plays an important part in creating contact between a business and its customers is the blog; it is often used by financial institutions to address financial problems. Because consumers often have to click the first few links that show in a search engine to seek for information or a product online, positioning is a search engine that is both successful and inexpensive.

The use of the Web, Internet, intranets, extranets, or any combination of these to conduct business is referred to as electronic business (e-business). E-business is related to e-commerce, but it encompasses more than just the online purchase and sale of goods and services. Supply chain management, computerized order processing, and customer relationship management are just a few examples of e-business operations. As a result, e-business procedures may assist businesses in operating more successfully and efficiently.

### *1.1 Types of e-Commerce:*

Now there are actually many types of e-Businesses. It all depends on who the final consumer is. Some of the types of e-commerce are as follows:

#### *1. Business-to-Business (B2B)*

Transactions that take place between two organizations come under Business to business. Producers and traditional commerce wholesalers typically operate with this type of electronic commerce. Also, it greatly improves the efficiency of companies.

#### *2. Business-to-Consumer (B2C)*

When a consumer buys products from a seller then it is business to consumer transaction. People shopping from Flipkart, Amazon, etc is an example of business to consumer transaction. In such a transaction the final consumer himself is directly buying from the seller.

#### *3. Consumer-to-Consumer (C2C)*

A consumer selling product or service to another consumer is a consumer to consumer transaction. For example, people put up ads on OLX of the products that they want to sell. C2C type of transactions generally occurs for second-hand products. The website is only the facilitator not the provider of the goods or the service.

#### *4. Consumer-to-Business (C2B)*

In C2B there is a complete reversal of the traditional sense of exchanging goods. This type of e-commerce is very common in crowdsourcing based projects. A large number of individuals make their services or products available for purchase for companies seeking precisely these types of services or products.

Social media, such as Instagram, Facebook, Twitter, Google+, or YouTube, is another popular method for promoting business goods and services to consumers. E-mail marketing is the most cost-effective e-marketing tool for communicating with clients via e-mail. Significant characteristics of e-mail marketing include: measurability (number of e-mails sent, read, and what

interested whom), immediacy (messages can be sent and received instantly), scalability (e-mail can be sent to a large number of recipients), and savings (in view of cost e-mail done electronically without any papers). Another tool is the Squeeze page, which is a basic page that is devoid of advertising and extraneous material that diverts your attention; this page collects the visitor's e-mail address and is used to sell information goods, computer software, and e-books. Another important system for paid advertising that can be used with Google browser is Google AdWords. An entrepreneur creates an advertisement with keywords (these keywords are related to its profile), and then a sponsored link is displayed in the Google search engine results and on partner websites.

It leads to a direct link to the company's website as well as a payment system that is based on the user clicking on an ad. As a consequence, integrating e-business with suitable tools for selling goods and maintaining a strong connection with consumers has a clear impact on the development of an e-business strategy. Govindaraju(25) and Rajesri worked on creating a conceptual framework for ES implementation that is both profitable and beneficial. To get the most out of information system applications and projects, combine the project and post-project stages of enterprise system deployment with the organization's competitive strategy in which the new system is being used. Supporting a solid knowledge of how ES development may be managed to provide advantages to implementing companies, in order to achieve a long-term and successful project, specifying implementation stages and results should be taken into account.

## **2. DISCUSSION**

The goal of this article is to bring to light and explain the most important e-business criteria in terms of flexibility and execution, which are necessary for a competing companies. Without having to rebuild the system from the ground up, an enterprise system with great flexibility leads to resource savings (i.e. effective cost). On the other hand, a system optimization system is an essential characteristic to make the system more effective, so many studies focus on optimization models by evaluating and rating the system on a regular basis to gain benefits from the activated IT system, with users and management playing a significant role in the evaluation. Another important aspect of an enterprise network is the use of suitable tools for implementing a system in order to achieve the system's intended benefits and objectives. These findings were produced based on different characteristics as indicated in the table below, which were acquired from the previously mentioned research in this article.

## **3. CONCLUSION**

With such a large number of E-Businesses, achieving success through the Internet becomes a tough task; as a result, businesses need extremely adaptable structures and workflows since they must deal with and function under constantly changing conditions. Most companies are aware of the necessity to invest in ES in order to react quickly to the competitive climate. Integrated e-business with suitable tools and channels intended to assist the sale, as well as establishing good customer connections with sufficient planning, may have a beneficial impact on the development of an e-business strategy. As a result, we offer a business approach for ES deployment that is both profitable and beneficial to improving organizational competition while also saving money and time.

## **REFERENCES**

1. Legman V. Basic Knowledge About Erp Systems. Ann Univ Oradea, Econ Sci Ser. 2015;
2. Pandey B, Sharma KP. Radar Transmogrification Technology: Support for Unmanned System. In: Proceedings - 2019 Amity International Conference on Artificial Intelligence, AICAI 2019. 2019.

3. Singh D. Robust controlling of thermal mixing procedure by means of sliding type controlling. *Int J Eng Adv Technol.* 2019;
4. Anand V. Photovoltaic actuated induction motor for driving electric vehicle. *Int J Eng Adv Technol.* 2019;8(6 Special Issue 3):1612–4.
5. Alzahmi SM, Abu-Matar M, Mizouni R. A practical tool for automating service oriented software product lines derivation. In: *Proceedings - IEEE 8th International Symposium on Service Oriented System Engineering, SOSE 2014.* 2014.
6. Solanki MS, Sharma DKP, Goswami L, Sikka R, Anand V. Automatic Identification of Temples in Digital Images through Scale Invariant Feature Transform. In: *2020 International Conference on Computer Science, Engineering and Applications, ICCSEA 2020.* 2020.
7. Valverde R, Talla MR. Information systems reengineering for modern business systems: ERP, supply chain and e-commerce management solutions. *Information Systems Reengineering for Modern Business Systems: ERP, Supply Chain and E-Commerce Management Solutions.* 2012.
8. Zhang X, Yin X. Research of B2B E-business application & development technology based on web services. In: *Proceedings - 2009 2nd IEEE International Conference on Computer Science and Information Technology, ICCSIT 2009.* 2009.
9. Sadawarti H, Bansal PK. An efficient irregular augmented shuffle network. *WSEAS Trans Commun.* 2007;
10. Kumar M, Sharma A, Garg S. A study of aspect oriented testing techniques. In: *2009 IEEE Symposium on Industrial Electronics and Applications, ISIEA 2009 - Proceedings.* 2009.
11. Kaur A, Singh P, Rattan D. Automatic marking of Punjabi syllables boundaries in a sound file. In: *ICSPS 2010 - Proceedings of the 2010 2nd International Conference on Signal Processing Systems.* 2010.
12. Felix Piazzolo MF. Innovation and Future of Enterprise Information Systems: ERP Future 2012 Conference, Salzburg, Austria, November 2012, Revised Papers. *ERP Future* 2012. 2013.
13. Ziamba E, Oblak I, Zhao J, Tang Q, Xu X, Liu H, et al. Importance and Impact of ERP Systems on Industry and Organization. *J Manag Inf Syst.* 2011;
14. Sharma Y, Kumar S. Effect of power avaricious attack on MANET routing protocols. In: *ICECT 2011 - 2011 3rd International Conference on Electronics Computer Technology.* 2011.
15. Bhandari A, Singh M. On the ontology-based description of temporal services interfaces in asynchronously communicating services. In: *Proceedings - 2011 International Conference on Communication Systems and Network Technologies, CSNT 2011.* 2011.
16. Zhang X, Yin X. Research of B2B E-business application and development technology based on web services. In: *Proceedings - 2009 2nd IEEE International Conference on Computer Science and Information Technology, ICCSIT 2009.* 2009.
17. da Silva RM, Santos Filho DJ, Miyagi PE. From conception to implementation of reconfigurable and distributed manufacturing control system. In: *Lecture Notes in Computer Science (including subseries Lecture Notes in Artificial Intelligence and Lecture Notes in Bioinformatics).* 2015.
18. Mergel I. OpenCollaboration in Public Sector: The case of social codign on Github. *Gov Inf*

Q. 2012;

19. Hazzan O, Leron U, Hansson C, Dittrich Y, Gustafsson B, Zarnak S, et al. Preface. *J Syst Softw.* 2009;
20. Singh R, Singhal N. An enhanced vehicle parking management using artificial intelligence. In: *Proceedings of the 2018 International Conference on System Modeling and Advancement in Research Trends, SMART 2018.* 2018.
21. Singh P, Tyagi N. Radial Basis Function For Handwritten Devanagari Numeral Recognition. *Int J Adv Comput Sci Appl.* 2011;
22. Dutta C, Singhal N. A cross validated clustering technique to prevent road accidents in VANET. In: *Proceedings of the 2018 International Conference on System Modeling and Advancement in Research Trends, SMART 2018.* 2018.
23. Sharma TK. Enhanced butterfly optimization algorithm for reliability optimization problems. *J Ambient Intell Humaniz Comput.* 2021;
24. Sharma S, Sharma S. Design of high gain Wang shape microstrip patch antenna for wireless system. In: *2012 3rd International Conference on Computing, Communication and Networking Technologies, ICCCNT 2012.* 2012.
25. Stearns SC, Nesse RM, Govindaraju DR, Ellison PT. Evolutionary perspectives on health and medicine. *Proceedings of the National Academy of Sciences of the United States of America.* 2010.