

## A Survey on E-Business and Its Privacy

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**Abstract:** E-business (Electronic Business) is the conduct of business process on the Internet. These electronic business processes include buying and selling products, supplies and services, servicing customers, processing payments, managing production control, collaborating with business partners, sharing information, running automated employee services, recruiting and more. E-business is using technology to improve the business processes. This includes managing internal processes such as human resources, financial and administration systems, as well as external processes such as sales and marketing, supply of goods and services and customer relationship. Commerce constitutes the exchange of products and services between businesses, groups and individuals. Electronic commerce focuses on the use of ICT (Information and Communication Technology) to enable the external activities and relationships of the business or e-business refers to business with the help of internet network. Internet is the primary medium for conducting e-business is by design an open non-secure medium. Since the original purpose of the Internet was not for commercial purposes, it is not designed to handle secure transactions.

**Keyword:** E-business, Open access, Security.

### Introduction

E-business refers to a wide range of online business activities for products and services. It also pertains to any form of business transaction in which the parties interact electronically rather than by physical exchanges or direct physical contact. E-business is usually associated with buying and selling over Internet or conducting any transaction involving the transfer of ownership or rights to use goods or services through a computer-mediated network.

E-business was coined by IBM's marketing and Internet teams work on this marketing 1996. In 1997, IBM marketing and its agency use its foundation in IT solutions and expertise to market itself as a leader of conducting business on the Internet through e-business. E-business models best suit their goals. A business model is the organization of product, services and information flows and the source of revenues and benefits for suppliers and customers. The concept of e-business models is the same as in the online presence. The economic advantages of Internet are also evidence that some aspects of the internet such as maps and location aware services may serve to reinforce economic inequality and the digital divide.

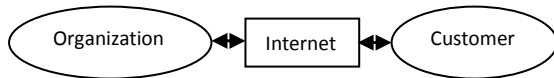
E-business can comprise a range of functions and services, ranging from the development of internets

and extranets to e-service, the provision of services and tasks over the Internet by application service providers. Nowadays, the big corporations continuously think their businesses in terms of the Internet, its availability, wide reach and changing capabilities. They are also conducting e-business to buy parts and supplies from other companies. E-business system to have high level of automation without needing large number of personnel, advanced technologies must be used for developing system functions, technologies able to develop complex and reliable applications whose execution threads are running on multiple locations. Object oriented programming must be implemented by these technologies for allowing the concepts of encapsulation, abstraction and polymorphism.

### Communication

Organizations have always regarded information as an important resource. However, in today's knowledge-based economy, the significance of information both as strategic input and output has been accentuated. It presents tremendous opportunity for global communication. A global communication infrastructure that is very conducive for low cost transmission of information and a global economy that is tending to be highly information-based. E-business makes the business easier, faster and

cheaper for businesses to communicate with their suppliers and their customers. Using email and online ordering systems, their communication and transactions can occur instantly between organizations situated anywhere the world. We can access the internet twenty-four hours a day, seven days a week. This means that buyers and suppliers can communicate for transactions at any time. This method is totally opposite to the regular trading hours and traditional business model.



### Different types of e-business

**(A) Business-to-Business (B2B)** – This type of business model sells product to an intermediate buyer who then sells the product to the final customer.

**(B) Business-to-Customer (B2C)** - This type of business model sells its product directly to a customer. Customer can view products on the website of related business organization. The customer can choose the required product and order on the same website. Website will send a notification to the business organization through email and organization will dispatch the product to the customer.

**(C) Customer-to-Customer (C2C)**- This type of business model helps the customer to sell their assets like residential property, car, bike etc. or rent a room by advertisement their information on the website. Website may or may not charge the customer for its services.

**(D) Customer-to-Business (C2B)** - In this method customer approaches the website to searching the different business organizations for a particular service.

**(E) Business-to-Government (B2G)** - This type of business model is a way of business to business model. Such websites are used by Government to trade and exchange information with various business organizations. This type of websites is accredited by the government and provides a medium to businesses to submit application forms to the government.

**(F) Government-to-Business (G2B)** - In this business model website approaches to business organizations. Such websites support auctions, tenders and application submission functionalities.

**(G) Government-to-Customer (G2C)** - Government to business model approaches to citizen in general.

### Security of e-business

Security measures have to be implemented in internet communication to maintain privacy, confidentiality, availability, integrity of e-business. Security attacks are mainly due to wrongly constructed software, human errors or missing processes. The number of technologies is available to ensure information security. E-business systems naturally have greater security risks than traditional business system, therefore it is important for e-business system to be fully protected against these risks. The greater numbers of people have access to e-businesses through the internet then would have access to a traditional business. Employees, customers, suppliers and numerous of other people use different types of e-business system daily and they required a confidential information to stay secure. Hackers are one of the great threats to the security applies for e-businesses include keeping business and customer information private and confidential, authenticity of data, and data integrity. The methods of protecting e-business security and keeping the information secure include physical security as well as data security, data transmission, anti-virus software, firewalls, encryption technique etc.

With any business, confidential information must remain secure and only be accessible to the intended recipient. However, this is more difficult when dealing with e-businesses specifically to keep the information secure like protecting any electronic records and files from unauthorized access, as well as ensuring safe transmission and data storage of the information. E-business security is a dynamic process. The technology is changing very fast and so are the threats and vulnerabilities. Creating a security and risk management culture is a slow process. It is necessary to establish an effective monitoring and feedback system in order to determine the efficiency of each of these aspects of the security.

With this opportunity comes the challenge of information security. Protecting online assets and network resources has become a mission critical concern for executives and managers.

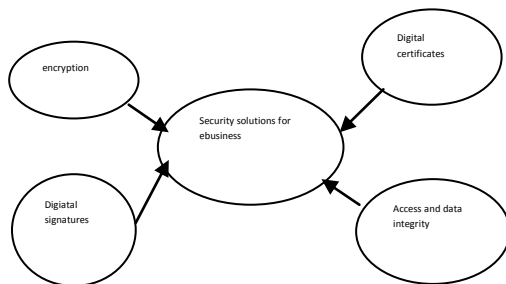
### Privacy of e-business

E-business transaction is a great challenge to the establishment of authentication due to the ease with which electronic information may be copied. Both parties in e-business transaction want to assure, the other party is who they claim to be, especially when a customer places an order and then submit the payment electronically. It is a way to ensure this is to limit access to a network or trusted parties or company. Identification is also a process of a user

positively identifying itself (human or machine) to the host (server) that it wishes to conduct a transaction. The most common method for establishing identity is by means of username and password. The response to identification is authentication. Without authentication, it is possible for the system to be accessed by an impersonator. Authentication needs to work both ways: for users to authenticate the server they are contacting, and for servers to identify their clients. The authentication establishment, a greater combination of techniques are used and such techniques involve checking something like (password, PIN), something you need (credit card, debit card) or something you (digital signature or voice recognition methods). Many times in e-business, something you are strongly verified by checking the purchaser's something you have like credit card and something you know like card number.

This concern deals with the existence of proof in transaction. Business assurance that the receiving party or purchaser cannot deny that a transaction has occurred. This means having sufficient prove of the transaction. One way to keep the proof of the using digital signatures. A digital signature not only ensures that a message or document has been electronically signed by the person, but since a digital signature can only be created by one person, it also ensures that this person cannot later deny that they provided their signature.

Transmitting information over the Internet (or any other network) is similar to sending a package by mail. The package may travel across numerous trusted and entrusted networks before reaching its final destination. It is possible for the data to be intercepted and modified while in transit. This modification could be the work of a hacker, network administrator, disgruntled employee, government agents or corporate business intelligence gatherer; it could also be unintentional.



There are several different ways to prevent access to the data online. One of the important ways is to use anti-virus software. Most of the people want to use

to protect their networks regardless of the data they have. It is also a way to protect the data is to use firewalls and network production. Firewalls are used to restrict access to private networks, as well as public networks that a company may use. E-business that use Wi-Fi need to consider different forms of protection because these networks are easier for someone to access. Encryption is a part of cryptography is transforming texts or messages into a code which is unreadable. These messages have to be decrypted in order to be usable or understandable for authentic user. There are a key that identifies the data to a certain person or company. In this method, there are two keys used. One key is public and one is private. The public key is used for encryption and the private key is used for decryption. To secure information online would be to use a digital signature. If a document has a digital signature on it, no one else is able to edit the information. If it is edited, it may be adjusted for reliability after the fact.

**Summary**

The problem is to get the information and information security in today's networked world is presented together with current common solutions applied to solve it. It is argued that the purely technological approach is not sufficient to produce trust or minimize risk. So this is the reason that the companies and their clients to conduct e-business with confidence. With the implementation of this approach, new financial security markets will emerge to handle the pricing and trading of this type of risk. Demand and supply of e-business risk insurance will lead to price discovery and market efficiency.

**Conclusion**

This paper presents various security issues in cloud environment and also present that we can get better security by separating encryption/decryption service from storage service. The problem security in today's networked world is presented together with current common solutions applied to solve it. It is argued that the purely technological approach is not sufficient to produce trust or minimize risk so as to cause companies and their clients to conduct e-business with confidence. E-Business systems have become indispensable for most of the large organizations because of the huge development of today's technology and the huge number of competitors that used them.

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