Ecommerce in bangladesh

It is currently one of the most important aspects of the Internet to emerge. E- commerce has grown tremendously worldwide. The aim of our study was to identify impact of this growth on societies and businesses. Another objective of our study was to find out how we can Implement e-commerce In Bangladesh and what problem we may face. We also study the technical perspective of e-commerce how It Is build and what software and hardware are needed to run It. E used several methods to reach our goals which include group study, group discussion to collect suggestion on the survey of e-commerce system, internet search to collect data, e-commerce site visits as clients, Architecture and code review of e-commerce site and introducing intentional change to understand e-commerce engine. E-commerce has significant Impact on societies and businesses. In the future e-commerce may become totally mobile based.

Keywords: Electronic commerce, business-to-business exchange, banking on the Web, credit card transaction, meta-information. 1. Introduction When Electronic commerce, commonly known as ' commerce', is the buying and selling of products or services over electronic systems such as the Internet and other computer networks. Electronic commerce draws on such technologies as electronic processing, electronic data interchange (DE'), inventory management systems, and automated data collection systems.

Modern electronic commerce typically uses the at least at one point in the transaction's life-cycle, although it may encompass a wider range of technologies such as email, mobile devices and telephones as well. Electronic commerce is generally considered to be the sales aspect of business [1]. It also consists of the exchange of data to facilitate the

financing and payment aspects of business transactions. E-commerce can be divided into: I. E-tailing or " virtual storefronts" on Web sites with online catalogs, sometimes gathered into a " virtual mall" it.

The gathering and use of demographic data through Web contacts iii. Electronic Data Interchange (DE'), the business-dubiousness exchange of data ' v. E-mail and fax and their use as media for reaching prospects and established customers (for example, with newsletters) v. Business-to-business buying and selling v'. The security of business transactions The main areas of e-commerce are following: I. Business to Business (EBB) I'. Business to Consumer (BBC) iii. Business to Government (BEG) lb. Government to Business (EBB) 2.

Objectives Our objectives are following: I. To define e-commerce and describe how it differs from business. It. To identify and describe the unique features of commerce genealogy and discuss their business significance. Iii. To describe the major types of e-commerce. ' v. To discuss the origins and growth of e-commerce. V. To explain the evolution of e-commerce from its early years to today. V'. To identify the factors that will define the future of commerce. Vii. To describe the major themes underlying the study of commerce. Iii. To identify the major academic disciplines contributing to e-commerce and understand design of an e-commerce engine ' x. To identify the opportunity and problem of e-commerce implementation in Bangladesh. X. To identify the future of e-commerce. Volume 2 Issue 2, February 2013 wry. Sirs. Net 150 International Journal of Science and Research (SIRS), India Online SINS: 2319-7064 3. E-commerce in Bangladesh In Bangladesh there is

a limited application and use of BBC e-commerce . This field is not yet much developed in Bangladesh.

There are many reasons behind it one simple reason this country is not so developed and most of its citizens are poor and uneducated. It is quit natural that there are few customers who is willing and can shop in internet. It will take years to be developed this sector in bad. The telecommunication infrastructure any country affect the Internet services directly, cause it is largely depended on it. In this chapter Define Need for e-commerce in Bangladesh, different sector in Bangladesh, overview of implementation stage of e-commerce in Bangladesh.

And there is some problem such as: low internet speed, no payment gateway and internet range, and diffusion of Acts, more specifically the Internet, the global business community is rapidly moving towards Business-to-Business (EBB) e-commerce. The buyers/ importers gain a clear advantage when the Internet gives them access to the global market, by which they can compare prices across regions, find out whether prices array by order fragmentation, get awareness about substitute/ alternative products.

Consequently, the sellers/ exporters make sure that they are well portrayed in the cyber world through websites and portals. Like buyers, sellers also benefit from increased and more efficient access to the global market through the Internet. Bangladesh is pursuing an economic policy of export-led growth. With the rising forces of globalization, it is becoming increasingly important that the private sector, particularly the export sectors are well

prepared to meet the requirements and expectations of the importers and also stand out in the competition against exporters in other countries.

In such a scenario, two issues are becoming particularly important for Bangladesh export sectors -one, whether businesses are automating their internal processes with these of Acts to become increasingly efficient and competitive in a global context, and two, whether businesses have effective presence and participation in the cyber world. International organizations such as UNCLAD (United Nations Center for Trade and Development) and WTFO (World Trade Organization) [2] eave, over the last several years, put much emphasis on the importance of e- commerce for developing countries.

UNCLAD has special programs to facilitate developing countries to transition into e-commerce. The WTFO has also developed rules and guidelines for global e-commerce transactions. 3. 2 E-commerce in Different Sector in Bangladesh Despite being a under developed country, selected segments of the Bangladesh business community has embraced technology with reasonable success. Personal computers and the Internet are also emerging as day-to-day business tools. These positive indicators are favoring the prospects of e-commerce in Bangladesh. I. ARM Sector I'.

Banking on the Web (Online Banking) iii. Online Shopping ' v. Web Hosting, Domain v. Online cards, gifts v'. Pay Bill 3. 3 The Existing Situation and Potential of E-commerce in Bangladesh Internet services are presently available in Bangladesh. Its usage for e-commerce by the Bangladesh producers to export as well as to access inputs will be dependent on their willingness and ability to use this medium as well as that of the buyers of

final products and the sellers of intermediate goods and services. Figure 1 depicts the three dimensions of e- commerce.

Business to-consumers (BBC) e-commerce is practically non-existent within Bangladesh, while a very limited level of Business-to-Business (EBB) and Businesses-Government (BEG) transactions exists [3]. The potential for use of e- commerce by Bangladesh consumers and businesses with foreign firms is much brighter, and can play an important role in boosting the country's exports. A significant volume of BEG is also possible, as the government remains the biggest spender. Figure 1 . The Three Dimensions of E-commerce 3. 4 E-commerce growth in Bangladesh E-commerce growth in Bangladesh shown in figure 3. N the year of 2000 e-commerce business is 11440 million take. In the years of 2001 business Off- million take 2002 to 2004 businesses is not very fast but in the year of 2005 business of e-commerce is 22480 and end the year of 2006 business of e-commerce growth is 252000 million take. Figure 2. E-commerce growth in Bangladesh 4. Methodologies The methodologies of our survey are given below: 4. 1 Identification of scope of study 151 International Journal of Science and Research (SIRS), India Online SINS: 2319-7064 To accomplish the project objectives, a systematic process is followed.

The project process begins with the identification of the project topic where studies was carried out to obtain enough information on the topic. 4. 2 Group discussions to collect suggestions on the survey of e-commerce system Discuss with group member about the topic and collect their suggestions on this topic. Also discuss impacts of commerce in our society and business and barriers commerce in different sectors in Bangladesh and the future of e-

commerce system. 4. 3 E-commerce site visits as clients Some e-commerce websites visits were made as clients.

We visited websites like www. EBay. Mom, browsed many products, added product to shopping cart, created user account and observed the check out process. We also examined their user interface, front end design and various category of product. We searched products by different types, the product names and the company name. 4. 4 Internet search to collect data on e-commerce growth world wide We searched the internet to collect data on e-commerce business growth based on time, data on e-commerce revenue based on geographic locations.

We also collected data about e-commerce business growth and present situation of commerce in Bangladesh. 4. 5 Architecture ND code review of e-commerce site We reviewed the main technologies involved in commerce site, which include pH sessions, catalog technology, server technology (hardware and software). We also reviewed credit card transaction and shopping cart checkout process. 4. 6 Interviews to find what people think about commerce We interviewed people from various sections of the society to find out what they think about e-commerce and what changes they needed.

We also discussed with them what the advantages and disadvantages of e-commerce systems are. 4. 7 Introducing intentional change to understand commerce engine We downloaded e-commerce tie code and changed the catalog of product, banner, product detail, product image, and increase and decrease number of product show in the main page also changed the theme

of e-commerce site. We entered new products and removed selling product and updated the products. 5. 1 Architecture This is the design of front-end design shown in Figure 3.

There is a one home page, wish list, account, shopping cart, and product list and checkout option. A sample entity-relationship diagram using Sheen's notation is shown in Figure 4. 5. Technical Design of E-commerce Site The technical design of e-commerce site include database structure, database chem., table structure, pH session, shopping cart, e-r diagram, and credit card transaction. Figure 4. A sample entity-relationship diagram using Sheen's notation In software engineering, an entity-relationship model (ERR model for short) is an abstract [4] and conceptual representation of data.

Entity-relationship modeling is a database modeling method, used to produce a type of conceptual schema or semantic data model of a system, often 1 52 International Journal of Science and Research (SIRS), India Online SINS: 2319-7064 a relational database, and its requirements in a top-down fashion. Diagrams created y this process are called entity- relationship diagrams or ERR diagrams. Using the three schema approach to software engineering, there are three levels of ERR models that may be developed.

The conceptual data model is the highest level ERR model in that it contains the least granular detail but establishes the overall scope of what is to be included within the model set. The conceptual ERR model normally defines master reference data entities that are commonly used by the organization. Developing an enterprise-wide conceptual ERR model is useful to support

documenting the data architecture for an organization. A conceptual ERR model may be used as the foundation for one or more logical data models.

The purpose of the conceptual ERR model is then to establish structural metadata commonality for the master data entities between the set of logical ERR models. The conceptual data model may be used to form commonality relationships between ERR models as a basis for data model integration. A logical ERR model does not require a conceptual ERR model especially if the scope of the logical ERR model is to develop a single disparate information system. The logical ERR model contains more detail than the conceptual ERR model. In addition to master data entities, operational and transactional data entities are now defined [5].

The details of each data entity are developed and the entity relationships between these data entities are established. The logical ERR model is however developed independent of technology into which it will be implemented. One or more physical ERR models may be developed from each logical ERR model. The physical ERR model is normally developed be instantiated as a database. Therefore, each physical ERR model must contain enough detail to produce a database and each physical ERR model is technology dependent since each database management yester is somewhat different.

The physical model is normally forward engineered to instantiate the structural metadata into a database management system as relational database objects such as database tables, database indexes such as unique key indexes, and database constraints such as a foreign key constraint or a

commonality relational database objects and to maintain the structural metadata of the database. The first stage of information system design uses these models during the requirements analysis to describe information needs or the type of information that is to be stored in a database.

The data modeling technique can be used to describe any ontology (I. E. An overview and classifications of used terms and their relationships) for a certain area of interest. In the case of the design of an information system that is based on a database, the conceptual data model is, at a later stage (usually called logical design), mapped to a logical data model, such as the relational model; this in turn is mapped to a physical model during physical design. 5. 2. The Building Blocks: Entities, Relationships, and Attributes The building blocks: entities, relationships, and attributes as shown in Figure 5, first here two related entities then an entity with an attribute next in this figure a relationship with and attribute and finally see primary key. Figure 5. The building blocks: entities, relationships, and attributes An entity may be defined as a thing which is recognized as being capable of an independent existence and which can be uniquely identified. An entity is an abstraction from the complexities of some domain.

When we speak of an entity we normally speak of some aspect of the real world which can be distinguished from other aspects of the real world. An entity may be a physical object such as a house or a car, an event such as a souse sale or a car service, or a concept such as a customer transaction or order. Although the term entity is the one most commonly used, following Chin we should really distinguish between an entity and an entity-type. An

entity-type is a category. An entity, strictly speaking, is an instance of a given entity-type. There are usually many instances of an entity-type.

Because the term entity-type is somewhat cumbersome, most people tend to use the term entity as a synonym for this term. Entities can be thought of as nouns. Examples: a computer, an employee, a song, a mathematical theorem. A relationship captures how entities are related to one another. Relationships can be thought of as verbs, linking two or more nouns. Examples: owns relationship between a company and a computer, supervises relationship between an employee and a department [6], performs relationship between an artist and a song, a proved relationship between a mathematician and a theorem.

The model's linguistic aspect described above is utilized in 153 International Journal of Science and Research (SIRS), India Online SINS: 2319-7064 the declarative database query language ERROL, which mimics natural language, constructs. Roll's semantics and implementation are based on Reshaped relational algebra (ERA), a relational algebra which is adapted to the entity-relationship model and captures its linguistic aspect. Entities and relationships can both have attributes.

Examples: an employee entity might have a Social Security Number (USN) attribute; entity) must have a minimal set of uniquely identifying attributes, which is called the entity's primary key. Entity-relationship diagrams don't show single entities or single instances of relations. Rather, they show entity sets and relationship sets. Example: a particular song is an entity. The collection of all songs in a database is an entity set. The eaten relationship

between a child and her lunch is a single relationship. The set of all such child-lunch relationships in a database is a relationship set.

In other words, a relationship set corresponds to a relation in mathematics, while a relationship corresponds to a member of the relation. 5. 2. Relationships, Roles and Cardinalities In Sheen's original paper he gives an example of a relationship and its roles. He describes a relationship " marriage" and its two roles " husband" and " wife". A person plays the role of husband in a marriage (relationship) and another person lays the role of wife in the (same) marriage. These words are nouns. That is no surprise; naming things requires a noun.

However as is quite usual with new ideas, many eagerly appropriated the new terminology but then applied it to their own old ideas. Thus the lines, arrows and crows-feet of their diagrams owed more to the earlier Bushman diagrams than to Sheen's relationship diamonds. And they similarly misunderstood other important concepts. In particular, it became fashionable (now almost to the point of exclusivity) to " name" relationships and roles as verbs or phrases. 5. 2. Limitations ERR models assume information content that can readily be represented in a relational database.

They describe only a relational structure for this information. Hence, they are inadequate for systems in which the information cannot readily be represented in relational form, such as with semiconductors data. Furthermore, for many systems, the possible changes to the information contained are nontrivial and important enough to warrant explicit specification. Some authors have extended ERR modeling with constructs to

represent change, an approach supported by the original author; an example is Anchor Modeling. An alternative is to model change separately, using a process modeling technique.

Additional techniques can be used for other aspects of systems. For instance, ERR models roughly Figure 6. E- R modeling 5. 3 Table Structure In relational databases and flat file databases, a table is a set of data elements (values) that is organized using a model of vertical columns (which are identified by their name) and horizontal rows, the cell being the unit where a row and column intersect. A table has a specified number of columns, but can have any number of rows each row is identified by the values appearing in a reticular column subset which has been identified as a unique key index.

Table is another term for relations; although there is the difference in that a table is usually a multi-set (bag) of rows whereas a relation is a set and does not allow duplicates. Besides the actual data rows, tables generally have associated with them some meta- information, such as constraints on the table or on the values within particular columns. The data in a table does not have to be physically stored in the database. Views are also relational tables, but 154 correspond to Just 1 of the 14 different modeling techniques offered by ML.

Another limitation: ERR modeling is aimed at specifying information from scratch. This suits the design of new, standalone information systems, but is of less help in integrating pre- detail. Even where it is suitable in principle, ERR modeling is rarely used as a separate activity. One reason for this is today's abundance of tools to support diagramming and other design

support directly on relational database management systems. These tools can readily extract database diagrams that are very close to ERR diagrams from existing databases, and they provide alternative views on the information contained in such diagrams.

In a survey, Broodier [7] and Lie could not find a single instance of entity-relationship modeling inside a sample of ten Fortune 100 companies. Bad and Limier blame this lack of use on the lack of guidance but also on the lack of benefits, such as lack of support for data integration. Also, the enhanced entity-relationship model (ERE modeling) introduces several concepts which are not present in ERR modeling. ERR modeling as shown in Figure 6. Their data are calculated at query time. Another example is nicknames, which represent a pointer to a table in another database. . 4 Database Schema A database chem. of a database system is its structure described in a formal language supported by the database management system (DB'S) and refers to the organization of data to create a blueprint of how a database will be constructed (divided into database tables). The formal definition of database schema is a set of formulas (sentences) called integrity constraints imposed on a database. These integrity constraints ensure compatibility between parts of the schema. All constraints are expressible in the same language.

A database can be considered a structure in realization of the database language. The states of a created conceptual schema are transformed into an explicit mapping, the database schema. This describes how real world entities are modeled in the database. " A database schema specifies, based on the database administrator's knowledge of possible applications, the facts that can enter the database, or those of interest to the possible end-users. "

The notion of a database schema plays the same role as the notion of theory in predicate calculus.

A model of this " theory' closely corresponds to a database, which can be seen at any instant of time as a mathematical object. Thus a schema can notation formulas representing integrity constraints specifically for an application and the constraints specifically for a type of database, all expressed in the same database language. In a relational database [8], the schema defines the tables, fields, relationships, views, indexes, packages, procedures, functions, queues, triggers, types, sequences, materialized views, synonyms, database links, directories, Java, XML schemas, and other elements.

Schemas are generally stored in a data dictionary. Although a schema is defined in text database language, the term is often used to refer to a graphical depiction of the database structure. In other words, schema is the structure of the database that defines the objects in the database. In an Oracle Database system, the term " schema" has a slightly different connotation. For the interpretation used in an Oracle Database, see schema object. 5. 5 Levels of Database Schema A conceptual schema or conceptual data model is a map of concepts and series of assertions about its nature.

Specifically, it describes the things of significance to an organization (entity classes), about which it is inclined to collect information, and characteristics of (attributes) and associations between pairs of hose things of significance (relationships). Figure 7. Conceptual schema or conceptual data model A logical schema is an alias that allows a unique name to be given to all the

physical schemas containing the same data store structures. The aim of the logical schema is to ensure the portability of the procedures and models on the different physical schemas.

In this way, all developments in Designer are carried out exclusively on logical schemas. A logical schema can have one or more physical implementations on separate physical schemas, but they must be based on data servers of the same technology. A logical schema is always directly linked to a technology. To be usable, a logical schema must be declared in a context. Declaring a logical schema in a context consists of indicating which physical schema corresponds to the alias – logical schema – for this context.

For example: The logical schema LEDGER is the set of Sybase tables required for the functioning of the accounting application. These tables are stored in a physical schema for each installation of the accounting application. Work in Designer or Operator is always done on the logical schema LEDGER. Only the context allows he physical schema on which the operations are actually done to be determined. Thus, the user can switch from one physical environment to another in a single action. A logical schema's example is shown in figure 8.

Table 1: Name of the logical schema Name of the logical schema LEDGER LEDGER LEDGER Context Boston Seattle Production Seattle Test Physical Schema Sybase Boston LAG Sybase SEATTLE PROD LAG Sybase SEATTLE TEST LAG 155 This article discusses the Oracle use of the term. For other uses of " schema" in a database context, such as a graphical representation of tables and other objects in a database, see database schema. In an Oracle

database, associated with each database user is a schema. A schema comprises a collection of schema objects.

Examples of schema objects include: tables, views, sequences, synonyms, indexes, clusters, database links, snapshots, procedures, functions and packages. Figure 8. Logical schemas Physical schema is a term used in data management to describe how data is to be represented and stored (files, indices, et al.) in secondary storage using a particular database management system (DB'S) (e. G. , Oracle ROADS, Sybase SQL Server, etc.). The logical schema was the way data were represented to inform to the constraints of a particular approach to database management. At that time the choices were hierarchical and network.

Describing the logical schema, That is the domain of the physical schema. Now logical schemas describe data in terms of relational tables and columns, object-oriented classes, and XML tags. A single set of tables, for example, can be implemented in numerous ways, up to and including an architecture where table rows are maintained on computers in different countries. Figure 10. Schema objects 5. 6 PH Sessions A PH session variable is used to store information about, or change settings for a user session. Session variables hold information about one single user, and are available to all pages in one application [9].

When you are working with an application, you open it, do some changes and then you close it. This is much like a Session. The computer knows who you are. It knows when you start the application and when you end. But on the internet there is one problem: the web server does not know who you are

and what you do because the HTTP address doesn't maintain state. A PH session solves this problem by allowing you to store user information on the server for later use (I. E. Surname, shopping items, etc). However, session information is temporary and will be deleted after the user has left the website.

If you need a permanent storage you may want to store the data in a database. Sessions work by creating a unique id (DID) for each visitor and store variables based on this I-KID. The I-KID is either stored in a cookie or is propagated in the URL. In PH, sessions can keep track of authenticated in users. They are an essential building block in today's websites with big communities and a lot of user activity. Without sessions, everyone would be an anonymous visitor. In system terms, PH sessions are little files, stored on the server's disk.

But on high traffic sites, the disk 1/0 involved, and not being able to share sessions between multiple web servers make this default system far from ideal. This is how to enhance PH session management in terms of performance and share ability. If you have multiple web servers all serving the same site, sessions should be shared among those servers, and not 1 56 Figure 9. Physical schema In Database lore, a schema object is a logical data storage structure. This possibly originates from the use of the term in the context of Oracle databases. The term " schema" can have other meanings when talking about non-

Oracle databases. Reside on each server's individual disk. Because once a user gets load-balanced to a different server, the session cannot be found,

effectively logging the user out. A common way around this is to use custom session handlers. 5. 7 Shopping Card A shopping cart is a software application that typically runs on the computer where your Web site is located (the Web server), and allows your customers to do things such as searching for a product in your store catalog, adding a selected product to a basket, and placing an order for it. The shopping cart " integrates" with the rest of