Business-to-Consumer E-Commerce:
The Art of Buying and Selling Online

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The word ‘shopping’ has changed drastically in the 21\textsuperscript{st} century. Before, the act of shopping for a product or service meant scheduling time out of your day, making sure your car’s gas tank is filled, and interacting directly with cashiers or sales representatives. Today, the scenario is very different. Although traditional means of shopping still exist, a relatively new and more convenient alternative has taken over the global market. This alternative is called e-commerce. The definition of the term ‘e-commerce’ can be as vast as the Internet itself. In this report, we will discuss some of the basics in B2C e-commerce transactions. We will cover the critical topics of e-commerce strategy, usability, marketing and advertising, mobile commerce, and trust and security.

Section 1. Strategy

Electronic commerce refers to the buying and selling of goods and services over the Internet. Also known as e-comm or e-commerce, this method of connecting buyers and sellers has soared in popularity over the past two decades. In addition, online shopping transactions are completed real-time, either with or without an intermediary service. The intermediary service acts as third party transaction connector or gateway for payment processing but prevents a direct link of consumer and business computer systems; thus allowing the transaction to be secure from data theft. As one author boldly states the current e-commerce business is the “largest gold rush...of the past fifty to sixty years” (Cunningham, 2000). In order to effectively harness the power of the ‘gold rush’, the e-commerce industry has blossomed beyond simple transactions between buyers and sellers. Today’s e-commerce business is sophisticated and deeply competitive, requiring businesses to rely on strategic positioning, marketing, and innovative communication methods. Collectively, these business facets are rolled into mass strategic frameworks known as e-commerce strategy.

E-commerce strategy encompasses the entire process of developing, marketing, selling, delivering, servicing, and paying for products and services online. For example, a transaction in modern e-commerce typically uses the World Wide Web at least once during the transaction period but may include additional forms of technology, such as email and mobile devices. Business-to-consumer or B2C e-commerce strategy allows the business to remain connected to consumer via the Internet, without open and close times. Consumers can shop without hassle and in the privacy of their home, office, or anywhere an Internet connection can be established. This saves both the business and the consumer time and resources, such as gas, for the consumer and utility and labor costs for the business, for example.

A popular B2C site that has an effective e-commerce strategy is Tigerdirect.com. Tigerdirect.com relied completely on sales from online shopping which allowed for lower prices and a larger inventory
of items. Tigerdirect.com posed a severe threat to brick-and-mortar competitors such as Best Buy and Fry’s Electronics. Recognizing Tigerdirect.com’s appeal and competitive threat, CompUSA struck a partnership with Tigerdirect.com in 2009.

According to the August 2010 ATG research report, 80% of mid-sized merchants classified e-commerce as very important or critical to their overall business plan for achieving sales and profit targets over the next 1-3 years. With competition and overall disposable income reduced in the average American household, businesses are fighting harder than ever to maintain their competitive edge in an oversaturated online shopping environment. Today, retailers are turning to the help of specialized Internet business consulting firms that combine technology with marketing. Popular brick-and-mortar shopping mall retailers such as Claire’s, Lululemon Athletica, Golfsmith, and Movado have turned to Addison, Texas-based Amplifi Commerce to provide “interactive marketing services enabling clients to navigate and thrive in today’s digital economy” (Amplificommerce.com, 2010).

For Claire’s, a jewelry and hair fashion trends store targeted for ‘tweens’, the company quickly scrambled to implement a strategy to protect sales loss when disposable income for tweens and their parents were drastically reduced as a result the economic recession. Beyond having less ‘fun money’, retail outlets also identified transportation to and from mall locations as a significant barrier. Claire’s target age group of 8 to 14 year olds must depend on a parent or an adult for transportation to and from the mall. However, parents were more concerned about conserving gas given the record high gas prices, rather than driving their tween to the mall. To be proactive, Claire’s sought the help of Amplifi Commerce to create a fun, interactive website that connects their tween consumer group to the brand, without having to rely on parental transportation. Claire’s e-commerce strategy contained the “business strategy, digital marketing, technology implementations and operational management solutions” which resulted in “a measurable difference” (AmplifiCommerce.com, 2011). Claire’s strategy also included implementing a blog to provide the ability to share online with other friends as well as keep up with current fashion trends. Future plans for Claire’s website is to develop a login process that will vary by age and have the ability to customize the user background for personalization.
Section 2. Usability

Current Technology Employed for E-commerce Services

Recommender System
The recommender system is becoming more attractive to online retailers. Even though it had a slow start, it is now in use in almost every online store. A recommender system is a program that learns from a customer shopping habits and recommends products that he or she will find most valuable (Schafer, 2010). In other words, the recommender system directs the customers’ attention to the products that they will most likely favor and most likely purchase. It is, however, broader than just purchase suggestions to customers. It expands to include product recommendations based on the top overall sellers on a site, on their demographics, and location of the customer.

Recommender systems enhance e-commerce sales in three important ways (Schafer, 2010):

- Browsers into buyers
- Cross-sell
- Loyalty

Browsers into Buyers
Visitors to a website often look over the site without ever completing a purchase. This is caused by the excess of products presented to customers, which tends to cause frustration by overwhelming the customer. They often end up exiting the site as a response to the confusion. Recommender systems can enhance the customer experience by helping them to find products they wish to purchase and subsequently present the information to them without requiring any extra effort on their part.

Cross-sell
Recommender systems also functions as a marketing tool since it improves the cross-sell process by suggesting additional products of interest during or after the initial purchase. This is a good marketing technique that helps to increase the sale of other similar items. If the recommendations match with the initial product, the average order size will increase. For example, a customer purchasing punching bags will receive suggestions to purchase boxing gloves, hand wraps, and jump ropes.

Loyalty
“Recommender systems improve loyalty by creating a value-added relationship between the site and the customer” (Schafer, 2010). The recommender system invests in learning about the website’s users by presenting custom interfaces that match customer needs. Customers will most likely visit the
website that best matches their needs. As the visitor frequency increases, the recommender system learns about the customer and builds a better relationship with them, thus increasing loyalty. Even if a competitor builds the same system, customers would need to spend time on their site to establish a relationship. Therefore, customers are more likely to stick with the website they are already comfortable with rather than switch over to a competitor site. For example, many Amazon.com users might find their books for less on eBay.com or Half.com, however because Amazon knows what kind of books they read and constantly send email updates on their favorite artists or writers, books and new releases, they will choose to keep shopping with Amazon instead of other businesses that offer more for less.

**Intelligent E-services**

Business intelligence (BI) is a term that refers to a variety of software applications used to analyze an organization’s raw data. BI as a discipline is made up of several related activities, including data mining, online analytical processing, querying and reporting (Mulcahy, 2008). BI is used to improve decision making, cut costs and identify new business opportunities. Business intelligence has been used to identify cost-cutting ideas, uncover business opportunities, roll ERP data into accessible reports, react quickly to retail demand and optimize prices.

Successful retailers strive to accomplish three basic objectives (TIS):

- Align their business with client needs
- Differentiate from competitors
- Optimize product mix and space utilization

In the retail industry, it is important to understand client preferences and behavior so retailers can respond to market demand and trends. A BI system can be a very effective means of organizing and analyzing the complexity of information generated in retail businesses. It helps businesses achieve a more effective business model to satisfy the needs of their customers and improve profitability.

**Friendly Search Engines (Marketing)**

The search engine is the first stop a customer makes on any website. Shoppers can browse and research content in order to make the right purchase for the right price. Consumers usually search by brand name, by product name, by location, by color, and by any qualifier that meet their needs. “In other words, the search engine is one of the few places on the Internet where a company can connect with a user at the point of interest” (Nadile, 2011).
A search engine copies webpages and stores information about the content on those webpages so the information could be used to respond to a search. When a person enters topical words into an engine, the search engine presents a list of pages with sites ranked according to relevance (Nadile, 2011). A search engine sends into the Internet an automated script, called a web spider. It usually starts at a web directory. The spider acts as a crawler that travels through websites via page links. It copies the content of each webpage and sends the copy back to the search engine mother ship for indexing (Nadile, 2011). The spider, however, feeds on text so websites that rely on media are not taking advantage of the spider. As the search engine receives webpages, it parses the information, breaking it down into content and metadata.

**Online Shopping Carts**

A shopping cart is usually a web application that contains information about the products offered for sale. Such information typically consists of pictures, dimensions, and price details (Sabir, 2010). This system usually includes a method of payment. Popular payment processing methods that are commonly used include some integrated web applications, which connect bank networks and third party payment processing tools such as Paypal or Google Checkout. (Sabir, 2010).

The relationship between consumers and online retailers can be sketched as follows:

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Consumers → Product/Service requested → Transaction
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As consumers find the product they need, they add it to their virtual shopping cart. Once they checkout and the transaction is completed, in most cases instantly after financial information is received. The product is then shipped out to the customer.

**Open Source Policy**

Open source software is beneficial to consumers because it allows for the flow and reproduction of popular software. Open source policy allows the development of software and programs to meet the needs of customers. Shopping carts, for example, can be implemented and used in different websites without violating any copyright laws. The open source policy benefits consumers because software is constantly being tested and developed for improvements.

**The Monetary Impact of Non-user Friendly Websites**

**Effect of Website Layout in Attracting Consumers; Aesthetic Interface in B2C**

It is evident that beautiful things attract humans. The visual appeal can influence human attitude, and it is major determinant of success to the market is obvious (Hong, 2010). A website should be
asymmetrical and have balanced management of elements for ease of view as well as be colorful and organized for attraction. Color harmony is another dominant factor that strongly impacts human emotions and behaviors. Plenty of studies have investigated color effect on human emotions, and how it influences customer decision to buy certain products (Hong, 2010). A highly aesthetic interface can decrease bad experience in usability, and a good aesthetic impression can amplify the experience of good usability.

**Speed of Transaction**

When customers log in to their website of choice, it takes time for the system to process the login information. This defines the transaction speed. It is the amount of time a system takes to perform a transaction. Quicker transaction speeds increase customer satisfaction. Transaction processing inherently requires data persistence, high availability, scalability and performance. Systems must also continuously handle large amounts of random data with heavy peak loads, which is a formidable performance challenge in itself. Historically, efforts to address these issues have been less than successful because the available tools lack one or more of these key capabilities (Solid Data Systems, Inc., 2002).

**Future of E-commerce Technology**

**Cloud Computing**

Cloud computing is becoming more attractive and in demand due to the recent economic downturn. Companies that are looking for ways to save money by cutting costs turn to cloud computing. “According to Amazon.com, the estimated expense related to the cost and operation of the servers accounts for 53% of the total budget (based on a 3-year amortization schedule), while energy-related costs amount to 42%, and include both direct power consumption (19%) and the cooling infrastructure (23%) amortized over a 15-year period” (Andreas, 2009).

Furthermore, as sustainability becomes a growing topic of interest in developed countries and among corporations, the need for green technology and smart products is becoming a necessity. Smart solutions are products with low carbon footprint and are environmentally friendly. This suggests that the adoption of smart IT solutions will lead to large GHG (Green House Gases) reduction. Information and communication technologies (ICT) form one of the largest IT bases and therefore are large power consumers and GHG emitters. IT solutions have a huge potential impact in reducing GHG emissions in many sectors” (Andreas, 2009).
Cloud computing offers three potential benefits:

- Cost
- Flexibility/speed of implementation
- Scalability (sometimes called elasticity)

Cloud Computing Cost Benefit
Cloud computing costs are based on consumption without the need for hardware, software, or infrastructure purchase, individual cloud users can technically save money. The argument that cloud computing can save money is built around peak usage. E-commerce websites are usually the busiest during certain times each year. During these peak periods websites require greater bandwidth, more computational power, and more data storage. For the rest of the time, as traffic slows, it only requires just a third of the bandwidth and data storage capacity.

In the traditional information technology model, businesses would purchase servers, frames, a PAN Manager and applications sufficient to handle peak activity, leaving much of the capital hardware and software idle for most of the year. With cloud technology, all of the hardware is unnecessary and theoretically businesses would only have to pay for bandwidth, processing, or data storage they use during peak time, therefore saving money when business is idle.

Cloud Computing Scalability Benefit
Because users are not limited to one server or even one data center, cloud computing promises to be very accessible. As an example, the social media site, Twitter, recently went down for lack of bandwidth, leaving hordes of micro-bloggers waiting to share their up-to-the-second status updates. But in cloud computing, an application should be able to add more and more resources so service is never interrupted. As traffic wanes, so does the consumption of these resources.

Predicting Cloud Computing Effect on E-commerce
How will cloud computing effect e-commerce in the near term? Hopefully 90% of e-commerce businesses will use some form of cloud computing within the next five years. The move to cloud computing will simply mean that more and more e-commerce businesses will offload infrastructure, development, and software to the cloud. In some ways, cloud computing will be the next generation for e-commerce for the savings, consistency, and availability it offers.
Section 3. Marketing/Advertising

E-commerce has become one of the main ways consumers shop and purchase their goods. In the last decade, the popularity of sites such as Amazon.com and eBay.com, for example, has drastically increased along with many other popular stores. Like any business, even online commerce needs help with marketing and advertising to consumers and other merchants. Advertising for e-commerce began when the first shopping cart was created on a website (E-Commerce Optimization, 2008). Marketing and advertising is one of the most important factors that make e-commerce as strong as it is today. It is constantly changing and businesses are discovering the great benefits that come along with online marketing.

There are a few different ways an online business can make use of advertising and marketing their products and business. When trying to market e-commerce, a company can use online and offline methods. Offline methods are more traditional methods of advertisement such as print ads and television. These advertisements usually do not have the same impact as online methods since offline methods are limited to who they can reach out to. Online methods are used more frequently than offline. It is very common for a user to search a website or use a search engine to see advertisements posted on a site. Businesses can use links on webpages such as Google and other search engines. Companies can do this by using “pay-per-click” method of marketing (Cash, 2011.). This method allows companies to put in keywords that relate to their site so when a user inputs those words into a search engine, their ad will show up on screen. The advantage of this technique is the company only has to pay for the users that actually click on their ad, creating a benefit to the company because they will know how sought out their products are and they only have to pay for the users that actually view their advertisement (Cash, 2011).

Many benefits arise from e-commerce advertising compared to traditional advertising. It is much more cost effective to use online ads as they do not cost as much to prepare and use. Generally, they are much quicker in reaching consumers since ads are instantly posted on their site when ready (Marketing, 2011). Not only are they more cost effective and quicker to put to use, they can also be more informative for the company. Newer techniques can involve user feedback where the company can get feedback on the products they offer (E-Commerce Optimization, 2008). This allows companies to analyze their strategies and make needed adjustments. Using online marketing for e-commerce allows nonstop advertising opportunities for companies and opens up markets that normally would not exist for some merchants. Increasing revenue is one of the benefits of the using
Marketing for e-commerce has changed over the years. It is constantly being revised and new techniques are being tried out continuously. Many trial and errors have occurred in the search for a productive method to market their products for e-commerce (E-Commerce Optimization, 2008). One of the more innovative ways a company can market their product is to have an interactive advertisement that a user can relate to, which helps build trust in their product as opposed to normal print advertisement (E-Commerce Optimization, 2008). A user that interacts with an advertisement naturally becomes more inclined to trust that product and, as a result, they have a greater desire to learn more about, unlike static print advertisements. In today’s competitive marketplace, it is not uncommon for a site to post advertisements on coupon sites, such as Groupon.com, that offer discounts on their products (Cash, 2011). This is a technique that has been developed over the past few years and it is starting to catch on with many large businesses. While offering discounts on products, they are marketing and allowing people to purchase their products initially for a discounted price. This marketing strategy has deemed well for e-commerce as it has dramatically increased in use.

This section of e-commerce illustrates the use for marketing and advertisement techniques that are used everyday in today’s market. There are numerous advantages to marketing e-commerce sites and the techniques used have evolved over the relatively short life of e-commerce. With this evolution of marketing and advertising, businesses have become more competitive, and it has helped open up markets for thousands of businesses across the globe. The business world will continue to see changes in e-commerce as it evolves and the world will continue to see new markets arise because of the use of e-commerce.

Section 4. Mobile E-commerce

Mobile Commerce, also known as M-Commerce or mCommerce, is defined as the “use of handheld wireless devices to communicate, interact, and transact via high-speed connection to the Internet” (Abdelkarim, 2010). M-commerce applications extend past purchasing a product and/or service to include directory/store-finder services, paying bills, hotel, restaurant, and ticket reservations, playing games, using apps and so on (Valacich et al, 2010). In an October 2010 research report titled Mobile Commerce, authors Abdelkarim and Nasereddin, state that only 7% of 90% of Americans have participated in mobile commerce in 2009. This means that the transition of commerce from a desktop or brick-and-mortar location to mobile devices has been a slow process. However, a lot has changed
since 2009. With the steep rise and popularity of smartphones, PDAs and tablets saturating the marketplace as well as the availability of high-speed 3G and 4G data transfer, mobile commerce participation has also increased. From a reputable commerce site, PracticalEcommerce.com, Matt Ferner states that in Q2, 2010, mobile data consumption increased by 112% across all networks. (Ferner, 2010) Translating this to mean a rise in mobile commerce is erroneous because, according to the latest research, mobile commerce is more dependent on the confidence and clarity of cautious retailers and on consumers’ trust and usability of mobile devices, sites and applications.

Current Technology
For merchants with online stores, having a mobile-optimized site or mobile apps is becoming a competitive requirement. What complicates the process of being mobile-ready is the fact that there are several carriers and unique devices that use their own, special proprietary language. According to Maximiliano Firtman, the author of the book, Programming the Mobile Web, when it comes to charging for content, “[t]here is no simple or standard solution… you would have to have a contract with every carrier in every country in which you wish to sell your [product], and every carrier has its own charging method” (Firtman, 2010). Programming a compatible mobile presentation of an online store for every portable, wireless platform can be a daunting task. Luckily, with the availability of flexible, open APIs and Software Development Kits (SDK), the process of creating a mobile-ready store is less painful than ever before.

Since mobile business is relatively new, standards and best practices are unstructured because they are continually evolving. In this rather chaotic world of mobile programming, solutions like GSM Association’s, OneAPI, are cropping up to help with standardization. Solutions like OpenAPI provide the missing, all-inclusive piece, of the puzzle, “access to network capabilities and information, regardless of operator, and via web applications, rather than simple device clients” (About OneAPI, 2011). OpenAPI helps reduce proprietary integration to multiple operators by implementing RESTful principles and JSON data format that bind with other popular, ubiquitous coding languages such as JavaScript, PHP, .net, Ruby, and plugins such as jQuery and Eclipse. (About OneAPI, 2011). The main benefit to businesses looking to break into the mobile commerce world is they can achieve it relatively quickly through the availability of such universal APIs.

In effort to narrow the subject of SDK technology, we will focus on the most popular mobile platform, Apple iOS and commerce involving paid applications or what is commonly referred to as ‘apps’. iPhones, iPods and iPads sales claim a large market share of mobile users. Therefore, creating an online store compatible with Apple devices is critical to business success today. In iOS, there are five abstraction layers. Core OS, Core Services, Media, Network and Cocoa Touch. The Cocoa API framework is built on Objective-C, which is reflective, object-oriented programming language that is
an extension of ANSI C and Smalltalk, one of the first object-oriented programming languages. App programmers will use an integrated development environment (IDE) called Xcode, a set of tools designed to work with the main aforementioned abstraction layers. The latest version, Xcode 4, offers a powerful IDE where a developer can design the user interface, code, test, debug, and simulate all within a single window. To collect payment for paid content, the app can integrate with iTunes accounts. Some apps are designed to receive the delivery of paid content, such as Kindle, but the purchase itself is made directly from the business’s main website. (Apple iOS, 2011).

Analysis on Current and Future Trends
According to a June 17, 2011 web article published on InternetRetailers.com, Don Davis explains mobile commerce stands at a relatively low $6 billion but it is predicted to increase to $39 billion by 2016. Mobile commerce will still remain a small part of the e-commerce world but this can simply be a result of a low percentage of mobile-optimized web stores. Retailer wariness of mobile commerce as being effective revenue channel has also contributed to this lackluster trend. The 2011 Forrester survey shows that only 29% of retailers have implemented a mobile strategy, 19% are starting to implement a strategy, 9% have only a strategy, 34% are in the early stages of developing a strategy and 9% have no strategy whatsoever. The core problem preventing a more positive outlook on mobile commerce is the lack of retailer confidence in this relatively new revenue stream. Some concerns include confusion over whether it is best to create a mobile-ready website versus a sophisticated, yet device-exclusive app. There is also difficulty in calculating a reliable ROI since mobile activity influences purchases through other channels such as in-store, by phone, or via a desktop computer. The rampant introduction of new devices in the marketplace also adds to the overall confusion. (Davis, 2011).

Main Consumer Issues with Mobile Commerce
Mobile commerce activity is slowly rising however trust and usability issues are still a pervading concern to most consumer groups. In a 2011 paper written by Shafiq Rehman and Jane-Lisa Coughlan titled Building Trust of Mobile Users and Their Adoption of M-Commerce, they identify the main trust challenges facing mobile users consist of a combination of two factors, usability of interface design and security of mobile payment systems. Creating a well-designed interface will improve trust through ease of “learnability, efficiency, memorability, errors avoid, and satisfaction” (Rehman, et al., 2011).

The universal theme of mobile commerce today is the need to address interface constraints. These constraints include “limited connectivity and bandwidth, diverse yet simplistic devices, the dominance of proprietary tools and languages, and the absence of common standards for application development” (Rehman, et al., 2011).
The general consumer fear of conducting transactions wirelessly is lack of privacy. When asked in a 2011 Forrester survey what would make consumers purchase more using their mobile devices, 45% said they would purchase if they knew their mobile information would be kept private, 44% said if mobile payment services were more secure, 36% said if the mobile site looked more like a conventional website, 33% said if mobile web were faster and 32% said if their phones had larger screens (Davis, 2011). When it comes to mobile payment security, the good news is APIs have been developed for popular and trusted payment systems such as PayPal, Bango, and Google Checkout. They can easily be integrated with online stores to increase a sense of mobile security for their customers. Other concerns relate to bandwidth access and size of the device, which are also viable issues in the world of mobile commerce.

Section 5. Security and Trust

Security in regards to commerce is a very important topic. All people want to feel safe when they make a purchase, whether it is an e-commerce purchase or a purchase at brick-and-mortar locations. There are a growing number of companies that are exclusively e-commerce such as Amazon.com and eBay.com. There are also several companies that fall under the combined umbrella of brick-and-mortar and e-commerce such as Barnes and Noble and American Eagle Outfitters. Our research shows there are a number of security issues concerning B2C e-commerce. For example, one article focuses on moving toward secure e-commerce transactions, another focuses primarily on consumer privacy concerns.

With the growth of computer and Internet use, the electronic signature has become standard practice. Electronic signatures can take on many forms, such as digital fingerprints, pin numbers or a signature embedded in an e-mail. One of the main issues with e-signatures is that it is very easy to forge. It could be said that it is easier to forge an e-signature than the written version. As with all things in technology, there are some signatures that are more secure than others. Most sites require that you click an ‘I Agree’ button before you can move on to pay. Others require additional security information such as a password, or the billing address on file at the credit card issuing bank.

A digital signature is an entire document encrypted and sent out with a private key. Using a digital signature has both advantages and disadvantages. One of the main advantages is that the digital signature meets all of the requirements of the United Nations’ security evaluation factors. These factors include authorization and approval, which help protect the user from fraud. Authorization occurs because the digital signature accompanies the document and this provides identity.
confirmation of the person signing the document. Approval occurs because the document is frozen when it is created and this prevents alterations of the document. Finally, the most important for consumers, is fraud protection. This occurs because it is difficult for someone to determine a person’s private key. There are a few disadvantages as well to digital signatures. One disadvantage is that the signer’s key is long and can be difficult to memorize. Another critical disadvantage is that the certificate for a digital signature needs to be issued by a certification authority. It is assumed that over time, this should not be as cumbersome because digital signatures should become more popular and easier to use, thus making them less expensive.

Consumer privacy in regards to e-commerce is another major trust and security concern. The goal of e-commerce is to personalize to individual customers based on their information. A growing concern for customers is how their private information is being used, collected and shared. When a customer makes an online or e-commerce purchase, there are two exchanges of information. The first is the exchange of goods and/ or services in exchange for money. The second exchange is of the customers’ personal data. Studies have shown that people have one of three types of views on security. First, is that they are not concerned about sharing information with others and would prefer to have personalized offers. Second, is a customer who will only give information to companies that have privacy protection policies but will still provide personalized offers to them. The last group of consumers will never share information because they do not wish to release any of their data due to privacy concerns.

What can stores do to improve e-commerce security? As we know e-commerce has become less costly with time and has allowed ‘stores’ to be open 24 hours, 7 days a week, 365 days the year. There are many advantages to having an e-commerce store and one of them is you can track where each order originated from, thus reducing fraud.

E-commerce sites should use encryption and decryption methods for all information sent to and received from customers. One of the biggest issues with e-commerce is that businesses must track customers to know what types of products they are interested in. To track, most sites use cookies. Valacich defines cookies as a text file that is on your computer that stores information about your activity on any given website. Because of such data mining strategies, e-commerce has become a target for malicious activity such as identity and credit card theft. To protect themselves and their customers, e-commerce sites can take a few precautions such as limiting access to sensitive data, storing financial information on a more secure server, and making sure when electronic products are purchased, the correct customer is receiving the product. As discussed, there are threats to both businesses and consumers alike when dealing with e-commerce. Taking the necessary precautions is no longer an option when conducting business with consumers online.
Conclusion:
After reading this report, you can conclude the exciting and continually evolving world of e-commerce is here to stay. However, as elucidated within the each section, it is still a rocky and somewhat unfamiliar path for businesses and consumers to tread upon. Businesses need to carefully strategize their presence on the World Wide Web, pay attention to usability issues, even on mobile devices, and be proactive in safeguarding the trust and security of their consumers. There is no clear cut path to ensure business success online but embracing the changing world of commerce with cautionary enthusiasm is a good first step in the right direction.

References:


