E-commerce Website with AWS

Himanshu Namdeo[1], Abhishek Sharma[2], Nakul Dave[3], Prof. Manoj Gupta[4], Prof. Nisha Rathi[5]

Students, Department of Computer Science and Information Technology[1,2,3]

Project Guide, Department of Computer Science and Information Technology[4]

Project In charge, Department of Computer Science and Information Technology[5]

Acropolis Institute of Technology and Research, Indore, Madhya Pradesh, India

Abstract: *E-commerce could be a boom within the modern business. E-commerce means electronic commerce. E- Commerce involves buying and selling of products and services, or the transmitting of funds or data, over an system, predominantly the net. E-commerce could be a paradigm shift influencing both marketers and also the customers. Rather e-commerce is quite just differently to spice up the prevailing businesspractices. It's leading to a whole change in the traditional way of doing business. This significant change in business model is witnessing an amazing growth round the globe and India isn't an exception. A large internet penetration has added to growth of E-commerce and more particularly start-ups are increasingly using this selection as a differentiating business model. More over E-Commerce has significant influenceson the environment. Although the model is very employed in current business scenario but the choice has not been explored at its fullest. The present research and analysis has been undertaken to explain the condition of E-Commerce websites, analyze the trends of E-Commerce. This website is build using MERN stack and this website will be deployed on Amazon Web Services (AWS) due to their low cost in their services, flexibility, security and pay-as-you-go pricing. The services used for the same will be EC2, RDS, S3. Also, a round of Vulnerability Assessment and Penetration Testing (VAPT) will be performed on the website to remove the vulnerabilities and reduce the chances of Ethical Hacking.*

Keywords: E-commerce, B2C, E-customer buying process, AWS

I. INTRODUCTION

E-commerce (electronic commerce or EC) is the purchase and trade of products and services, and/or the transfer of finances or data, by internet. This business sale takes place as a business-to- business,business-to-buyer, buyer-to-buyer or buyer to-business-commerce stores become a part of our diurnal lives. Advances in technology have made it possible for people to measure during a comfortable terrain intheir homes and shop online without having to travel to any store. The design is astronomically divided into two main modules Sellers and Guests/ Users. The shop director and staff work as Sellers. They will have the ability to add, edit, review products or, remove products therefore being suitable to change brand titles, change costs, add, or take off products. The client can search the merchandise selection, make changes to the wail, remove the products from the wan and go in the store. The client is additionally ready to update their information similar as titles, address, and other diverse data. The user can only browse the web store and add the merchandise to the wain. User is restricted to using the store.

II. RELATED WORK OR LITERATURE STUDIES

The benefits to companies that achieve Business-to Customer (B2C) e-Commerce are compelling. Effective B2C e-Commerce implementations can help organizations realize substantial cost savings, increase revenue, provide faster delivery, reduce administration costs, and improve customer service. Thus, e-Commerce might be a major area for research thanks to its novelty and exploding growth. Extensive research in E-Commerce implementation studies indicates that the definition of implementation has been argued and confusing for researchers. Development of E-commerce is done by B2B and B2Cand helps the customer to fulfill the requirement.

2.1 Motivation

Our project is engrossing with extended scope. Now a day's website are hosting through many different types. Our website is hosting through Aws services. Traditional web hosting services are unable to keep up with an increase in website traffic, and therefore, it is difficult to scale and adjust website performance. AWS, on the other hand, is highly scalable and can easily add bandwidth if an increase in website traffic is detected. Another added advantage is that in case of AWS, not only can you add bandwidth, but also reduce it depending upon the traffic. Just a few clicks away, AWS adjusts to the website traffic more efficiently as compared to traditional hosting services. It is good to have such implementation as it will reduce cost, time and efforts.

2.2 Problem Domain

As it is known that e-commerce is a common trend that is developing in an amazing speed recent year (E-commerce Europe, 2013), but everything has two sides, based on existing argument (Gren Fell), there exist several issues in nowadays e-commerce that could cause bad online shopping experiences for customers. Based on existing survey (Web Of Trust), it is seen that half of respondents had both good and bad online shopping experiences among those people shopped online. According to the explanations about those bad experiences (Web Of Trust), it is demonstrated that the first problem is the crisis of trust from customers' perspective. Before customers make buying decision, what the online buyers most worry about is whether they will get cheated or not. Those Internet frauds make consumers lose trust once it happens. According to the study of trust in e-commerce, what might makes consumers worry is losing money while not getting products in online shopping. In another word, they get defrauded by Internet frauds. Based on most the shared information about those frauds (Web Of Trust), two most common Internet frauds is: Phishing and malware

Phishing: According to the recent research about phishing (Ramzan, 2010), it is a kind of fraudulent conduct that the frauds disguise to be some official organization's that requires the customers to offer their personal and bank information through online communication, thus those frauds could easily take money from customers. Malware Based on the definition of Malware (Tech Terms), It is the malicious software that could easily be installed and operate without the permission of computer's administrator, it is used to collect sensitive personal data and undermine the system. Thus those data that collected by malware would be transferred to hackers; they could use it to do some unethical and illegal behavior.

Thus, it is fact that there are problems existing in nowadays e-commerce, and those problems will be clearly identified through primary data and analyzed in the later part of the thesis.

2.3 Problem Definition

This projects aims to develop an online shopping for customers with the goal so that it is very easy to shop your loved things from a extensive number of online shopping sites available on the web. With the help of this you can carry out an online shopping from your home. Here is no compelling reason to go to the crowed stores or shopping centers during festival seasons. You simply require a PC or a laptop and one important payment sending option to shop online. To get to this online shopping system all the customers will need to have a email and password to login and proceed your shopping . The login credentials for an online shopping system are under high security and nobody will have the capacity to crack it easily. Upon successful login the customers can purchase a wide range of things such as mobiles, books, gifts, tools, etc. can be dispatched using online shopping system. Not just these, you can also purchase from outside nations by few clicks on your mouse. And of course, you will get your requested ordered items at your door step. It is simple. No need to go physical shops with this you will have more time to spend with your family. It Just need a computer and a payment making options like net banking, credit card, debit card or PayPal. You can purchase goods from foreign places from your bedroom and you will get your goods at your home. It is extremely secure. Customer service is accessible.

2.4 Statement

E-commerce provides an easy way to sell products to a large customer base . The purpose of any e-commerce website is to help customers narrow down their broad ideas and enable them to finalize the products they want to purchase

III. SOLUTION METHODOLOGIES OR PROBLEM SOLVING

This is with the reference to the problem; we have proposed the methods through which this problem can be resolved. The following Block Diagram is as shown below:
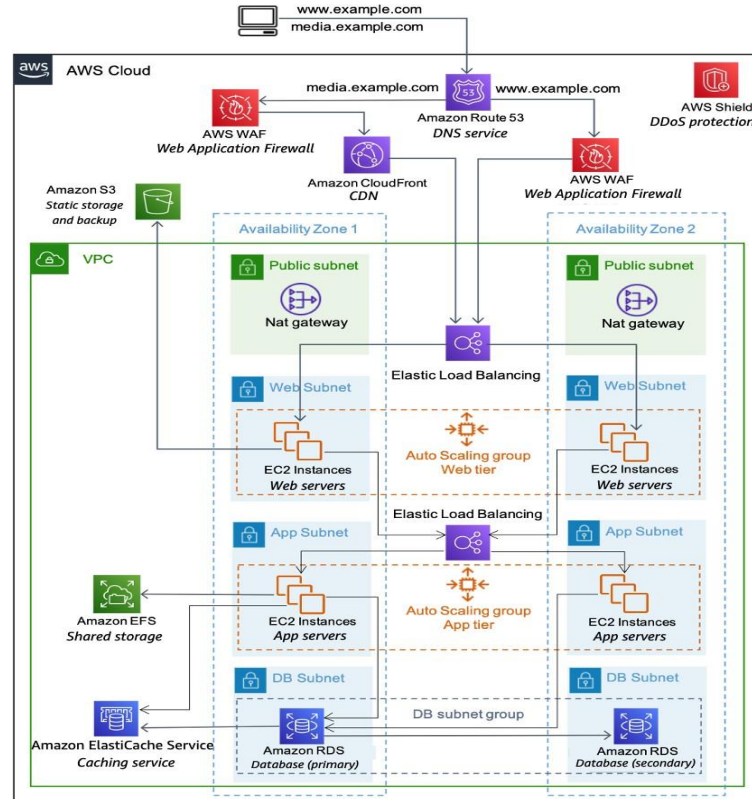

Fig. architecture used for hosting

IV. RESULTS AND SENSITIVITY ANALYSIS

Consumers have more trust and confidence in e-commerce sites with superior information quality, professional design, and authentic protection of financial data, according to this survey, and are more likely to make purchases. E-commerce also saves time because the selection and payment process in online purchasing is quite quick. There is no need to visit physical stores, so you can save on travel timeas well. Lower Prices: Many middlemen were involved in offline stores, causing consumers to spend more. This study discovered that E-commerce has caused a significant shift in the way customers think. E-commerce also saves time, as does the procedure of online purchasing selection and payment.

V. CONCLUSION

This research paper provides insight into the development of e-commerce of website. While understanding the different aspects with special emphasis on B2C e-commerce. Whichhas shown tremendous growth in the recent years because of increased consumer awareness, investor trustand technological proliferation? The study has also produced certain trends and factors which shall propel further growth within the e-commerce market in India. A sustainable business practice would be to push e-commerce and m-commerce as complements instead of substitutes to traditional business. The synergies between offline and online businesses will enhance efficiency and end in a more stable existence. The longer term also entails a scenario which shall witness an increase in niche businesses, as well as mergers and acquisitions to enable firms to grow inorganically. Firms must commit themselves to the provision of services and application of internet marketing, to get and retain larger audience. Through mobile penetration, opportunities are emerging within the rural markets which are mobile app infrastructure, content development in local languages and walk connectivity. Also, within the aftermath of demonetization. The share of digital payments is

anticipated to rise, to sustain which, firms must develop safer payments infrastructure.

VI. ACKNOWLEDGEMENT

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