## A Survey Paper for E-Commerce Website

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Abstract: E-commerce has taken the world of retail by attract the imagination of the entire generation of entrepreneurs, with e-commerce enterprise with various business and commercial models.[2] Online shopping has opened the door of opportunity and advantage to the firms.[1] The primary objective behind the current study is to understand the online shopping behaviour in India and how the e-retailers can accelerate their growth in India.[2] The survey aims to provide theoretical contribution in understanding the present st atus of online shopping. Present paper is an expressive study based on the detailed review of earlier relevant studies related to the various concepts of online shopping to discover the concept of online shopping. Shopping convenience, information and reviews, so cial contact, and diversity affects the consumer attitude towards online shopping.[1]

Keywords: E-commerce, Online Shopping, Online shopping behaviour, e-retailers, relevant

### I. INTRODUCTION:

The e-commerce industry is one of the fastest growing sectors in the country today.[2] A good marketer continuously satisfying cons umer's needs in better way. Internet is changing the way consumers shop for goods and services and has rapidly evolved into a globa l event [1] Key factors driving the growth story of e-Commerce in India include[2]:

- Considerable rise in the number of internet users
- Growing acceptability of online payments
- Proliferation of internet-enabled devices
- Favorable demographics

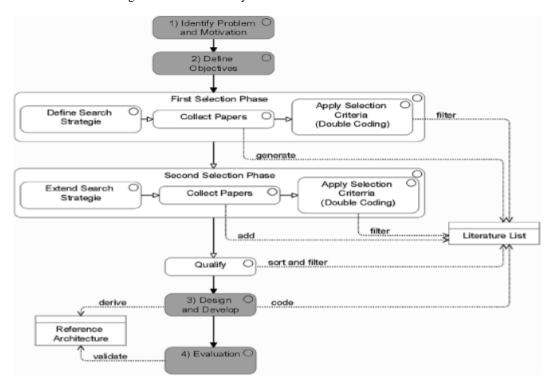
In order to develop an e-commerce website, a number of Technologies must be studied and understood. These include multi-tiered ar chitecture, server and client side scripting techniques, implementation technologies such as ASP.NET, programming language (such as C#) and relational databases. This is a project with the objective to develop a basic website where a consumer is provided with a s hopping cart application and also to know about the technologies used to develop such an application. [4]

Microsoft Visual Studio is an integrated development environment (IDE) from Microsoft. It is used to develop computer programs f or Microsoft Windows, as well as web sites, web apps, web services and mobile apps. Visual Studio uses Microsoft software development platforms such as Windows API, Windows Forms, Windows Presentation Foundation, Windows Store and Microsoft Silverlight. It can produce both native code and managed code.[6]

### II. LITERATURE REVIEW

### A. Overall methodological approach

Our research is twofold and it combines a literature study, which aims at identifying the current state of the art in ecommerce archite ctures with the development of a reference architecture. For this purpose, a multi-method approach is applied consisting of a systema tic literature review nested into a design science research cycle.



### B. Online Shopping Behaviour in India[2]

India is at the cusp of a digital revolution. Internet has become an integral part of the growing urban Indian population. We are billion people country with a mobile penetration of almost 80% and now 40% of them are on smartphones which means a sizeable population is internet ready. The e-commerce industry is one of the fastest growing sectors in the country today.

The facility of comparing your product with competitive products on the basis of price, colour, size and quality is one of the biggest benefits of online shopping. The facilities of various coupon and discount scheme are also fascinating the customers in online shopping. Online shopping is available for customers around the clock comparing to traditional store as it is open 24 hours a day, 7 days a week is also a reason in increasing growth of e-households in India. The e-Commerce market in India has enjoyed phenomenal growth of almost 50% in the last five years. (Up to 2015)

In India, cash on delivery is the most preferred payment method, accumulating 75% of the e-retail activities. However, COD may ha rm e-commerce business in India in the long run and there is a need to make a shift towards online payment mechanisms to a high er percentile. However the number of users making online transactions in India is expected to grow from 11 million in 2011 to 38 million in 2015.

Considering the evidences of the present research it can be concluded that

- The e-commerce market has a great potential for youth segment. If the all features are considered carefully then it can be easily identified that maximum number of respondents of online shopping are lying in age group of 18- 25 years.
- The market segments like food, electronics and books must be targeted by the marketers on through e-tail penetration. And the market for other products and services must be expanded through more awareness among the customers.
- As many people (approx. 93 percent of sample) has shown the trust in online shopping and major percent prefer online payment. Though the Cash on delivery method is still preferred, this can be eliminated in long run with more security provided during online transactions.
- With the introduction like third party payment in India such as Paytm, PayU, Mobiwik., buyers also prefer paying via them because of the personalized offers provided by them.
- The data shows how people are also preferring shopping via mobile application, which doesn't restrict to browser. This gives the wider scope to the e-Tailers to focus towards mobile shopping and strategy.

Table I: Top Ten Leading E-Commerce Companies[2]

Danling	Website	About & Services
Ranking 1	vvebsite	Flipkart is an ecommerce company founde
	Account.	d in 2007 operates exclusively in India. It o
	Eliphant	ffers products in various categories includi
	Flipkart	ng movies, music, games, mobiles, camera
		s, computers, healthcare and personal care.
2		Amazon is one of the most reputed name in
	amazonin	the world of online shopping for products l
	amazon.in	ike eBooks, electronics and others items. A mazon.in is operated by Amazon Seller Ser
		vices Private Ltd, an affiliate of Amazon.co
		m, Inc. is a Fortune 500 company
3		Snapdeal is an online marketplace headqua
		rtered in New Delhi, It is India's Largest O
	snapdeal	nline Shopping marketplace great range of products, best prices and free shipping.
		products, best prices and free simpping.
4	A A A A A A A A A A A A A A A A A A A	The online shopping Store in India for Bra
	.com	nded Shoes, Clothing accessories for Men
	com	and Women of fashion and casual lifestyle products, headquartered in Bangalore.
		products, headquartered in Bangarore.
	India's Largest Online Fashion Store	
5		The Indian fashion and lifestyle ecommerc
	JABONG COM	e portal, selling apparel, footwear, accessor
	JADUNU WWW	ies, beauty products, fragrances, home acce ssories Online shopping in India for men,
	,, ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	women & kids.

	www.ijtra.com	
6		eBay.in is the Indian version of the popular online shopping portal eBay.com – world's online marketplace. EBay has a diverse a nd passionate community of individuals and small businesses. EBay offers used and fresh items with a wide network of international shipping.
7	YEP ME	Yepme, one of the top ecommerce sites in I ndia is popular for selling wide range of wa tches and shoes. At present, the site is dealing with brands that specialize in manufacturing accessories like sunglasses, leather belts, fashionable shoes, etc
8	naaptol® shop right shop more	Naaptol.com is one of the fastest growing top ecommerce sites in India. Initially the company served as a search engine to provide comparison of product prices and offer services for product research. A year later, they emerged to be an online market ing platform and were able to create a furor in the market.
9	infibeam.com	Infibeam is one of the leading online shopp ing portals in India, Started in 2007 and has grown across the length and breadth of India. Headquartered in Ahmedabad and has one of the largest online retailer and a premier technology provider.
10	HOME 18	HomeShop18 is India's leading digital commerce platform – present on TV, web and mobile. It was launched on 9 April 2008 as India's first 24-hour Home Shopping TV channel and on-air retail and distribution venture of Network 18 Group.

Table 2: Analysis Of The Data Collected [2]





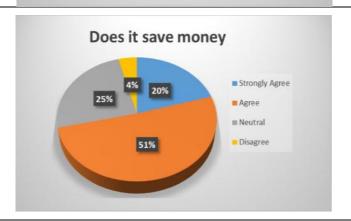
### Does online shopping saves time?

The survey has shown that 72 percent res pondent have agreed that online shoppin g saves time. While 24% chose to be neu tral. Thus the majority of the people agre ed with the time saving quality of online shopping.



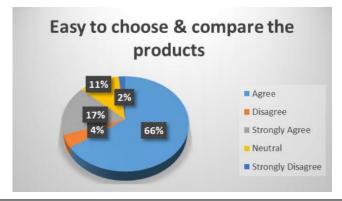
# What is the kind of availability of onli ne information about product & servic es?

While majority of people (61%) believed that the information available is excellen t there were close to 28% who believed it was good enough. 11% gave opinion as average while none of them said that onli ne information is poor in nature.



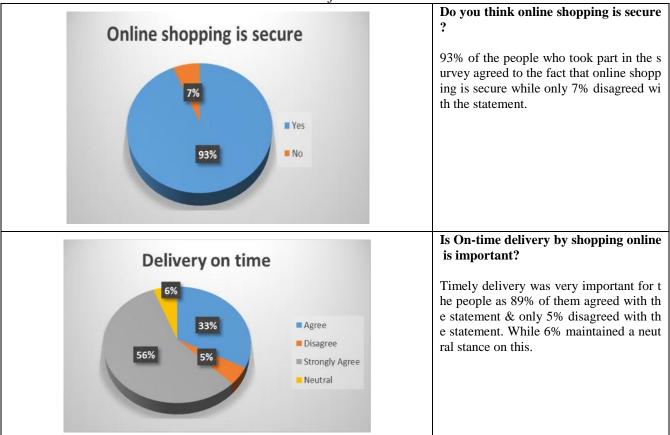
### Does Online Shopping saves money?

More than 70% people believed that online shopping saves money while 25% respondents maintained a neutral stance on it. Only 4% people believed that online shopping does not saves money



### It is easy to choose and make comparis on with other products while shopping online?

In the survey it was observed that more t han 80% people agreed to the fact that it is easy to choose & compare the product s. 11% maintained a neutral stance and o nly 6% disagreed with the statement



### III. IMPORTANCE OF ONLINE SHOPPING

The main motivation to shop online is that it is more convenient than to shop in-store; in other words, convenience is the most promi nent factor that motivates consumers to shop through the internet.[16] Consumers can purchase any goods and services anytime at everywhere. Online shopping is user friendly compare to in store shopping because consumers can just complete their requirements just with a click of mouse without leaving their home.[1] Online shopping has some advantages like below[1]:

- 1. Save the Time of The consumers.
- 2. They can purchase any time anywhere
- 3. The can compare the price with the others retailers very easily.
- 4. Compare the advertising price and actual price
- 5. They can easily track their product
- 6. They can use cash back policy
- 7. They can purchase the product from the foreign marketers.

# NET Java PHP HTML NET JSP Servlet Serv

### A. .Net Technology

.Net framework is an important windows component that provides software environment for developing, deploying and running applications. It provides language interoperability to create applications using various programming languages like C#, ASP.Net, etc. Using .Net we can create Web Applications, Web Services, Mobile Applications, Windows Applications. The .Net Framework is a soft ware framework for developing and executing applications on Windows client and server operating systems. It provides features and functionality that are designed specifically for creating and running applications on the Windows platform, but also supports connectivity with non-Windows systems. The Microsoft .NET Platform consists of five main components: the Windows operating system, Windows Enterprise Servers, .NET Framework, .NET Building Block Services, and Visual Studio.NET toolset. The three major components of the .NET Framework are the Common Language Runtime (CLR), Framework Class Library, and ASP.NET.

### **Features**

- 1. Assemblies
- 2. Cross Language Interoperability
- 3. Easy Development
- 4. Rich Functionality
- 5. OOPS support
- 6. Multi Language Support
- 7. Multi device Support
- 8. Automatic Memory Management
- 9. No more DLL Hell
- 10. Strong Xml Support
- 11. Ease of deployment and configuration
- 12. Security

### B. C#

C# is one such language that involves less coding and has a rich Graphical User Interface (GUI). C# is a platform neutral language, i mplying that it is compatible with any programming language.

### **Features**

- 1. Async and await
- 2. Caller information
- 3. Lambda expressions
- 4. Named arguments
- 5. Overload resolution.

### C. ASP.Net

ASP.Net is a web development platform which provides a programming model, a comprehensive software infrastructure and various services required to build up robust web applications for PC as well as mobile devices.

### **Features:**

- 1. Strongly Typed Data Controls
- 2. Value provider
- 3. Output cache extensibility
- 4. Routing
- 5. Session state compression.

### D. Java

Java is a programming language expressly design for use in the distributed environment of the internet. It was designed to have the l ook and feel of the C++ language, but It is simpler to use than C++ and enforces an object oriented programming model. Java refers to a set of programs and standards originally created by Sun Microsystems, and now owned by Oracle Corporation. The Java platfor m, which includes the Java Development Kit (JDK) which includes the java compiler and other utilities, and Java Runtime Environ ment (JRE), which includes the Java Virtual Machine (JVM). The Java Class Libraries, a large body of reusable code containing mo st of the Application Programming Interfaces (APIs) and functions that would be provided by the operating system.

### Features

- 1. Simple
- 2. Object Oriented
- 3. Portable
- 4. Platform Independent
- 5. Secured
- 6. Robust
- 7. Dynamic
- 8. Architectural neutral
- 9. High Performance
- 10. Interpreted

- 11. Multi-Threading
- 12. Distributed

### E. Servlet

A Servlet is a Java technology based web component, managed by a container, which generates dynamic content. Servlets are platfor m independent. Servlets interact with web clients via a request/response paradigm implemented by the servlet container. Servlet has components like 1) Cookies, 2) filters, 3) session management.

### **Features**

- 1. Robust
- 2. Powerful
- 3. Support for Annotation

### F. JSP

Java Server Pages (JSP) is a technology for developing web pages that support dynamic content which helps developers insert java c ode in HTML pages by making use of special JSP tags. A JSP component is a type of Java Servlet that is designed to fulfil the role of a user interface for a Java web application.

### **Features**

- 1. Extension to Servlet
- 2. Portable
- 3. Flexible

### G. PHP

PHP (Hypertext Preprocessor) is a general purpose scripting language that is especially suited to server side web development, in wh ich case PHP generally runs on web server. Any PHP code in a requested file is executed by PHP runtime, usually to create dynamic webpage content or dynamic images used on website or elsewhere.

### **Features**

- 1. Simple
- 2. Efficiency Interpreted
- 3. Open Source
- 4. More faster
- 5. Platform Independent
- 6. Flexibility

### H. HTML

HTML stands for Hyper Text Markup Language. It describes the structure of web pages using markup. Hypertext is simply a piece of text that works as a link. Basically HTML document is a simple plain text file. It contains rich text. The rich text means text with tags. HTML is a standardized system for tagging text files to achieve font, colour, graphic and hyperlink effects on WWW pages.

### **Features**

- 1. Multi Media Support
- 2. Local Storage

### J. CSS:

CSS stands for Cascading Style Sheet. It is a markup language used in the web document for presentation purpose. The primary inte nsion of CSS was to separate out the web content from the web presentation. Various elements such as text, font, and colour are used in CSS. By using CSS we can maintain consistency in the web document. If a small change needs to be done in the style of web con tent, then CSS makes it more convenient.

### **Features:**

- 1. Selectors
- 2. Box Model
- 3. Background and Borders
- 4. Image Values and Replaced Content
- 5. 2D/3D Transformation

### K. JavaScript:

JavaScript is a scripting language. JavaScript can be effectively used for interaction with users. JavaScript can be used as an alternative to Java applets. JavaScript can get embedded in XHTML. JavaScript can be used to create cookies. Also used to validate the data on the web page before submitting it to the server. Objects in JavaScript are dynamic. JavaScript has 3 parts: 1) Core 2) Client-side 3) Server-side.

### **Features:**

- 1. Object Based Scripting Language
- 2. Light Weighted
- 3. Handling Dates and Time
- 4. Interpreted

Table 3: Comparison between Technologies

		Table 3: Comparison between		
SERVICE OR FEATURE [3]	MICROSOFT . NET[3]	JAVA/JEE[3]	РНР	HTML
Language	C#,VB.NET, C++ ,PHP,Ruby, Pytho n and other modif ied languages	Java, Clojure, Groovy, Sc ala, PHP, Ruby, Python, J avaScript and over 50 oth ers	C,C++(Some Compon ents)	HTML(Standard Mark up Language),JavaScri pt
Operating Syst em	Windows	Multiple	Unix, Windows	Multiple
Runtime	CLR	JVM	JIT	HTML Executable
Server Compo nents	.NET, COM+serv ice	EJBs	React	<u>jQuery</u> , React, <u>Angular</u> <u>JS</u>
Client/GUI Co mponents	.NET Class	JavaBeans	JavaScript	Bootstrap, CSS, JavaSc ript
Web Server Sc ripting	Classic ASP	JSP/Servlet	Server Side Scripting Language	CFML(Cold Fusion Ma rkup Language)
Data Access	ADO.NET/OLED B	JDBC	PDO(PHP Data Object s)	
Object Persiste nce	Entity Framework /NHibernate	Hibernate	Propel	No object needed
Message Queui ng	Sys. Messaging, MSMQ	JMS on (MQ series etc.)	rabbitMQ	STOMP
Asynchronous Invocation	COM+QC	EJB Message Beans	makeNetworkCallmet hod	Invoke method
Remoting	SOAP,HTTP,DC OM	RMI-over-IIOP	АМГРНР	Static HTML
Naming	ADSI	JNDI	ZFCS	
XML	System XML	JAXP	SimpleXML	XML
HTTP Engine	IIS	Application Servers from Multiple Vendors	Modern Template Eng ine	View Engine

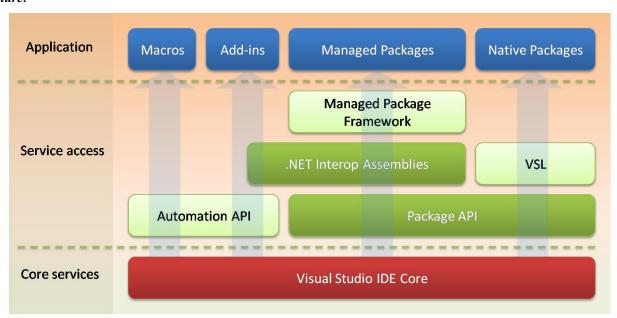
Web Services Support	Built-In	Add-on	Built-In	Add-on
Unit Testing	Microsoft Unit Te sting Framework, NUnit	Junit	PHP Unit (PHAR)	HTML Unit (Browser Simulator)
Web Applicati on Framework	ASP.Net MVC,Sp ring.Net	Spring	Laravel Codelgniter S ymFony	Lonic Bootstrap Sprout Core

### V. TOOLS

### A. Microsoft Visual Studio

Visual Studio .NET is Microsoft's visual programming environment for creating Web services based on use of the Extensible Marku p Language (XML). The product suite provides a visual interface for identifying a program as a Web service, forms for building a us er interface (including support for mobile device interfaces), features for integrating existing application data, and for debugging. Vi sual Studio .NET comes with the .NET Framework, including the Common Language Runtime, and includes several programming I anguages including Visual Basic, Visual C++, and Visual C#.

### Architecture:



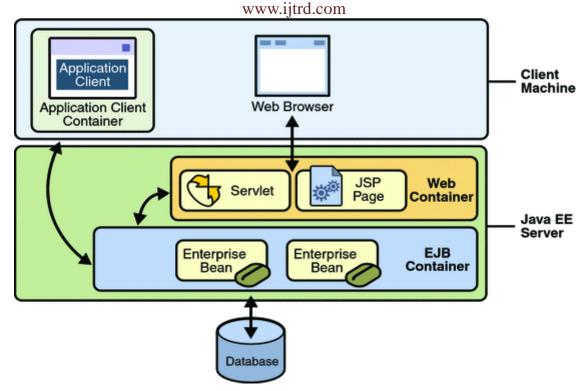
### **Features of Microsoft Visual Studio:**

- 1. Develop: Navigate, write, and fix your code fast.
- 2. Debug: Debug, profile, and diagnose with ease.
- 3. Test: Write high-quality code with comprehensive testing tools.
- 4. Collaborate: Use version control, be agile, and collaborate efficiently.
- 5. Extend: Use version control, be agile, and collaborate efficiently.

### B. NetBeans

Most developers recognize the NetBeans IDE as the original free Java IDE. It is that, and much more! The NetBeans IDE provides s upport for several languages (PHP, JavaFX, C/C++, JavaScript, etc.) and frameworks. NetBeans is an open-source project dedicated to providing rock solid software development products (the NetBeans IDE and the NetBeans Platform) that address the needs of dev elopers, users and the businesses who rely on NetBeans as a basis for their products; particularly, to enable them to develop these products quickly, efficiently and easily by leveraging the strengths of the Java platform and other relevant industry standards.

### **Architecture:**



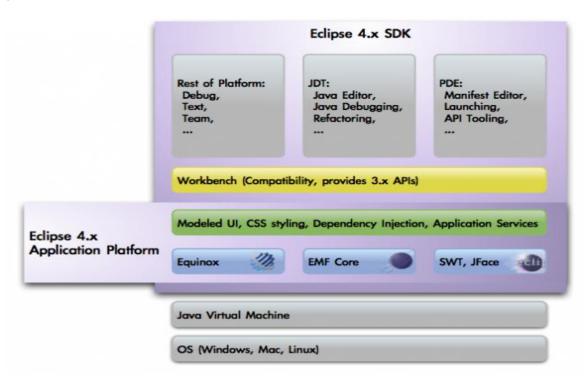
### **Features of NetBeans**

- 1. Maven
- 2. Out of the box
- 3. Java Editor
- 4. Java EE
- 5. HTML5, JavaScript, CSS3
- 6. Internet of Things
- 7. Profilers
- 8. Configurability
- 9. Community

### C. Eclipse

Eclipse provides IDEs and platforms for nearly every language and architecture. We are famous for our Java IDE, C/C++, JavaScript and PHP IDEs built on extensible platforms for creating desktop, Web and cloud IDEs. These platforms deliver the most extensive collection of add-on tools available for software developers.

### **Architecture**



### **Features of Eclipse**

- 1. JavaScript Editor
- 2. CSS Editor
- 3. Java Servlets
- 4. Spring Framework Support
- 5. Web fragments
- 6. Database Tooling
- 7. Embedded Tomcat Server

### D. XAMPP Server

**XAMPP** is a free and open source cross-platform web server solution stack package consisting mainly of the Apache HTTP Server, database, and interpreters for scripts written in the PHP and Perl programming languages XAMPP stands for Cross-Platform (X), A pache (A), PHP (P) and Perl (P). It is a simple, lightweight Apache distribution that makes it extremely easy for developers to create a local web server for testing and deployment purposes. Everything needed to set up a web server – server application (Apache), data base and scripting language (PHP) – is included in an extractable file. XAMPP is also cross-platform, which means it works equally well on Linux, Mac and Windows. Since most actual web server deployments use the same components as XAMPP, it makes transit ioning from a local test server to a live server extremely easy as well.

### **CONCLUSION**

From above discussion we have conclude that now a days all customers want to do online shopping to save timeand money as well. All online shopping websites provide better platform of shopping, security and efficiency. So that customers attract towards online s hopping. The idea is clear that in future there is a huge scope for online shopping. There are multiple websites, mobile applications a nd web applications are available on internet. We have gone through today's scenario for online shopping that people uses how man y websites and applications for online shopping. For the development of those websites and applications many technologies, platfor ms, servers and tools are used that all we studied and summarised in this paper. We have visited all the websites and applications and trying to develop something attractive and innovative website for online shopping for the customers.

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