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Research Article

A STUDY ON SERVICE QUALITY OF SELECTED WEB BROWSERS IN SIVAGANGA DISTRICT

Ganapathy S* and MugeshKannan Reguraman

Department of Commerce, Alagappa University, Karaikudi-04, Tamilnadu, India

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ABSTRACT

The purpose of this paper is to empirically identify categories of browser's service quality, satisfaction, preference and expectation and to test the effect of this service quality on browsers. Survey method was employed to test the mediating role of browsers' service quality. The structured questionnaire has been collected with 120 online users. It comprises customer involvement with the online presence and a friend is the main source for aware about the browsers. This paper is among the first to explore the nature and drivers of browser's service quality. It uses multi-method approach to identify which service quality significantly affects browsers satisfaction, preference and expectation.

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INTRODUCTION

As online users are now using more different types of internet browsers than ever before, it is more important than ever that the ecommerce site performs consistently throughout all browsers. E-commerce (e-business) is just another term for conducting business over the Internet. Whenever you buy or sell something over the Internet on sites such as eBay, Amazon, etc., you are charming in e-commerce. E-commerce has many advantages for consumers. It lets you buy things at any time, and you can save time and money by comparing the same items buy on directly from another place to get the best price. The good news is that the vast majority of online shoppers over 75%- use either Google Chrome or Firefox browser. The common argument used to avoid dealing with compatibility issues is that as the percentage of people using for example Internet Explorer is relatively low. The truth is, that tailoring an ecommerce site for cross browser compatibility is a pain. But the benefits can pay off in the long run by allowing you to secure sales from a wider customer base. As the number of users on the World Wide Web increases every day, its use in different areas is also growing. One of the most powerful aspects of the Web is that anybody who has Internet access can browse on the net. This enables sharing the information World Wide. One of the fast growing areas of the Web is distance education (distance learning). The reason distance education on the Web is getting popular is because it has advantages over other types of distance education programs. It gives much more flexibility to the users. The users can take the courses they registered for at any computer connected to the Internet. They

usually have a more flexible time frame to take their classes and their tests. The World Wide Web (WWW) is a shared information system operating on top of the Internet

Web Browser

A web browser is a software application for retrieving, presenting and traversing information resources is identified by a Uniform Resource Identifier (URI/URL) and may be a web page, image, video or other piece of content.

A web browser is a software or computer program that lets you browse, access sites or information, and interact with all data on the Internet. Although browsers are primarily intended to use the World Wide Web, they can also be used to access information provided by web servers in private networks or files in file system.

The Web Browser Domain

Web browsers retrieve content and display from remote web servers using a stateless and anonymous protocol called Hyper Text Transfer Protocol (HTTP). Web pages are written using a simple language called Hyper Text Markup Language (HTML). They may be augmented with other technologies such as Cascading Style Sheets (CSS), which adds additional layout and style information, and JavaScript, which allows client-side computation. Plugins are invoked for content that the browser cannot handle natively, such as Java applets. Browsers typically provide other useful features such as bookmarking, history, password management, and accessibility features to accommodate users with disabilities.

*Corresponding author: **Ganapathy S**

Department of Commerce, Alagappa University, Karaikudi-04, Tamilnadu, India

Statement of the Problem

Communication is one of the developed sectors in India. In day to day life, most of the individuals are using the recent communication tools of social media like Facebook, twitter, Gmail, yahoo, Indiarocks and other websites for exchanging ideas & information, business collaborations, paperless office management, E-Governance and other activities in modern business development. The web browser plays the vital role in the internet application software. The present study is to analyze the selected web browsers used in the internet for the development of E-activities in the district of Sivagangai.

Objectives of the Study

- To analyze the services level of selected web browsers
- To evaluate the satisfaction level of web users
- To find out the users expectation of selected web browsers

Scope of The Study

The present study discusses the quality and services of web browsers in Sivaganga district. The study analyses the facilities provided in the selected web browsers used by the respondents. The study focuses on quality of services, satisfaction and expectation of respondents in Sivaganga district.

METHODOLOGY AND DATA COLLECTION

The study is based on both primary and secondary data. Questionnaire is the main tool for collecting primary data. The questionnaire was designed in a systematic way of covering adequate and relevant aspects of the study. The data collected from the primary sources were arranged sequentially and tabulated in a systematic manner. Secondary data were collected from books, magazines, journals, newspaper, past research and various websites.

Sampling Design

The present study is based on convenience sampling techniques was used to select a sample of 320 web users in Sivaganga district.

Tools of the Analysis

Data collected through questionnaire were presented in a master table. In order to make analysis and interpretation of study the researcher has used research statistical tools like Frequency table analysis, Chi-square test, ANOVA and Henry Garrett ranking method.

Analysis and Interpretation

Frequency table

It is noted from the above table that the majority of the respondents are prefer the device of computer for using internet, in which 37.5% of the respondents were Scholar, 30.8% of the respondents were Post Graduate, 22.5% of the respondents were UG and remaining 6.7% and 2.5% of the respondents were HSC and SSLC respectively. Thus in the qualification factor, majority of the respondents are prefer the device of computer for using internet.

Factors	Frequency (N=120)	Percentage	Mean	Standard Deviation		
Gender						
Male	59	49.2	1.51	0.502		
Female	61	50.8				
Age						
Below 20 years	11	9.2	2.36	0.807		
20-25 years	69	57.5				
25-30 years	26	21.7				
Above 30 years	14	11.7				
Occupation						
Govt. Employee	12	10	2.56	0.671		
Pvt. Employee	29	24.2				
Students	79	65.8				
Qualification						
SSLC	3	2.5	3.94	1.048		
HSC	8	6.7				
Graduate	27	22.5				
Post Graduate	37	30.8				
Scholars	45	37.5				
Device preference						
Computer	50	41.7	1.94	0.882		
Mobile	27	22.5				
Both	43	38.5				
Browsers						
Mozilla firefox	19	15.8	2.51	1.202		
Google Chrome	61	50.8				
Internet Explore	12	10.0				
Opera mini	16	13.3				
Safari	12	10.0				
Reasons for using						
Speed	82	68.3	1.71	1.212		
Safety & Security	12	10.0				
Options	12	10.0				
New version	7	5.8				
Adequacy	7	5.8				
Option preference						
Download	51	42.5			2.24	1.328
Icon	21	17.5				
Multiple window	27	22.5				
Menu bar	10	8.3				
Bookmark	11	9.2				

H1: There is no relationship between Qualification and Device Preference for using Internet.

Chi-Square test	Calculated value	Table value	DF	Significant level	Accepted/Rejected
	7.054	15.5	8	5%	Accepted

For $v=8$, $\chi^2_{0.05}=15.5$. The calculated value χ^2 is less than the table value. Hence the null hypothesis is accepted. Qualification does not influence respondent's device preference for using internet.

H2: There is no significant relationship between Occupation and Browser like to use.

Chi-Square test	Calculated value	Table value	DF	Significant level	Accepted/Rejected
	10.394	15.5	8	5%	accepted

For $v=8$, $\chi^2_{0.05}=15.5$. The calculated value χ^2 is less than the table value. Hence the null hypothesis is accepted. Occupation does not influence respondent's Browsers like to use.

H3: There is no significant relationship between Age Group and Services level of selected web Browsers.

A Chi-Square test was used and the result of the test is shown in the following table.

Services	Calculated value	Table value	DF	Significant level	Accepted/Rejected
Speed	98.105	21.0	12	5%	Rejected
Security	1.899	21.0	12	5%	Accepted
New version	1.695	21.0	12	5%	Accepted
Adequacy	2.288	21.0	12	5%	Accepted
Download option	1.264	21.0	12	5%	Accepted
Icon Option	1.489	21.0	12	5%	Accepted
Multiple Window	1.532	21.0	12	5%	Accepted
Bookmark	1.575	21.0	12	5%	Accepted

It is clearly identified from the above table that the calculated chi-square value for speed quality is higher than the table value so the null hypothesis rejected. Hence, there is a significant relationship between the age and service level of selected web browsers. And remaining services of selected web browsers chi-square value is less than the table value so the null hypothesis accepted. The result is significant at 5% level. Hence, it is concluded that there is no significant relationship between the age group and services level of selected web browsers.

H4: There is no significant relationship between qualification and expectation level of selected web browsers.

Expectation of Services	Calculated value	Table value	DF	Significant level	Accepted/Rejected
Latest version update automatically	12.224	26.3	16	5%	Accepted
Hyper Speed	10.238	26.3	16	5%	Accepted
Adequate information	11.531	26.3	16	5%	Accepted
Applications	12.217	26.3	16	5%	Accepted
Entertainment	9.987	26.3	16	5%	Accepted
Availability	10.928	26.3	16	5%	Accepted

Garrett Ranking Techniques

Hendry Garrett ranking techniques has been used to analyze the source available for awareness of the web browser by the respondents. Under the Garrett ranking technique the percentage position is calculated by using the following formula:

$$\text{Percentage position} = \frac{100(R_{ij}-0.5)}{N_j}$$

Where, R_{ij} -Rank given for i^{th} variable by the j^{th} respondents N_j -Number of Variables ranked

Rank	Percentage Position	Calculate value	Garrett's table value
1	100 (1-0.5)/4	12.5	73
2	100 (2-0.5)/4	37.5	56
3	100 (3-0.5)/4	62.5	44
4	100 (4-0.5)/4	87.5	27

$$\text{Mean Score} = \frac{\text{Total Garrett Score}}{\text{No.of Respondents}}$$

Source of Awareness of the Browsers

Google chrome

S.No	Source	Rank				Total no. of respondents	Total score	Mean score	rank
		1	2	3	4				
1	Friends	47	41	20	12	120	69371	57.76	I
2	Relatives	22	28	31	39	120	5591	46.59	III
3	Existing users	35	37	22	26	120	6297	52.48	II
4	Magazine & Newspaper	20	24	33	43	120	5417	45.14	IV

Mozilla Firefox

S.No	Source	Rank				Total no. of respondents	Total score	Mean score	rank
		1	2	3	4				
1	Friends	51	25	19	25	120	6634	55.28	I
2	Relatives	19	32	44	25	120	5790	48.25	II
3	Existing users	25	19	44	32	120	5689	47.41	III
4	Magazine & Newspaper	12	19	51	38	120	5210	43.42	IV

Internet Explorer

S.No	Source	Rank				Total no. of respondents	Total score	Mean score	rank
		1	2	3	4				
1	Friends	50	30	20	20	120	6750	56.25	I
2	Relatives	20	20	30	50	120	5250	43.75	IV
3	Existing users	20	50	30	20	120	6120	51.00	II
4	Magazine & Newspaper	30	20	40	30	120	5880	49.00	III

Opera Mini

S.No	Source	Rank				Total no. of respondents	Total score	Mean score	rank
		1	2	3	4				
1	Friends	60	22	23	15	120	7029	58.58	I
2	Relatives	37	30	23	30	120	6203	51.69	II
3	Existing users	7	30	23	60	120	4823	40.19	IV
4	Magazine & Newspaper	7	45	53	15	120	5768	48.07	III

Safari

S.No	Source	Rank				Total no. of respondents	Total score	Mean score	rank
		1	2	3	4				
1	Friends	40	60	10	10	120	6990	58.25	I
2	Relatives	30	20	30	40	120	5710	47.58	III
3	Existing users	30	30	20	40	120	5830	48.58	II
4	Magazine & Newspaper	20	20	50	30	120	5590	46.58	IV

Table shows that through the Garratt Ranking most of the respondents posted their opinion towards the awareness of the Browsers (Google Chrome, Mozilla Firefox, Internet explorer, Operamini, Safari) to Friends as a First rank followed by them recorded their opinion to remaining sources. Hence, its conclude that the most of the users aware about browsers through the friends.

Suggestion

Google chrome is the best browser when compare to other browser and other browsers can gain marketshare only if they introduce innovative services like google chrome. All the respondents are expecting hyper speed in browsers while browsing over on the internet. And the browsers should avoid pop-up windows and warning windows.

CONCLUSION

Now all business activities are done thorough Internet. As online user are now using different types of internet browsers, it is more important that all e-commerce sites perform consistently throughout all browsers. This research study reveals that Google chrome is best among the selected five browsers in consistently and performance followed by Mozilla Firefox. Google chrome and Mozilla Firefox give various features and services to the users so that most of the users are willing to use these browsers for browsing.

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