



Usability Testing of Wiki's

Mafaza Sajid and Sarah Mansoor

Department of Computer Science and Information Technology, Jinnah University for Women, Karachi, PAKISTAN

Available online at: www.isca.in

Received 6th May 2013, revised 20th June 2013, accepted 15th July 2013

Abstract

This Paper shows the results of usability evaluation of 3 wikis (Wikispaces, Zoho Wiki, Educause Wiki). Wikispaces is create to work anywhere, anytime only you need is a web-browser and internet connection Zoho Wiki is a free online tool to create collaborative web portals. Educause Wiki provides research facilities for researchers, job facilities and latest updates about online conferences and events. To identify the usability problems in these websites which users have faced, it has been tested by 25 users(technical or nontechnical). 10 users have tested all 3 wikis while 15 have tested one or two wikis. From the result we come to know that which wiki is most likely used by the users and where users have to face problems.

Keywords: Web-browser, wiki, Internet connection.

Introduction

Wikis are Learning Web sites, where users can contribute. "In a wiki, any user with a Web browser can add new pages or add new content to existing pages, as well as change or delete existing information, upload and download files. Users can create new wikis and can also change logo, change theme and can change style sheet"¹. Using Wiki you can also set permission on several things.

Related Literature: Wikispaces: The goal of wikispaces is to build a wiki that is easy to use and adopt by everyone (technical or non technical user). Wikispaces provides a feature of building content, talking with members, building your community.

Wikispaces invite members to create and update web-pages without any restriction. Only those member can add pages whose have created his account in wikis. Wikispaces support all languages. Wikispaces is designed to be used by everyone. Wikispaces is faster in small as well as in large communities.

Educause: "Educause wiki provides a research work facilities for research students and let you up-to-date about challenges and opportunities for higher education in IT. You can also post and search job through educause career development. By using educause you can also update about all conferences and events"². "Educause provides a feature of connect and contribute by which you can always connect with your colleague, share your experience with them and support them and guide them"³.

Zoho Wiki: "Zoho wiki provide a feature to create online portals for group collaboration and knowledge sharing.. Zoho wiki provides you the feature to add permission by which you can add restriction to pages or folders. Zoho wiki provides you a team collaboration feature by which you can create dynamic

team portals where different teams can come and share knowledge (upload, store and access documents online) and work untidily on the same project"⁴.

By using zoho wiki you can create interactive online course content for students. Where you can insert videos, presentation, lectures and online books etc.

Methodology

Methods: We conduct testing by giving a task set to users and let them to perform their testing and we record the user expressions, time duration, where they get confused where they suffer from errors and where they need help. This task set includes. i. Create an account, ii. Login, iii. Upload file, iv. Download, v. FileLink Upload, vi. Create new wiki, vii. Create table, viii. Edit table, ix. Change logo, x. Change themes, xi. Invite members, xii. Search file, xiii. Recent changes, xiv. Dashboard.

We have see that mostly users make errors while changing logo and creating new wiki the user get frustrate when they don't find the things where they expect them. Many users face difficulty in uploading files and making link. While they easily go to dashboard, change themes, download file, create table. The user get frustrate while searching any file because in wiki they have to remember the name of the file they want to search.

Explanation of Table-1: The table-1 shows the comparison between Wikispaces, Zoho:wiki and Educause:wiki with the help of the time duration taken by each users to perform a task.

Sign Up: In making signup user take less time in wikispaces where as in Edacause:wiki user take average time and in Zoho:wiki user take a much more time from edacause:wiki but less time than wikispaces.

Table1
Time Duration

Task Set	Average Time Taken in Wikispaces	Average Time Taken in Educause:Wiki	Average Time Taken in Zoho:Wiki
Sign Up	01:57	01:58	01:59
Login	02:33	02:45	05:44
Upload File	03:18	05:33	11:24
Download File	00:37	06:22	11:27
Link Upload	01:28	10:21	11:21
Create Wiki	03:00	03:00	11:50
Invite Members	05:59	05:26	08:23
Create Table	06:45	09:56	10:57
Edit Table	04:59	04:26	10:19
Change Logo	07:25	06:21	04:20
Recent Changes	04:45	03:23	02:42
Sending Message	07:39	07:29	09:42
Dashboard	05:52	08:26	09:33
Theme	11:07	02:49	06:45
Search File	10:14	10:22	11:12

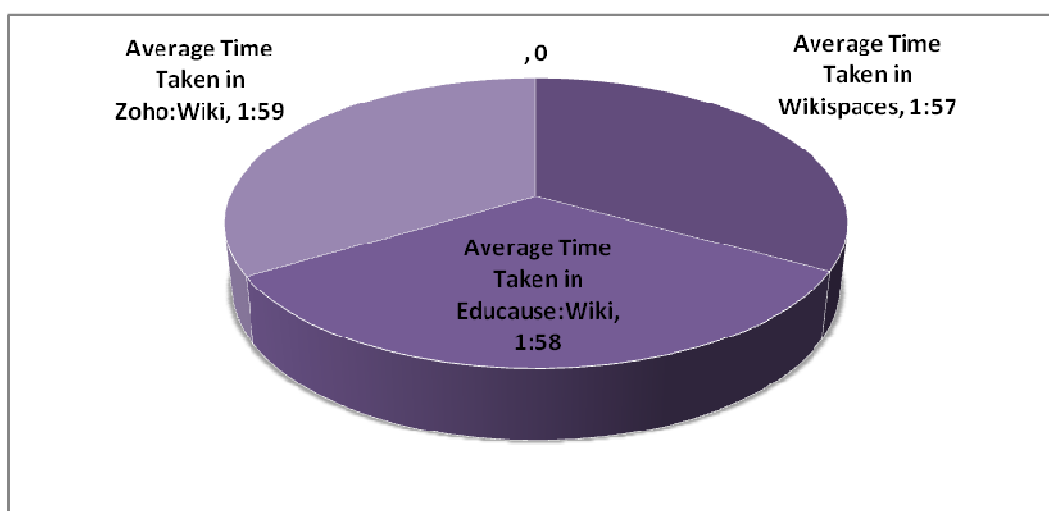


Figure-1
Chart of Sign Up

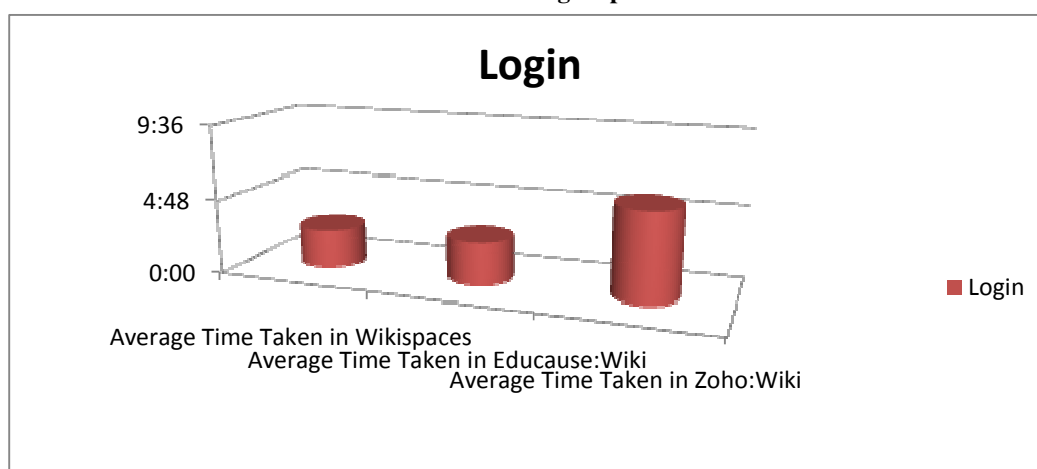


Figure-2
Chart of Login

Login: Login in the website user take less time in wikispaces where as in edacause:wiki users take a little more seconds while Zoho:wiki take average time to perform a task (figure-2).

Upload File: In uploading file the users find a little bit difficulty in zoho:wiki where as in edacause:wiki and wikispaces take average time period to perform a task (figure-3).

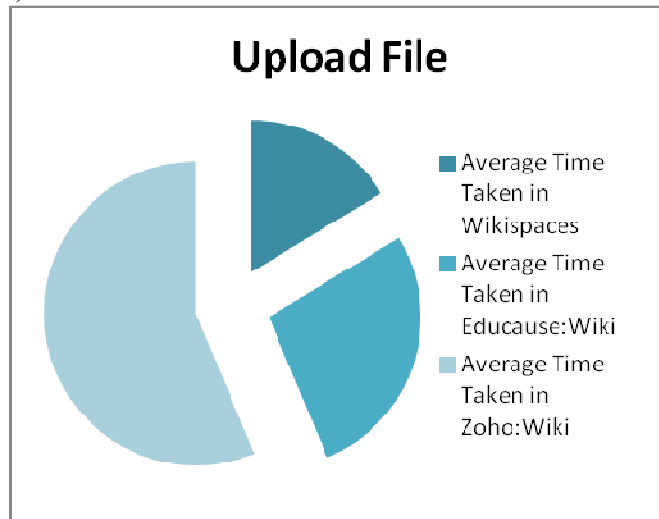


Figure-3
Chart of Upload Files

Download File: In downloading the file users easily download file in wikispaces whereas users take average time in downloading file in edacause:wiki and zoho:wiki (figure-4).

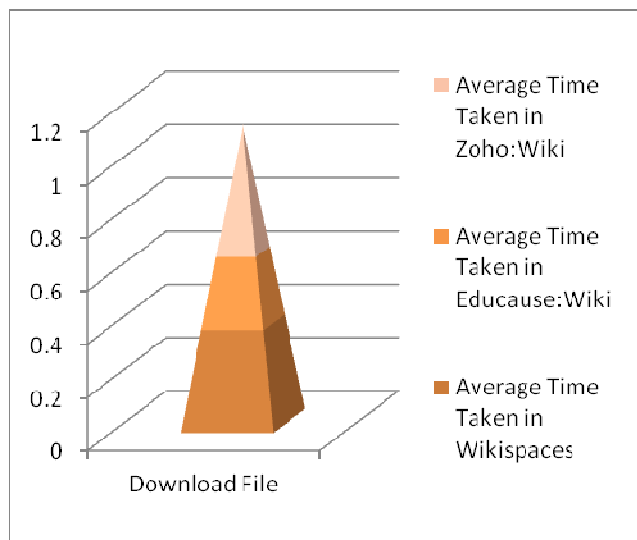


Figure-4
Chart of Download File

Link Upload: User take less time in making link to be uploaded in wikispaces where as in edacause:wiki and zoho:wiki take average time to upload a link on the website (figure-5).

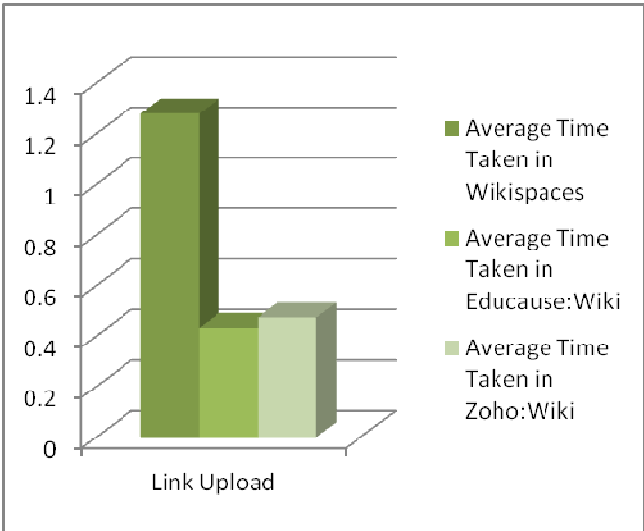


Figure-5
Chart of Link Upload

Create Wiki: In creating Wiki users take average time to perform a task in wikispaces and edacause:wiki where as zoho:wiki take a little bit more time to complete a task (figure-6).

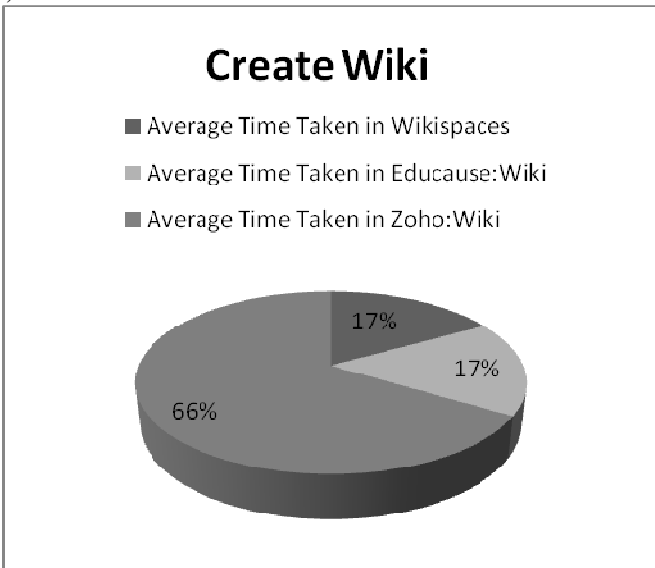


Figure-6
Chart of Create Wiki

Invite Members: Users take average time in inviting member on all three websites that is: wikispaces , edacause:wiki and zoho:wiki (figure-7).

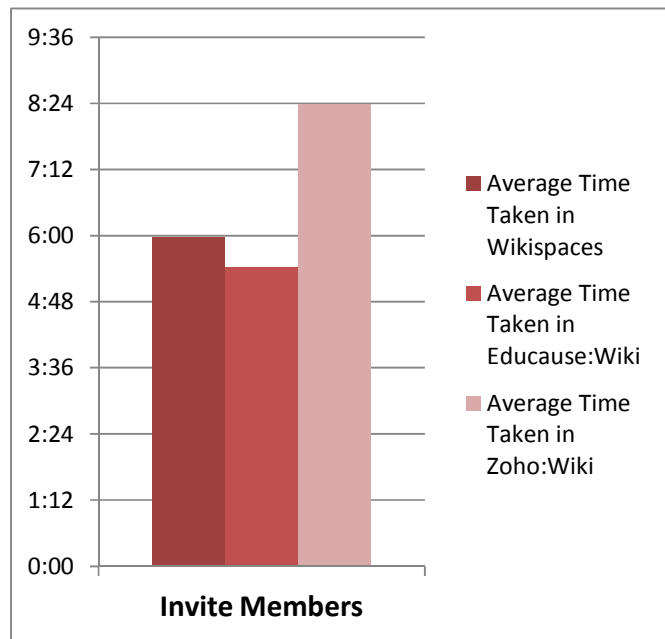


Figure-7
Chart of Invite Member

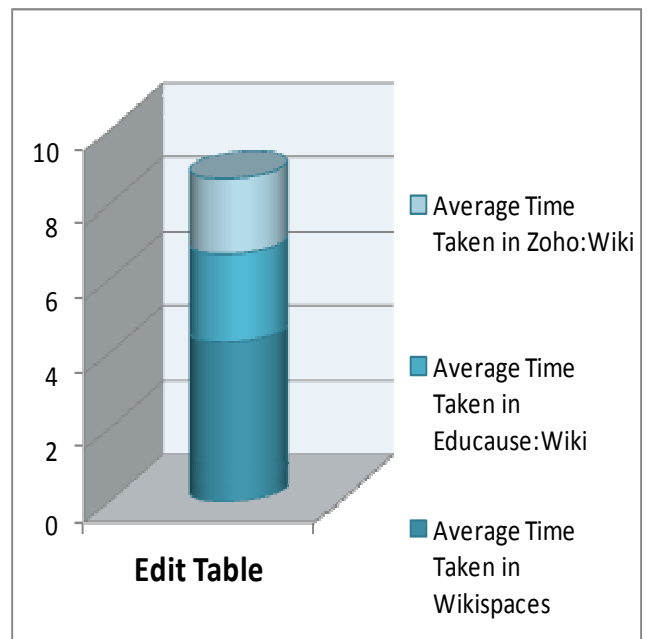


Figure-9
Chart of Edit Table

Create Table: User take less time in creating table in wikispaces where as in zoho:wiki and edacause:wiki the task could not complete in the present time frame (figure-8).

Change Logo: Change logo in wikispaces ,edacause:wiki and zoho:wiki ,users complete the task quickly with taking less period of time as compare from other task (figure-10).

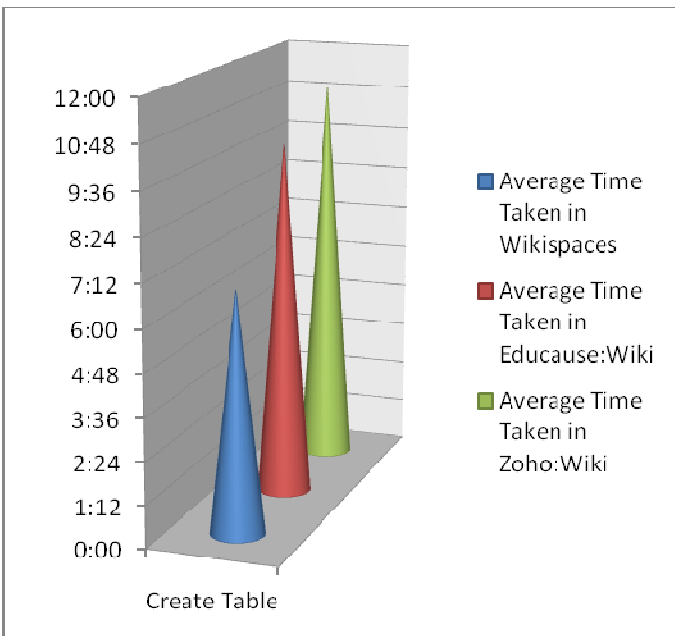


Figure- 8
Chart of Create Wiki

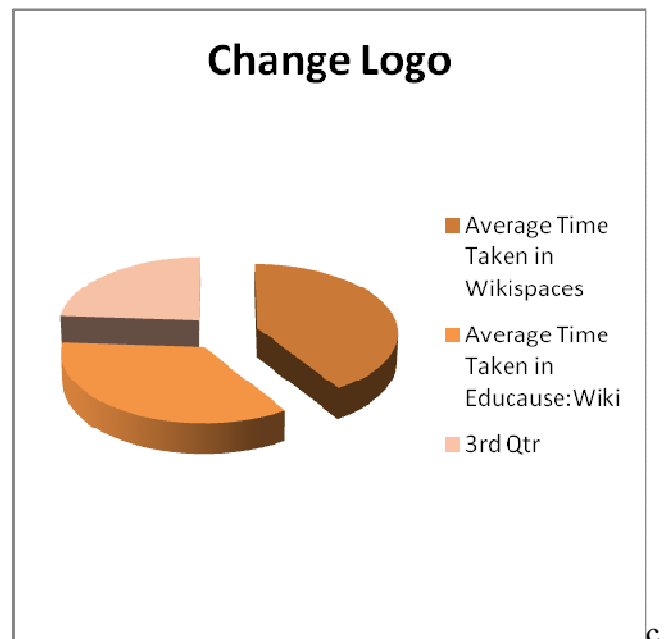


Figure -10
Chart of Change Logo

Edit Table: The table easily edit in wikispaces while user face problem in editing table in zoho:wiki and edacause:wiki (figure-9).

Recent Changes: This task is perform easily by each users using wikispaces, zoho:wiki and edacause:wiki (figure-11).

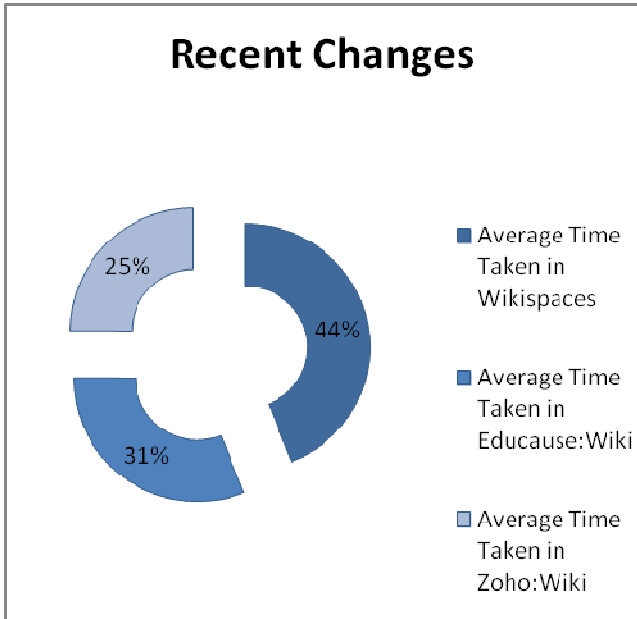


Figure-11
Chart of Recent Changes

Sending Message: This task complete in the present time frame in wikispaces,zoho:wiki and edacause:wiki (figure-12).

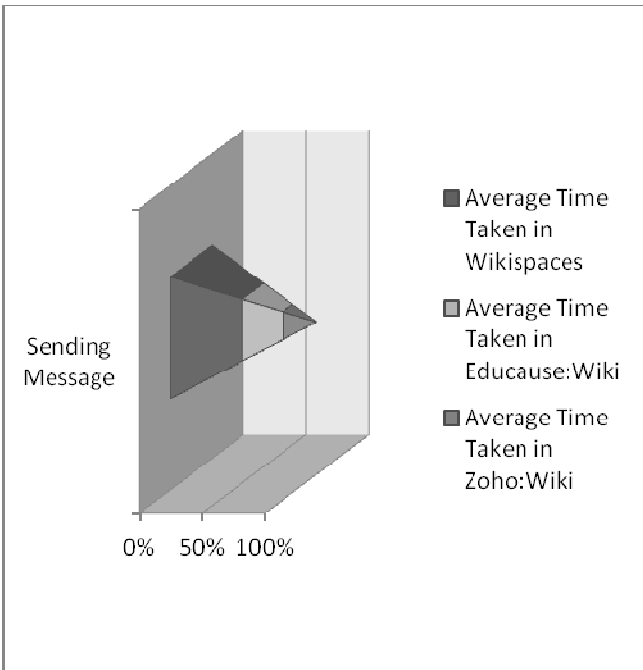


Figure-12
Chart of Sending Messages

Dashboard: The Dashboard navigating bar find easily by each user in wikispaces, edacause:wiki and zoho:wiki (figure-13).

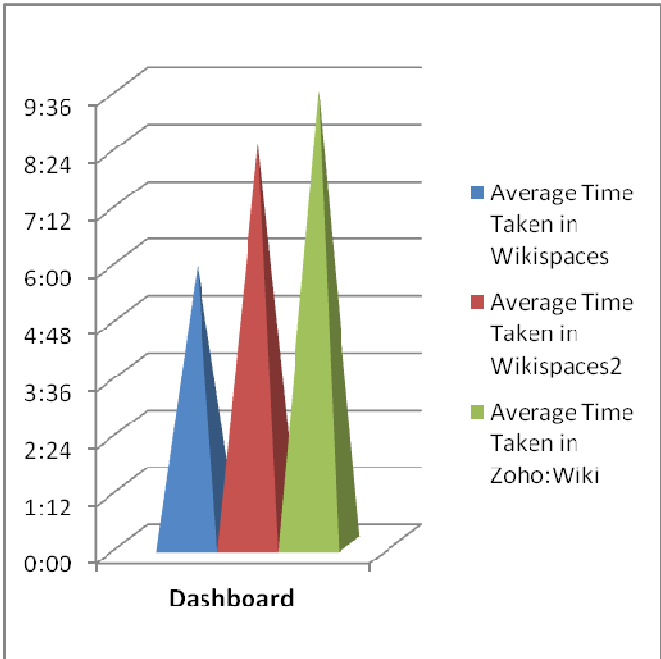


Figure-13
Chart of Dashboard

Theme: Theme is easily change on all three website(wikispaces, edacause:wiki, zoho:wiki) (figure-14).

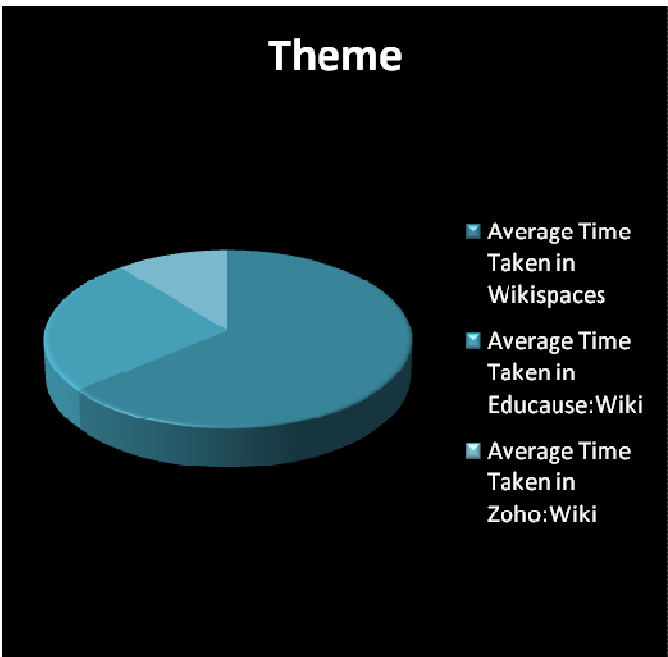


Figure-14
Chart of Theme

Search File: The file is easily search in wikispaces while in zoho:wiki and edacause:wiki ,it take average time to search a file (figure-15).

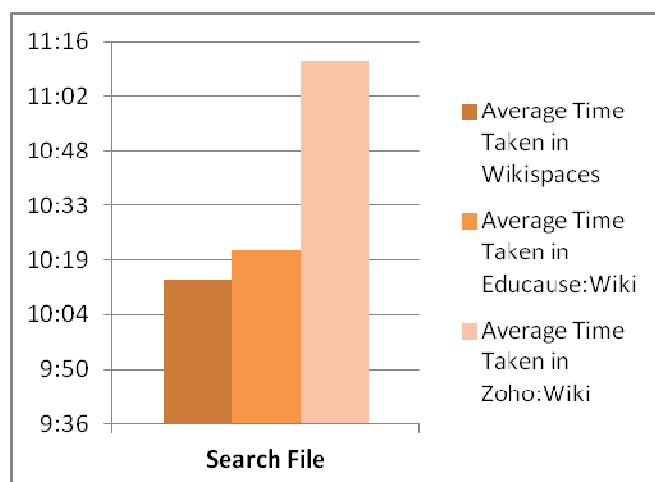


Figure-15
Chart of Search File

Results and Discussion

Result: The result of Usability Testing of Wikis shows that Users are comfortable in using Wikispaces, it takes less time to complete all the tasks in the present time frame. While using edacause:wiki it takes average time in completing the task as compared to Wikispaces and in Zoho:wiki it takes more time to complete a task and some task is not complete in the present time frame.

Table-2
User Usability Satisfaction Questionnaires Testing

Items	Wikispaces Average Time	Edacause:wiki Average Time	Zoho:Wiki Average Time
Design/Layout	3.5	2.0	3.0
Functionality	3.0	6.5	1.5
Ease To Use	5.5	4.5	2.0
Learnability	2.7	3.0	2.5
Satisfaction	7.5	2.75	1.0
Outcome / Future Use	2.7	2.7	1.7
Errors / Website Reliability	5.0	3.5	2.0

Explanation of Table 2: The table 2 shows the User Usability Testing Questionnaires. It includes: Wikispaces

The User Usability Satisfaction Questionnaires Testing shows that 58% users were satisfied in using this website regularly in future uses.

Edacause:wiki: The User Usability Satisfaction Questionnaires Testing shows that 31% users were satisfied in using this website regularly in future use.

Zoho:wiki: The User Usability Satisfaction Questionnaires Testing shows that 12% users were satisfied in using this website regularly in future use.

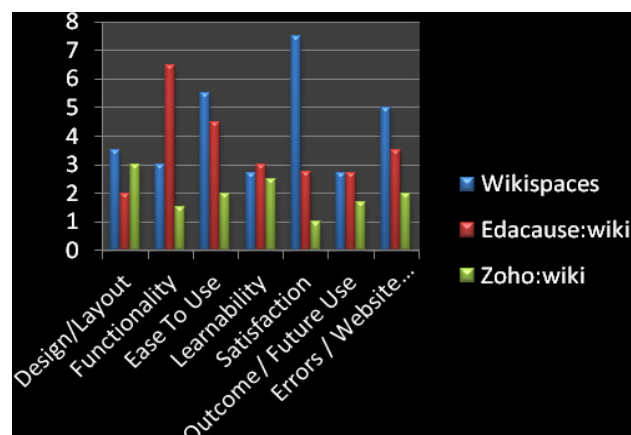


Figure-16
Chart of User Usability Satisfaction Questionnaires Testing

Weight Average: The weight average of User Usability Evaluation of Wiki are as follows:

Wikispaces: The weight average of Wikispaces shows that 73% Users like this website.

Edacause:Wiki: The weight average of Edacause:Wiki shows that 60% Users like this website.

Zoho:wiki: The weight average Zoho:Wiki shows that 32% Users like this website.

Weight Average Table3

Usability Testing Of Wikis	Weight Average
Wikispaces	73%
Educause:wiki	60%
Zoho:wiki	30%

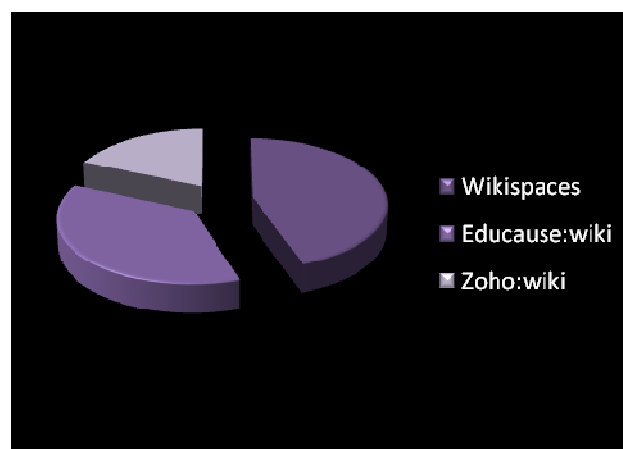


Figure-17
Weight Average Pie Chart

Conclusion

Wikis are very informative website in which user can add pages, can maintain record, can update and download file, it can change theme, logo, profile, search file, create table etc.

To evaluate Usability testing of Wikis we organize some task set that were tested by the users. We conduct testing by giving a task set to users and let them to perform their testing and we record the user expressions, time duration, where they get confused where they suffer from errors and where they need help.

The result of the task set shows that in Wikispaces all task were performed in the present time frame and user were get the task done quickly with taking no help in completing the task. While in Edacause:Wiki users take average time in completing the task as compare to Wikispaces whereas in Zoho:Wiki users take more time in performing the task and some task were not complete in the present time frame.

Questionnaires were conducted so that we come to know, is the user is satisfied with this website or it having difficulty or they can use this website regularly in the future use.

The result of the Questionnaires shows that in Wikispces 58% users were satisfied with this website and they can use it regularly in future. While 31% users were satisfied in Edacause:wiki and only 12% users were satisfied with Zoho:Wiki.

The Overall outcome of the Usability testing of wikis shows that 73% users likes wikispaces,60% users like Edacause:Wiki and 30% users likes Zoho:wiki.

References

1. http://libres.curtin.edu.au/libres16n1/Kille_essayopinion.htm (2013)
2. <http://www.educause.edu/research-and-publications/7-things-you-should-know-about/7-things-you-should-know-about-campus-wide-it> (2013)
3. <http://www.educause.edu/connect-and-contribute> (2013)
4. <http://www.zoho.com/wiki/online-team-collaboration.html> (2013)