

COLLABORATION IN THE CLOUD COMPUTING AMONG PROFESSIONAL STUDENTS IN DR. BABASAHEB AMBEDKAR MARATHWADA UNIVERSITY, AURANGABAD

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Abstract:-The Study examines how professional students in Dr. Babasaheb Ambedkar Marathwada University, Aurangabad, collaborate in the cloud computing. A well structured questionnaire was distributed among the 160 students in five departments: Library Science; Journalism; Tourism; Law; Physical education; and only 121 retrieved. Findings of this study show that all the respondents were aware of using the Internet, respondents prefer to access internet from mobile phone, and student's collaboration in the cloud computing is being heavily used web mail, Face book, and Yahoo. And also the study highlights that the majority of respondents are chatting (Mean=3.75) and Sending and receiving email. (Mean=3.55). Also study showed that the majority of respondents have a very high ability to use and access Google applications: "Google groups" (Mean=4.78), "Google sites" (Mean=3.88), "Google talk" (Mean=3.09), "Google Docs" (Mean=3.07), "Google calendar" (Mean=3.88). The study revealed that there is no significant difference in the extent of satisfaction of professional students to collaborate in the cloud computing based on gender ($t=0.518$; $df = 119$; $P>0.05$). Also there is no significant difference in impact of cloud computing in education of professional students to collaborate in the cloud computing based on gender ($t = 0.379$; $df = 119$; $P>0.05$). There is significant difference in the extent of satisfaction of professional students to collaborate in the cloud computing based on post graduation ($t = -2.112$; $df = -119$; $P<0.05$); and also there is significant difference in impact of cloud computing in education of professional students based on post graduation ($t= -2.185$; $df = -119$; $P<0.05$). There is significant difference in evaluation performance of collaboration in the cloud based on professional departments ($F=3.565$; $df = 4 \& 116$; $P<0.05$); these significant according to (library science & tourism), (library science & journalism). Eventually, the study discusses the problems that are preventing while collaborate and use of the internet; and showed that The majority difficulties faced by respondents are lack of IT and lack of facilities.

Keywords: Collaboration; Cloud Computing; Professional Students; Dr. B.A.M.U.

INTRODUCTION

Cloud computing is transforming 21st century organizations, and libraries are not excluded. All around the globe more organizations, including libraries, are using cloud computing enabled Web-based services to organize events or groups, to accomplish their missions and to get work done. This is not surprising as both cloud computing and the emerging Web-based services provide the

modern organization with opportunities for greater synergies among various individuals over dispersed locations (Shane, 2010).

Cloud based meeting and cloud based collaboration tools and its applications services are some of advanced important of the information technology industry's hottest items. In the simple way (Jamsa, 2013)

Now day's academic areas are adopting computing resources and services that do not own to provide new and innovative services. So, the professional departments working in the cloud zone to achieve their goals. For years many students used to collaborate via sending and receiving email. To meet their needs of improving their knowledge and also many students attend conferences and forum via virtual meetings, for instance: Skype VOIP, GoToMeeting, ect...

REASON FOR SELECTING THE RESEARCH:

The rapid growth of ICT and its impact on human being is unbelievable.

- 1) It is very necessary to study the collaboration on cloud computing for professional students for speedily dissemination of education and communication beyond geographical boundaries.
- 2) It is also benefited to improve skills of professional students, and keeping them up to date in their future job.

STATEMENT OF THE PROBLEM:

The problems selected for the present Study Is Entitled "Cllaboration in the cloud computing by students of professional departments of Dr. Babasaheb Ambedkar Marathwada University".

OBJECTIVES OF THE STUDY

- 1) To study the awareness of the Internet by professional students departments in Dr. B.A.M.U
- 2) To determine the tools that are using to collaborate in the cloud computing by professional students departments in Dr. B.A.M.U
- 3) To identify the ability of access and use of some popular cloud computing applications by professional students departments in Dr. B.A.M.U.
- 4) To determine the significant differences between the professional students for extent satisfaction to collaborate in the cloud computing based on gender and post graduation.
- 5) To determine the significant differences between the professional students for the impact of cloud computing in the education based on gender and post graduation.
- 6) To determine the significant differences between professional students for the evaluation performance of collaboration in the cloud computing based on the professional departments, age and experience.
- 7) To find out the difficulties encountered while collaborating in the clouds by professional students of Dr. B.A.M.U.

PURPOSE OF RESEARCH

The study aim was to establish the professional students in Dr. B.A.M University, "Cloud computing collaborating, awareness, seeking and use. Such a study would help determine whether the services that are provided by the Internet meet the information needs of this particular group or not.

SCOPE AND LIMITATIONS OF THE STUDY

The scope and limitation of the present study is limited with entitled "Collaboration in the cloud computing among students of professional departments of Dr. Babasaheb Ambedkar Marathwada University, Aurangabad".

To find out the cloud computing collaboration by students in professional departments: Library and information science; Journalism; Tourism; Law; Physical education.

RESEARCH METHODOLOGY

Research methodology revolves descriptive approach; in order to fulfill the specific objectives. A well administrated questionnaire was prepared to collect data from professional students, and 160 questionnaires distributed, only 121 returned.

HYPOTHESES

- 1) Web mail is the most tool used by professional students to collaborate in the cloud computing.
- 2) There is no significant difference in impact of cloud computing in education of professional students in Dr. B.A.U based on gender.
- 3) There is no significant difference in the extent of satisfaction of professional students in Dr. B.A.U based on gender to collaborate in the cloud computing
- 4) There is no significant difference in the extent of satisfaction of professional students in Dr. B.A.U based on post graduation to collaborate in the cloud computing
- 5) There is no significant difference in impact of cloud computing in education of professional students based on post graduation.
- 6) There is no significant difference in evaluation performance of collaboration in the cloud computing based on professional departments, age and years of experience.
- 7) There is positive estimation performance to collaborate in the cloud computing.

LITERATURE REVIEW

(Mahalakshmi & Ally, 2012) a questionnaire was used to identify the awareness and applications of cloud computing in libraries in Indian context and revealed that a great majority of the respondents are aware of the term of cloud computing and half of them offered optimistic opinions on the feasibility of application in library ambience.

(Yuvaraj, 2013) conducted a survey to explored the librarians' inquisitiveness in adoption of cloud computing in libraries of Indian Central Universities. As well as, he studied the tools and techniques of Cloud Computing used in their daily library services and showed that librarians are heavily reliant on cloud computing tools and the majority of respondents are using various devices for improving the quality of library and information services though they are a bit worried about the security prospect of the system.

(Grant, 2013) comprehended the mission of librarianship in cloud computing environment and how professionals differentiate themselves from other information suppliers by keeping the values of librarianship intact and preserved when using technology.

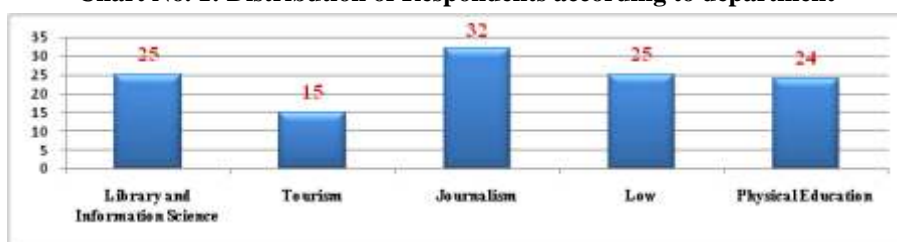
(Manjunatha, K1 and Ramadevi, 2014) they aimed to provide a means of understanding the awareness among library professionals and infrastructure needs to implement cloud computing technologies in enhance the effectiveness of library services offered by them. The analysis of this study shows that librarians have strong willingness to adopt cloud computing technology in the libraries. Librarians are aware various tools provided by OCLC, ExLibris, Polaris, Duraspace & Knimbus which are dedicated to library services. Librarians support the idea of introducing cloud computing into the library and are desirous of various services that can be implemented on the cloud platform. Finally Government agencies need to formulate policies to encourage the acceptance of cloud computing applications in library settings.

ANALYSIS AND INTERPRETATION

In terms of the data analysis that it is important to ensure that the format of data analysis which is employed matches the research paradigm and data, and can answer the research question. Data analysed by SPSS; using Frequency; percentage; mean, standard deviation, T-test and One-Way-ANOVA.

Table No. 1: Distribution of Respondents according to department

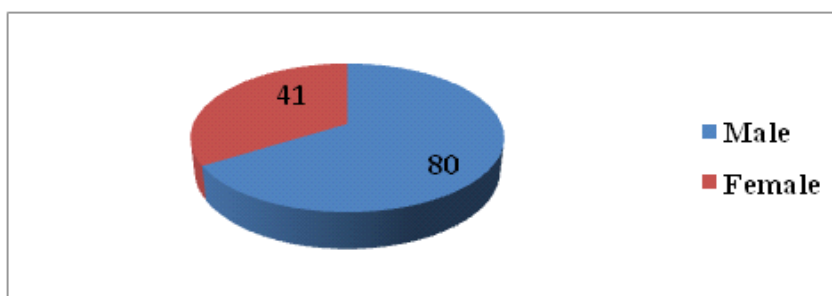
Sr. No.	Department	Frequency	Percentage
1.	Library and Information Science	25	20.7
2.	Tourism	15	12.4
3.	Journalism	32	26.4
4.	Low	25	20.7
5.	Physical Education	24	19.8
Total		121	100

Chart No. 1: Distribution of Respondents according to department

It is observed from the analysis that journalism department has the highest respondents with 32(26.4%). While the Library and Information science & low counting the same rate with 25 (20.7%) for each, followed by Physical education with 24(19.8%), Tourism with 15 (12.4%).

Table No. 2: Distribution of Respondents according to gender

Gender	Frequency	Percentage
Male	80	66.1
Female	41	33.9
Total	121	100

Chart No. 2: Distribution of Respondents according to gender

It is observed from the table & chart No. 2 that 80 (66.1%) out of 121 respondents are male and 41 (33.9%) are female.

Table No. 3: Nationality of respondents

Nationality	Frequency	Percentage
Indian	116	95.9
Foreigner	5	4.1
Total	121	100

Data in table No. 3 shows that, the majority 116 (95.9%) of the respondents are Indian, whereas only 5(4.1%) are foreigners.

Table No. 4: Age of respondents

Sr. No.	Age	Frequency	Percentage
1.	= < 20	04	3.3
2.	21 - 23	41	33.9
3.	24 - 26	57	47.1
4.	27 - 29	12	9.9
5.	= > 30	7	5.8
Total		121	100

From table No. 4 shows that the majority 98 (81%) of the respondents have the age between 21 to 26. and 19 (15.7%) of respondents having age = >27. Whereas only 4(3.3%) o respondents having = < 20.

Table No.5: Qualification of respondents

Qualification	Frequency	Percentage
PG ^{1st}	58	47.9
PG ^{2nd}	63	52.1
Total	121	100

The table No. 5 shows that 58 (47.9%) of respondents belong to PG (first year), whereas 63 (52.1%) of respondents are PG (second year).

Table No. 6: Awareness of using the Internet

Awareness of Internet	Frequency	Percentage
Yes	121	100
No	-	-
Total	121	100

It noticed from the table No.6 that all the respondents 121(100%) are aware of using the Internet, This result confirmed by the study of Singh (1998) who revealed that all the librarians had heard and had awareness of the Internet.

Table No. 7: Experience of using Internet

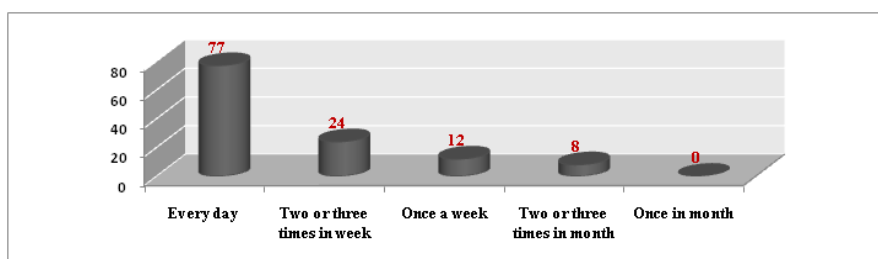
Sr. No.	Year of experience	Frequency	Percentage
1.	0 to 1	09	7.4
2.	1 to 2	27	22.3
3.	2 to 3	35	28.9
4.	3 to 4	21	17.4
5.	More than 4 years	29	24.0
Total		121	100

The table No.7 shows that more than third 35(28.9%) of students had been experience in using the Internet 2- 3 years. Followed by 29 (24.0%) had been experience from 1- 2 years, 27(22.3%) of respondents had been experience from 1- 2 years. Whereas only 9 (7.4%) of respondents had been less using the Internet for 1 year.

Table No. 8: Frequency of using the Internet

Sr. No.	Frequency of use	Frequency	Percentage
1.	Every day	77	63.6
2.	Two or three times in week	24	19.8
3.	Once a week	12	9.9
4.	Two or three times in month	08	6.6
5.	Once in month	-	-
Total		121	100

Chart No. 3: Shows Frequency of using the Internet



It has been showed from the table No.8 and chart No.3 that a majority 77(63.6%) of respondents use the internet every day, and 24(19.8%) of respondents use it for two or three times in week, these results are somehow in lines with findings of Khaparde (2011) and Islam (2013) who showed that the majority of respondents use internet every day and more than two times in week. And also the study found that 12(9.9%), 8(6.6%) of respondents are using the Internet once in week, and 2 or three times in month. Otherwise no one of respondents use the Internet once in month.

Table No.9: Mean Response Values and Standard Deviation of Students' Place of using the Internet

Sr. No.	Place	Mean	Std. Deviation	Rank
1.	Department computer lab	3.38	1.624	3
2.	At home	3.46	1.555	2
3.	Mobile phone	3.50	1.592	1
4.	Internet Cafés	2.88	1.299	4
5.	At friends/Colleague's home	2.21	1.316	6
	University library	2.51	1.473	5

Note: 5=Always, 4=Often, 3=Sometimes, 2=Rarely, 1=Never

Chart No.4: Mean Response Values and Standard Deviation of Students' Place of using the Internet

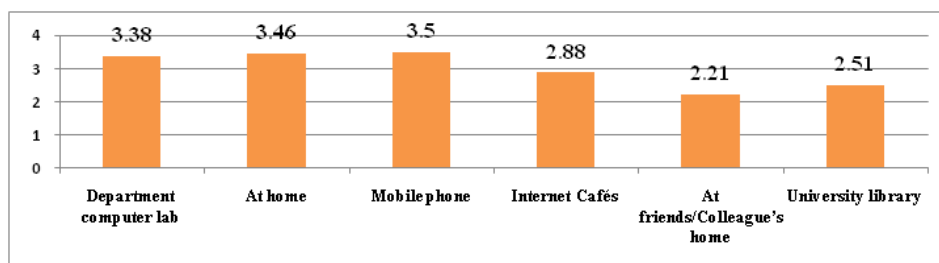


Table No.9 and chart No.4 shows that the majority of respondents are accessing the Internet from "Mobile phone", at home and department lab, with similarity means: (mean=3.50),

(mean=3.46) and (mean=3.38) respectively. And also study revealed that low similarity means belong to respondents who use the internet from “Internet Cafés” (mean=2.88), “University library” (mean=2.51), and “At friends/Colleague’s home” (mean=2.21).

Table No.10: Frequency of respondents having opening accounts in clouds computing

Sr. No.	Accounts	Library	Tourism	Journalism	Law	Physical education	Frequency	Percentage
1.	Gmail	24	14	28	21	15	102	84.30
2.	Yahoo	13	07	12	13	09	54	44.63
3.	Hotmail	-	-	03	-	04	7	5.79
4.	Rediff mail	02	04	06	04	05	21	17.36
5.	Zoho mail	02	-	01	-	-	3	2.48
6.	MySpace	-	01	01	-	01	3	2.48
7.	Facebook	15	13	24	19	19	90	74.38
8.	You Tube	02	06	11	6	12	37	30.58
9.	Twitter	02	05	10	05	03	25	20.66
10.	Blog	02	01	10	05	-	18	14.88
11.	Skype	01	02	02	03	09	17	14.05
12.	Nimbuz	02	03	-	-	04	9	7.45
13.	Other	01	03	-	02	-	6	4.96

From table No.10 it is revealed that highest numbers 102 (84.30%), 90 (74.38%), 54 (44.63%) of respondents are having opening accounts in Gmail, Facebook and Yahoo, respectively. Also 37 (30.58%) and 25(20.66%) of respondents are having opening accounts in You Tube and Twitter, respectively. And also 18(14.3%), 17 (14.05%), of respondents are having nearest frequencies of opening accounts in Blog and Skype, respectively. Whereas only 9(7.45%), 7(5.79%), 6(4.96%) of students are having few numbers of opening accounts in Nimbuz, Hotmail and other, respectively.

Table No.11: Tools of collaborating in the cloud computing

Sr. No.	Tools	Mean	Std. Deviation	Rank
1.	Web mail	4.25	1.149	1
2.	Instant messaging (IM)	2.86	1.491	3
3.	Wiki	2.81	1.572	5
4.	Blog	1.99	1.339	9
5.	Virtual meeting	1.94	1.356	10
6.	Skype	1.89	1.270	11
7.	Shared documents	2.55	1.489	6
8.	Microsoft office web applications	2.18	1.455	7
9.	Social networks	3.32	1.479	2
10.	Phone systems	2.81	1.551	4
11.	Calendar management	2.07	1.436	8

Note: 5=Always, 4=Often, 3=Sometimes, 2=Rarely, 1=Never

From the table no.11 it is obvious that the majority of respondents are using “web mail” (mean=4.25), as a main tool to collaborate in the cloud, This finding similar to many studies such as that of Ajuwon (2003), Palesh, Saltzman and Koopman (2004), Khaparde (2001), Nwezeh (2010) and Bankole (2012) who revealed that the majority of students used the email to communicate with their friends and colleagues. Also “Social networks” and “Instant messaging” ranked as second and third tools are using by professional students with (mean=3.32), (mean=2.86) respectively. Then, “Phone systems” (mean=2.81), “Wiki” (mean=2.81), “Shared documents” (mean=2.55),

“Microsoft office web applications” (mean=2.18), “Calendar management” (mean=2.07). Finally “Blog” (mean=1.99), “Virtual Meeting” (mean=1.94), and “Skype” (mean=1.89) come as the less tools used by respondents to collaborate in the cloud computing.

Table No. 12: Purpose of Collaboration in Cloud Computing by Respondents

Sr. No.	Purpose	Mean	SD	Rank
1.	Chatting	3.75	1.428	1
2.	Send a short message to another user outside of e-mail	3.37	1.324	3
3.	To talk face to face interaction	2.62	1.392	7
4.	Audio-only calls over the internet	2.33	1.480	9
5.	Sending and receiving email	3.55	1.549	2
6.	Sending voice mail and receiving	2.36	1.543	8
7.	Add and edit content in blog, wiki	2.21	1.443	11
8.	Create and access to a word processor, spreadsheet, and presentation	2.71	1.524	6
9.	Sharing documents (videos, photos)	2.94	1.468	5
10.	Create and publish content on the web (e.g. blog)	2.26	1.357	10
11.	Share calendars to simply appointments and meetings	2.18	1.478	12
12.	Entertainment	3.14	1.593	4

Note: 5=Always, 4=Often, 3=Sometimes, 2=Rarely, 1=Never

Table No.12 shows that the main purposes to collaborate in the cloud computing by professional students are: “Chatting” (mean=3.75), “Sending and receiving email” (mean=3.55), “Send a short message to another user outside of e-mail” (mean=3.37), “Entertainment” (mean=3.14). On the other hand, respondents provide similarity less purposes regarding to “Sharing documents (videos, photos)” (mean=2.94), “Create and access to a Word Processor, Spreadsheet, and Presentation” (mean=2.71), “Sending & receiving voice mail” (mean=2.36), “Audio-only calls over the internet” (mean=2.33), “Create and publish content on the web (e.g. Blog)” (mean=2.26). “Add and edit content in Blog, Wiki” (mean=2.21), and “Share calendars to simply appointments and meetings” (mean=2.18).

Table No.13: Ability to Access & Use some Popular Applications to Collaborate in Clouds Computing

Sr. No.	Applications	Mean	Std. Deviation	Rank
1.	Google groups	4.78	1.651	1
2.	Yahoo groups	3.50	1.967	4
3.	Google Docs	3.07	1.880	6
4.	Google calendar	3.02	1.800	7
5.	Google sites	3.88	2.005	2
6.	Google talk	3.09	1.945	5
7.	GoToMeeting and WebEx	2.23	1.537	13
8.	Zoho meeting	2.04	1.480	15
9.	Word press (a leading blog sit)	2.40	1.749	10
10.	blogger	2.46	1.718	9
11.	Office web apps	2.53	1.780	8
12.	Zoho wiki	2.28	1.649	12
13.	Wikipedia	3.72	1.885	3
14.	Zentation	2.21	1.653	14
15.	Picasa	2.69	1.755	8
16.	Other	2.33	1.777	11

Note: 6= perfectly, 5=Very well, 4=Quite well, 3=fairly well, 2=Very little, 1=Not at all

Table No.13 shows that the majority of respondents had a very high ability to use and access “Yahoo groups (mean=4.78) & Google applications: “Google groups” (mean=4.78), “Google sites”

(mean=3.88), "Google talk" (mean=3.09), "Google Docs" (mean=3.07), "Google calendar" (mean=3.88). Also study revealed that respondents have perfect ability to use "Wikipedia" (mean=3.72). While the less abilities to use and access popular applications come to Picasa, Office web apps, blogger, Word press (a leading blog sit), Zoho wiki, Zentation, GoToMeeting and WebEx, Zoho Meeting, with range us other applications and services; these means range between 2.04 - 2.69.

Table 14: T-test Comparisons of Extent of Satisfaction based on Gender

Extent of satisfaction	N	X	SD	t cal	df	Sig.	Rmk
Male	80	2.150000	.7811060	.518	119	.605	p>0.05
Female	41	2.073171	.7546603				

* Significant at 0.05 level
 $H_0 t = 0.518; df = 119; p > 0.05$
 Decision: Not significant

The study found that there is no significant difference in the extent of satisfaction of professional students based on gender. The study showed t value of 0.518 and a significant score of 0.605, $t = .518; df = 119; p > 0.05$. Thus the hypothesis is hereby validated.

Table 15: T-test comparisons of impact of cloud computing in education based on gender

Impact of cloud in education	N	X	SD	t cal	df	Sig.	Rmk
Male	80	1.800000	.9195486	0.379	119	0.706	P>0.05
Female	41	1.731707	.9753048				

*Significant at 0.05 level
 $H_0 t = 0.379; df = 119; p > 0.05$
 Decision: Not significant

The study found that there is no significant gender difference in impact of cloud in education of professional students. The study showed t value of 0.379 and a significant score of 0.706, $t = 0.379; df = 119; p > 0.05$. Thus the hypothesis is hereby validated.

Table 16: T-test comparisons of Extent of satisfaction based on post graduation

Extent of satisfaction	N	X	SD	t cal	df	Sig.	Rmk
PG ^{1st}	58	2.276	0.744	2.112	119	0.037	P<0.05
PG ^{2nd}	63	1.984	0.772				

*Significant at 0.05 level
 $H_0 t = -2.112; df = -119; p < 0.05$
 Decision: significant

The study revealed that there is significant difference in the extent of satisfaction of professional students based on post graduation. The study revealed a t-value of 2.112 and a significant score of 0.037, $t = 0.037; df = 119, p < 0.05$. That means PG1st students exhibited higher level in the extent of satisfaction ($x=2.276$) than PG2nd ($x=1.984$). Thus the hypothesis is therefore invalidated.

Table 17: T-test Comparisons the Impact of Cloud Computing in Education based on Post Graduation

Impact of cloud in education	N	X	SD	t cal	df	Sig.	Rmk
PG ^{1st}	58	1.586	0.817	-2.185	119	0.031	P <0.05
PG ^{2nd}	63	1.952	1.007				

*Significant at 0.05 level
 Ho t = -2.185; df = 119; p<0.05
 Decision: significant

The study revealed that there is significant difference in impact of cloud in education of professional students based on post graduation. The study revealed a t-value of -2.185 and a significant score of 0.031, t= 0.031; df = 119, P< 0.05. That means PG2nd students exhibited little higher level in the extent of satisfaction (x=1.952) than PG1st (x= 1.586). Thus the hypothesis is therefore invalidated.

Table No. 18: Difficulties Facing by Respondents while Collaborating in the Clouds

Sr. No.	Difficulties	Mean	Std. Deviation	Rank
1.	Lack of IT knowledge	3.64	1.371	1
2.	Lack of facility	3.21	1.284	2
3.	Lack of time	2.99	1.307	5
4.	Fear or anxiety	2.40	1.364	7
5.	Less speed	3.14	1.416	3
6.	Failure connection	3.01	1.332	4
7.	Some application costly according to my financial	2.67	1.446	6

Note: 5=Always, 4=Often, 3=Sometimes, 2=Rarely, 1=Never

An attempt was made to explore the difficulties faced by the respondents to collaborate in the cloud computing. Table 16 shows that the respondents had the following problems: “Difficulty in lack of IT knowledge” (mean=3.64), “lack of facility” (mean=3.21), “Less speed” (mean=3.14), “Failure connection” (mean=3.01), “Problems in Lack of time” (mean=2.99), “Some application costly according to my financial” (mean=2.67), and “Fear or anxiety” (mean=2.40).

Table No. 19: Evaluation performance of collaboration in the cloud computing

Sr. No.	Performance	Mean	Std. Deviation	Rank
1.	Accessibility	2.54	1.713	7
2.	Easy to use	2.74	1.731	6
3.	Security	3.07	1.621	5
4.	Privacy	3.21	1.658	3
5.	Capacity	3.30	1.815	2
6.	User friendly	3.11	1.779	4
7.	Reliability	3.42	1.692	1

Note: 1= High level, 2, 3, 4 ... 7= Low level

It is noticed from table No 16 that the respondents given the positive estimation performance to collaborate in the cloud computing. “Reliability” (mean=3.42), “Capacity” (mean=3.30), “Privacy” (mean=3.21), “User friendly” (mean=3.11), “Security” (mean=3.07), “Easy to use” (mean=2.74), and “Accessibility” (mean=2.54).

Table 20: On-Way-ANOVA-Test: Compare Means of Evaluation Performance of Collaboration in the Clouds Based On Professional Departments, Age and Years of Experience.

Factor variables	Source variance	Sum of Squares	df	Mean Square	F	Sig.	Rmk
Departments	Between Groups	1004.699	4	251.175	3.565	0.009	P<0.05
	Within Groups	8173.565	116	70.462			
	Total	9178.264	120	-			
Age	Between Groups	28.883	4	7.221	0.092	0.985	P>0.05
	Within Groups	9149.381	116	78.874			
	Total	9178.264	120	-			
Years of experience	Between Groups	187.229	4	46.807	0.604	0.661	P>0.05
	Within Groups	8991.036	116	77.509			
	Total	9178.264	120	-			

* Significant at 0.05 level

Departments: Ho F = 3.565; df = 4&116; p<0.05

Decision: significant

* Significant at 0.05 level

Age: Ho F = -0.092; df = 4&116; p>0.05

Decision: Not significant

* Significant at 0.05 level

Experience: Ho F = -0.604; df = 4&116; p>0.05

Decision: Not significant

From above, the study revealed that there is no significant difference in evaluation performance of collaboration in the cloud computing based on age and years of experience, F= -0.092; df = 4&116; P>0.05, and F= -0.604; df = 4&116; P>0.05, respectively. While there is significant difference in evaluation performance of collaboration in the cloud according to professional departments. The study revealed a F-value of 3.565 and a significant score of 0.009, F= 3.565; df = 4&116, p<0.05. Thus the hypothesis is therefore invalidated.

Note: The next table no: 21, shows the source significant deference's based on Professional departments using

Table 21: Dunnett C. Multiple Comparisons for professional departments

Professional Departments	Library Science	Tourism	journalism	low	Physical education
Library And Information Science		*	*		
Tourism	*				
Journalism	*				
Low					
Physical Education					

From the table above, we noticed that there are deference's significant between (library since & tourism), and (library science & journalism).

FINDINGS AND CONCLUSION:

The professional students in Dr. Babasaheb Ambedkar Marathwada University have high light to use the web mail and Facebook. Also respondents have high perception to use Google applications. The study revealed that there is no significant difference in the extent of satisfaction of professional students based on gender to collaborate in the cloud computing. There is significant difference in impact of cloud computing in education by professional students based on post graduation to collaborate in the cloud computing. There is no significant difference in impact of cloud computing in education by professional students based on gender to collaborate in the cloud

computing; but there is significant based on post graduation. There is no significant difference in evaluation performance of collaboration in the cloud based on age and years of experience; but there is significant difference based on professional departments; and these significant according to (Library Science & Tourism), and (Library Science & Journalism). The majority difficulties faced by respondents are lack of IT and lack of facilities. This study has a vital significance in redesigning the policy framework to suit to the modern era with more emphasize on new advanced technology and providing access to information more and more. The survey also helps us in great deal to identify the areas, which has to be looked in and give more importance to provide better facilities and services to the students of library science.

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