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The Value of Turning Virtual

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Abstract

Jordan Virtual reference service (known as VRS) in particular real time service (the chat service) is becoming a norm in libraries all over the world, and particularly in academic libraries. This paper is going to check if the management in Jordanian academic libraries aware of the value of turning virtual? In order to find out, the researcher created two focus groups; group A which was put into real time virtual environment and group B was put into physical environment and created two lists of identical reference questions and handed them over to the two groups in order to answer them in each environment, to measure the value of turning virtual.

Introduction

Virtual reference service in particular real time service (chat service) is becoming a norm in libraries all over the world, and particularly in academic libraries. Where in late 1990's libraries started to embrace the virtual reference service, known as VRS. By going virtual in the reference desk; the library reference service is conducted in the real time most of the times.

Academic libraries in Jordan are considered as the most advanced libraries in technological matters in comparing with other types of libraries. However, the real time virtual reference service is still unknown and unused in Jordanian academic libraries. This could be because of many reasons, such as lack of awareness of the importance of such service and in some cases the poor technological infrastructure.

As the VRS has been in use in libraries all over the world since over a decade, its advantages are now obvious to both librarians and users, but the question here is the management in Jordanian academic libraries aware of the value of turning virtual? This

paper will try to give the value of using real time service by comparing it with physical services.

Literature review

Virtual reference service is relatively new service in libraries, a review of the literature reveals that most of what have been written on virtual reference service describe this service and define it. It was defined as "*a new and exciting way to deliver library reference services via the Internet. Using software based on chat technology, the librarian can do a live reference interview; open Web pages, library databases, PowerPoint slides, or other software applications on the patron's computer*" (virtual reference 101,2004). Kelly described the virtual reference service, where he used the term real time service; he came across the first experience of Bowling Green State University library in using chat at the reference desk (Broughton, 2001).

Zheng stated that the virtual reference service was emerged in libraries in mid 1990's as a new development of the traditional reference service (Zheng, 2006).

Jasco described the way of offering information resources for the patrons before the emergence of the VRS, where librarians bookmark their favorite online resources in order to provide patrons with the needed information. He stated that the first step towards the VRS was the idea of the no-show users. One of the first conducted features of this idea was the online public access catalogue (Jasco, 2003). Also, simple instant massaging were used in the early stages of the VRS the software (virtual reference 101,2004).

Real time Virtual reference service (chat service) is the most popular form of VRS in libraries, this is because it is time and cost saving, as Helfer states that using the email in reference services is time consuming, where the patrons send the question and wait for the librarian to check the email and in many cases the patrons don't give sufficient information in the question so the librarian sends them to get more information to answer the question(Helfer, 2001). The whole process could take 24 hours. While in using chat service the process could take few minutes. Furthermore, real time service is more accurate than traditional references, where online references are updated in regular basis. However, Zumalt states that there is little significance difference in the information that is obtained from traditional sources and the internet sources. (Zumalt and Pasicznyuk, 1998)

The literature review reveals gab in research and studies on using real time reference service in Jordanian academic libraries and libraries in the region, where this paper will try to bridge this gab and show what value libraries could gain when using real time service in the reference section.

Methodology

The research will be conducted by:

- Creating two focus groups of students (Group A & Group B)
- Creating two lists of identical reference questions
- Putting group A in real time virtual reference environment to answer the questions, and putting group B in physical environment to answer the same questions.
- Calculating the time each group spends in answering the same questions.

- Using Yahoo Messenger, as the software to be used by a volunteer from the library staff to communicate with group A, where the chat reference service is not available in Jordanian academic libraries.

Instruments:

The researcher will use quantitative instrument that is the comparison of the time spent in answering the questions by the two groups; the (unpaired t-test) will be used in order to analyze the data.

Data Collection:

In order to collect data the researcher has created two identical lists of reference questions with ten questions in each one and handed them to group A and group B to answer them in two different environments.

Developing of the reference question list:

The researcher developed ten reference questions, tried to choose an easy to answer questions and that could be answered from online resource or printed resources.

Research population:

The research population is the library of Al-Balqa Applied University, where it was chosen as a representative sample of the academic libraries, since academic libraries in Jordan are joined in a consortium, where any new services adopted by the consortium, should be available in every academic library.

Pilot exercise:

The purpose of the pilot exercise was to test if all questions in the list were suitable to be included. If any of the questions were not suitable they would have been rephrased or omitted before the final draft of the list. The researcher asked the questions in the first time for the librarian on the reference desk and asked the library staff who was volunteered to answer the questions in real time by using Yahoo messenger. All questions were found to be suitable and the researcher included them in the final list

The significance of the study:

- Virtual reference service is relatively new in Jordanian libraries, where some reference librarians still do not realize the value of virtualization.
- The library of Al-Balqa Applied University; where this research takes place, still presents its reference services in physical environment more than the virtual environment. Moreover, real time service (chat service) is not available in Jordanian academic libraries. Consequently, the result of this research would be of significant value in ascertaining the cost and time-saving benefits for full virtualization.

Results and discussion

In order to compare between the mean times spent by the two groups in answering the questions the researcher used (unpaired t-test) see Appendix. The tables below

is the time spent by group A which was put into the real time environment and group B which was put into the physical environment. The questions were:

1. Find an article on digital libraries?
2. Where to find statistical information on countries?
3. Where to find meanings of abbreviations?
4. Where to find information on UK universities?
5. Where to find travel information?
6. Where to find information on citation styles?
7. How to find the difference in time between Jordan and Canada?
8. Find specialist dictionary on library and information science?
9. Find a resource on measures conversion?
10. Find a resource of flags of different countries in the world?

Table 1: Time spent by group A on answering the question list

Group A	Time spent to answer Q1	Time spent to answer Q2	Time spent to answer Q3	Time spent to answer Q4	Time spent to answer Q5	Time spent to answer Q6	Time spent to answer Q7	Time spent to answer Q8	Time spent to answer Q9	Time spent to answer Q10
Student 1	9 m*	4 m	7 m	8 m	4 m	8 m	9 m	4 m	10 m	6 m
Student 2	3 m	3 m	4 m	9 m	3 m	6 m	6 m	6 m	7 m	5 m
Student 3	14 m	7 m	8 m	6 m	6 m	7 m	8 m	4 m	6 m	6 m
Student 4	5 m	8 m	4 m	5 m	5 m	6 m	6 m	7 m	6 m	4 m
Student 5	6 m	4 m	5 m	8 m	4 m	8 m	6 m	6 m	7 m	4 m
Student 6	8 m	6 m	6 m	4 m	4 m	9 m	7 m	5 m	7 m	5 m
Student 7	6 m	3 m	8 m	6 m	6 m	7 m	6 m	6 m	6 m	8 m
Student 8	6 m	5 m	5 m	6 m	2 m	6 m	8 m	6 m	9 m	5 m
Student 9	4 m	2 m	6 m	6 m	4 m	8 m	6 m	4 m	7 m	7 m
Student 10	5 m	7 m	4 m	5 m	13 m	9 m	8 m	8 m	6 m	6 m
Student 11	4 m	9 m	6 m	8 m	6 m	6 m	9 m	6 m	10 m	8 m
Student 12	6	5m	6	8 m	7 m	6 m	7 m	6 m	9 m	9 m

Table 2: Time spent by group B in answering the question list

Group B	Time spent to answer Q1	Time spent to answer Q2	Time spent to answer Q3	Time spent to answer Q4	Time spent to answer Q5	Time spent to answer Q6	Time spent to answer Q7	Time spent to answer Q8	Time spent to answer Q9	Time spent to answer Q10
Student 1	35 m	41 m	15 m	23 m	17 m	45 m	35 m	20 m	25 m	15 m
Student 2	25 m	36 m	10 m	28 m	15 m	40 m	40 m	15 m	22 m	15 m
Student 3	33 m	55 m	16 m	20 m	20 m	37 m	36 m	15 m	26 m	10 m
Student 4	19 m	42 m	13 m	33 m	25 m	37 m	33 m	18 m	20 m	15 m
Student 5	23 m	37 m	n/a	23 m	n/a	40 m	29 m	20 m	18 m	18 m
Student 6	22 m	29 m	n/a	26 m	n/a	35 m	30 m	16 m	25 m	12 m
Student 7	31 m	36 m	n/a	21 m	n/a	36 m	36 m	19 m	18 m	15 m
Student 8	27 m	30 m	n/a	24 m	n/a	40 m	25 m	22 m	19 m	17 m
Student 9	38 m	26 m	17 m	27 m	18 m	35 m	30 m	15 m	23 m	13 m
Student 10	20 m	34m	15 m	33 m	15 m	25 m	35 m	24 m	20 m	10 m
Student 11	19 m	38 m	10 m	23 m	20 m	33 m	40 m	17 m	18 m	18 m
Student 12	24 m	41 m	15 m	26 m	13 m	38 m	35 m	15 m	15 m	12 m

By comparing the mean times for the equations of the two groups under the study, the researcher found that group A (using virtual environment) is significantly

* m: Minute

larger from that of group B (using physical environment), see appendix 1. In other words the physical environment was time consuming on the opposite of the real time reference environment that saves the users and the staff time as well. As it is obvious in question 3 and 5 in group B that some of the reference librarians failed in helping some of the students in answering the questions, where in the group A the whole questions were answered by the library staff on the other line of the chatting service.

Some of the important results were on question 2 and 6; where in average group B took about 37 minutes in answering question 2 and the same for question 6. While group A took in average about 5 minutes for answering question 2 and 7 minutes for question 6. See Table 3 bellow.

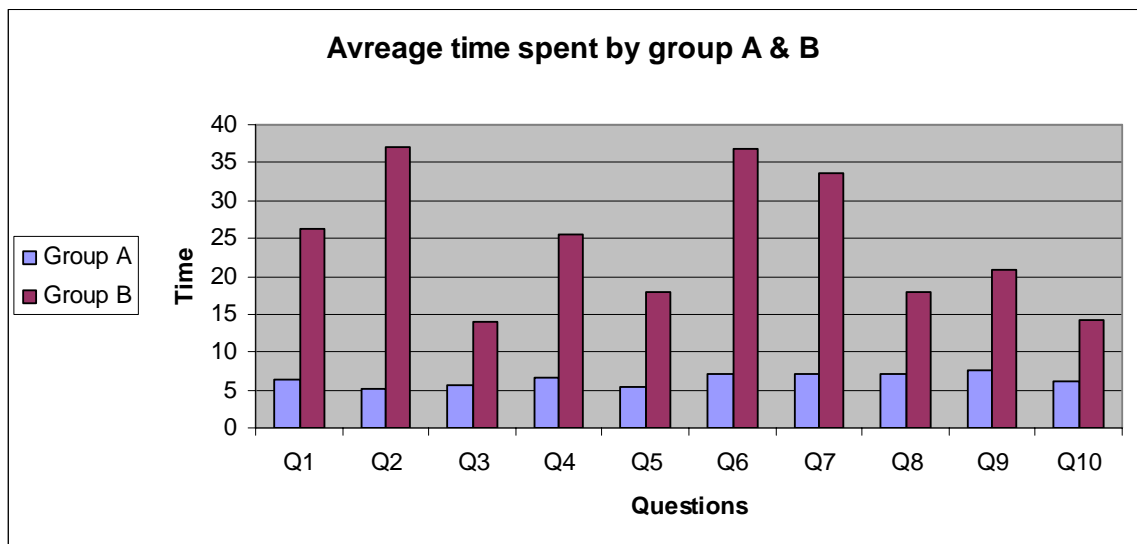


Table 3: average time spent by group A & B

These results indicated that while Jordanian academic libraries offer their services in some sort of digital and virtual ways except of the chat service, using the real time reference service in particular the chat service in those libraries would be most beneficial in terms of cost and time saving for both users and library staff.

Conclusion and Recommendations:

Academic libraries world wild offer their services in virtual way in order to reach their students in and out the campus. One of the best services offered by the reference section is the chat service. Jordanian academic libraries are still behind in offering these services where it dose not exist in any of those libraries.

After analyzing the data it was evident that offering the services on the reference desk by using the virtual reference service in particular the chat service is the best choice for the library in terms of saving the users and the staff time. It was obvious that chat Reference

services in Jordanian academic libraries is beneficial and the cost of offering it would be justified by fulfilling and meeting users needs at the right time.

As a result, it is recommended that libraries should adopt the chat service and wholly virtualizes their reference services in order to meet user's needs. Further more, the libraries should offer training courses for their staff and users on using the chat service, and should keep up to date for any new technologies in the reference services and in particular chat service.

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Appendix

	Question	n* ¹	Mean ± SD	(t value with P)
Q1	Group A:	12	6.333 ± 2.934	(t= -9.73; p< .00001)
	Group B:	12	26.330 ± 6.490	
Q2	Group A:	12	5.250 ± 2.179	(t = -36.78 ; P< .00001)
	Group B:	12	37.080 ± 7.550	
Q3	Group A:	12	5.7507 ± 1.422	(t= -7.69 ; p< .00001)
	Group B:	8	13.875 ± 2.642	
Q4	Group A:	12	6.583 ± 1.564	(t= -14.72; p< .00001)
	Group B:	12	25.580 ± 4.190	
Q5	Group A:	12	5.333 ± 2.807	(t = -9; p< .00001)
	Group B:	8	880 ± 3.800	
Q6	Group A:	12	7.167 ± 1.193	(t= -20.46;p<.00001)
	Group B:	12	36.750 ± 4.98	
Q7	Group A:	12	7.167 ± 1.193	(t= -19.8;p<.00001)
	Group B:	12	33.670 ± 4.480	
Q 8	Group A:	12	5.667± 1.231	(t= -13.01; p< .00001)
	Group B:	12	18.000 ± 5.045	
	Group A:	12	6.083 ± 1.62	

* n: No of students in each group

Q9 Group B: 12 14.167 ± 2.791 (t= -8.68 ; p< .00001)

 Group A: 12 6.083 ± 1.621

Q10 Group B: 12 14.167 ± 2.791 (t= -8.68; P< .00001)