

## Evaluating Virtual Reference Service at University of Botswana Library: a case study of Question Point

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### **Abstract:**

*Virtual Reference Service, VRS has become 'fashionable' in most academic libraries in recent years. VRS has not been confined to academic libraries only, but has been introduced in all types of libraries on a global scale, (Olszewski and Rumbaugh, 2010) Nevertheless, the successful implementation and sustainability thereof remains a major challenge, (Nicol and Crook, 2013). University of Botswana Library is no exception. One of the recommendations of the **Digital Scholarship Report (2009)** was: "The library should acquire cutting edge technology relevant for DS services. Some example of cutting edge technology and services include, virtual reference, Instant Messaging (IM) for reference chat with non traditional patrons".*

*The Library purchased Question Point, collaborative virtual reference software in 2009, and yet the subscription was terminated by the end of 2014, but why?*

*The article presents a case study of utilization of Question Point at University of Botswana Library, examines the Use of "ASK A LIBRARIAN". In order to determine why this was short lived, a questionnaire was administered to students and the subject librarians who have used the services in the past five years. The responses from students and librarians plus statistical usage was analysed to establish its effectiveness or otherwise. The results should provided useful insights with regard to the introduction of a virtual or digital reference service by any of the newly established academic libraries in Botswana.*

**Keywords:** *Virtual reference, question point; University of Botswana; academic libraries*

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## Introduction

The mission of University of Botswana Library (UBL) is to *provide globally competitive information services in support of learning, teaching and research*. UBL provides reference service as an aspect of customer or public services; the philosophy of reference service is to provide responsive and accessible information service in a friendly environment irrespective of place and time. The main purpose is to assist users in finding information and empower them with library research skills.

Librarians today provide seamless reference service anytime, anywhere, through a collaborative, Web-based network of libraries. Reference service refers to any form of assistance to those seeking information, and this can either be direct or indirect, in-person or remotely. Librarians have always provided reference service in a variety of formats, ranging from fixed desk, telephone, e-mail, to more recent synchronous virtual reference. UBL is not an exception; it operated reference service from fixed desk since its inception. Virtual reference service, (VRS) in the form of Question Point, (QP) was only introduced in 2010. QP is certainly one of the change agents in the 21<sup>st</sup> century librarianship.

University of Botswana (UB) set up Digital Scholarship task force in 2007 to provide future directions for the Library Services, eLearning and e-research in the digital environment as well as to assess the implications of digital scholarship for academic staff. One of the recommendations of the report was: “the library should acquire cutting edge technology relevant for digital scholarship services.” Task Group on UB and Digital Scholarship p61, (2008). One of these is Virtual Reference Service; consequently UBL introduced virtual reference software, QP, in 2009.

All librarians were trained by the South African Bibliographic and Information Network (SABINET) shortly after the purchase of QP; training covered quality and accuracy of answers/responses to customers. Moreover, in order to maximize its use, training was organized by Bettie de-Kock, Information specialist, from University of Pretoria. The training covered how to effectively use Question Point and so in implementing QP, a link called “**Ask a Librarian**” was created on the Library Web page. It is often recommended that in using the Library web site to raise awareness among users of options available for obtaining assistance from the library, it is important to consider words or phrases most likely to associate with the idea of contacting librarian, hence the use of “**Ask a Librarian.**” Accordingly, the Senior Librarian, Customer Services became the administrator of QP, and other librarians were each allocated login names and passwords and trained on its functionality, in order to ensure all can effectively operate QP.

Again during the implementation stage, it was hoped QP would be easy to use by both librarians and students and thereby become popular on campus. Furthermore, we hoped that it would create a more unified workflow to break silos and provide more a user-friendly interface for answering questions and that frequently asked questions would be noted. Nevertheless, it is evident QP has not been well received at UB, and hence the Library continues to offer traditional reference service parallel to the virtual.

QP was marketed on campus through library exhibitions on various important campus occasions including Information Literacy day as well as through presentations at Faculty and departmental meetings. Notwithstanding that, the use of QP has not been impressive at all. Consequently, by December 2014 a decision was taken to terminate our subscription. The purpose of this study is therefore to determine why the service has not been fully utilized and to answer the following questions:

1. How well were librarians trained in the use of QP?
2. Which strategies were put in place to market it to users?
3. What has been the volume of questions and the speed in which they were answered?
4. What are the users’ experiences of using QP?

The assumption is that the statistical evidence on usage will establish its effectiveness. The results of which should provide useful insights to other libraries considering introduction of a VRS.

## Background

University of Botswana (UB) is the premier academic institution in the country and was established by an Act of Parliament in 1982. The vision of UB is *to be a leading academic centre of excellence in Africa and the world*. In order to realize its vision, UB has A strategy for Excellence: University of Botswana Strategic plan to 2016 and Beyond. Furthermore, the library in alignment to the institution has a vision: *"The Library will be a leading customer-centred provider of excellent globally competitive information services and access to resources."* And so, over the years, UB has received adequate funding from government as the national university. Not surprisingly, towards the end of the 1990's it experienced a rapid increase in student numbers, academic programs, as well as overall physical developments. It was at this time that a new library building was planned and this was intended to be operational by 1998, but was only occupied in 2002.

By 2008, the holdings of UBL stood at 477, 764 book titles with a seating capacity of 911 students, a state of art auditorium, and 145 personal/fixed computer workstations. University Institutional Planning projected a student population of 18,695 by 2015/16. However, by 2013/14 the student population (Part time and full time) was already 18,717, 90.1% of whom are undergraduates. The implications of this is that the capacity of the library is far less than the acceptable 25% accommodation of students; this clearly stands out as a challenge

## Literature Review

A keyword search under *digital reference service* in Library and Information Science Abstracts retrieves some 1884 entries; the other keyword *virtual reference service* yields 1007 citations. Finally when this is narrowed to *Question point*, only 57 entries appear.

Undoubtedly, there has been considerable increase in literature on virtual/digital reference service during the past forty years. Technology trends specific to libraries include VRS, and so librarians in all types of libraries have no option but to adapt to the rapidly changing digital environment, especially library systems and various software products.

Copler, (1989) reported that librarians provided digital reference on a system wide computing network as far back as 1987, and in the mid-1990s synchronous video chat service was utilised by many librarians. However in 1999 chat software programs such as Library Systems & Services were introduced, Casey,(2004). Alessia Zanin-Yost (2004) provided historical development of digital reference service. Ogbaa, Fisher and Ancelet (2004) reiterated the importance of training staff and competencies which ultimately increase the comfort levels of all reference staff. They suggest methods such as internal reference workshops, best reference practices and intensive onsite training by VRS vendors. And that it is crucial for librarians to know the positive impact of VRS and how it supports core reference values, and above all that they appreciate the investment in VRS.

The successful implementation and sustainability thereof remains a major challenge. Nicol and Crook, (2013) identified two key factors which contribute to the effectiveness of VRS *viz*, the willingness of library users to use it, as well as the importance of support, training and enthusiasm of librarians. VRS has become a common feature of services offered in all types of libraries on a global scale, Olszewski and Rumbaugh, (2010).

In their article, Yang and Dalal (2014) argued librarians have always employed the most cutting edge technology tools and software products to find new ways to reach customer in the quickest and most convenient way.

As a result of the dynamic changes in library and information services and ICT, VRS has become so well developed that reference is not only a service but a place. According to Reference and User Services Association (RUSA) (2010), customers could use technological devices to communicate with the library staff remotely. The service normally uses chat, video conferencing, email, etc.

RUSA introduced guide lines for implementing and maintaining VRS, the purpose of which is to assist libraries and consortia implementing and maintaining VRS. These are intended to provide direction without being overly prescriptive. Nonetheless, these are vital when implementing VRS. For example, it is important that the library should integrate VRS with the traditional reference and view it as a long term commitment and not just as an ad hoc service. It should become a natural part of the institution's reference services. Furthermore, training of library personnel and marketing of the service is equally important.

VRS is generally viewed as more efficient and effective by most librarians, in particular those outside the library's service community, Cheng (2008). Despite this, Schwartz (2014) argues that VRS lacks the traditional visual and non verbal cues, but Yang and Dalal (2014) point to the excellent way to connect with students and faculty. It is through this service that librarians can reach out and provide research assistance at a convenient time for the user when users need information regardless of time and space.

Shaw and Spink (2009) discussed the fact that VRS can be provided by an individual institution or as a collaborative venture. They defined collaboration as comprising an online network of libraries using cumulative local knowledge and collections to provide VRS from any of their members, while an independent service is within one location. Staff training plays a major role for the success of any service, hence they maintain library staff must be proactive, knowledgeable and well trained

Pomerantz (2008) observed VRS is highly resource-intensive, in terms of both librarians' time and materials needed, and so it is essential to evaluate it in order to check how well the service meets the intended objectives and cost effectiveness. Chow and Croxton (2014) wrote on usability, noting that while many libraries offer VRS, the services are not always matched by actual use. Consequently this may lead to discontinuation of the service. In their view, a number of studies on VRS suggest that its success is determined by many factors including: the quality of service, funding, volume of questions, staffing levels, hardware and software plus institutional culture.

Elsewhere, Nicol and Crook (2012) stressed the importance of training and skills development for librarians, and that it is critical to the success of VRS. Library user preferences and characteristic also affect the use of VRS. Above all, the use of the services is influenced by the intensity of marketing and hence a pertinent question is, are customers aware of the service? They showed that the success of VRS is largely determined by the librarians who are skilled, supportive and enthusiastic. They further point out that if staff feel it adds value to their work, then it is more likely to flourish and thereby give users a positive experience. On the other hand if staff is indisposed, the service is likely to fail.

In addition, they noted that there are many reasons which contribute to reluctance to work with VRS. These include increases to the workload, lack of commitment to learn new skills, etc. Their conclusion is that providing training for librarians and tools which would make VRS as easy as possible can greatly promote the use of VRS.

Marketing and promotion are essential according to Connaway and Radford (2011). In their research "Seeking Synchronicity: Revelations and recommendations for virtual reference", they argue that it is not enough just to put a link in your library webpage on virtual reference - for example "*Ask a Librarian*" - but it is very important to promote reference service amongst all customers; they suggest the use of library instruction and posters. Additionally, customers do not discover virtual reference from the website, but from staff promotion of the services. In order to keep VRS vital, it is important to plan and implement more aggressive marketing strategies, continue to work closely with students, and liaise with academic staff and researchers on its use.

Chow and Croxton (2014) recommend that when considering usability of digital information environments one must look at factors of effectiveness, efficiency and satisfaction. Their point is that users value VRS for its effectiveness, quality, convenience, speed and efficiency.

The focus of this study is to evaluate VRS in the form of QP at the University of Botswana Library. Evaluation of any service is critical in order to establish the cost effectiveness of the service. To evaluate QP, it would be incomplete if the service usability is not considered. The decision to cancel the service was taken after consideration of a number of factors, primarily declining and poor usage.

## **Methodology**

The targeted population was students and subject librarians. A survey method was used to collect data from the respondents through a questionnaire. Student questionnaires were randomly distributed as they came into the library. Another questionnaire was distributed to subject librarians who have used the system from its implementation.

The student questionnaire focused on students' perception of QP and its usefulness in meeting their information needs. It was distributed over the library circulation counter. Distributing the questionnaire within the library proved to be the best approach, otherwise it would not be easy to get good responses even if this was done electronically.

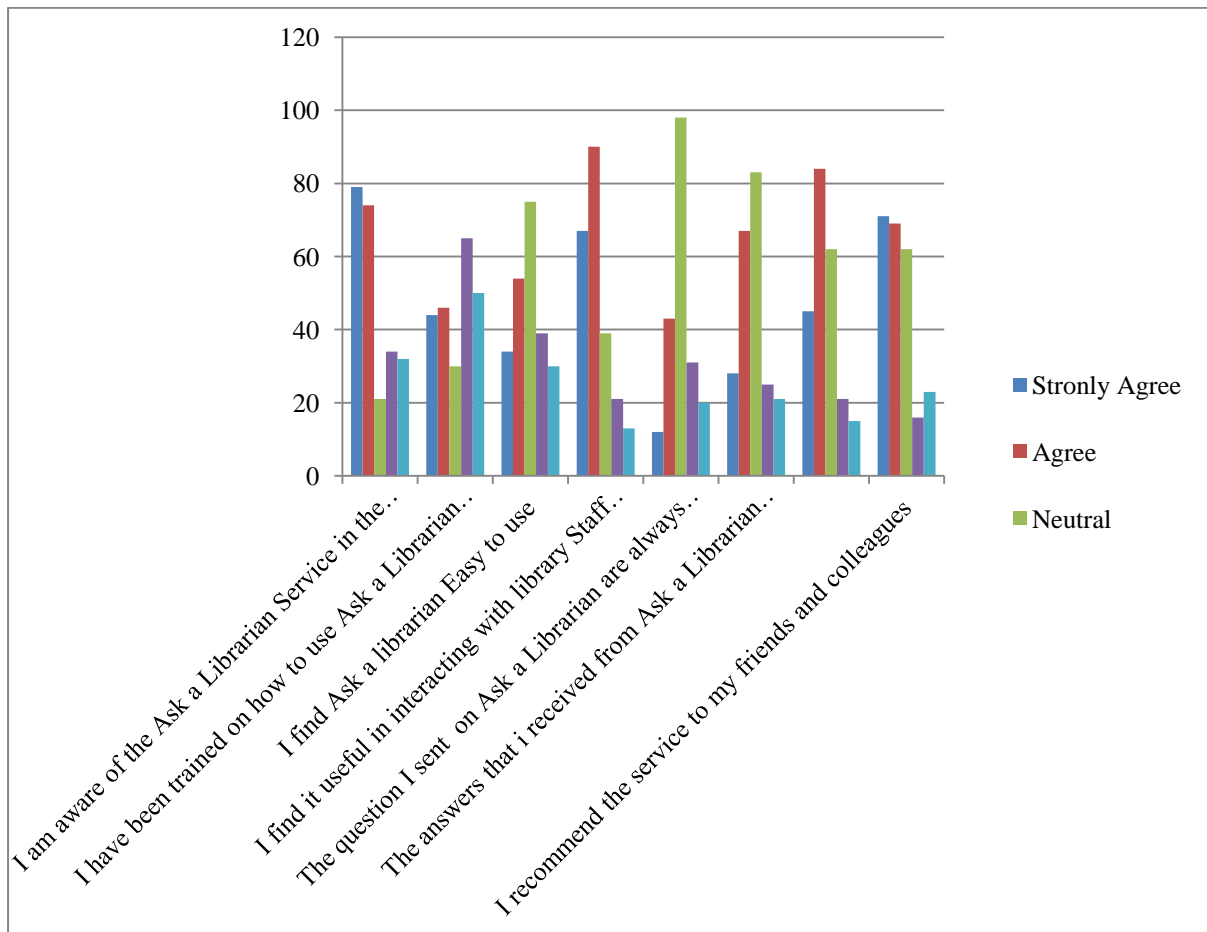
The subject librarians' questionnaire on the other hand was intended to collect information on their perceptions on the implementation and use of QP. This includes issues of training, marketing and overall user satisfaction; a sample of usage statistics is also considered.

## **Data Analysis and Discussions**

The data collected from the two sets of questionnaires, one for students and the other for the subject librarians, was analyzed using Excel software to arrive at conclusions. Four hundred students questionnaire were distributed; two hundred and thirty nine responded, which is 59.8%. The eight questions were based mainly on the usage and marketing of the service.

Bar chart 1 below reflects the findings from the students.

Bar chart 1



The usage of QP is determined largely by user’s awareness of its existence plus their skills to operate it, customer friendliness and, above all, the usefulness in their work and assignment. Students were therefore asked if they are aware QP. 74% either agreed or strongly agreed they were aware whilst the remaining 26% disagreed.

When asked about training in the use of QP, 19% agreed, 18% strongly agreed to having been trained, whilst 27% disagreed, 21% strongly disagreed, and 13% were neutral. This shows a good number felt there was inadequate training on the use of QP which probably accounts for the low usage.

A similar trend emerges on ease of use; only 14% strongly agreed and 24% agreed that QP was easy to use. It is worrying that a significant 60% were either neutral, disagreed or strongly disagreed. This could mean they find QP difficult to use because they have not been trained to use it.

Question 4 asked whether they found the QP useful as a way of communicating with librarians. A combined 66% agreed and strongly agreed; 15% either disagreed or strongly disagreed, and the remaining 16% were neutral/left the answer blank. There seems to be correlation with the first question: students who are aware and may have used QP find it a useful tool to communicate with the librarian.

Asked if questions were answered on time, a mere 5% strongly agreed and 18% agreed. 41% were neutral, altogether 21% disagreed and 15% did not respond to the question. Concerning the accuracy

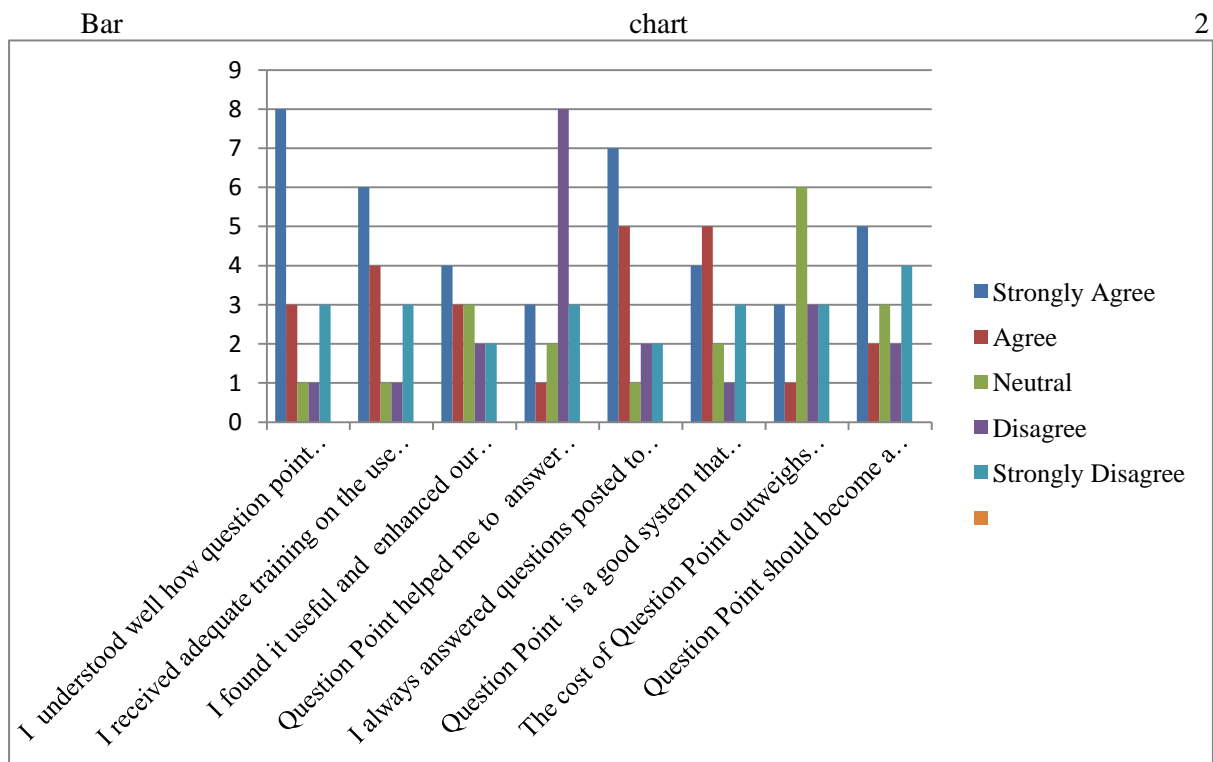
and helpfulness of the answers, 40% were happy with the answers from librarians while 54% were unhappy.

Question 7 is about satisfaction with answers: 35% agreed, 19% strongly agreed, 26% were neutral, 9% disagreed, 6% strongly disagreed and 5% did not answer. The net effect of those who are neutral and did not answer signifies the number of students who cannot answer in the positive or negative about QP because they simply not have a strong feeling about it.

Asked about recommending the service to others, 59% would do that while the rest either disagreed or were neutral. This shows that even though students may not be that happy with QP they are prepared to recommend it to their peers for one reason or another.

### Librarians

The key area for subject librarians was to find out how well they understood how QP works, their training and its usefulness. Altogether sixteen (16) librarians responded.

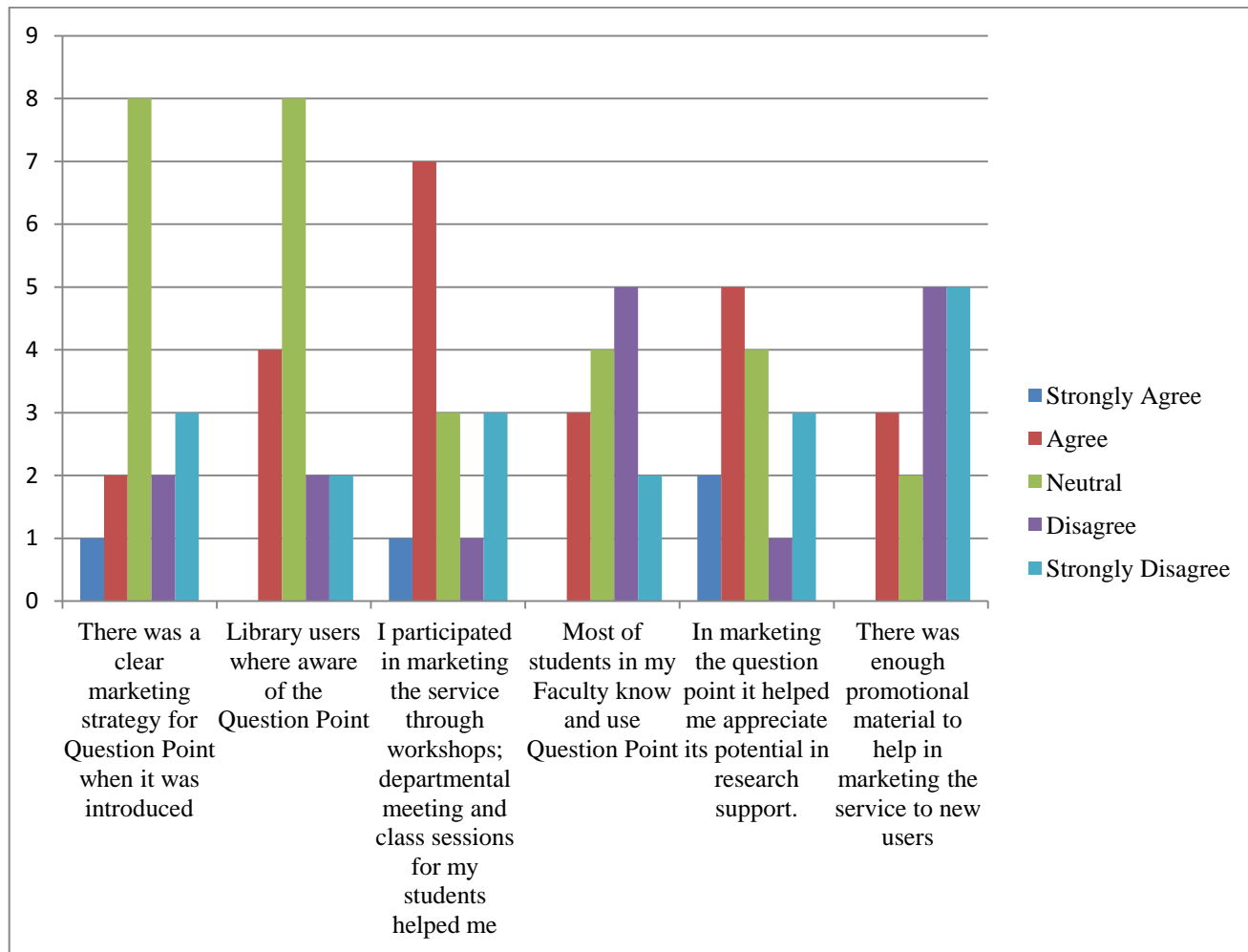


When asked their understanding of QP, eleven agreed they understand how it works, only four disagreed, whilst one was neutral. With regard to training ten agreed to have received adequate training, four disagreed and one was neutral. This illustrates most librarians understood how QP works and were adequately trained.

Regarding cost effectiveness, six were neutral, and the remaining ten either agreed or disagreed that the cost of QP outweighs its benefits. But the significant number of six shows the indecisiveness. When asked about its usefulness, nine felt it's a good system that needs to be improved, five agreed and four strongly disagreed it should be a permanent feature of the library, whilst three were neutral.

## Marketing of Question Point Service

Bar Chart 3



Marketing of a new service is always a critical factor. Librarians were asked if there was any marketing strategy for the QP when it was introduced and whether they participated in it and if users were aware of the service.

The findings are in bar chart 3 above: two agreed, eight were neutral, two disagreed and three strongly disagreed that there was a clear strategy for marketing. On the question of library users being aware of QP four agreed, eight were neutral, and four disagreed. When librarians were asked about their participation in marketing question point, seven agreed, three strongly disagreed and the other three were neutral.

When asked if students know about QP, five disagreed, three agreed and four were neutral.



## Online Reference Transaction

The online transactions for the past three years were considered in order to determine usage of QP. The data comes from the annual reports in a table below:

**Table 1:**

<b>Annual Year</b>	<b>No. of Transactions</b>
2011/12	468
2012/13	316
2013/14	109

From the table, it appears there was fairly good usage during the first year, but there has been a steady decline over the next two years. There were actually no transactions between June and December 2014. The question is what are the possible reasons for this drop in usage? Perhaps there was just not enough marketing during subsequent years and a more detailed qualitative study would be more informative.

## Conclusions

QP is a powerful OCLC product that provides quality online reference service in a cooperative environment. Some of the benefits of QP include availability 24/7 and shared global expertise. Needless to say, its success depends largely on regular training as well as effective marketing. So what is the story at the University of Botswana? Why has it been terminated after only three years of introduction? This is what Bettie DeKock, (2009) reiterated:

*“I think marketing, marketing, marketing is the most important factor for QP. Make the marketing fun for the students. I combined bubble gum with QP. In that way the students remember QP.”*

From the study, students’ usage of QP is low, and there are several reasons to explain this. This could be due to lack of awareness as a result of inadequate training to appreciate the value of QP. Despite everything, student indicated they found it to be a useful tool to communicate with the librarians, even though generally there is low satisfaction rate concerning their experience. This could in turn be attributed to the training and expertise of the librarians. And so, it might be necessary to have a dedicated team of reference librarians who can master and work specifically with QP. Furthermore, UB has operated QP on an individual basis and not in a shared environment, and so as the Botswana Libraries consortium unfolds, this may be an opportunity to revisit QP.

Overall, there is probably room for improvement. UBL needs to review QP in the larger context of Web 2.0 technologies and other social media tools.

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## Appendix A

This survey is intended to establish the extent to which **student** have embraced virtual reference service (QP) when it was introduced in 2009 as part of the Digital scholarship initiatives.

Please respond to the statements below by placing a tick ( ) in the corresponding box	Strongly Agree	Agree	Neutral	<i>Disagree</i>	Strongly Disagree
<b>Question Point usage</b>					
1. I am aware of the Ask a Librarian Service in the Library					
2. I have been trained on how to use Ask a Librarian service					
3. I find Ask a Librarian Easy to use					
4. I find it useful in interacting with the Library staff whenever I have a query					
5. The questions I sent on Ask a Librarian are always responded to on time					
6. The answers that I received from the Ask a Librarian were accurate and helpful					
7. I am satisfied with the answers provided by the Librarian					
8. I can recommend the service to my friends and colleagues					

## Appendix B

This survey is intended to establish and documents the extent to which the **Librarians** have embraced virtual reference service (QP) when it was introduced in 2009 as part of the Digital scholarship initiatives.

Please respond to the statements below by placing a tick ( ) in the corresponding box	Strongly Agree	Agree	Neutral	<i>Disagree</i>	Strongly Disagree
<b>Understanding how Question point</b>					
1. I understood well how question point worked when it was introduced in the UB Library					
2. I received adequate training on the use of Question Point					
3. I found it useful and enhanced our reference service					
4. Question Point helped me to answer more questions than face to face approach					
5. I always answered questions posted to me on time					
6. Question Point is a good system that needs improvement					
7. The cost of Question Point outweighs the benefits					
8. Question Point should become a permanent feature of University of Botswana Library reference service					