
«A Look at New Models of Reference and Information Services» is focused on technology aspects of virtual reference services, seen as new extended digital services offered to users: virtual reference services, mobile web services and «text a librarian», librarians in virtual worlds, combined reference desks, libraries without reference desks, call centre model, marketing reference and information services, bookless libraries… are the last possibilities or new extensions of virtual reference. The main idea is to keep the link with the user, using technology.


Reference services in libraries (but also provided by private companies) offer new models due to innovative technologies and innovative people: the role played by users and librarians is also an important component. The place and the location of reference services are not necessarily in the building of the library itself, it can be – and it is more and more often – outside the walls of the library, becoming «walking reference» or «street reference» or «mobile reference» with contact by texting or chatting: there is a real care to be closer to the user’s needs. How these changes are made possible? One of the main reasons is the way the public are using the Internet and how they are seeking for information. Over the past 15 years, reference and information services have moved away from library reference desks and away from libraries’ print collections into the digital world, offering electronic resources, new mediated services, or new online services. In parallel, if the number of questions is decreasing, their complexity is increasing at the same time than users’ computer skills (Denise E. Agosto, Lily Rozaklis, Craig MacDonald, and Eileen G. Abels, 2010). Nowadays virtual reference services are standard offers in most public, academic libraries all around the world. But it is also developed by commercial companies.

What do we see as reference librarians? : a real move from face-to-face to virtual venues and from paper to electronic resources. Reference transactions take place within a dynamic and rapidly changing information environment. The main question now becomes “is there a real change in the reference process with the digital information?”

1 A large part of this article is inspired by the results of their research with additions of my own experiments. See «References»
Current trends in the provision of reference and information services

Does everyone can answer a question? New roles facing the technology

We are moving toward an interactive, collaborative reference model, in which both the reference librarian and the reference user play the roles of information seeker, information receiver, and information creator. Both private or commercial and public offers are innovative: let’s see the new service offered by Facebook launched in March 2011 where your own people network can reply to your questions. It is one example of so called “Reference 2.0” which means users are acting as information providers as well as information seekers, creating resources such as personal blogs, adding to library collaborative blogs and wikis, reviewing materials to be posted on library websites, and so on.

63336 (formerly known as Any Question Answered or AQA 63336)\(^2\), which is a premium-rate SMS mobile question and answer service and micropublishing service based in the United Kingdom, operated by 63336 Ltd. Mobile phone users can text 63336 with any question and get a reply, on a charge per question basis. Launched in April 2004 by former Symbian CEO Colly Myers and Paul Cockerton (Head of Global Marketing Communications at Symbian), the service has gone on to receive widespread media coverage, and has answered over 25 million questions! Spin off publications have also been produced based on questions received and answers sent. After 5 years of providing their mobile question and answer service, in April 2009 the company also launched a commercial SMS text based micro-blogging service, AQA2U, similar to Twitter, in which 63336 and third parties can set up their own publishing topics, and send text updates to subscribers via 63336, receiving a share of the text message charge to subscribers. This service was discontinued just over a year later. Let’s have a look to some questions/answers by 63336:

- **Who was the oldest person who ever lived?** The oldest person who ever lived was Jeanne Calment of France. She was born on 21 Feb 1875 & died on 4 Aug 1997. She was 122 years & 164 days old.
- **Us nationals archives most requested photo?** The most-requested image in the US National Archives is a photo of Elvis Presley meeting President Richard Nixon in the Oval Office on 21 December 1970.
- **What is the most read newspaper in the world?** The most read newspaper in the world is the Yomiuri Shimbun from Japan, selling 14m copies a day. The Times Of India is the top English language paper.

No matter how big, small or unorthodox your question is, AQA aims to reply within half an hour, and claims to answer 85 per cent of all text queries in under five minutes. But it is not some faceless server pinging back the answer. It's real people, dotted all over the world, tapping away at AQA's specially built database – which contains six million answers – to pull up the best results. "Asking questions is a very human process," says Paul Cockerton, AQA's communication director. "It's a fundamental part of human folklore and interaction." AQA employs about 725 researchers, many of whom are working parents or students.\(^3\)

Intensive use of electronic sources

Because most of the sources reference librarians are using today are digitally based (sometimes, about 80 to 100 % of them), the sources for virtual and face-to-face reference tend to be the same, and they cover a wider range of formats and types than ever before. Reference services are increasingly digital in nature, but the sources used in virtual reference work as well. Shachaf and Shaw analyzed 1,851 e-mail and chat reference transcripts from one academic and one public library and found that 96 percent of the sources used in the responses were electronic.\(^4\) Similarly, a study by Bradford, Costello, and Lenholt showed that only 1.8 percent of an academic library’s 9,587 titles in the print collection were used to answer reference questions, and that academic reference used online sources significantly more than print sources.

\(^2\) http://www.aqa.63336.com/
\(^3\) http://www.telegraph.co.uk/technology/3355323/AQA-puts-answers-on-your-mobile.html
\(^4\) http://cat.inist.fr/?aModele=afficheN&cpsidt=20967061
In this new digital world, the public are widely using the Internet and the Web to search for information to support their personal, business, and other information needs. At the same time, a significant number of libraries are offering reference and information services via a large range of virtual technologies, and there has been an increasing shift from face-to-face reference interactions that relied on paper-based information resources to virtual interactions using electronic information resources. It is possible that these developments have changed the ways in which people use reference services and possibly even the ways in which reference providers deliver reference services to their users.

The Call Center Model

With the increased availability of technologies and the drive to increase library staff efficiency and reduce costs per reference transaction, some libraries have adopted the Call Center model. In this model, library staff operates as agents taking calls at computer workstations where they have ready access to databases, lists of frequently-asked questions and answers, prewritten scripts for particular situations, bookmarks and other tools needed to deliver information.

Multiple Mode of Reference: a non-stop service

Today, reference librarians are multitasking persons on a continual basis using face-to-face reference, chat reference, Instant Messaging reference, e-mail reference, telephone reference…The trend seems to be to view them all as subsets of “reference and information services,” or “question-answering services.” in both public and academic libraries. Users can ask questions 24/7 through virtual reference and expect an immediate response. Likewise, they can access electronic resources that the library provides through its Web site. Virtual reference is growing quickly; the appeal of instant messaging and like services point to a generational paradigm shift ahead. These online reference services have the advantage of being convenient and necessary in our fast-paced world. In numerous forms and fashions, technology continues to change reference services.

A Collaborative Process: work spaces and technology

Collaboration is more and more frequent at all stages of the reference process and among all types of reference users. This includes collaboration between multiple users working together to ask questions of shared interest, between multiple librarians working together (collaborative virtual reference desk are developing on a worldwide basis) on formulating answers to give to one or more users, and even between users and librarians collaborating during the question answering and research stages: in Paris – France, the Bibliothèque Publique d’Information (Bpi)\(^5\), one of the largest public library of the French capital open to the public, and one of the first in France to have launched virtual reference services, has introduced a chat on site between librarians and users in order to answer to questions more easily than going to the reference desk itself.

Collaboration at the users’ end of the reference/research process is indeed on the rise. A number of academic libraries, such as the Indiana State University library, are designing new collaborative in-house work spaces for groups of students and faculty working within the library building. Aldrich observed that “many libraries continue to overlook the fact that the collaboration taking place between group members is often mediated or moderated by technology.” He suggested that support of collaboration should be taken into account when designing technological infrastructure in libraries, such as computer work stations\(^6\).

Technology can be a mean to attract people again in libraries buildings. That is the case at the Swiss National Library where we developed in 2005-2008 SwissInfoDesk\(^7\), a virtual reference service special-ized on questions about Switzerland. As more and more complex questions were treated everyday, some of them needed to be answered with users: a new service, so called “Book a Librarian” found its place \(^8\).

Libraries are adding more points of service: for example, an information desk near the front of the library,

\(^5\) [http://www.bpi.fr/fr/index.html](http://www.bpi.fr/fr/index.html)


a reference service point combined with other library services or an in-depth reference centre where a user can sit down with a librarian and work out a plan for researching a paper have all been instituted.

To conclude: a look at the future of reference services

As a matter of evidence, librarians must be continuously adapting – as they do now – to meet the needs of their users: users will want to receive and read the information on the last new technology. New models are going to be developed in the future and reference services are certainly the most visible service for a library. It is the best “place” to market the library, to attract users who do not approach the reference desk.

Reference services will continue to use electronic means of communication. It will at the same time continue to be a personal service, online or virtual. This service is essential and central to the library, now and for the future.

References