

Digital Reference

**State of the Art with
the Focus on Quality**

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Structure/Outline

1. Role of Digital Reference in the Information Society

2. Digital Reference: Definition and Forms

3. Quality Criteria

4. Summary

Digital Reference in the Information Society

Beginnings in the early 1980s:

E-Mail-Reference, FAQs

Changing Information Culture /

Changed User Behaviour

Commercial Rivals:

Google Answers, Lycos IQ etc.

Advantages of Digital Reference:

Providing the Information Required

Digital Reference = Subject-Oriented Service

Search Engines = Object-Oriented Service

Digital Reference: Definition (1)

Digital Reference

- provides Reference Services, involving collaboration between Library User and Librarian, in a Computer-based Medium.
- can utilize various Media, including E-mail, Web forms, Chat, Video, Web Contact Center Software, Voice over Internet Protocol (VoIP), etc.

[Bernie Sloan 2002]

Digital Reference: Different Forms (1)

Digital Reference	
Asynchronous	Synchronous
E-Mail	Simple Chat
Web Form	Instant Messaging
Chatterbot/FAQ	Extended Chat
	VoIP
	Video Conferencing

Digital Reference: Different Forms (2)

E-Mail

Web Form

Chatterbot/FAQ

Simple Chat

Instant Messaging

Extended Chat

VoIP

Video Conferencing

Web Contact Center

Collaborative

Reference

Name

Email

Question

Digital Reference: Different Forms (3)

E-Mail
Web Form
Chatterbot/FAQ
Simple Chat
Instant Messaging
Extended Chat
VoIP
Video Conferencing
Web Contact Center
Collaborative
Reference

Name*

E-mail*

Provide a complete e-mail address
(**example:** *fluggly@aol.com*)
so that we can reply.

Confirm e-mail*

Enter the **same e-mail address**
here as you did **above**.

Where do you live?

Deadline for reply*

†**3 days** are usually needed
for us to reply.

Subject*

How will you use this information?*

If you have parental or mail controls turned on, please add *iplref@ipl.org* to your allowed mail list.

This helps to ensure that we have your correct e-mail address, and that you will receive a reply as quickly as possible.

Knowing where you live helps us recommend resources that are relevant, and accessible, to your area.

†If you need an answer in less than 3 days, please consider these [other resources](#) instead of the IPL.

Understanding the context and scope of your information needs helps us to deliver an answer that you will find useful.

Digital Reference: Different Forms (4)



I'm sorry, but I don't speak English.

When does the library open on sundays?



Digital Reference: Different Forms (5)



BIS.LiveInfo Chat-Help

[LiveInfo](#) | [Chat-Hours](#) | [Privacy Policy](#) | >> [Start Chat](#)

Here is what the chat will look like on your pc:

Chat: The small chat window opens on top of your browser when you click on the link. The graphic below shows a dialog between the chat-customer - you - and our chat agent..

Example:

.BIS.LiveInfo: Guten Tag
.BIS.LiveInfo: Wie kann ich Ihnen behilflich sein?
Guest: Hallo ich suche Bücher zur interkulturellen Pädagogik
.BIS.LiveInfo: Welche Quellen und Datenbanken haben Sie bereits recherchiert?
Guest: Noch nichts ...
.BIS.LiveInfo: Sie sollten zunächst in unserem Bibliothekskatalog nachschauen.
.BIS.LiveInfo: katalog.bis.uni-oldenburg.de

Input field with a back arrow icon.

Digital Reference: Different Forms (6)

E-Mail
Web Form
Chatterbot/FAQ
Simple Chat
Instant Messaging
Extended Chat
VoIP
VideoConferencing
Web Contact Center
Collaborative
Reference

Pro:

Synchronous
Buddy Lists
Very Popular

Contra:

Users have to Install Client Software
Suppliers finance through Advertising
Library and Users have to use the same
Software

Same Potential as simple Chat

Digital Reference: Different Forms (7)

The screenshot shows a web browser window with the address bar displaying <http://thalia.mcls.org/webline/html/agent/AgentFrame.jhtml>. The browser's toolbar includes Back, Forward, Stop, Refresh, Home, Search, Favorites, History, Mail, Print, Edit, and Discard.

The main content area is divided into several sections:

- Script Menu:** A vertical sidebar on the left with a blue background, listing various scripts for the 24/7 Reference Project, including Web Pages, Script Chat, Messages, Dynamic Content, Send a File, Dynamic Comparisons, Slide Presentation, and Launch CAPI.
- Share Web Pages:** A section with the heading "Share Web Pages" (circled in red) and a description: "Share any public web page from any web site in the world. Click on the link to share the web page among all participants in an active WebLine session." Below this is a sub-section "Web Pages - Push web pages" (circled in red) with a list of links: "How to get a library card", "Library hours", "Do you have this book", "Find your library", and "Business" (with sub-links "Business Directory" and "Guide to Starting a").
- User Interface:** A section at the bottom left with a "User" label and a "Queue" button (circled in red). It includes fields for "Name" and "Perm. Ext", a "Log Out" button, and "Preferences" and "Join a Session" buttons. A "webline" logo is also present.
- Navigation and Search:** A vertical sidebar on the right with a "County of Los Angeles Public Library" logo and a "Find Your" heading. Below the logo is a list of navigation buttons: "About the Library", "What's New", "Career Opportunities", "Library Services", "Librarian's Bookshelf", "Materials Collections", "Support Groups", "FYI Research Services", "Find Your Library" (highlighted in red), "Community Libraries", "Children's Services", and "Catalog".
- Welcome Text:** A section on the right with the heading "Welcome to Find Your Library" and a paragraph: "this section to make it easy for library in your area. We also provide library home pages, email addresses, and informative documents." Below this is another paragraph: "To use the Find Your Library hyperlink to list all the libraries, follow the links below to browse a library in a particular area, or use the text field at the bottom to search for a particular library name of the library. It doesn't matter if you use upper or lower case letters in the search field." At the bottom right, there are two links: "City of Anaheim" and "City of Burbank".

Digital Reference: Different Forms (8)

E-Mail
Web Form
Chatterbot/FAQ
Simple Chat
Instant Messaging
Extended Chat

VoIP

Video Conferencing

Web Contact Center
Collaborative
Reference

VoIP - Pro:

Synchronous
Could supersede Chat

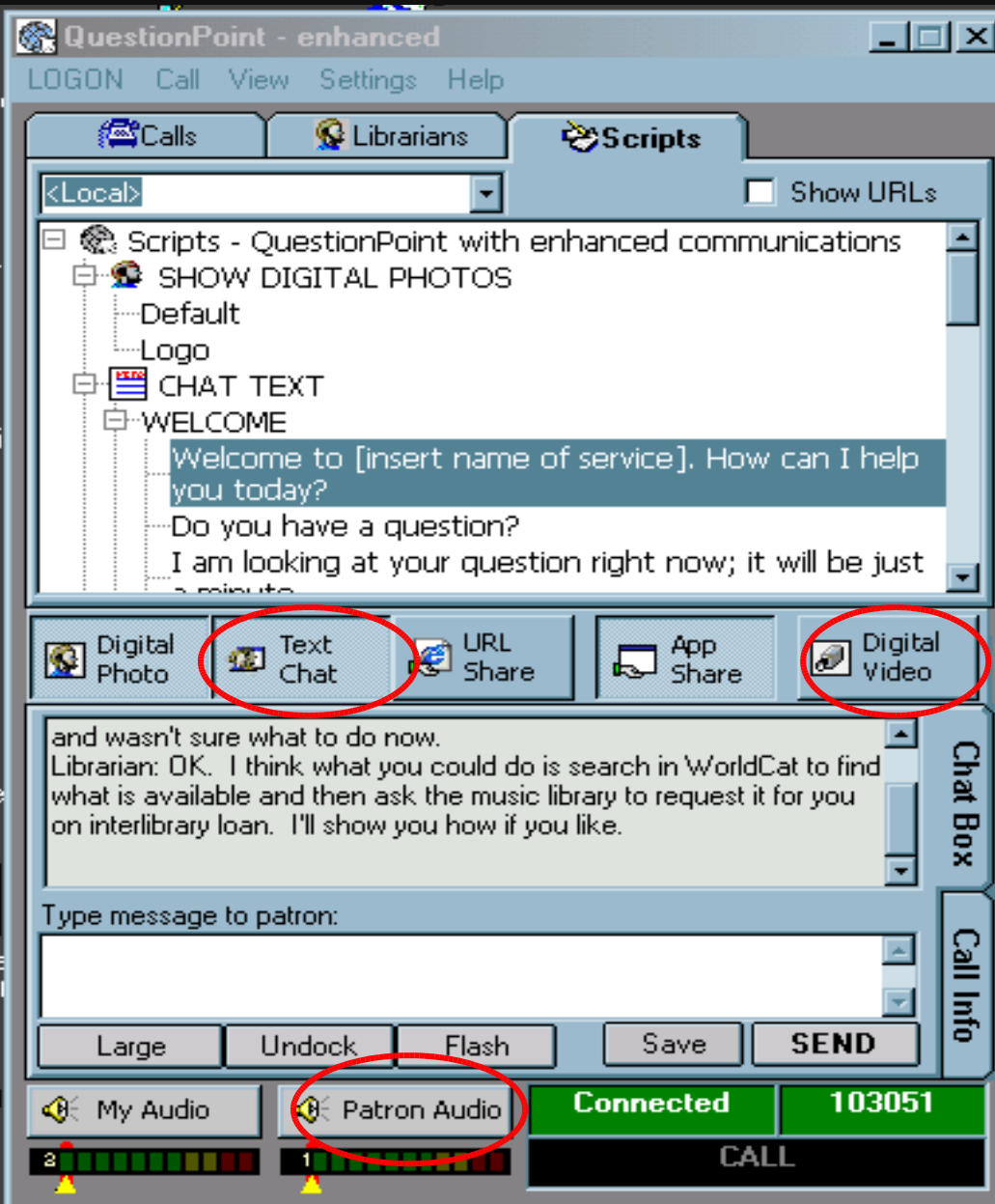
VoIP - Contra:

Additional Hardware needed (Microphone)
Difficult to store

Video Conferencing:

Until now: no general acceptance
in the community

Digital Reference: Different Forms (9)



**QuestionPoint
as an Example
for
Web Contact
Center Software**

Digital Reference: Different Forms (10)

E-Mail
Web Form
Chatterbot/FAQ
Simple Chat
Instant Messaging
Extended Chat
VoIP
Video Conferencing
Web Contact Center
**Collaborative
Reference**

Pro:

Raises level of Quality
Broadens the Range of Subjects
Enables Sharing of Workload and Shifts

Contra:

Need of Standardization (Pro?)

Digital Reference: Quality Criteria (1)

Organisation

Efficiency

Breadth/Extend of
the Service

Communication Process

Quality of Answers

Usage of the Service

Methods of Evaluation

- Availability
- Variants of Digital Reference
- Software
- Staff Qualifications
- Turnaround Times
- Free Access,
Targeted User Groups
- Policy
- Privacy
- Publicity

Digital Reference: Quality Criteria (2)

Organisation

Efficiency

Breadth/Extend of
the Service

Communication Process

Quality of Answers

Usage of the Service

Methods of Evaluation

- o **Duration of an Individual Reference Process**
- o **Staff Resources for each Reference Process**
- o **Costs of Software Licence**
- o **Resources for Technical Servicing**
- o **Overall Costs for each Reference Process**

Digital Reference: Quality Criteria (3)

Organisation

Efficiency

**Breadth/Extend of
the Service**

Communication Process

Quality of Answers

Usage of the Service

Methods of Evaluation

- o **Types of Questions Allowed**
- o **Style and Scope of Answers**
- o **Knowledge Base**

Digital Reference: Quality Criteria (4)

Organisation

Efficiency

Breadth/Extend of
the Service

Communication Process

Quality of Answers

Usage of the Service

Methods of Evaluation

- Polite Language
- Automatically Generated Acknowledgements of Questions Received
- Personal Identification of the Reference Librarian
- Role and Breadth of the Reference Interview
- Description of the Information Finding Process
- Follow-up Regarding User Satisfaction
- Questions about further Information Needs

Digital Reference: Quality Criteria (5)

Organisation

Efficiency

Breadth/Extend of
the Service

Communication Process

Quality of Answers

Usage of the Service

Methods of Evaluation

- o **Quality in Comparison with Conventional Reference Service**
- o **Use of Quality Information Sources**
- o **Full References for Sources quoted**
- o **Accurate and Complete Answers**
- o **Adequate and Neutral Answers**

Digital Reference: Quality Criteria (6)

Organisation

Efficiency

Breadth/Extend of
the Service

Communication Process

Quality of Answers

Usage of the Service

Methods of Evaluation

- o Number of Queries received
- o Number of Queries answered
- o Number of Queries not answered
- o Ratio between Digital and Conventional Reference Services in the Library
- o Saturation Rate: Ratio between Digital Reference Users and Overall Library Users
- o User Return Rate
- o Usage Frequency: Ranked by Time of the Day, Day of the Week, Month

Digital Reference: Quality Criteria (7)

Organisation

Efficiency

Breadth/Extend of
the Service

Communication Process

Quality of Answers

Usage of the Service

Methods of Evaluation

- **Request for User Feedback immediately following the Reference Process**
- **User Survey via Email, Phone etc. at a later Stage**
- **Quality Controll via Peer Review and Peer Monitoring**

To Do:

Development of differentiated Catalogues of Quality Criteria relating to

- Different Forms Digital Reference
- Collaborative Digital Reference
- Different Types of Questions
- Particular Target Groups
- Different Library Type

**Thank you very much
for your Time and Patience!**

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