



*Virtual Dave Lankes*

P r e s e n t a t i o n

<http://www.DavidLankes.org>

**TITLE:** Standardizing your Website

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**ABSTRACT:** Discussion of important standards for reference on the web including NetRef.

**KEYWORDS:** virtual reference, web, standards, librarianship, libraries



# Standardizing your Website

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# What are Standards

- The outcome of a political/social process to agree on aspects of a process or product a priori. The aim of a standard is to promote interoperability and the efficient functioning of a market or community







# Classes of Standards

## Utilization

- Standards that deal with the use and delivery of digital reference services, specifically to determine whether a digital reference services is succeeding. These can include a mix of qualitative and quantitative metrics as well as more abstract statements on best practice or objectives for a service.

## Technical

- Hard tools (software, hardware, protocols and other standards enforced by computers with little or no interpretive room) and soft tools (primarily metadata and organizational schema) where aspects of human description are controlled, but still open to interpretation.

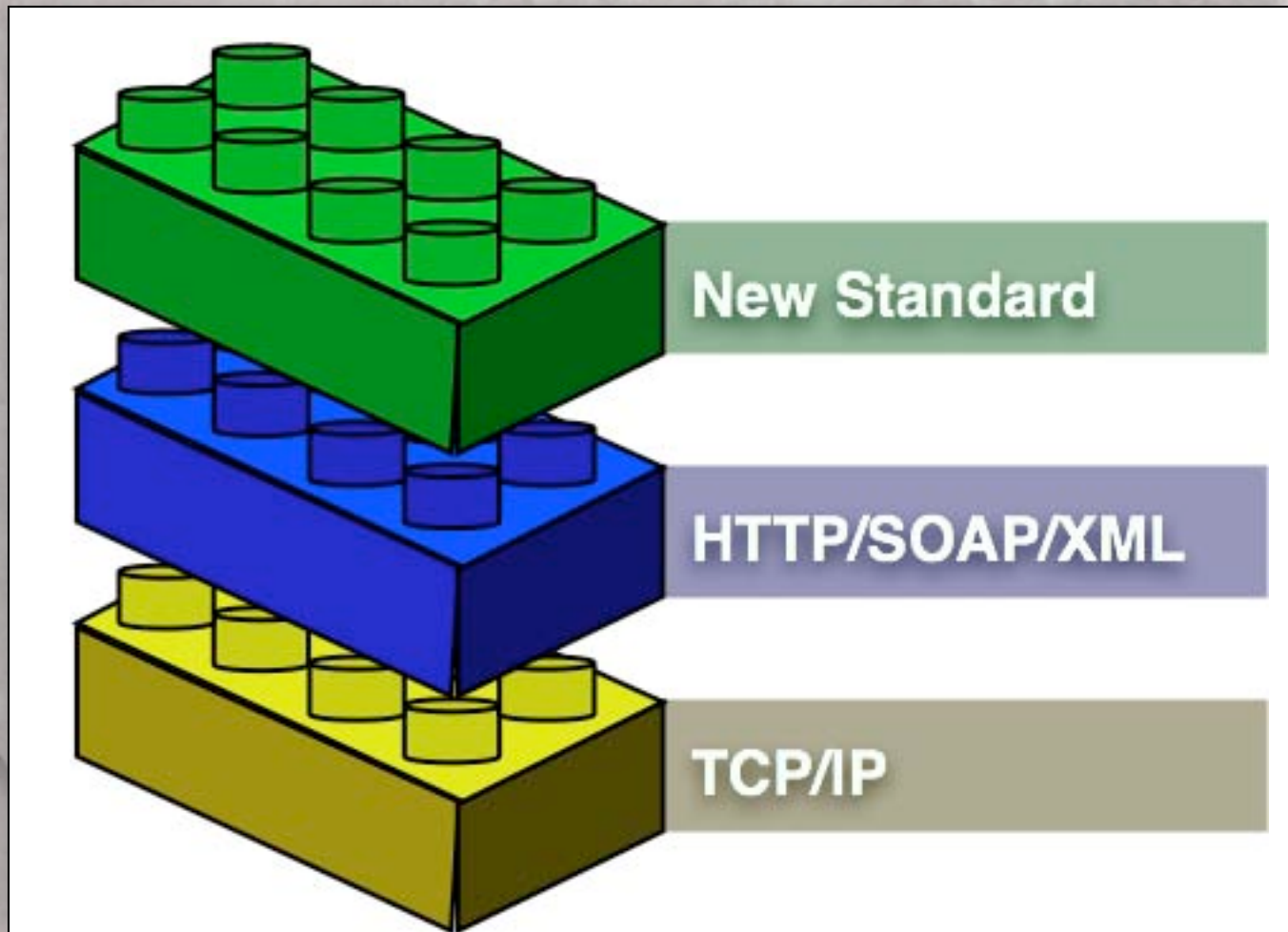




# Standards to Watch

- General Web Standards
  - XML, XHTML, CSS
  - [Validation](#)
- Emerging Web Standards
  - Web Services, RDF
- Metadata
  - Dublin Core, OAI
- Library-Land
  - MARC, OPenURL, NetRef

# Today's Standards Architecture







**FOR INSTANCE . . .**

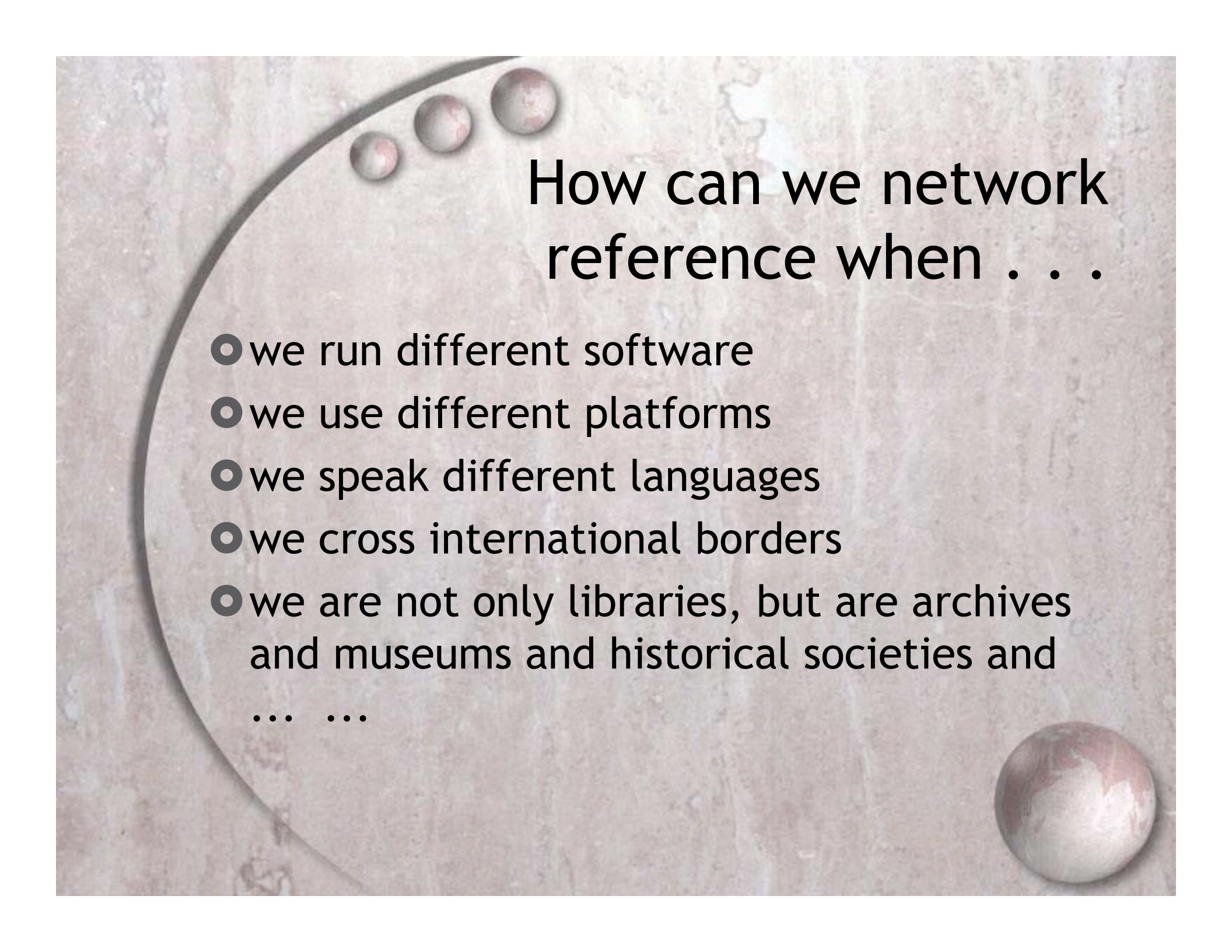




# The NetRef Environment

- Information providers using digital reference to extend services and reach more users
- Cooperation and collaborative services growing:
  - QuestionPoint - 24/7
  - Virtual Reference Canada
  - regional/state/provincial consortia
  - chat networking
  - others





# How can we network reference when . . .

- we run different software
- we use different platforms
- we speak different languages
- we cross international borders
- we are not only libraries, but are archives  
and museums and historical societies and  
... ..



# In the beginning . . .

- Question Interchange Profile (QuIP)
- Proposal to NISO
- NISO AZ Committee on Networked Reference Services established December 2001
- Draft Standard for Trial Use, April 2004





# Involved Parties

- Libraries and librarians
- Reference service providers
- Reference software and management providers
- Integrated library system providers
- Database and information systems
- Other providers of community services
  - Tutoring programs
  - Research services



The background is a light-colored, textured surface, possibly stone or concrete. A large, dark, semi-circular arc is drawn across the left side of the image. In the upper left quadrant, three small, stylized globe icons are arranged in a slight curve. In the bottom right corner, a single larger globe icon is positioned. The text is overlaid on the right side of the image.

## Do I need it?

- Yes you do, if you want your digital reference system to communicate with networks and consortia not using your software or platform or architecture.



# What is it?

QATP (NetRef) is a question processing transaction protocol that allows:

- Processing and routing questions and responses/answers
- Packaging other information to be exchanged as part of Qs or As
- Cross domain exchange



## QATP also proposes . . .

- Metadata element sets to identify and describe key components of:
  - Question and answer metadata
  - Profiling metadata (institutional and personal data)



# Protocol Design Criteria

- Client/Server Design
- Transaction based - transaction consists of one or more messages
- Interaction is between 2 independent systems (although nothing precludes use inside a single system)
- Must support a wide range of application areas
- Protocol does not speak to interactions with end user
- Automate the question/answer process but recognize actual answers will be provided by people



# Simple Scenarios

- Simple Question/Answer
- Multipart Question
- Multipart Answer
- Clarifications
- Constraints
- Status reporting
- Suspend Resume
- Cancellation

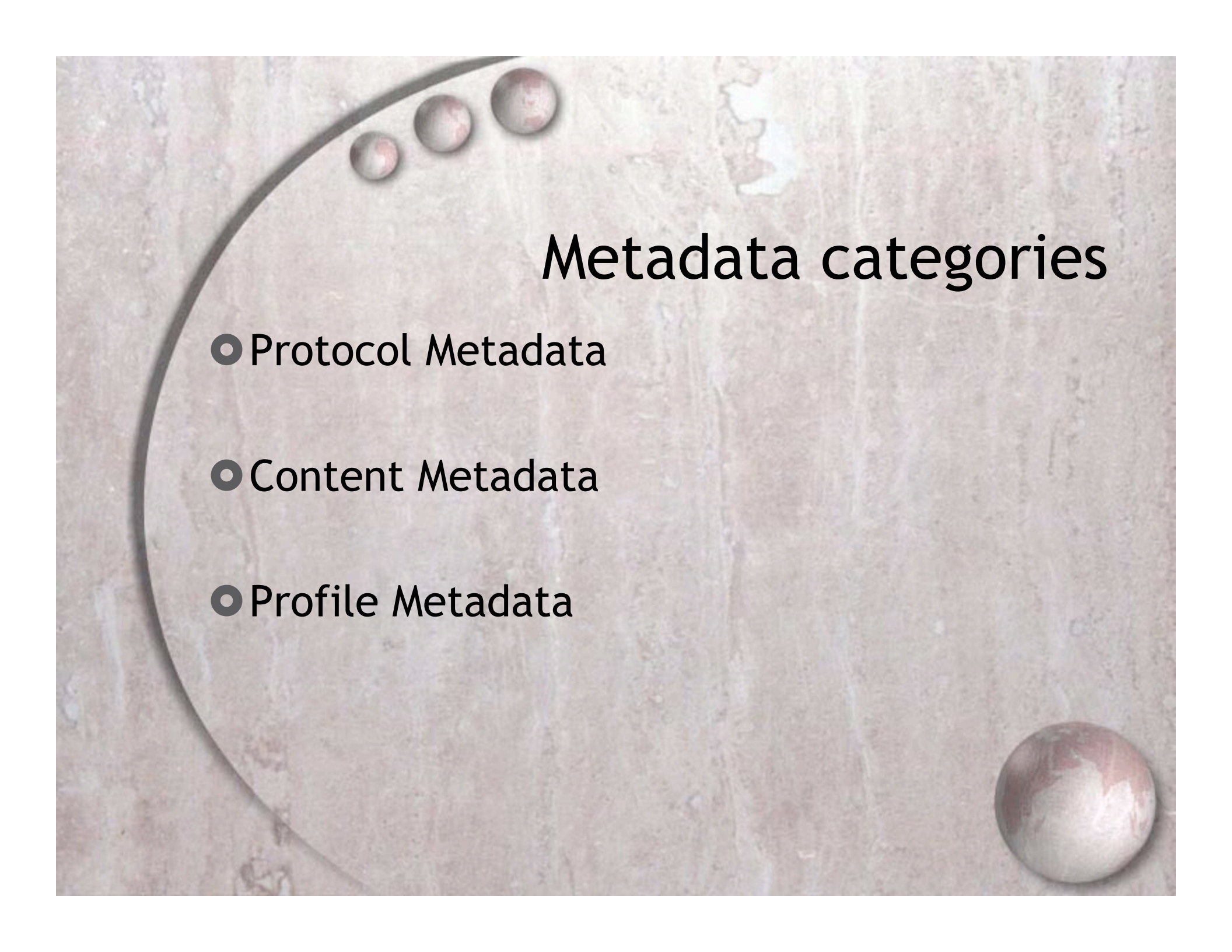




# More Scenarios

- Failures
- Timeouts
- Forwarding
- Conversations
- Patron Redirect
- References to Archived Transactions





# Metadata categories

- Protocol Metadata
- Content Metadata
- Profile Metadata



# Metadata can be . . .

- Demographic information about the user
- Information about the user's library
- Information about the question and the context in which it was asked
- Information about the types of resources desired in the answer
- Information about services desired
- Metadata for describing various constraints





# Other development considerations

- Needs in the community, e.g., directory services
- Interaction with other protocols and standards
  - NCIP, OpenURL, Z39.50, ILL, others?
- Additional models
  - Fee-based services (e-commerce)
  - Local systems
  - Knowledge bases
- Measuring user satisfaction
- Legal considerations: privacy, copyright, jurisdictional law
- Global considerations: language, cultural and national relevancy



# Currently . . .

- Trial implementors conducting trial use and experimentation to test the proposed standard
  - **ATTEND THE VRD SESSION**  
**NetRef on Trial: Testing the QATP**  
**TOMORROW AFTERNOON, 3:20 P.M. TO HEAR MORE**
- NISO Committee AZ to develop implementation guidelines & recommended best practices following results of trial use





# NISO AZ Committee Documents

- Overview
- Use Cases
- Functional Model (illustrated)
- Protocol Specification
- XML schema

Available at:

- <http://www.loc.gov/standards/netref/>