



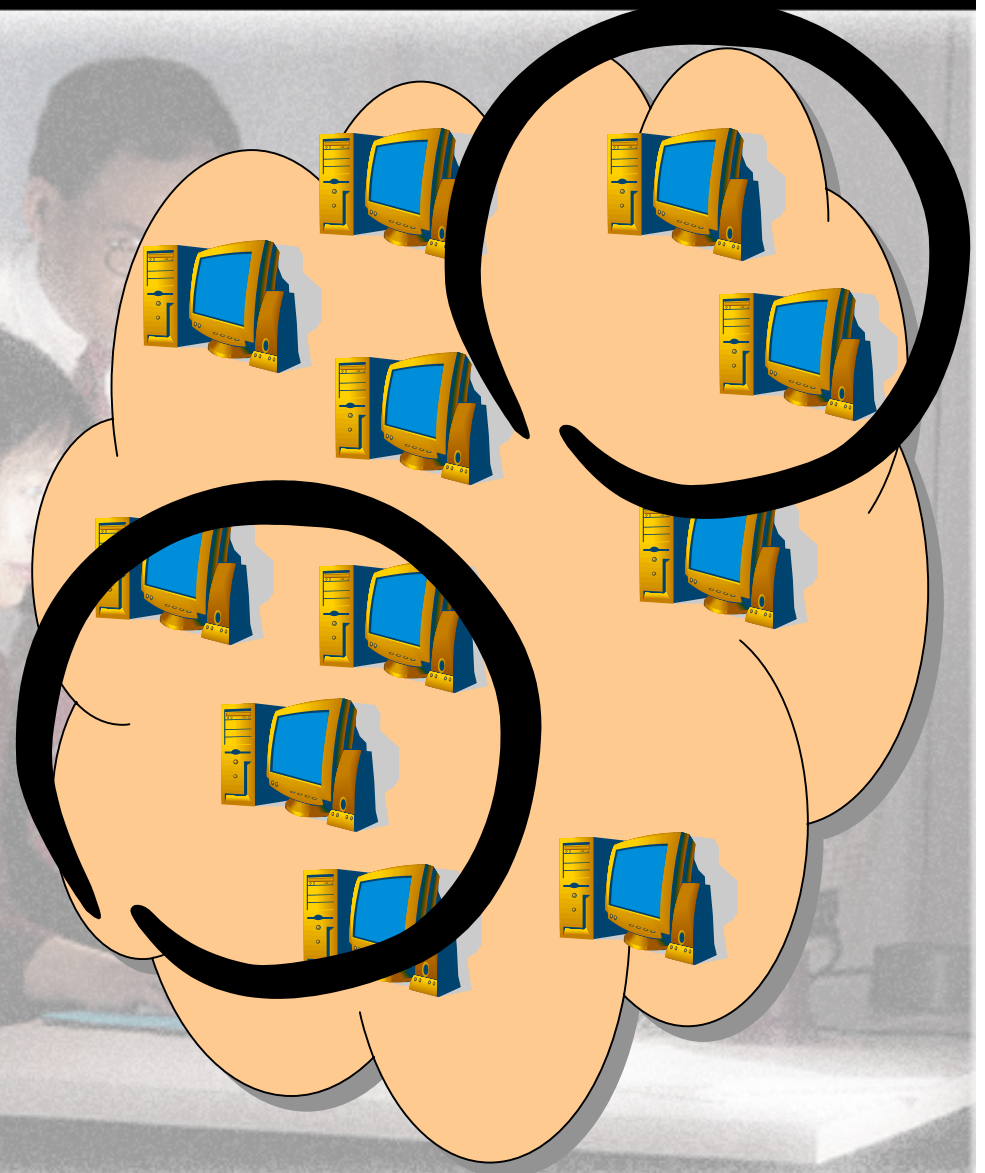
VIRTUAL THINK

R. David Lankes @ <http://www.askeric.org/~rdlankes>

- 
- The International Stage
 - Rise of Peer Networks
 - Definition
 - Examples
 - Advent of Standards
 - Utilization
 - Technical
 - Envisioning an Ontario Digital Reference Network
 - Informing
 - Planning
 - Training
 - Prototyping
 - Contributing
 - Evaluating

Agenda

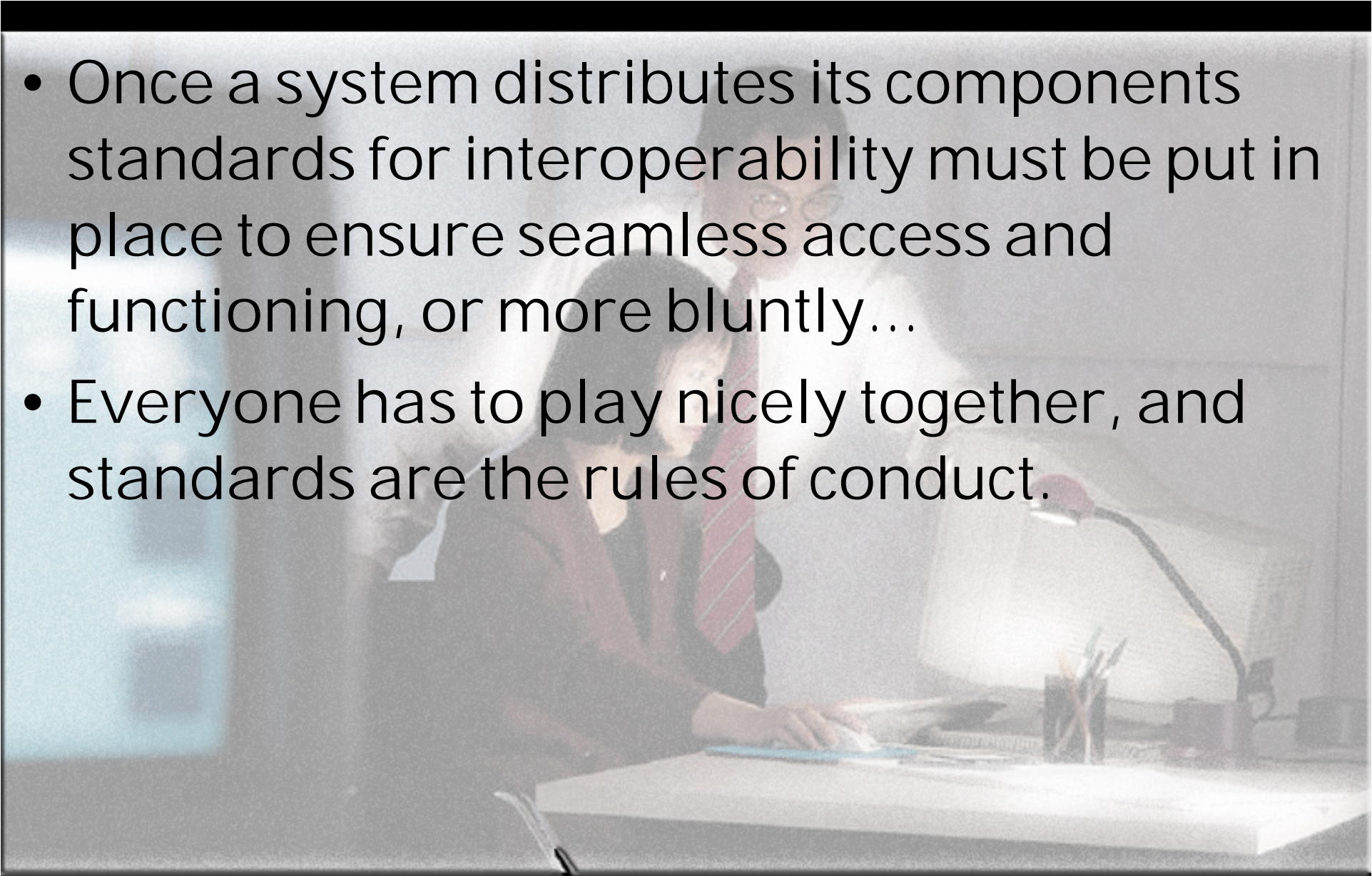
- A Collection of Digital Reference Services (and capabilities) bounded by some common aspect
 - Geography, topic, population, capability
- Combined Networks constitute a Digital Reference Cloud



The Advent of Peer Networks

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- Canada
 - Alberta
 - Virtual Reference Canada
 - California, USA
 - 24/7 Reference
 - Washington State
 - AskA Networks
 - National Science Digital Library, USA
 - QuestionPoint

The Rise of Peer Networks

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- Once a system distributes its components standards for interoperability must be put in place to ensure seamless access and functioning, or more bluntly...
 - Everyone has to play nicely together, and standards are the rules of conduct.

Advent of Standards

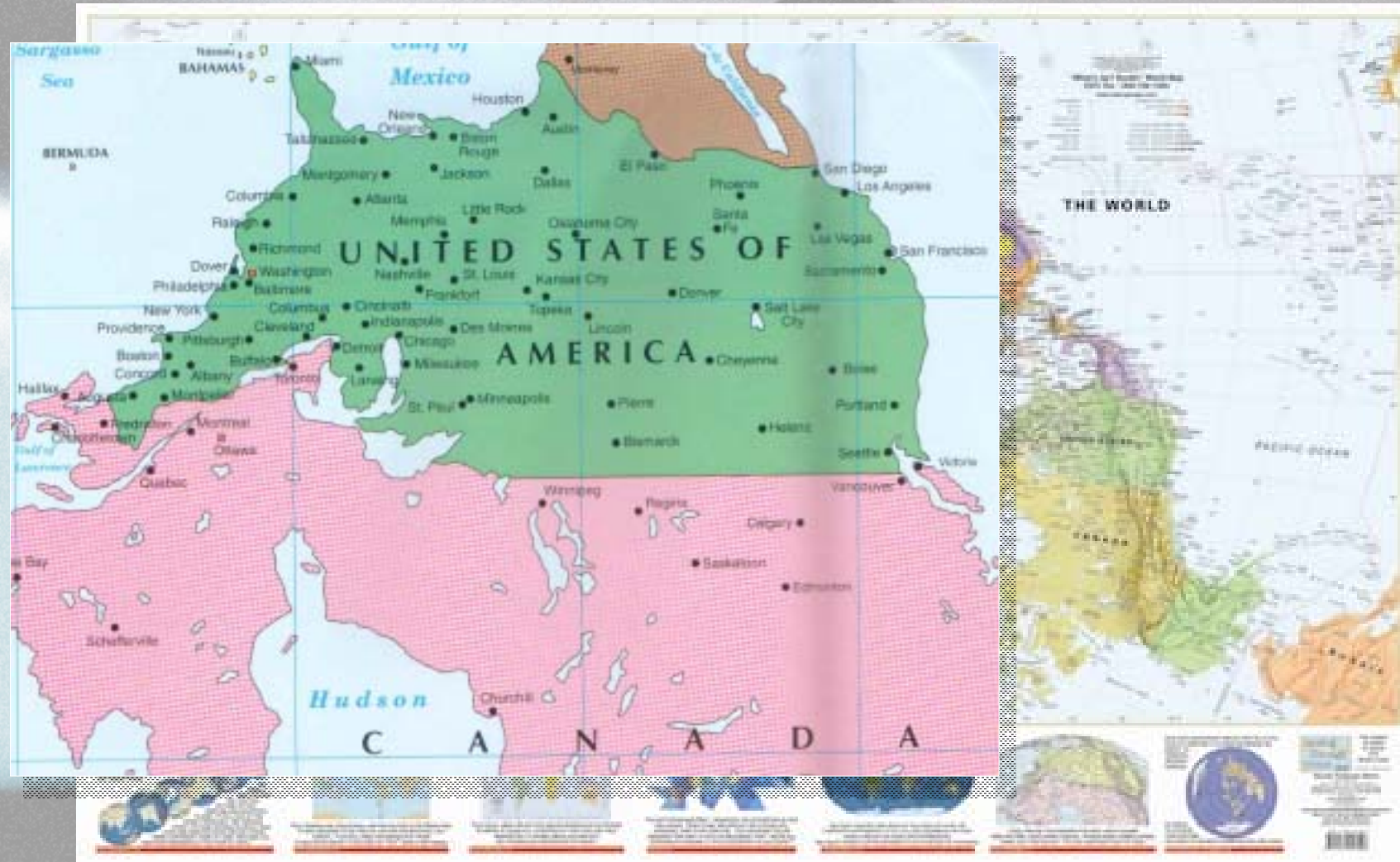
- The outcome of a political/social process to agree on aspects of a process or product a priori. The aim of a standard is to promote interoperability and the efficient functioning of a market or community



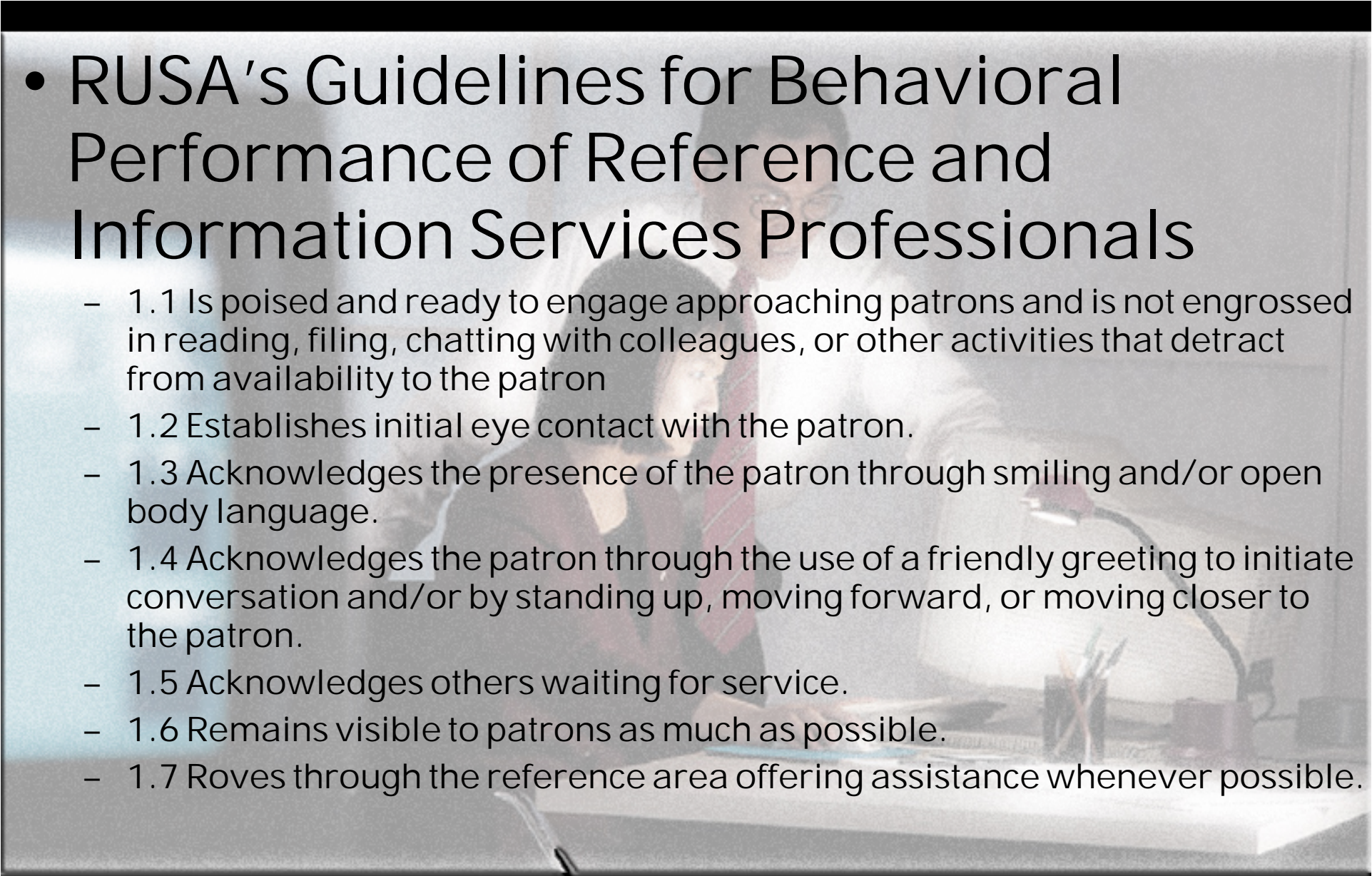
What are Standards



Standards Affect our Worldview



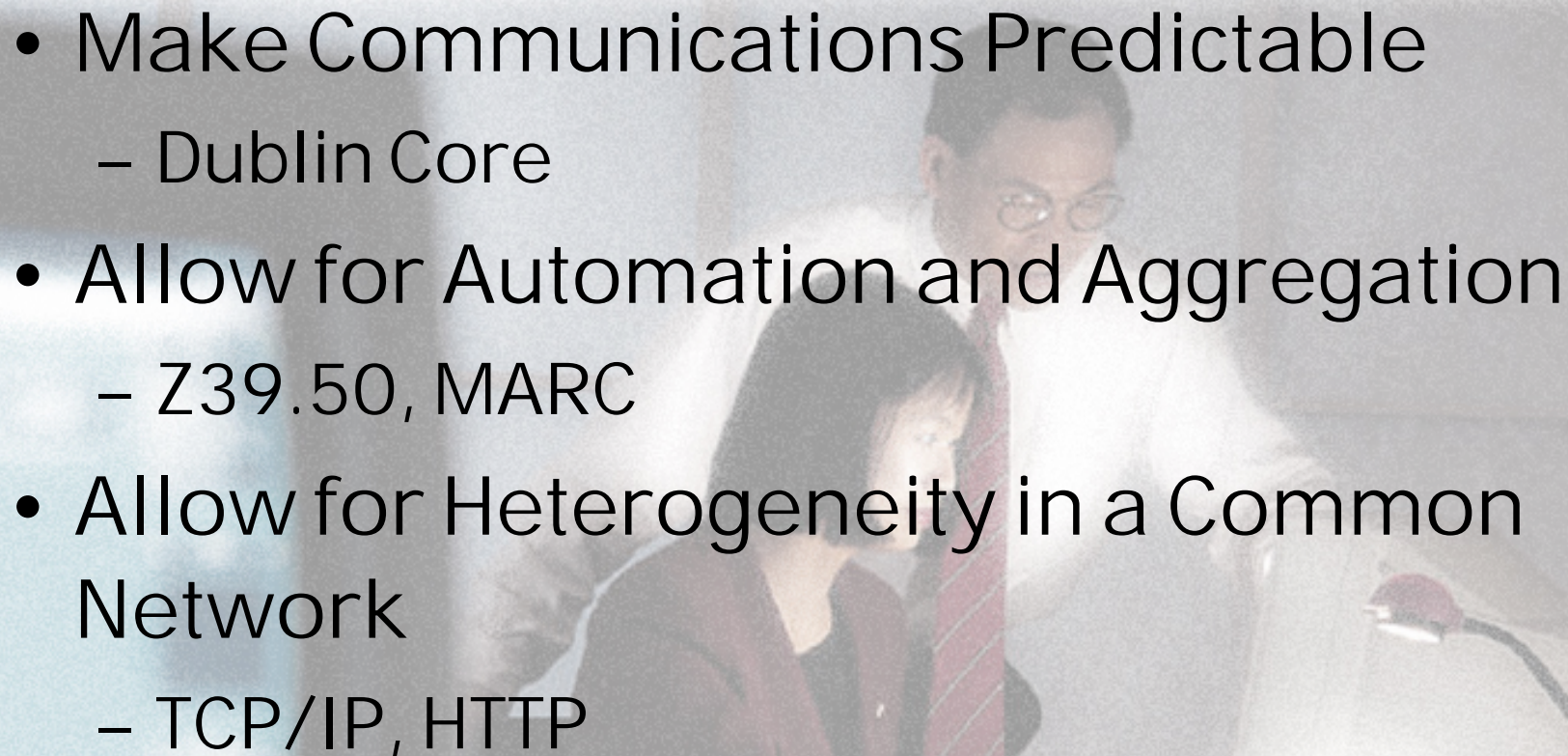
Standards Affect our Worldview



• RUSA's Guidelines for Behavioral Performance of Reference and Information Services Professionals

- 1.1 Is poised and ready to engage approaching patrons and is not engrossed in reading, filing, chatting with colleagues, or other activities that detract from availability to the patron
- 1.2 Establishes initial eye contact with the patron.
- 1.3 Acknowledges the presence of the patron through smiling and/or open body language.
- 1.4 Acknowledges the patron through the use of a friendly greeting to initiate conversation and/or by standing up, moving forward, or moving closer to the patron.
- 1.5 Acknowledges others waiting for service.
- 1.6 Remains visible to patrons as much as possible.
- 1.7 Moves through the reference area offering assistance whenever possible.

Examples

- 
- Make Communications Predictable
 - Dublin Core
 - Allow for Automation and Aggregation
 - Z39.50, MARC
 - Allow for Heterogeneity in a Common Network
 - TCP/IP, HTTP

Interoperability

- 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

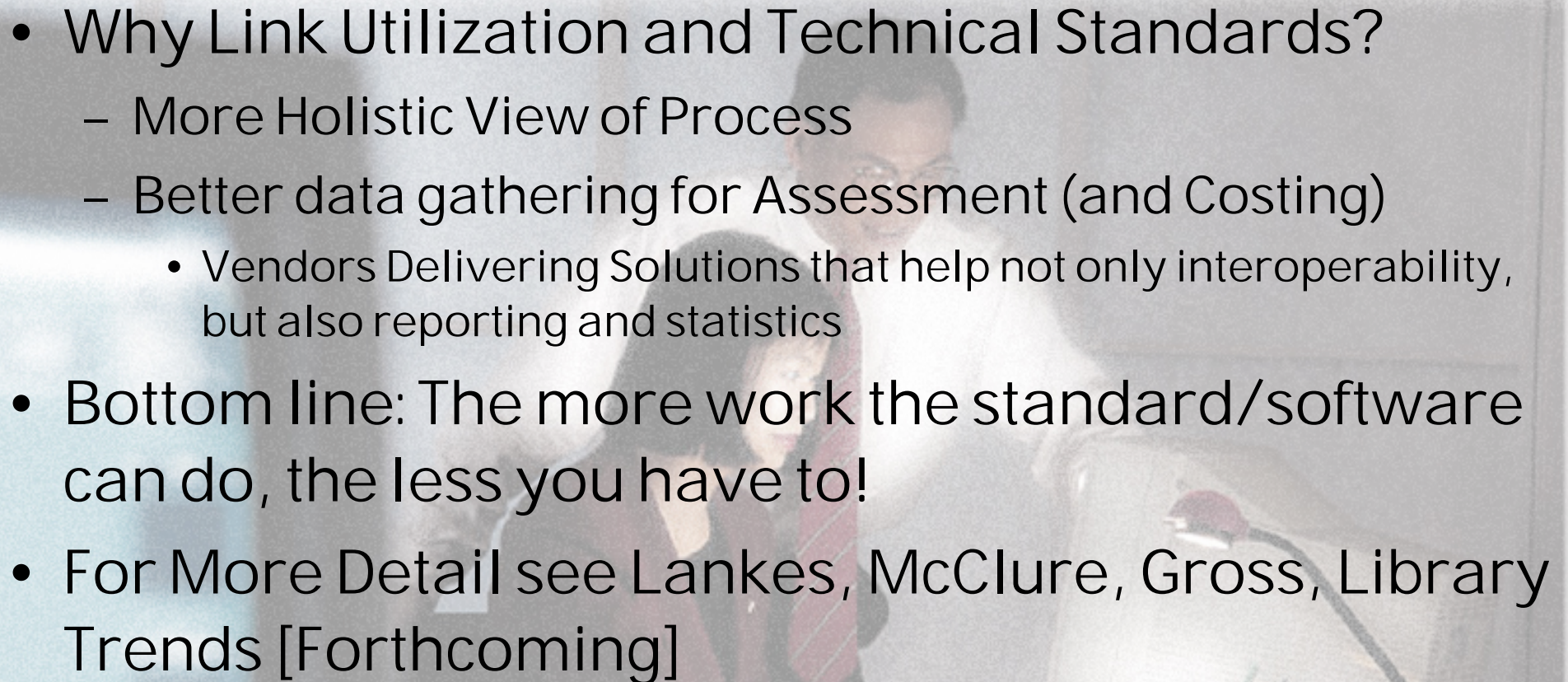
- hard tools (software, hardware, protocols and other standards enforced by computers with little or no interpretive room) and soft tools (primarily metadata and organizational schema) where aspects of human description are controlled, but still open to interpretation.

Assessing Quality in Digital Reference

<http://quartz.syr.edu>



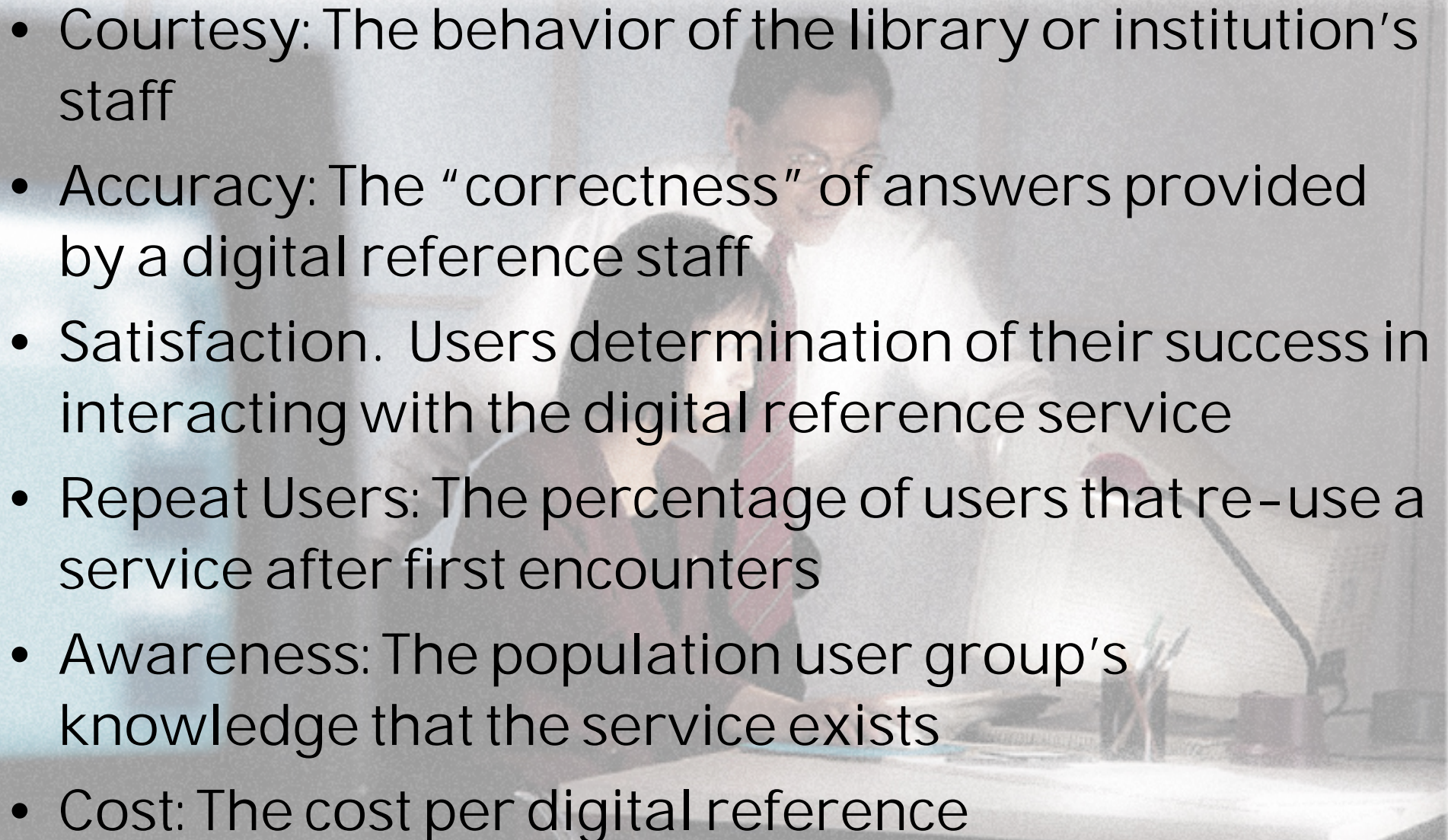
Digital Reference Standards

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- Why Link Utilization and Technical Standards?
 - More Holistic View of Process
 - Better data gathering for Assessment (and Costing)
 - Vendors Delivering Solutions that help not only interoperability, but also reporting and statistics
 - Bottom line: The more work the standard/software can do, the less you have to!
 - For More Detail see Lankes, McClure, Gross, Library Trends [Forthcoming]

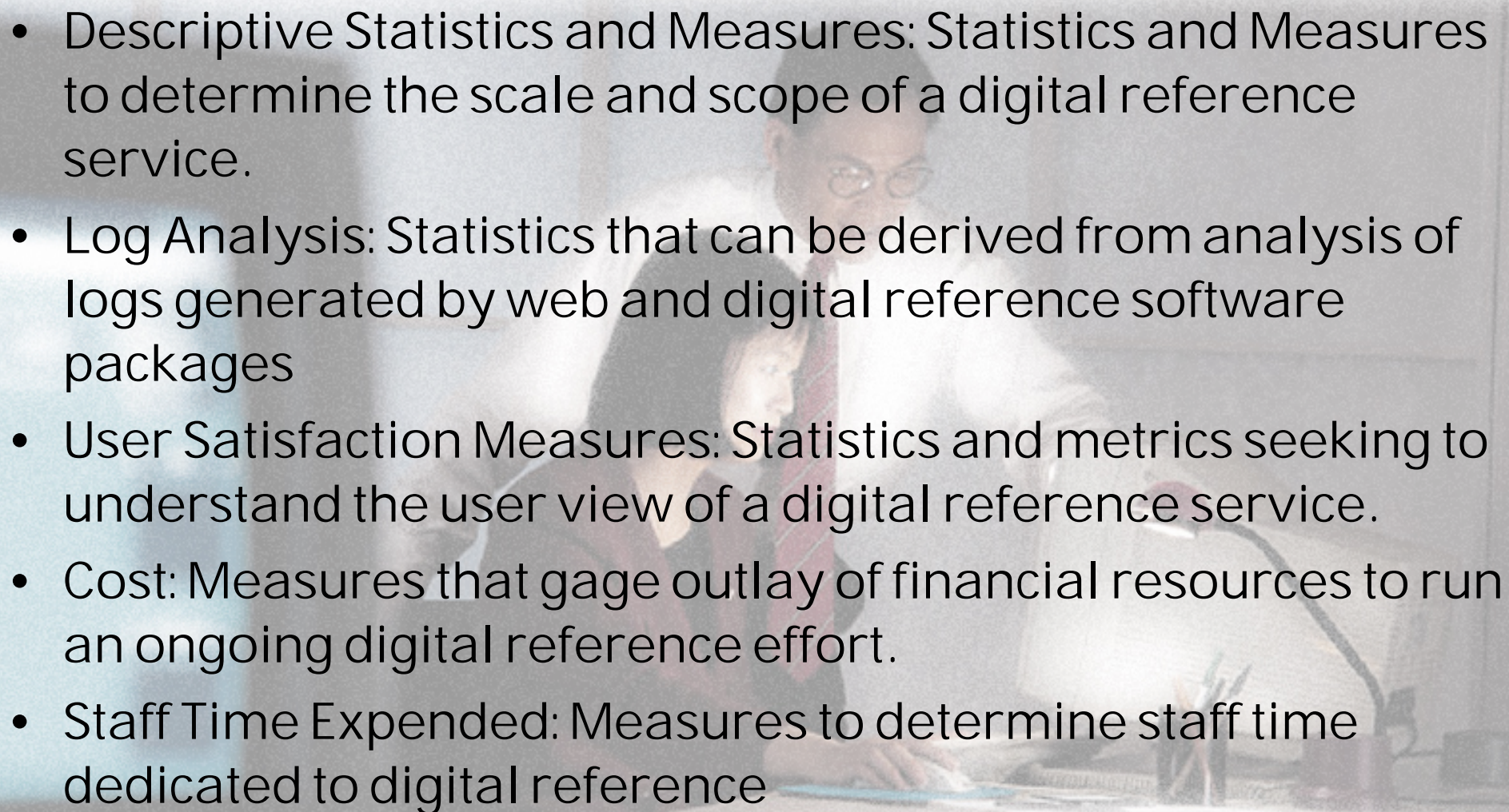
A Unified Standards Framework

Utilization	Quality	Courtesy
		Accuracy
		Satisfaction
		Repeat Users
		Awareness
	Performance Measures	Cost
		Descriptive
		Log
		User
		Cost
Technical	Question Interchange Profile Knowledgebase	Staff
		For more details see NISO AZ

Unified Dig_Ref Framework

- 
- Courtesy: The behavior of the library or institution's staff
 - Accuracy: The "correctness" of answers provided by a digital reference staff
 - Satisfaction. Users determination of their success in interacting with the digital reference service
 - Repeat Users: The percentage of users that re-use a service after first encounters
 - Awareness: The population user group's knowledge that the service exists
 - Cost: The cost per digital reference

Quality Standards

- 
- Descriptive Statistics and Measures: Statistics and Measures to determine the scale and scope of a digital reference service.
 - Log Analysis: Statistics that can be derived from analysis of logs generated by web and digital reference software packages
 - User Satisfaction Measures: Statistics and metrics seeking to understand the user view of a digital reference service.
 - Cost: Measures that gage outlay of financial resources to run an ongoing digital reference effort.
 - Staff Time Expended: Measures to determine staff time dedicated to digital reference

Performance Measures

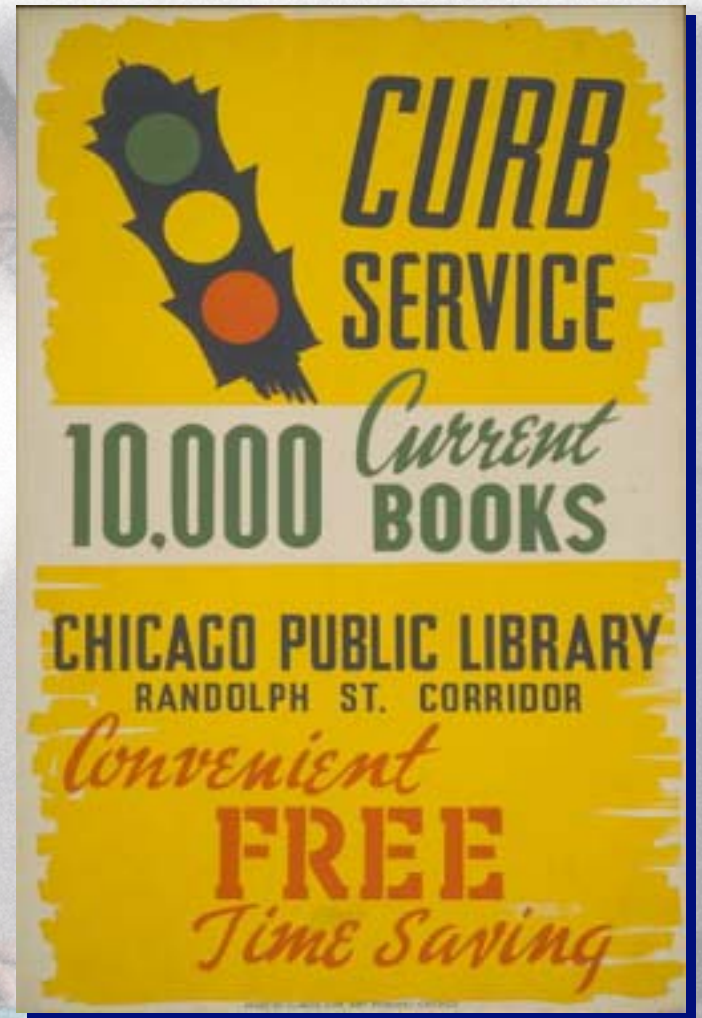
Descriptive	Log	User	Cost	Staff
Number of digital reference questions received	Number of digital reference sessions	Awareness of Service	Cost of digital reference service	Percent of staff time spent overseeing technology
Number of digital reference responses	Usage of digital reference service by day of the week	Accessibility of service	Cost of digital reference service as a percent of total reference budget	Percent of staff time spent assisting users with technology
Number of digital reference answers	Usage of digital reference service by time of day	Expectations for service	Cost of digital reference service as a percent of total library or organizational budget	
Total reference activity	User's browser	Other sources user tried		
Percentage of digital reference questions to total reference questions	User's platform	Reasons for use		
Digital reference correct answer fill rate		Reasons for non use		
Digital reference completion rate		Satisfaction with staff		
Number of unanswered digital reference questions		Delivery mode satisfaction		
Type of digital reference questions received		Impact of service on user		
Total number of referrals		Additional services that need to be offered		
Saturation rate		User demographic data		
Sources used per question				
Repeat users (return rate)				

Performance Measures

- Question Interchange Profile (QuIP)
- NISO Standards Committee AZ
 - Metadata
 - Profile
 - Protocol



Technical Standards



Technical Standards

Utilization Standards

The Dangers of Early Standards

- Informing
 - Gather Information
- Planning
 - Develop a Digital Reference Plan
- Training
 - Prepare a Training Program
- Prototyping
 - Pilot the Service
- Contributing
 - Promote the Service
- Evaluating
 - Assess Service Quality



Envisioning an Ontario Digital Reference Network

- 
- Virtual Reference Desk Project
 - Virtual Reference Desk Conference
 - November 11-12, Chicago, IL, USA
 - Website and Publications <http://www.vrd.org>
 - AskA Digests, Whitepapers, AskA Starter Kit, AskA+ Locator
 - Dig_Ref Listserv
 - National Library of Canada
 - Virtual Reference Canada
 - Canadian Digital Reference Listserv REFCAN_L
 - Print
 - Reference & User Services Quarterly
 - Other Canada
 - Toronto Public Library, Alberta

Informing

- Develop a Digital Reference Plan

- Inputs

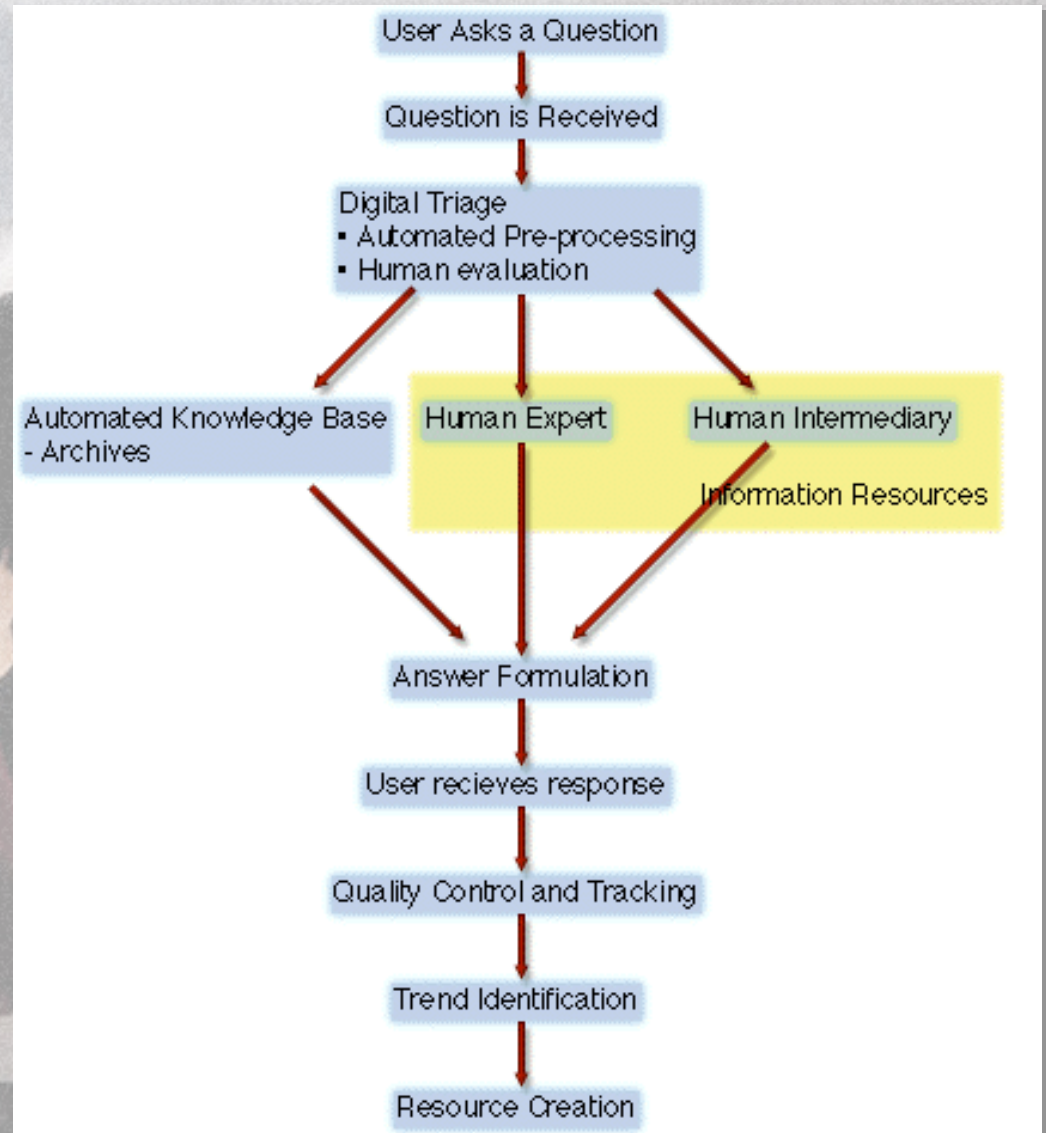
- Who are the users?
 - End users or institutions?
 - Integration with General Digital Reference
 - Web Forms?
 - Real-Time?

- Process

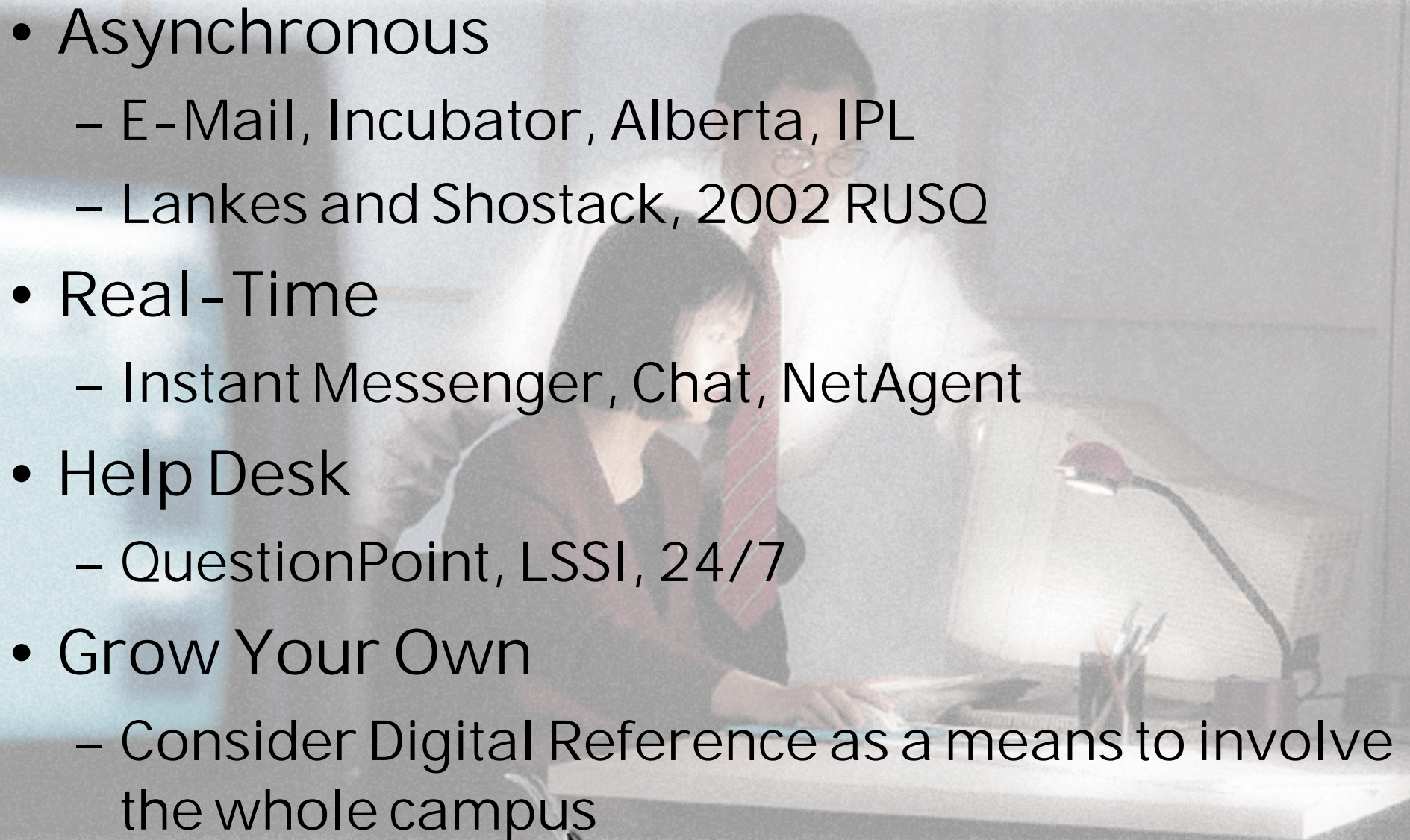
- Question Distribution
 - Policies

- Output

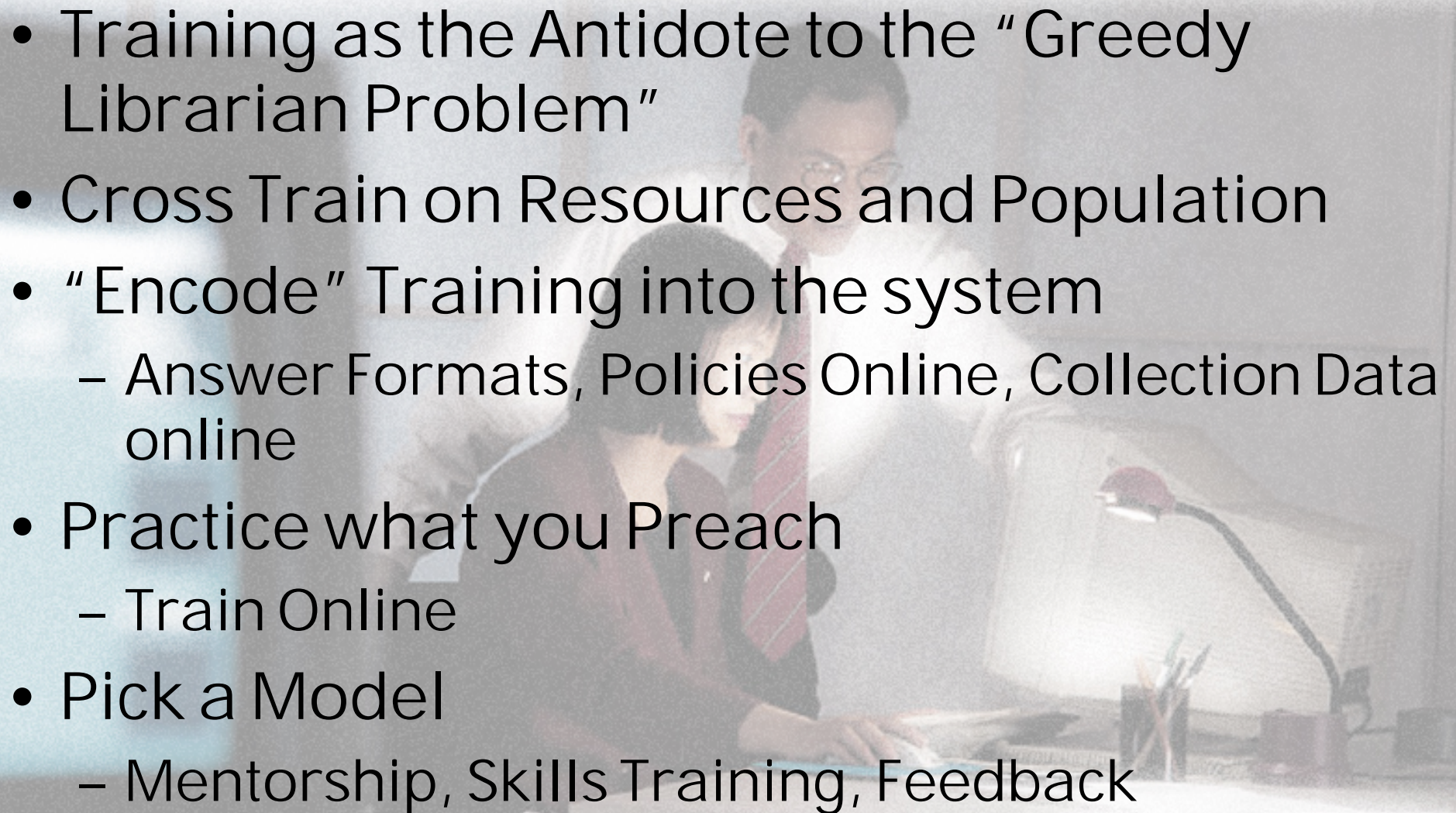
- Integration into the collection



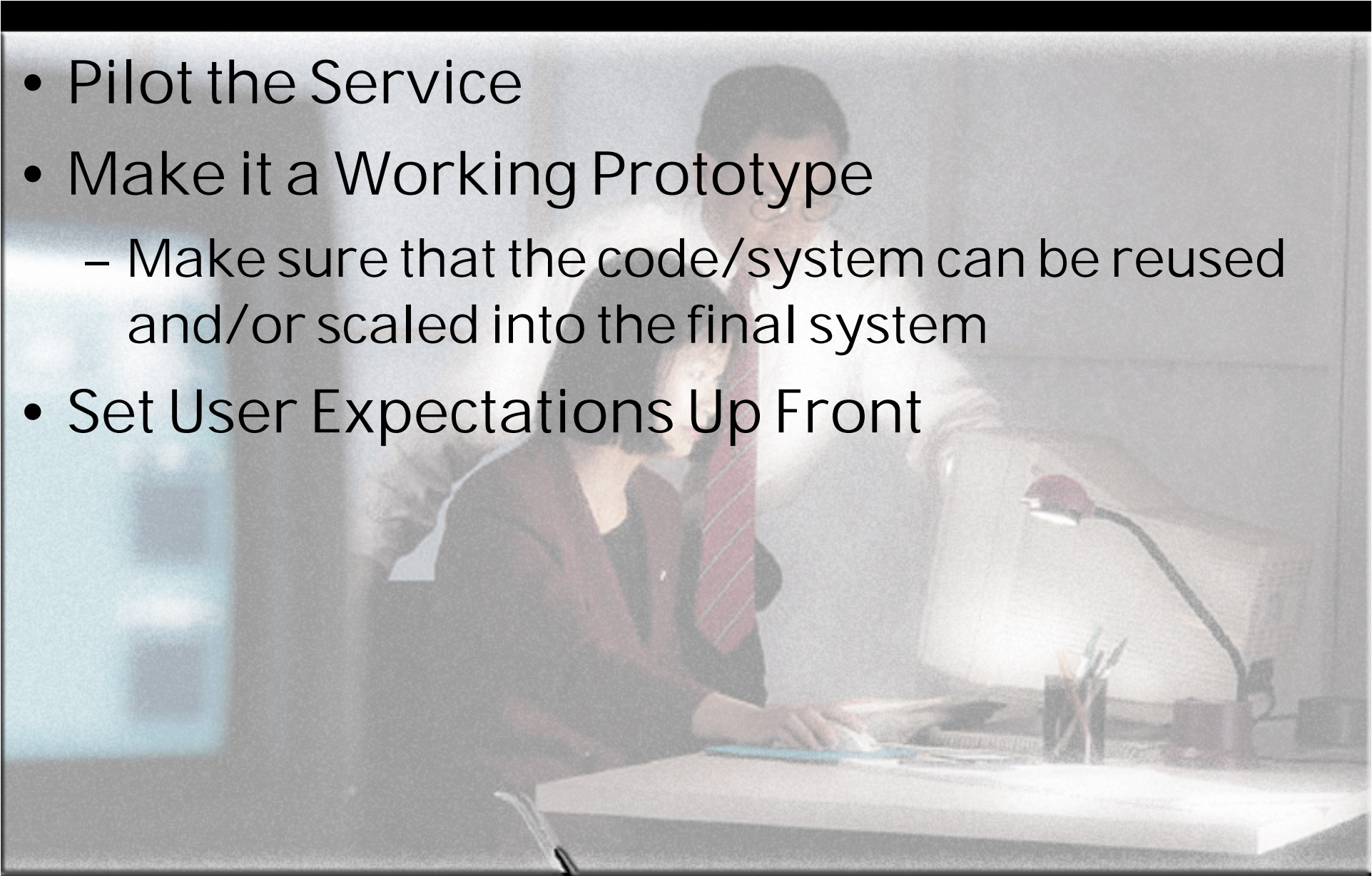
Planning

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- Asynchronous
 - E-Mail, Incubator, Alberta, IPL
 - Lankes and Shostack, 2002 RUSQ
 - Real-Time
 - Instant Messenger, Chat, NetAgent
 - Help Desk
 - QuestionPoint, LSSI, 24/7
 - Grow Your Own
 - Consider Digital Reference as a means to involve the whole campus

Planning Software

- 
- Training as the Antidote to the “Greedy Librarian Problem”
 - Cross Train on Resources and Population
 - “Encode” Training into the system
 - Answer Formats, Policies Online, Collection Data online
 - Practice what you Preach
 - Train Online
 - Pick a Model
 - Mentorship, Skills Training, Feedback

Training

- 
- Pilot the Service
 - Make it a Working Prototype
 - Make sure that the code/system can be reused and/or scaled into the final system
 - Set User Expectations Up Front

Prototyping

- Expect and Strive for 10% Unique Visitors to ask Questions
- Don't HIDE!
 - Bury the link
 - Change the Name with Every click
 - Present a 12 page disclaimer before the form or
 - A 12 page form



Contributing

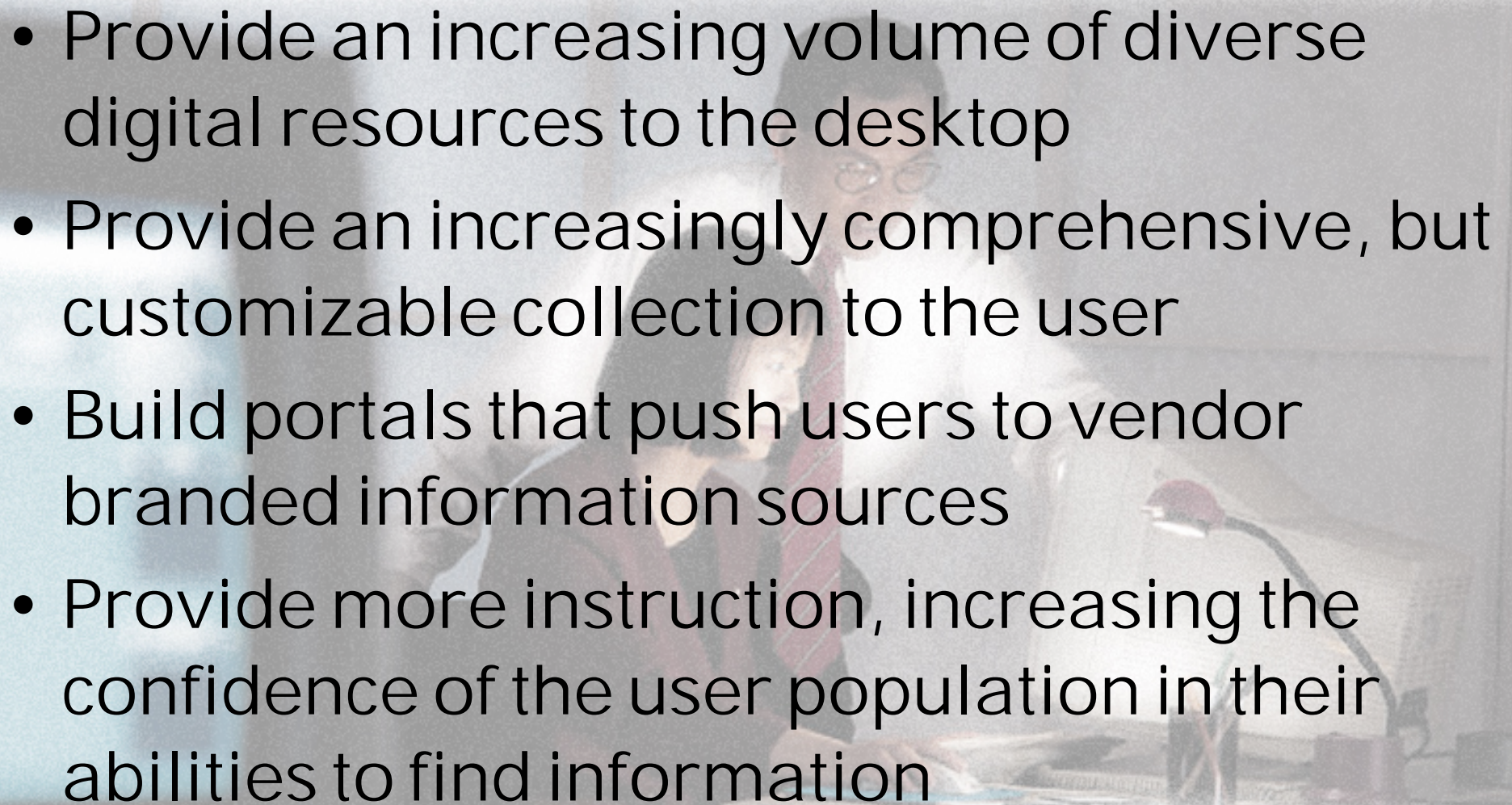
- Plan an Evaluation BEFORE you scale up
- Wherever possible, build evaluation into software and processes
- Mix of Qualitative and Quantitative Methods
- Use Transcripts for Peer Evaluation



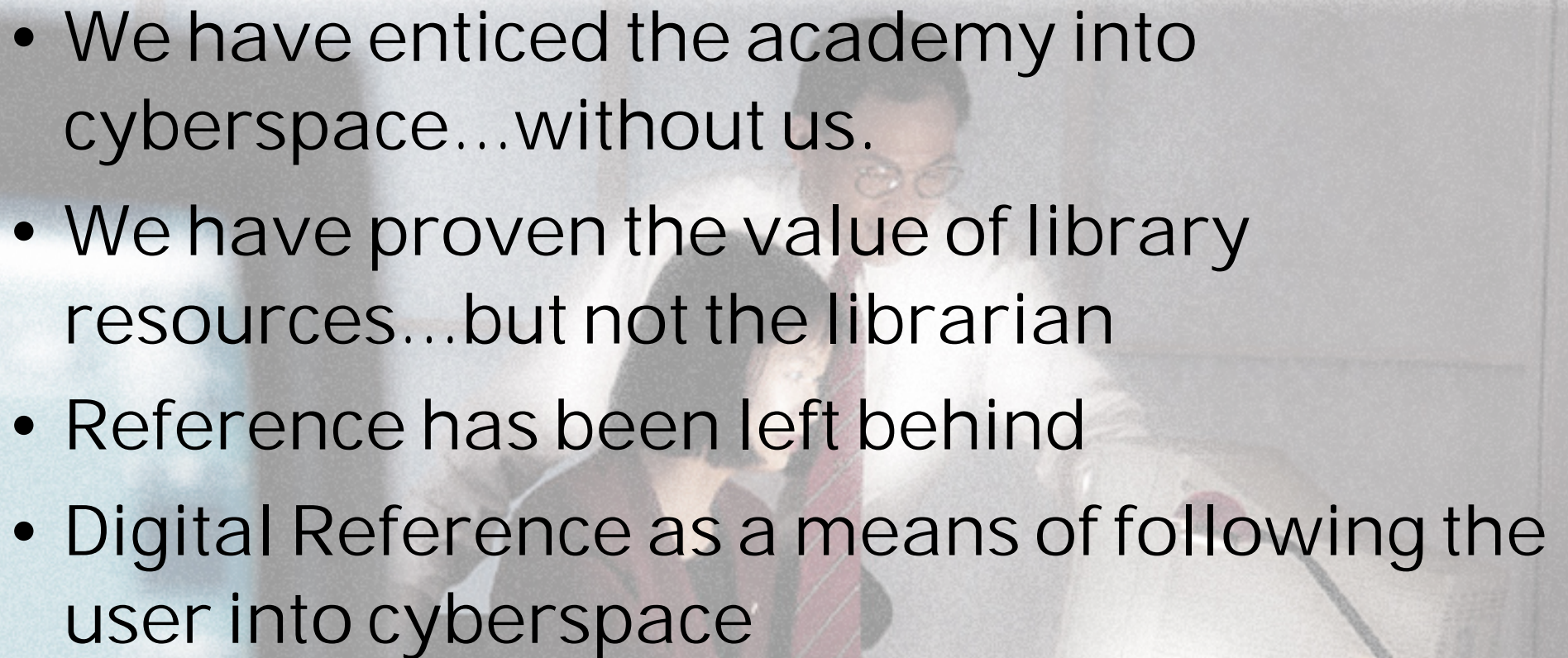
Statistics, Measures
and Quality Standards
for Assessing Digital
Reference Library Services:
Guidelines and Procedures

Charles R. McClure
R. David Lankes
Melissa Gross
Beverly Choltco-Devlin

Evaluating

- 
- Provide an increasing volume of diverse digital resources to the desktop
 - Provide an increasingly comprehensive, but customizable collection to the user
 - Build portals that push users to vendor branded information sources
 - Provide more instruction, increasing the confidence of the user population in their abilities to find information

A Scenario

- 
- We have enticed the academy into cyberspace...without us.
 - We have proven the value of library resources...but not the librarian
 - Reference has been left behind
 - Digital Reference as a means of following the user into cyberspace

The Consequence