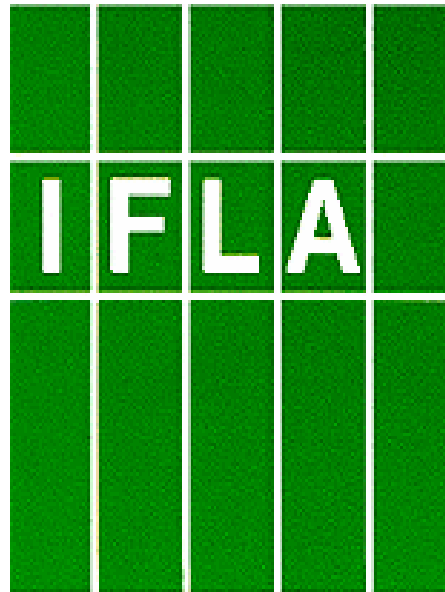


## IFLA Metropolitan Libraries Section

<http://www.ifla.org/VII/s46/index.htm>



# Information Architecture & Customer Service

a presentation to  
IFLA Metropolitan Libraries Section  
Conference, Seattle  
May 2007

# Your Presenter

- **Karen Rossi**

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# Carnegie Library of Pittsburgh



“Free to the people” since 1895

# Why did we embark on this project?

# Examining role of public library

- For the past several years we have been examining all aspects of what we do:
  - How has the Internet changed our role?
  - How has amazon.com and super bookstores changed our role?
  - How has the rise in the service economy changed our customers' expectations of us?
  - How has the decrease in free time and increase in discretionary income (for some) changed the way our customers want/need to interact with us?

# Strategic planning

- Our mission
- Our guiding principles
  - Customer Service
  - Collaboration
  - Competence
  - Community
- Our strategic focus

# Customer service

- Renewed focus on excellence in customer service
- In light of the changing role of the public library and changing expectations of our customers, what does excellent customer service mean for us?
- Philosophy of and Standards for Service Excellence



# Capital projects

- We embarked on our renovation projects
- 6 architects, 7 locations and more to come!
- Website redesign
  
- Concern that communication with the public would become more fragmented and unplanned unless we created a consistent conceptual framework that would both inform and be layered on top of the new physical architecture

# Capital projects

- Our Main Library architects were simultaneously asking our librarians about the information architecture of the library, and not getting what they needed.
- With our former IT Director and architects, we had the validation to push the idea of “doing an information architecture” for the library.
- We retained a local firm with national experience in information architecture and user-centered design: Maya Design.
- Taming complexity

# Libraries as complex organizations

- Variety of services
- Variety of materials
- Depth of resources
- Facility issues
- Customer needs

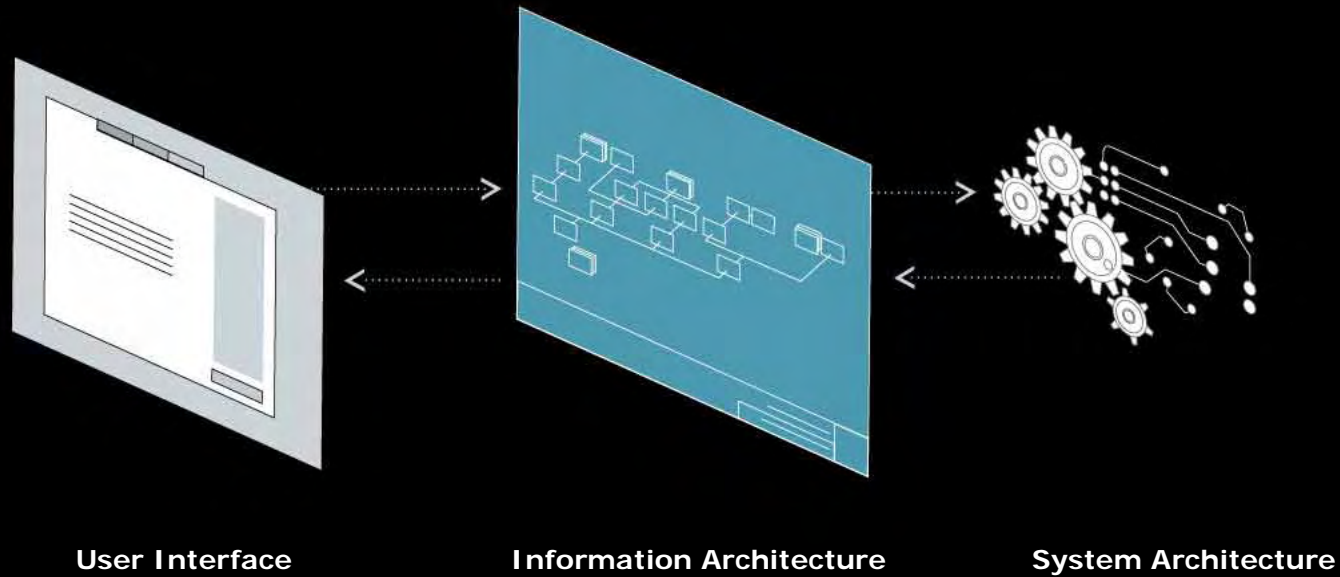
## Goals of library redesign

- Increase user base
- Deliver information needs to users
- Focus on customer-centered service
  - Eliminate customer frustration
  - Arrange activities and key spaces
- Make library a destination in the community

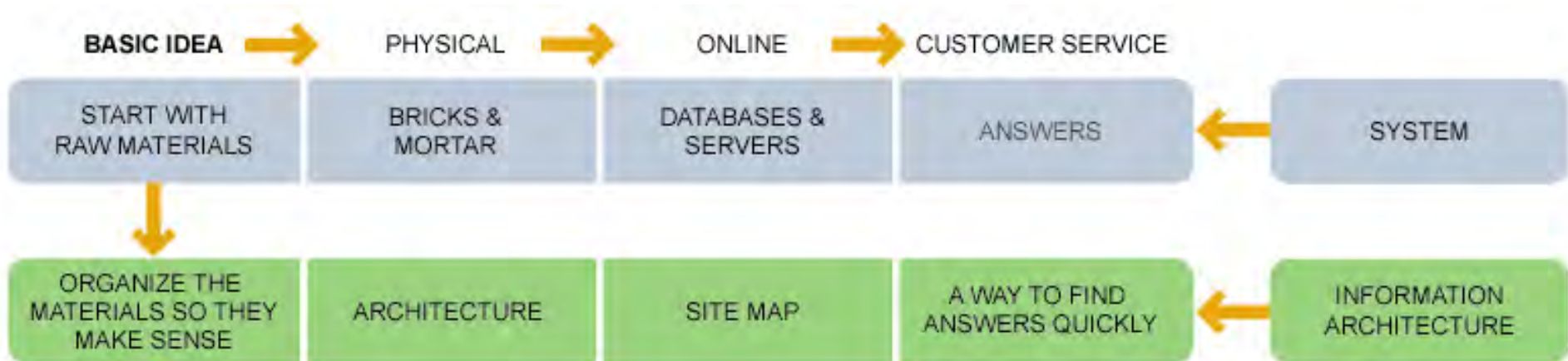
Information Architecture influences and directs the entire process.

# Information Architecture?

# An information architecture gives you predictability (it's one of the ways we make things easier to use...)













**OFTEN EFFORTS HAVE A FEATURE OR OPERATION FOCUS, THE USER EXPERIENCES THE RAW SYSTEM**  
 -BUT THIS CONFUSES USERS AND EXPOSES A MESSY BEHIND-THE-SCENES "STEW" OF PROCESSES AND TECHNOLOGIES

**SO WHY THREE DIFFERENT LAYERS?**

- +THE SYSTEM IS RAW AND VARIES DUE TO ENVIRONMENTAL OR TECHNOLOGICAL SHIFTS
- +THE INFORMATION ARCHITECTURE CAPTURES AND MAPS A USER-CENTRIC VISION, REGARDLESS OF SYSTEM SHIFTS
- +THE USER EXPERIENCE, NOW REMOVED FROM THE RAW SYSTEM, CAN CHANGE FOR DIFFERENT USERS AND TIMES

**WHAT ARE THE BENEFITS OF A GOOD INFORMATION ARCHITECTURE?**

- +HIDES THE COMPLEXITY OF THE SYSTEM, FOCUSING ON USERS AND THEIR NEEDS (SCENARIOS)
- +MAKES IT EASY TO FIND GOALS AND DISCOVER CONNECTIONS (SIGNPOSTS)
- +CLEARLY DESCRIBES WHAT'S POSSIBLE (MAPS WORLD)
- +EVOLVES ORGANICALLY (CREATES FRAMEWORK FOR FUTURE GROWTH)

# Example: McDonald's

- **Infrastructure:** the building, the cooking equipment, the pricing structure, what times of day you can get an Egg McMuffin vs. a Big Mac, etc.
- **user interface:** the signs and the design of the customer-facing portions of the infrastructure.
- **information architecture:** the mental model that most people share for “how to interact with a fast food restaurant”. Includes the concepts of:
  - a menu with items and their prices (only shows what you can order at that time, or lists the times)
  - a place where promotions are displayed
  - a sequence of events that are followed in a particular order
  - an area in which to place an order, pay for the order, pick up the order
  - an area in which to eat the food
  - a place to discard the garbage
  - etc.

# User Centered Design?

Shadowing, personas, walking a mile in their shoes, user testing, etc.

# Shadowing customers

CUSTOMER AND LOCATION

Male. Age 20. Fiction open stack.



## APPARENT TASK

Walked into fiction open stacks.  
Paused at opening. Walked left.  
Paused, turned back. Walked  
right. Paused again, turned left.  
Stopped, and turned back left.

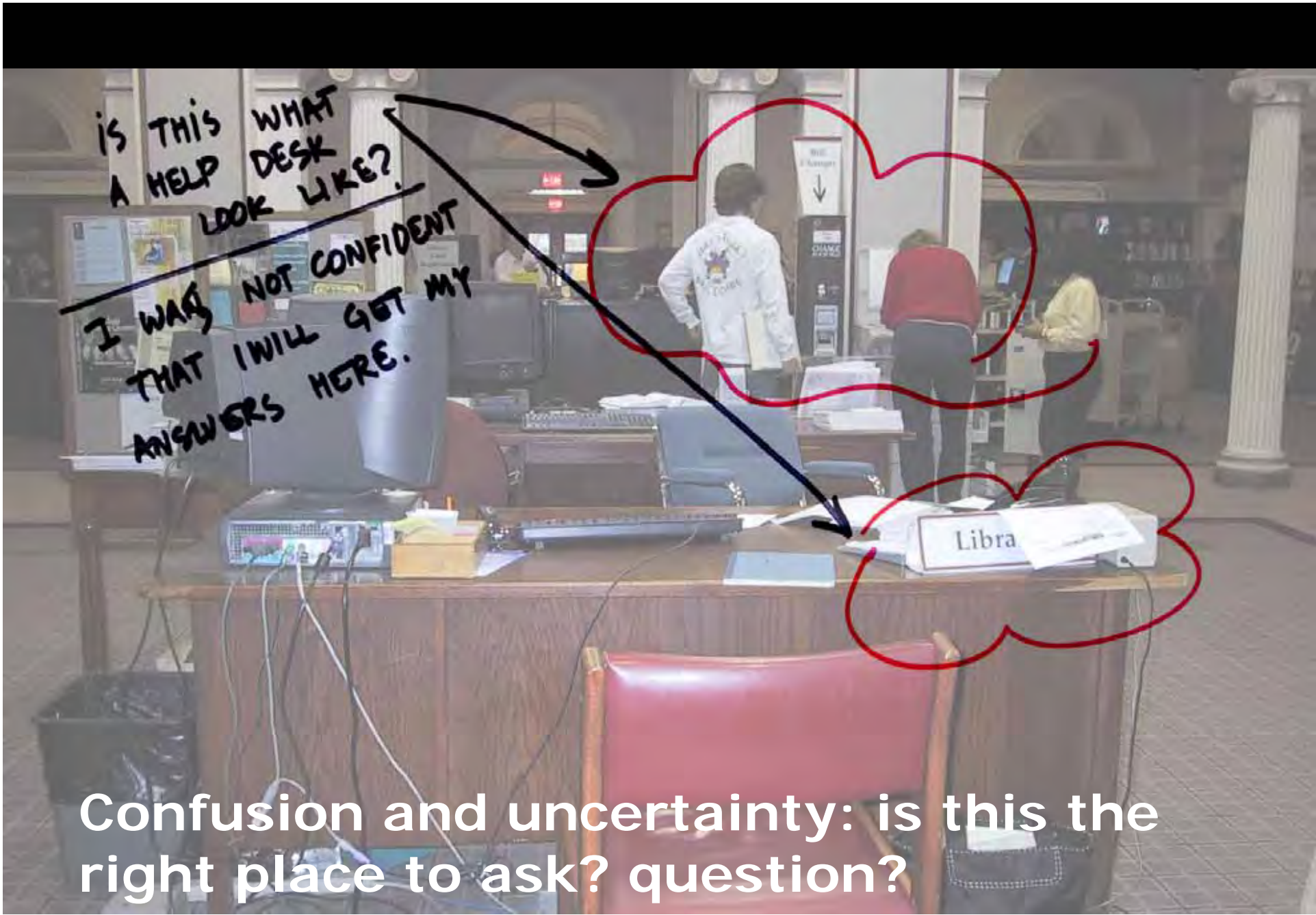


# Confusion and uncertainty: is the library open or closed?



THE BOOK DROP IS HIDDEN / NOT PROMINENT AT ALL

THIS IS PRETTY MUCH THE STATE OF THE LIBRARY. EVERYTHING WAS A MYSTERY AT FIRST AND IT BEGINS TO MAKE SENSE AFTER ABOUT 1 HR.

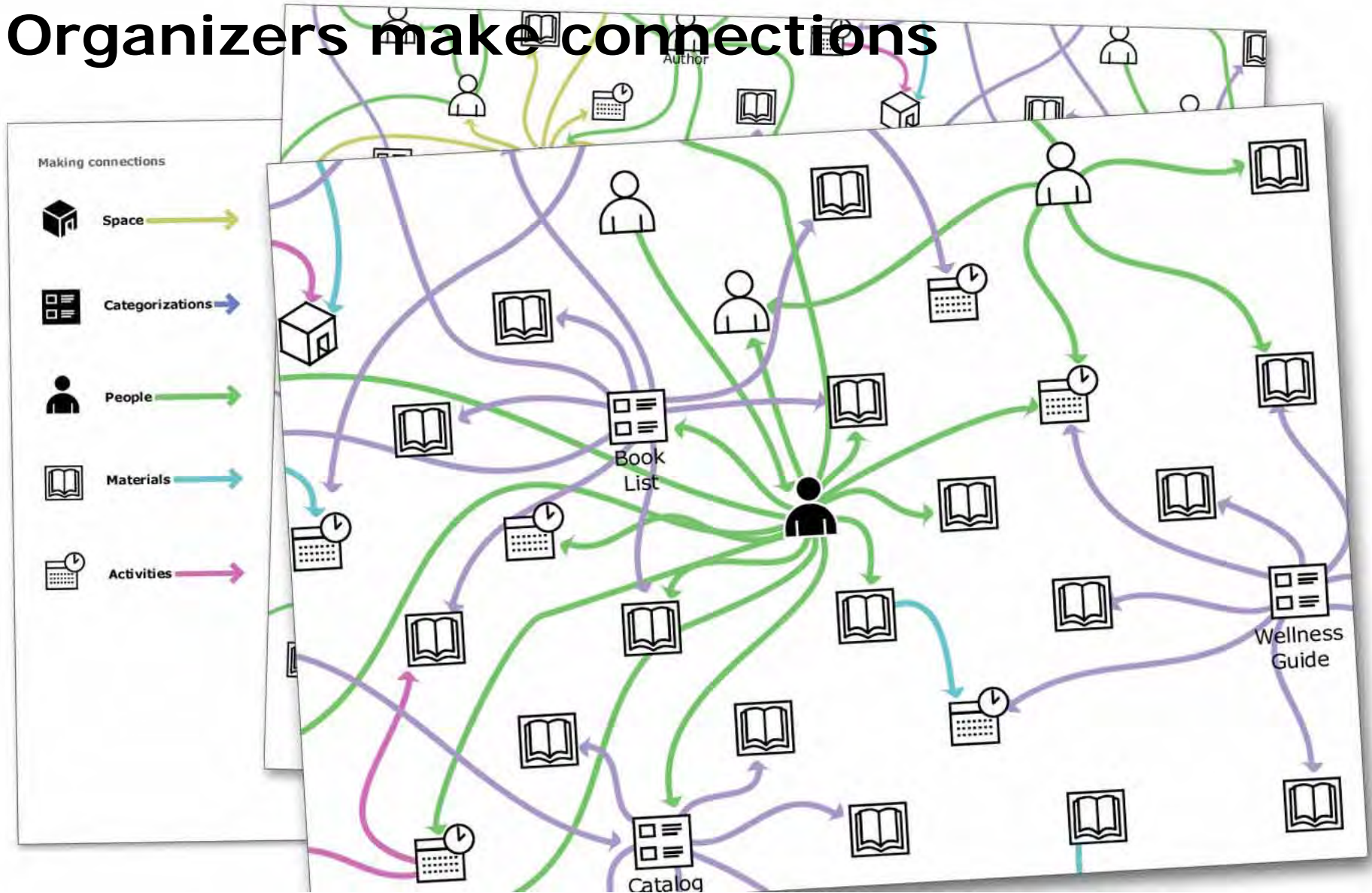


Confusion and uncertainty: is this the right place to ask? question?

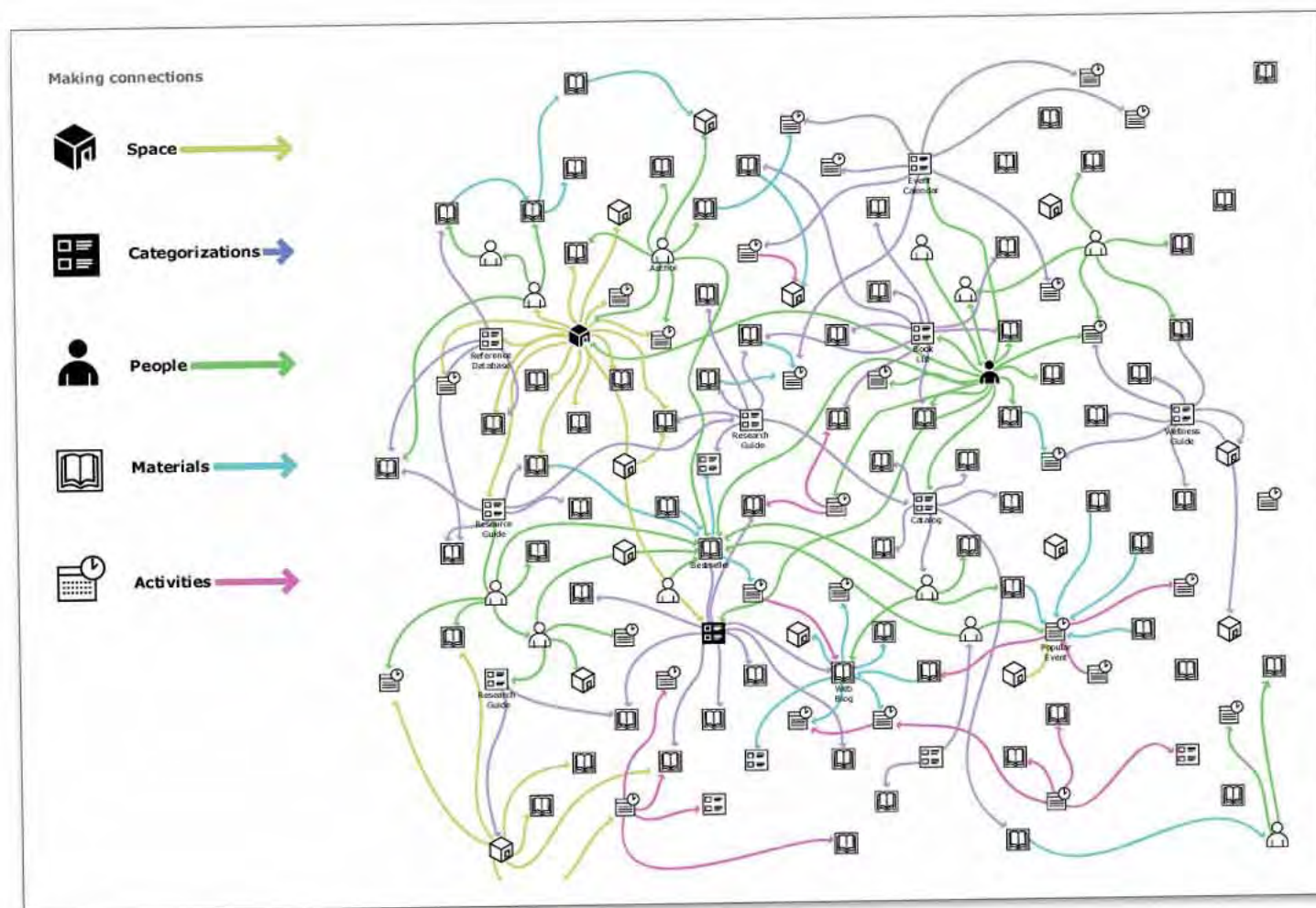
**Now that we have a sense of the users and of the underlying system, it is time for a rough IA plan...**



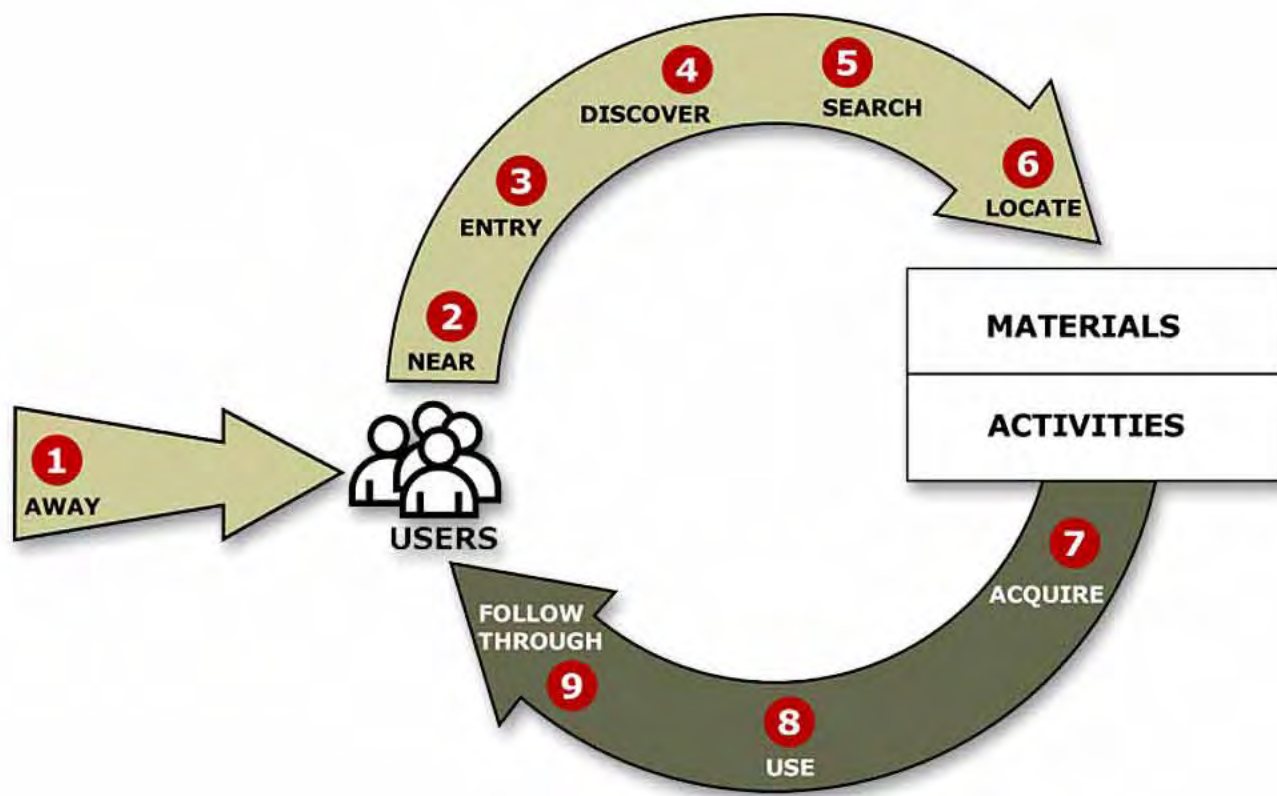
# Organizers make connections



# Exposing the right connections "just in time"



The end of every customer journey should be the beginning of a new one



# Catalog/Search tool

# Redesign of the Catalog UI

## Existing Search Usability

Fixing the user interface to the current catalog system to improve usability and eliminate jargon.

## Library establishes connections

Exploring a technique to allow library staff to establish connections among and between library material and activities. Such connections could facilitate topic guides and recommendations. Cross-referencing resources through physical and digital interfaces.

## Users establish connections

Exploring a technique to allow library users to establish connections among and between library material and activities (e.g., collaborative filtering). Such connections could facilitate topic guides and recommendations.

## Rich Search Interface

Designing a truly next-generation information discovery tool that goes well beyond the current EIN catalog experience.

## Current catalog interface



## Sketch design for Find-it interface



**website**

# Polishing the library's website

After...

The screenshot shows the Carnegie Library of Pittsburgh website with a clean, modern design. At the top, there is a header with the library's logo, name, and contact information. Below the header is a navigation bar with five tabs: "Find it Here", "About the Library", "What's Happening", "Customer Services", and "Discover More".

The "Find it Here" section includes a search bar with a "Go" button and radio buttons for "This web site" and "Catalog".

The "About the Library" section lists links for "Hours and locations", "Library shop", "Donate/Volunteer", and "Employment".

The "What's Happening" section lists links for "Today's events", "Event calendar", "Class listings", and "Library renovations".

The "Customer Services" section lists links for "Your account", "Get a library card", "Borrowing policies", and "Renew materials".

The "Discover More" section lists links for "Bestsellers", "Latin American food", "Homework help", and "Genealogy research".

Below the navigation bar, there are several content sections:
 

- Resources:** Catalog, Databases, Topic guides, Lists.
- Special sites:** Kids, Teens.
- Departments:** Job and Career Education Center, Pennsylvania Department, Business and Foundation Center, Patent and Trademark Depository.
- News:** A section with a headline "Lorem ipsum dolor sit amet, consectetur adipiscing elit sed diam nonummy nibh." and a photo of a young man.
- Library Shop:** A section with a headline "The more you support the library..." and a photo of a young man.
- Did You Know?:** A section with a headline "Borrow from our collection of more than 19,700 musical scores..." and a photo of a book.

©2003 Carnegie Library of Pittsburgh, 4400 Forbes Avenue, Pittsburgh, PA 15213 Phone: 412-622-3114

[Privacy policy](#) | [Site index](#)

# Results?

- Named Number One  
“Most Useful Web Site” in Pittsburgh  
  
by *Pittsburgh Magazine* in 2004
- 4,176,669 visits in 2004
- 6,240,857 visits in 2006



# How does Information Architecture influence:

- *Space*
  - Glass panels
  - Community destination
  
- Systems
  - Static signage
  - Dynamic signage
  
- Staffing

# IA and library *space*: Glass panels

- Customer Service
- Opens up the space
- Intuitive connections



“Free to the people” since 1895



“Free to the people” since 1895

# How does Information Architecture influence:

- Space
  - Glass panel design
  - Library as community destination
  
- *Systems*
  - *Static signage*
  - *Dynamic signage*
  
- Staffing

# signage

## Classification Scheme

Orientation, Identification, Education, and Connection

We've organized signs into five broad categories. This will help guide visual design, allowing sign designers to create consistent styles and templates. It will also help us make decisions about the relative importance of signs and how much of the user's attention should be devoted to each kind of communication. Each category is further divided into sub-categories, and examples of each are provided.

### Orient/Wayfinding [A]

Display the scope of physical spaces, time-based events and provide directions to major areas.

#### Spatial [A-1]

- \* Library map
- \* Area map
- \* Directory
- \* Directions

#### Temporal [A-2]

- \* Event calendar

#### Status [A-3]

- \* Open/Closed
- \* Hours of operation
- \* Holiday schedule

### Identify Area [B]

Identify building, areas, stacks, and facilities within the library system.

#### Major Areas [B-1]

- \* Carnegie Library of Pittsburgh
- \* Entrance/Exit
- \* New and featured
- \* Coffee Bar
- \* Lounge
- \* Teens
- \* Children's
- \* Magazines and Newspapers
- \* Movies, Music & Audiobooks

#### Stacks [B-2]

- \* \_\_\_\_\_ Collection (Open Shelves)
- \* \_\_\_\_\_ Collection (Closed Shelves)
- \* LOC Subject (e.g., U.S. History)
- \* Subtopic (e.g., Vegetarian cookbooks)
- \* Location (e.g., Stack 16)

#### Facilities [B-3]

- \* Meeting room
- \* Restrooms
- \* Elevator

#### CLP Network and Beyond [B-4]

- \* Immediate neighborhood
- \* Other branches
- \* Region

### Identify Action [C]

Identify actions that take place in the library.

#### Actions [C-1]

- \* Ask a Librarian
- \* Find it Here
- \* Explore the Internet
- \* Browse (Open/Closed Shelves)
- \* Customer Services
- \* Self-Checkout
- \* Returns
- \* Device-based actions (Photocopier, microfilm, listening booths, etc.)

### Educate [D]

Instruct, explain and inform library users to encourage self-sufficiency and help them become expert users.

#### Instruct: "Just-in-time help to get results" [D-1]

How to...

- \* Sign up for an event
- \* Use online databases
- \* Access online databases

#### Explain: "Transforming 1st-time-user into power-user" [D-2]

Did you know?

- \* Fiction is shelved by author's last name
- FAQ
- \* How is fiction organized?

#### Inform: "What CLP and its users expect of each other?" [D-3]

- \* Usage policies (link and time limit: 30 min)
- \* Behavior expectations (No smoking)
- \* Legal disclaimers and disclosures

### Connect [E]

Establish connections between library's activities and resources in order to reveal them to the users serendipitously.

#### Related connections (map directly to user actions/goal) [E-1]

- \* Sponsored by the library
- \* Sponsored/Cosponsored by a trusted third party (e.g., regional library initiatives or partnership with hospital)
- \* Sponsored by the community (e.g., James Turrell lecture at CMU)

#### Random connections (serendipitous in nature) [E-2]

- \* Sponsored by the library
- \* Sponsored/Cosponsored by a trusted 3rd party (e.g., regional library initiatives or partnership with hospital)
- \* Sponsored by the community (e.g., neighborhood meeting, bulletin boards)

## IA and *signage*

- Architectural design of structures and interiors vary greatly among our locations
- *Challenge:* Create a single signage design that works well everywhere and can be changed easily and quickly
- *Solution:* Use templates to create a framework that can be applied everywhere



# IA and *signage*

- Agile and flexible
- Librarians in each location are able to generate their own signs
  - (Effectively authoring, editing, and publishing their location's freshest information onto the surfaces of the library itself)



"Free to the people" since 1895

Lexicon shifts to user-centered  
(not system-centered) language

Reference desk = Ask a Librarian

The screenshot shows the Carnegie Library of Pittsburgh website. At the top, there is a navigation bar with the library's name and contact information (E-mail, Chat, 412-622-3114). A prominent "Ask a Librarian" button is highlighted with a red box. Below the navigation bar, the website is organized into several columns and sections:

- Find it Here:** Includes a search bar with a "Go" button and radio buttons for "This web site" and "Catalog".
- About the Library:** Lists "Hours and locations", "Library shop", "Donate/Volunteer", and "Employment".
- What's Happening:** Lists "Today's events", "Event calendar", "Class listings", and "Library renovations".
- Customer Services:** Lists "Your account", "Get a library card", "Borrowing policies", and "Renew materials".
- Discover More:** Lists "Bestsellers", "Latin American food", "Homework help", and "Genealogy research".
- Resources:** Lists "Catalog", "Databases", "Topic guides", and "Lists".
- Special sites:** Lists "Kids" and "Teens".
- Departments:** Lists "Job and Career Education Center", "Pennsylvania Department", and "Business and Foundation Center".
- News:** Features a "Lorem ipsum" placeholder and a "Did You Know?" section about a collection of more than 10,700 musical scores.
- Library Shop:** Promotes the library's shop, stating that purchases help support the library's programs and allow for the purchase of more books, CDs, and DVDs.

Consistent across "user interfaces"  
from website to physical site...





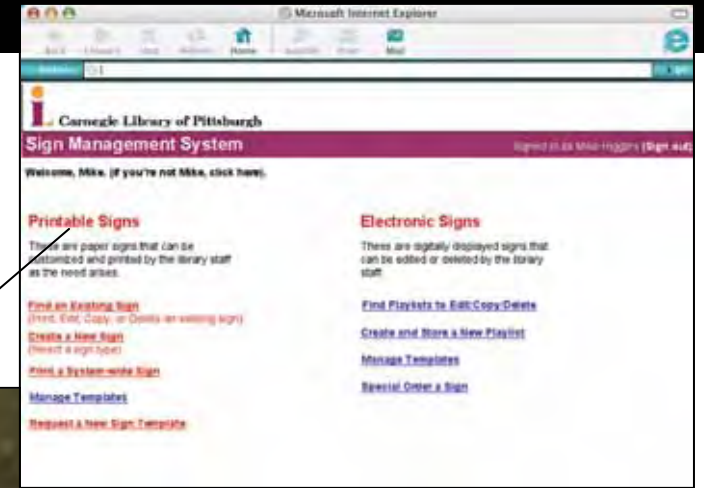
"Free to the people" since 1895



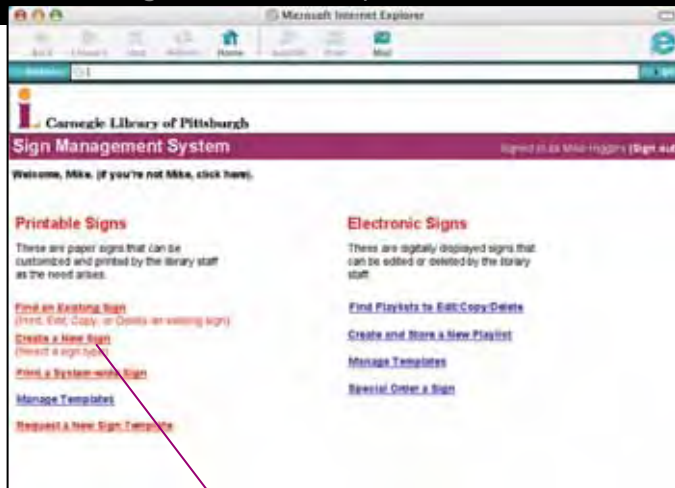
Examples of actions a perform right here...



Circulation desk = Customer Services



Librarian gets numerous questions about the sorts of on-line databases CLP has... we decide to make a new "did you know?" sign...



we fill out template...

...that you can look up the latest articles in health publications in our online subscription databases?

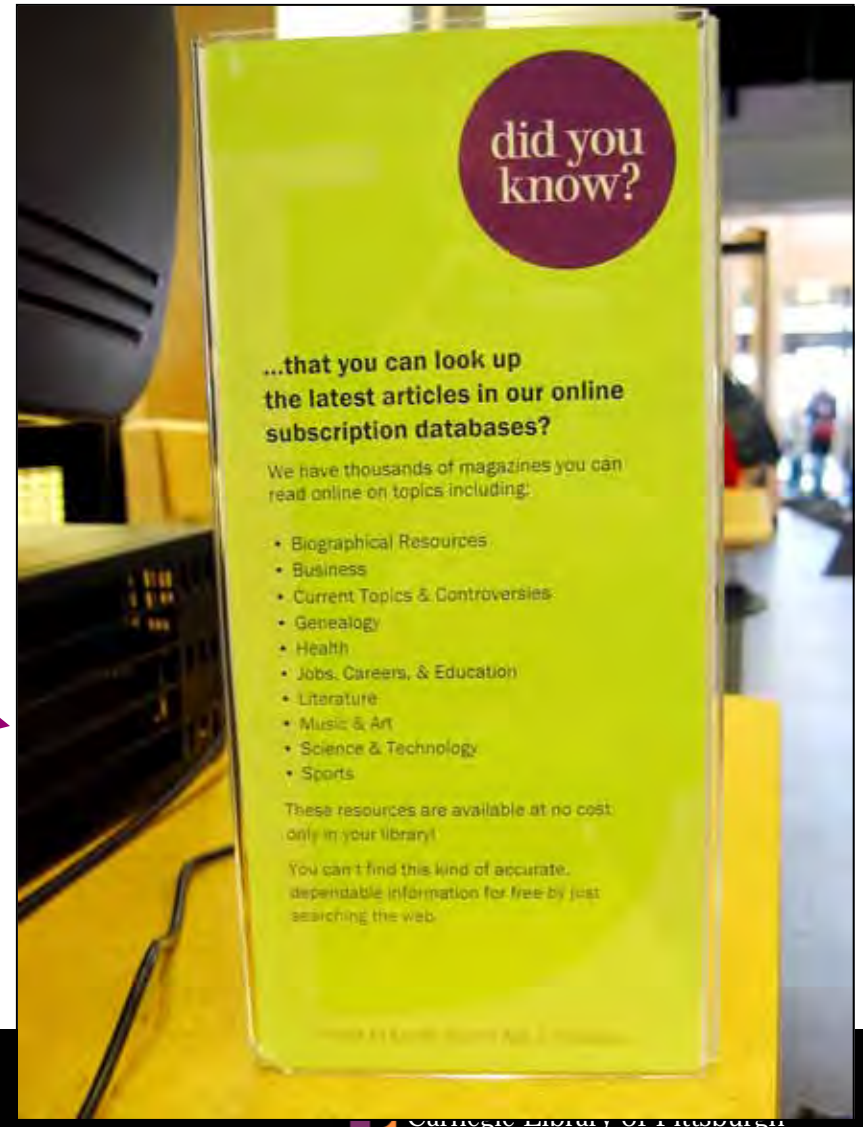
We have thousands of magazines you can read online on topics including:

- Addictions
- Aging
- Alternative Medicine
- Cancer Resources
- Sports Fitness
- Heart Health
- Medicines and Supplements
- Men's, Women's, and Children's Health
- Preventative Care & Diagnostic Tests
- Surgery
- Thousands more ...

These resources are available at no cost only in your library!

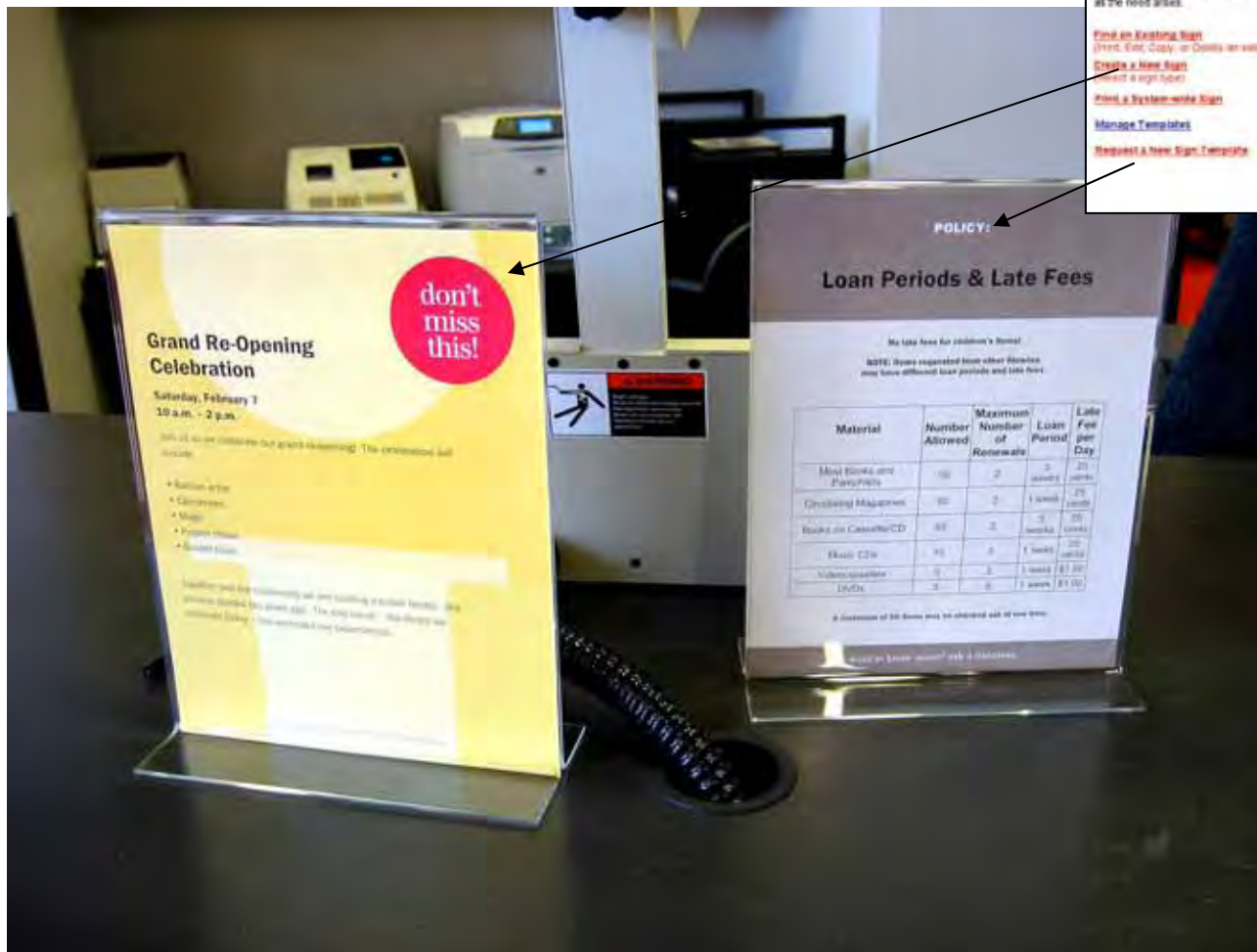
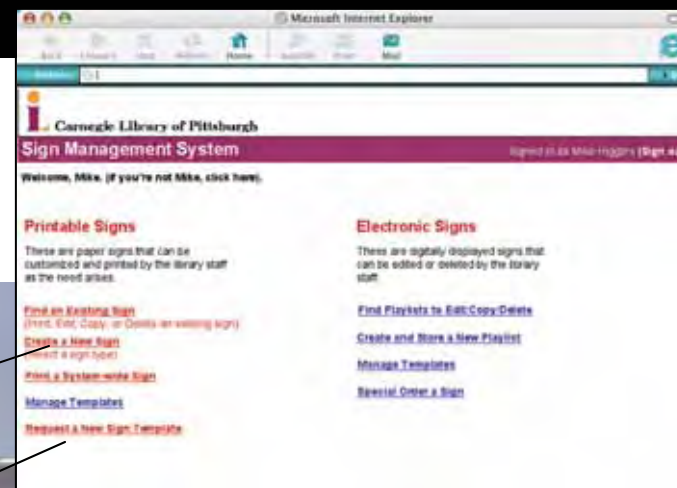
You can't find this kind of accurate, dependable information for free by just searching the web.

And print it out on "did you know?" paper



"Free to the people" since 1895

Different “kinds” of information signs have different templates...







"Free to the people" since 1895



## Dynamic signage (publishing fresh daily...)

- Dynamic, electronic information to announce:
  - Programs
  - Collections
  - Special departments
  - Did you know factoids
  - Policies and procedures
  - Answers to intriguing reference questions
  - Interactive reviews, polls, etc.
  - Reader enrichment
  - And much more!

# Dynamic signage

- Exposes library resources that were previously hidden
- Helps customers connect with many areas and resources



“Free to the people” since 1895



"Free to the people" since 1895



ask a  
librarian

I can help you:  
find information  
choose books  
locate materials



“Free to the people” since 1895



# How does Information Architecture influence *staffing*?

- Five areas of user activity
- Springboard into the collection
- Gain access to additional information and make new discoveries

## IA and *staffing*

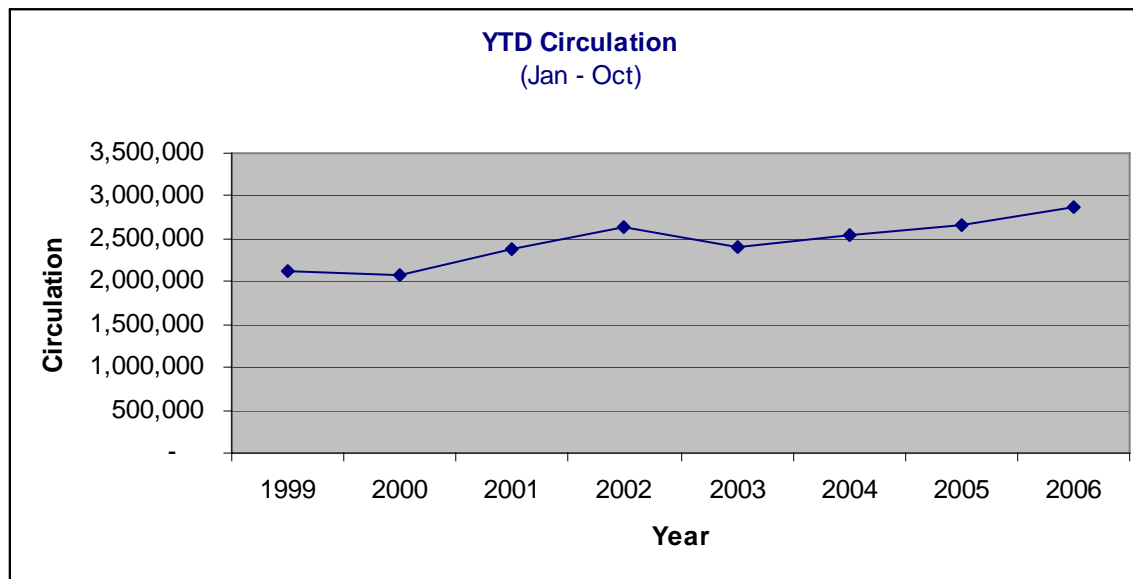
- We're creating a unique atmosphere, even a spirit.
- We're identifying 21<sup>st</sup> Century customer service expectations.
- We're creating a new type of teamwork for managers and staff.
- The team works together to create and develop the new library.

# Information Architecture and the library experience

- Library as a destination
- Many more users
- The library is easy to use and understand.
- No “secret handshake” is necessary.

## Results of the renewal?

- Children's and Teen print circulation up 187%
  - Hazelwood Library
  - Since reopening in Nov. 2003
- Visitors up 36%
  - Brookline Library
  - Since reopening in Feb. 2004
  - Over 1,100 library card registrations in Feb. 04
- Children's and Teen print circulation up 112%
  - Hazelwood Library
  - Since reopening in May 2004



## Results so far?

Brookline STAFF

We would love your comments about our  
New Library

Good work

It's awesome

look's great!

This is the coolest thing I have ever  
seen ever in a library! ~~Danny~~  
Also the chairs seats & computers are  
really nice & comfy, (Danny) S.

It's hard to believe it's the same bldg.  
Thanks to all who made it possible.  
It's an asset to our community.

Good Job!!

“Any medium powerful enough to extend man’s reach  
is powerful enough to topple his world. To get the  
medium’s magic to work for one’s aims rather than  
against them is to attain literacy.

Alan Kay

# Information Architecture & Customer Services URLs

- <http://www.carnegielibrary.org/presentations/>
- <http://libraryjournal.com/article/CA6312505.html>
  - Beth Dempsey, "Power Users," *Library Journal*. Vol. 130 No. 20. December 2005. p. 72-75.



# Your presenter

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