# Understanding the Personal Info Cloud:
## Using the Model of Attraction

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# Overview

- Why Model of Attraction

- Overview of InfoClouds

- Understanding the Model of Attraction

- Using Model of Attraction to aid the user's Personal InfoCloud

# Why the Model of Attraction (MoA)

- MoA is a framework describing:

  - Interaction of users & digital information

  - The physical properties of digital information

  - Users finding, storing, and reusing information

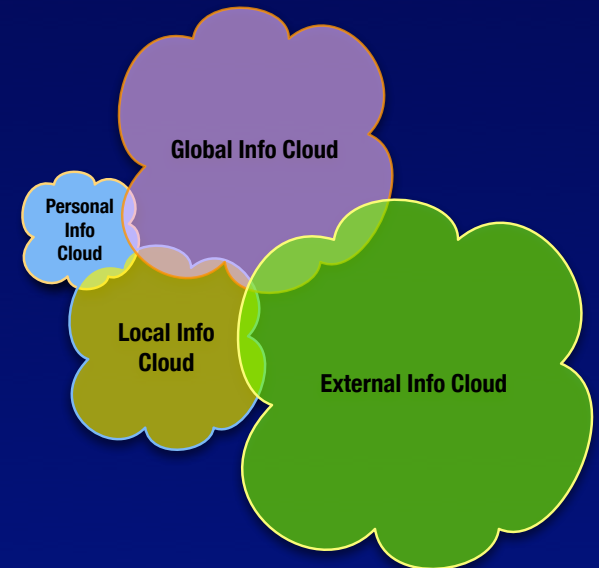- Outline of a user's needs and desires in information life cycle

# In the Beginning

**Internet**

# Now More Cloudy

# Global InfoCloud



Global Info Cloud
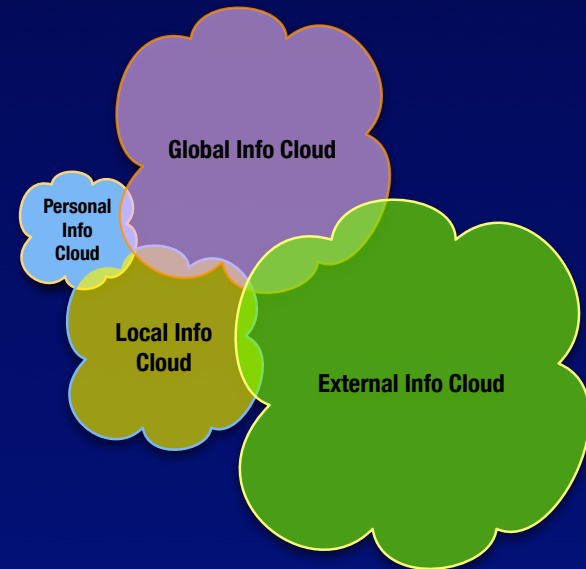
Personal Info Cloud
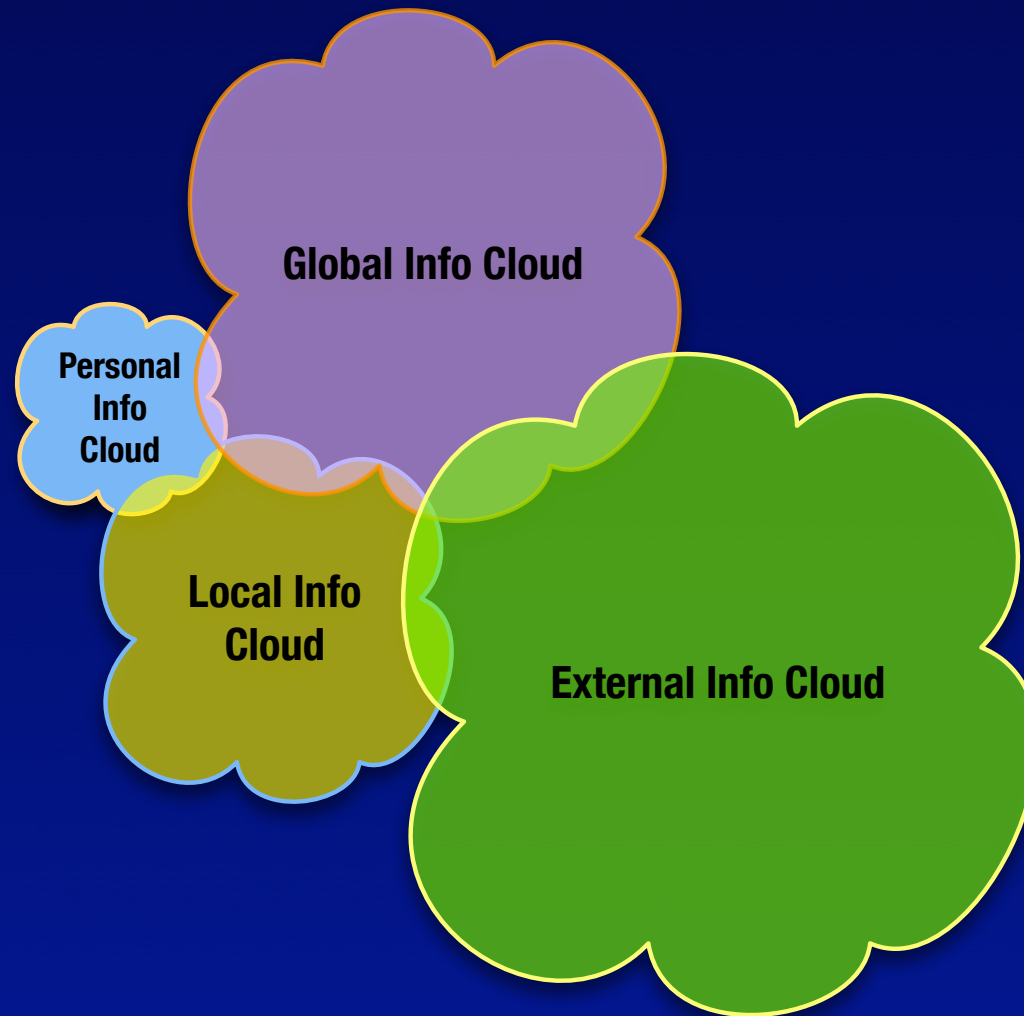
Local Info Cloud

External Info Cloud

- Internet

- Attributes:

  - Access to info from anywhere

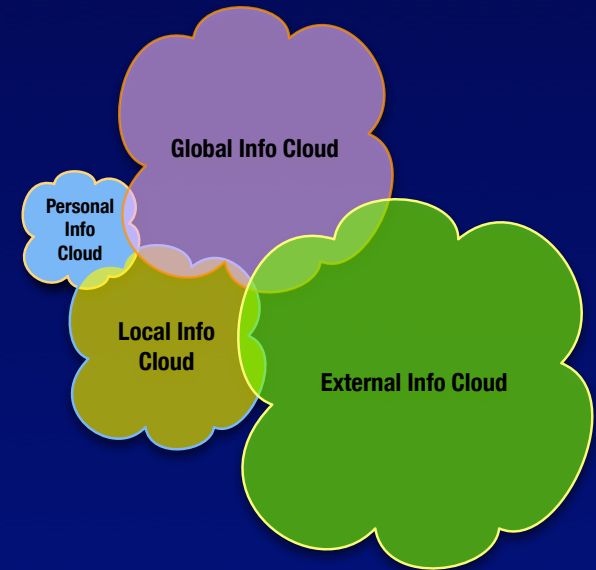  - Not user organized

  - Not user controlled

# Local InfoCloud

- LAN/Intranet

- Location and/or membership based network

- Attributes:

  - Access to info by location or membership

  - Not user controlled

  - Not user organized, but often user is familiar with structure

# External InfoCloud

- Information Repository the user does not have access to

- Behind a firewall

- Location-based

- Membership access

- Information and knowledge sharing is difficult

Global Info Cloud

Personal Info Cloud

Local Info Cloud

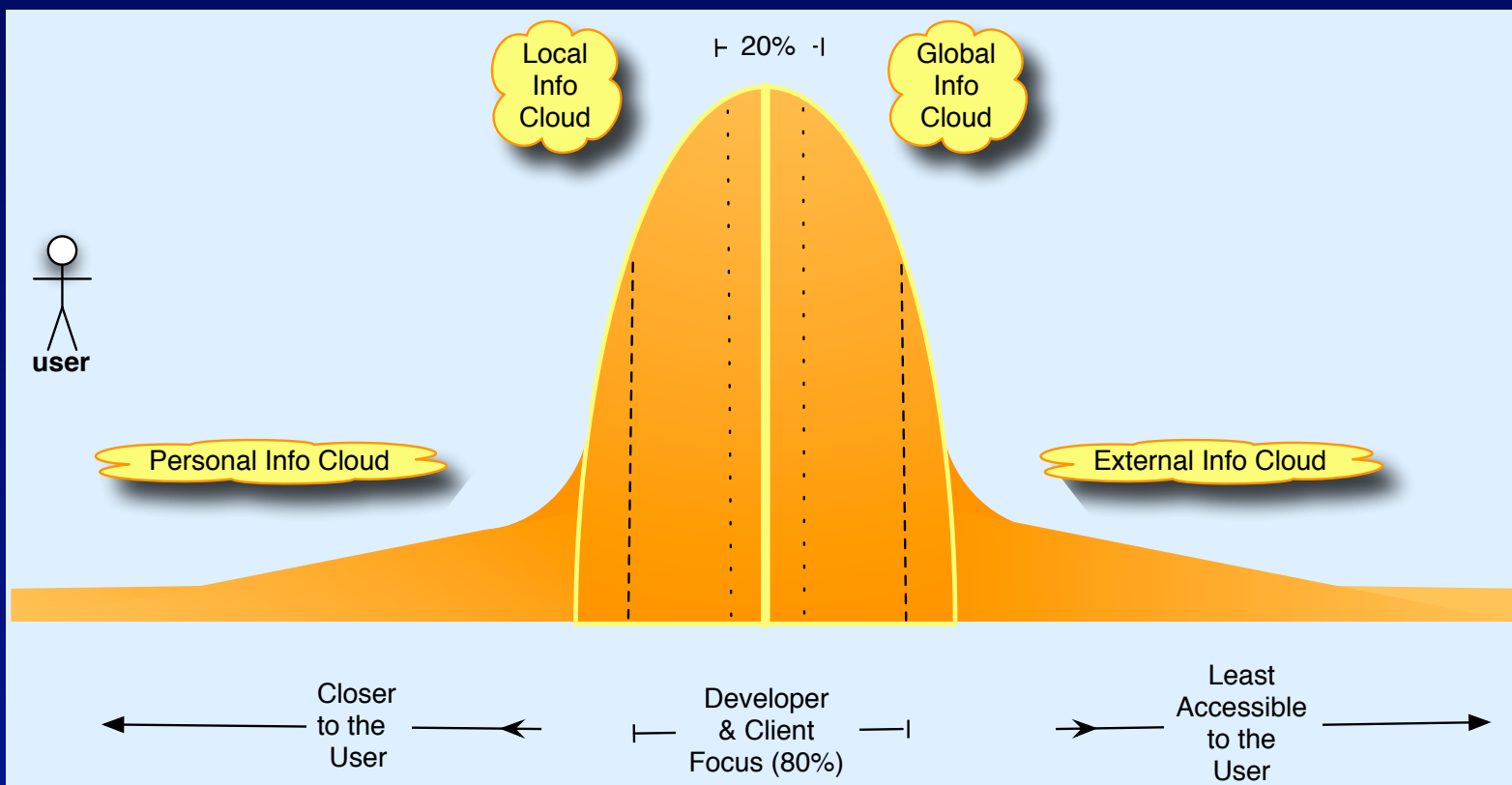External Info Cloud
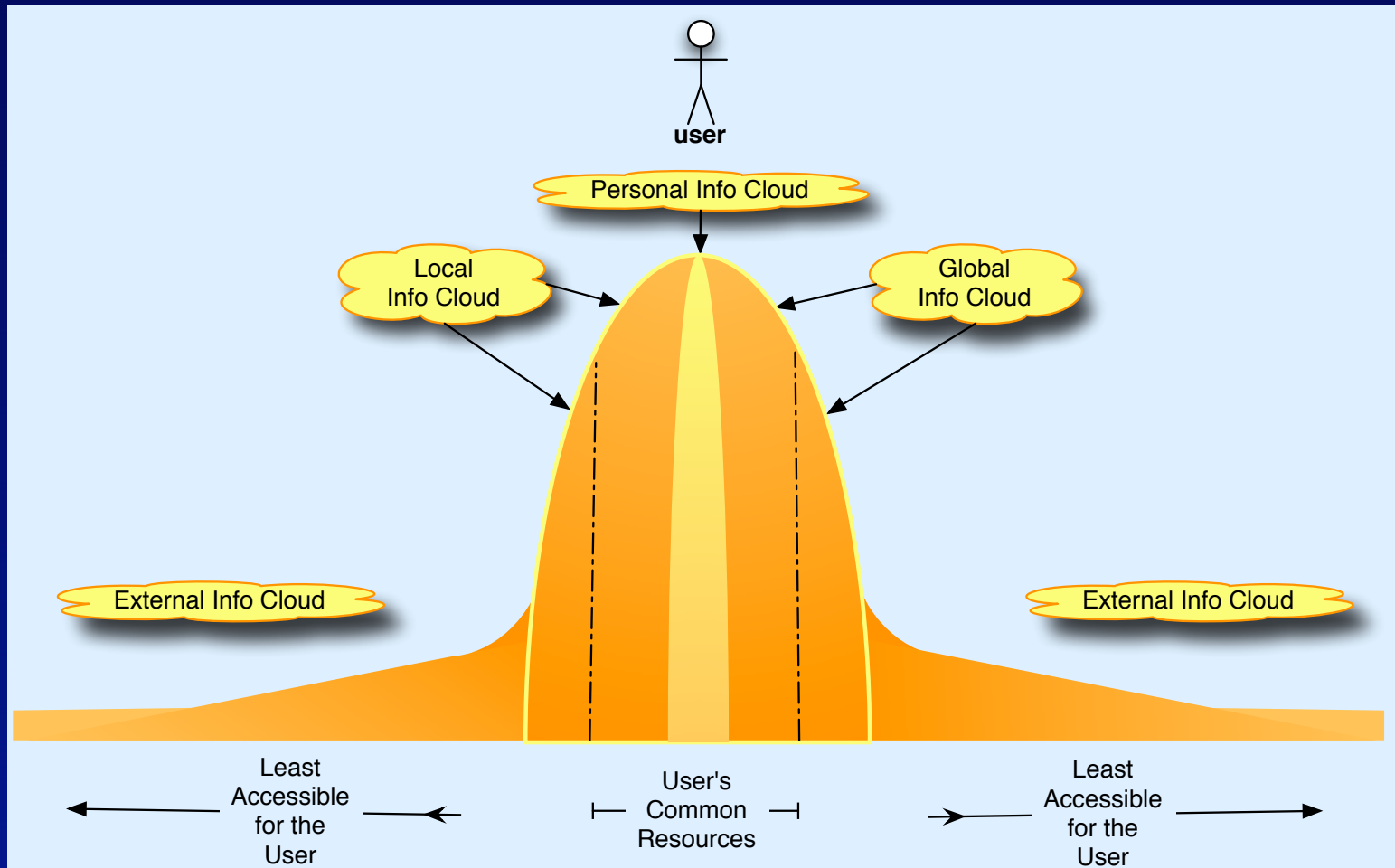
# Personal Info Cloud

- User's information repository

- Attributes:

  - User organizes & controls information

  - Portability (information follows user)

  - Easy access to information

  - Information agregation
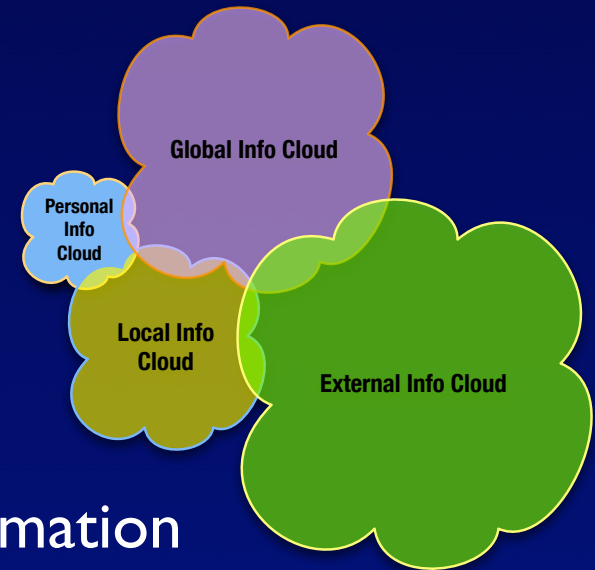
# Developer's View of Information World

# User's View of the Information World

# Navigation –
# Living in a Box

- Navigation is used to define the path between the user and information

- Navigation as a metaphor, breaks quickly once one leaves browsing within the site

- Counter to spacial navigation:

  - On the Web we do not go places

  - Information and digital elements come to us

# Why Attraction?

- Literal description of user interaction with information in an information application and beyond

- Literal understanding of getting information and people together

- Two-way attraction: User drawing info closer, as well as user attracted to terms and presentation layer

- MoA is easy to understand for non-initiated

- Encompasses browsing, searching, interface design, portals, personalization, content management, information access, mobile information use, knowledge management, etc.

# Phases of Attraction – Information Use Cycle
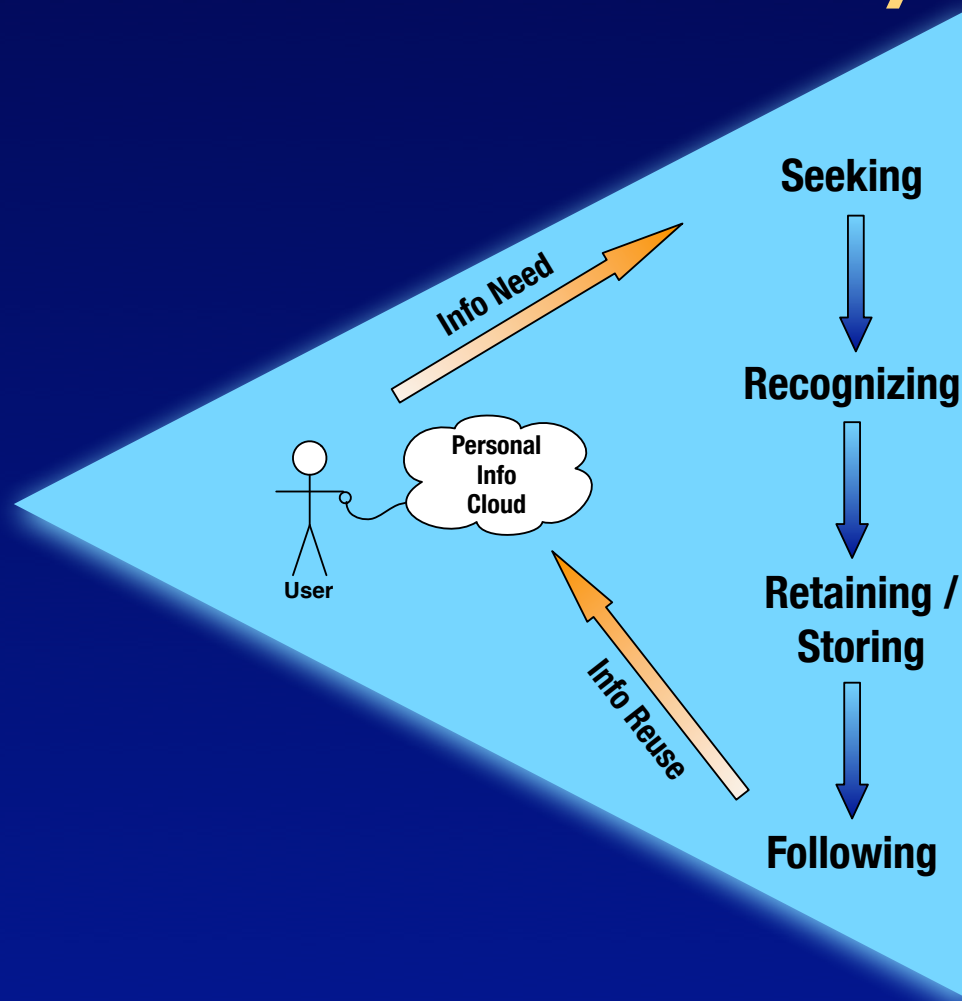
# Seeking
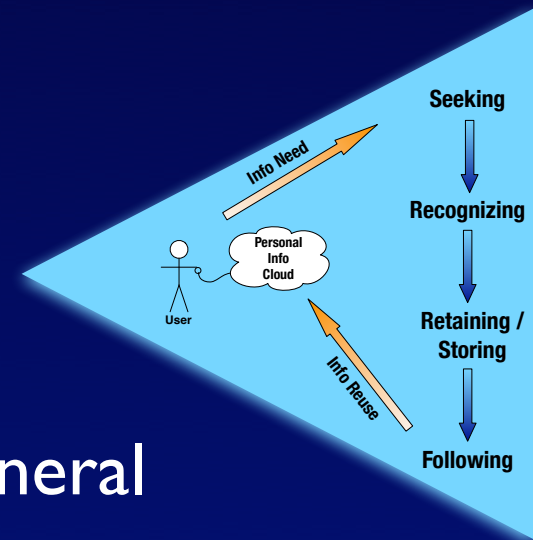


- User tries to get specific or general information

- Uses hyperlinks, search, browsing, stored resources

- User has a mental model of the properties of what they are seeking

# Recognizing
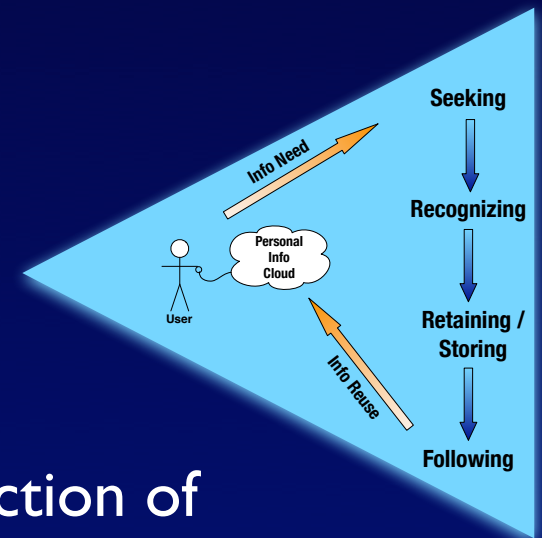


- As new information arrives on the screen the user interprets and assesses the attraction of the elements to the user's mental model

- Attraction based on vocabulary and relation of terms to what is being sought

- Visual presentation can add or detract from the attraction

- User must be able to find the related terms and believe the information is drawing closer

# Retaining/Storing



- How does the user consume the information?
  - User prints, e-mails, copies, bookmarks, blogs, stores in data repository (database, etc.), enters in PIM (calendar, address book, etc), uses personalization system on a site/portal, adds to wishlist, enters in project tracking
  - User chooses if and how to store the info
- The Web downloads information into the browser's cache, often by default
- User may want add their own attractors to the information (metadata or annotations to ease reuse of the information)
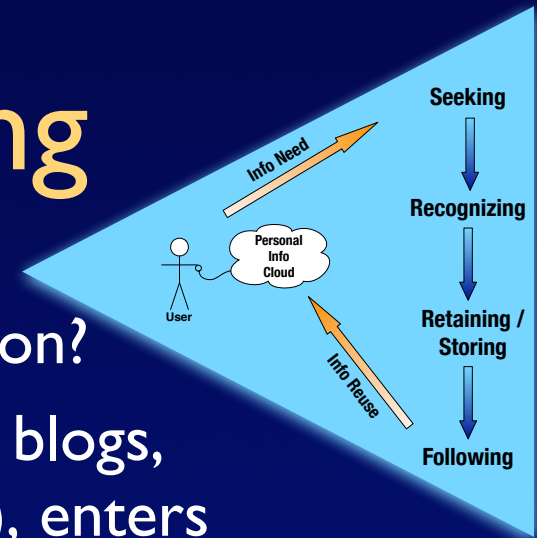
# Following
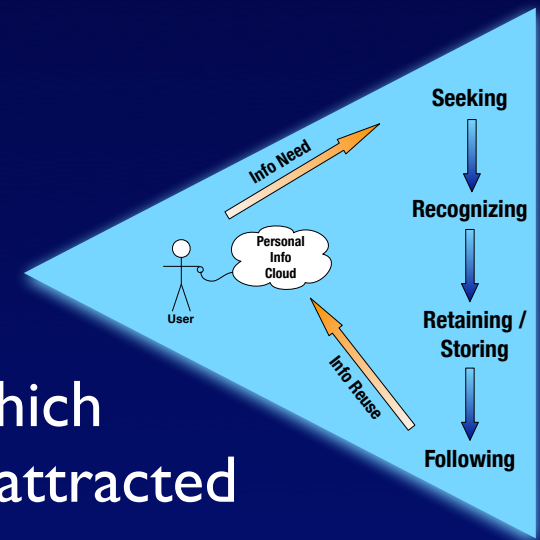


- Users manage their Personal InfoCloud, which stores information the user wants to stay attracted to them and follows them

- Users prefer to have the information follow when it is needed, so it can easily be reused

- Methods of Following: Synch PIM to a mobile device, mobile access, weblog, personalized portal, mobile internet, wishlist, automated e-mail/voicemail reminders, talking house/furniture/car, GPS or other location-based service

# Attraction Receptors
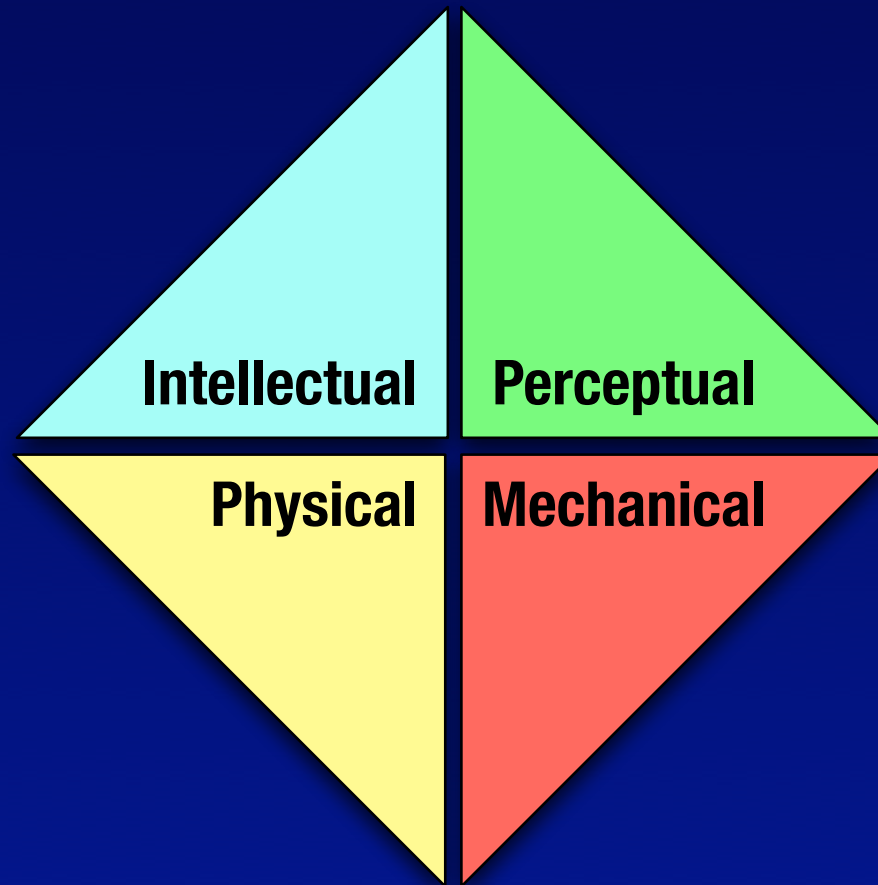
# Receptor: Intellectual (Cognitive)

**Intellectual**

- The user seeks based on their terminology/lingo and current understanding

- User will continue to draw information to them if they believe they are getting closer to an exact match

- Users have preconceived ideas of the results and filter information based on these models

- Classification systems are built are based on the cognitive attraction terms based on the user's definition of those terms

# Receptor:
# Perceptual (Sensory)

**Perceptual**

- Visual, auditory, and writing style cues may have an effect on the user interaction

- The user has preconceived ideas of the of visual and auditory presentation form & style

- What are the norms the user expects and norms for that type of information

# Receptors: Mechanical (Digital)

- The algorythms that drive search engines in one example of digital attractors

- There are a multitude of aggregators that seek out information to bring the information closer to the user or only draw information that matches certain criteria

  - RSS (pull)

  - Personalized news (push)

# Receptors: Physical

- A user's personal physical capabilities (sight or motion limitations) can inhibit access to information
- Devices are conduits to and repositories for information
  - Devices can aid or inhibit access to information
- Users are continually trying to attract and keep desired information closer to themselves
  - Synching devices permits and mobile access provide pervasive access to information
- Location can have an impact on access to information

**Physical**

# Receptors: Physical

- Users set parameters of attraction for the information in their devices determining which information should have a strong attraction to the user

- Mobile devices provide a consduit for the Personal InfoCloud information to stay attracted to the user

- Users prefer to have information in formats that work easily with their receptors

# Understanding Attraction

- Attraction brings common elements together by grouping and defining through similarity

  - Defining users

  - Defining information

  - Defining information usage

  - Attraction needs a catalyst

    - Words are common attractors for Web site users

# Understanding Attraction

- Attraction also involves repulsion

    - Users not finding information (good and bad)

    - Repulsion of unwanted information also helps users find what they are seeking in a smaller collection of information

    - Repulsion helps define an element as much as attraction

    - Repulsion is a discriminator

# Optimizing Attraction

- Attraction need the ability to have some draw between the two elements

  - Clear sight: A user can not be attracted to an element if the element is obscured

  - Proximity: A magnet only has a certain range that will pull the elements toward it

- Cognitively attraction can be optimized with crosswalks between sets of information -- Attraction and Personalization

- Focus on optimizing for receptors

# InfoCloud Discriminators

- Accessibility of information

  - Portable information

  - Location-based

  - Ubiquitous access

  - Information format

- User control of the information

- User categorization

# Attraction & Personal InfoCloud

- The user is interested in more than just getting the info in front of them

- What applications do the users use

- What standard formats should the information conform

- What location is the information used

- How will the user be able to add their own categories and/or metadata

# Attraction & Personal InfoCloud

- Information following the user

  - Setting what you want to follow you

  - Easing the ability to have like information to be drawn to proximity

  - Proximity to information sources can change preferences or strength of the attraction

- Stronger attraction with more narrow focus is needed for portability of information

# Summary

- Focus on the user and their information use cycle

- Focus on making information reusable

- Keep up with conventions and standards

- Let the user control their information

- Attraction works to draw closer and repel, for clarity of the information that is wanted and needed

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