

Access to Digital Libraries: Close-up and Personal

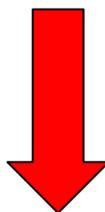
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Rebirth of the Field

DIGITAL LIBRARIES



KNOWLEDGE COMMONS

Future Digital Libraries

Content-centric

Person-centric

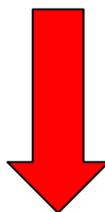
Targeted for static storage

Targeted for active communication/collaboration

Future Digital Libraries

Content-centric

Person-centric



PERSONALIZATION

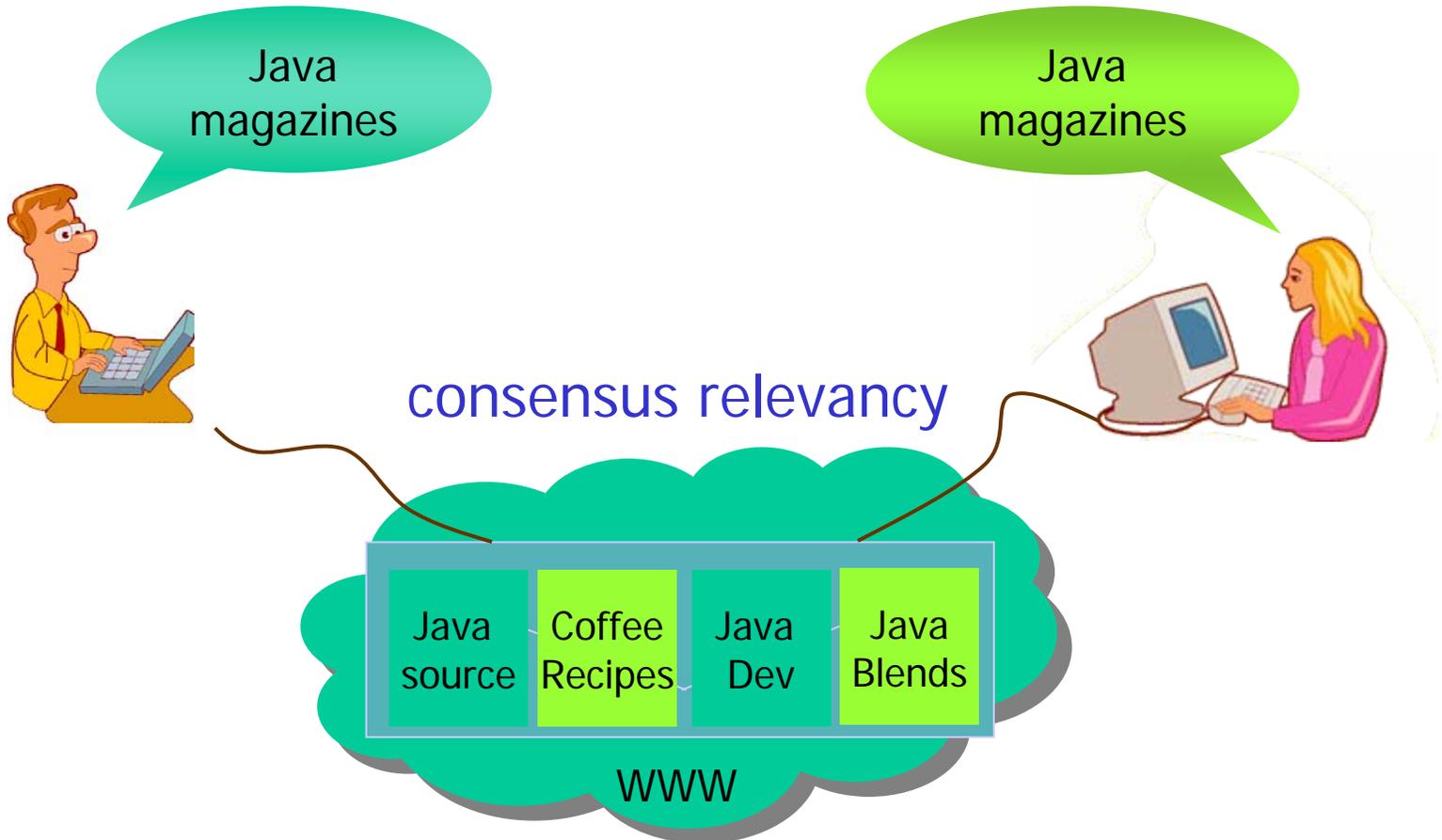
What is Personalization?

Personalization

... providing an overall
customized, individualized user experience
by taking into account the
needs, preferences and characteristics
of a user or group of users.

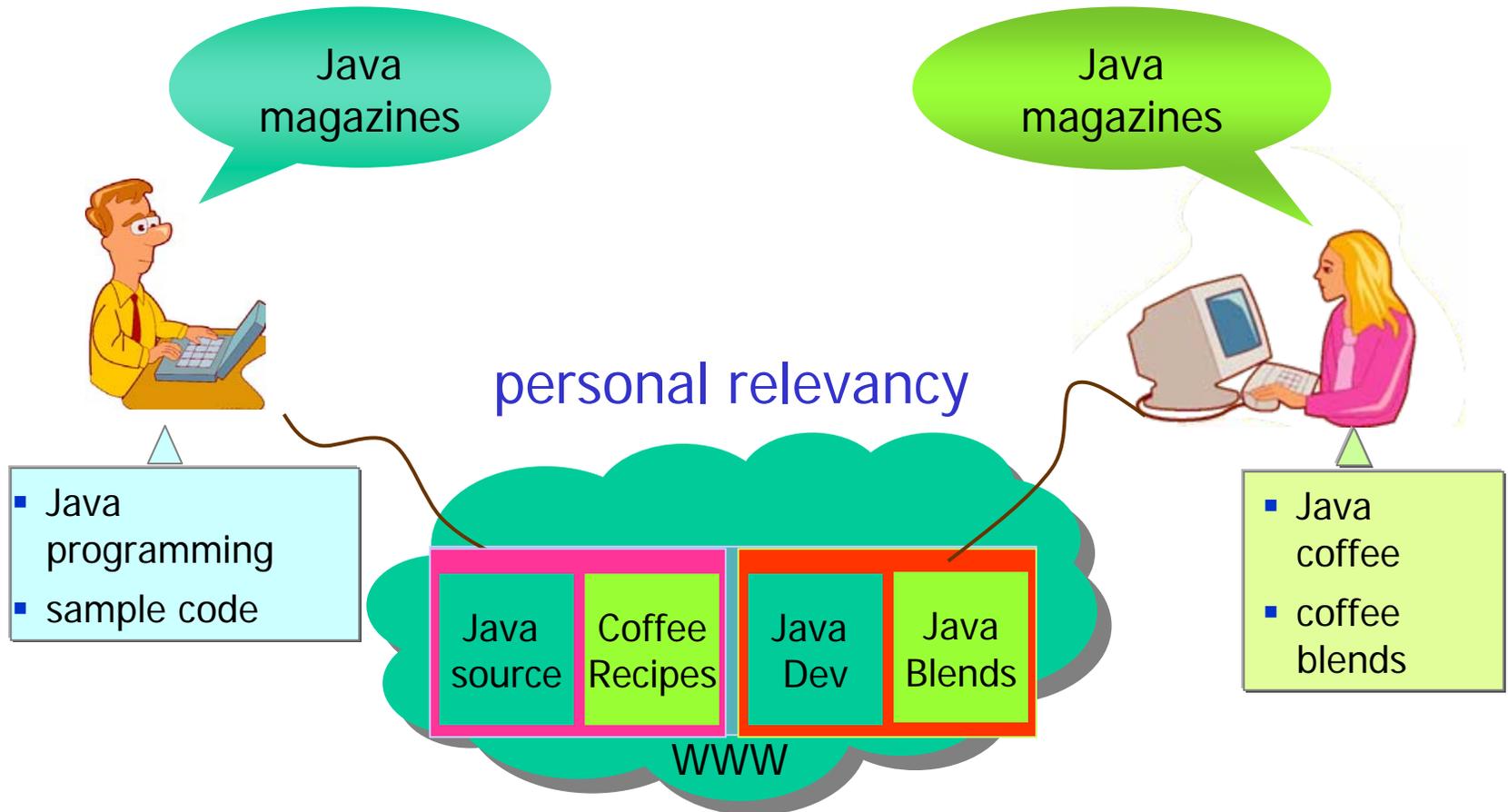
Personalized Search

Search engines are “deterministic”



Personalized Search

One size does not fit all



User Models



Personal data

Id, name, ...

Background

Education, expertise ...

Demographic data

Age, marital status, ...

Behavioral data

Behavior patterns, ...

Preferences

Interests, ...

Accessibility

Disabilities, ...

Transient

Time, platform,
connectivity, location

Preferences



I like W. Allen **very much**

I like adventures only **a little**

I **don't like** thrillers **at all**

I **prefer** a movie duration to be **around** 2 hours

I **prefer** downtown theatres **and** I'm **frustrated** with everything else

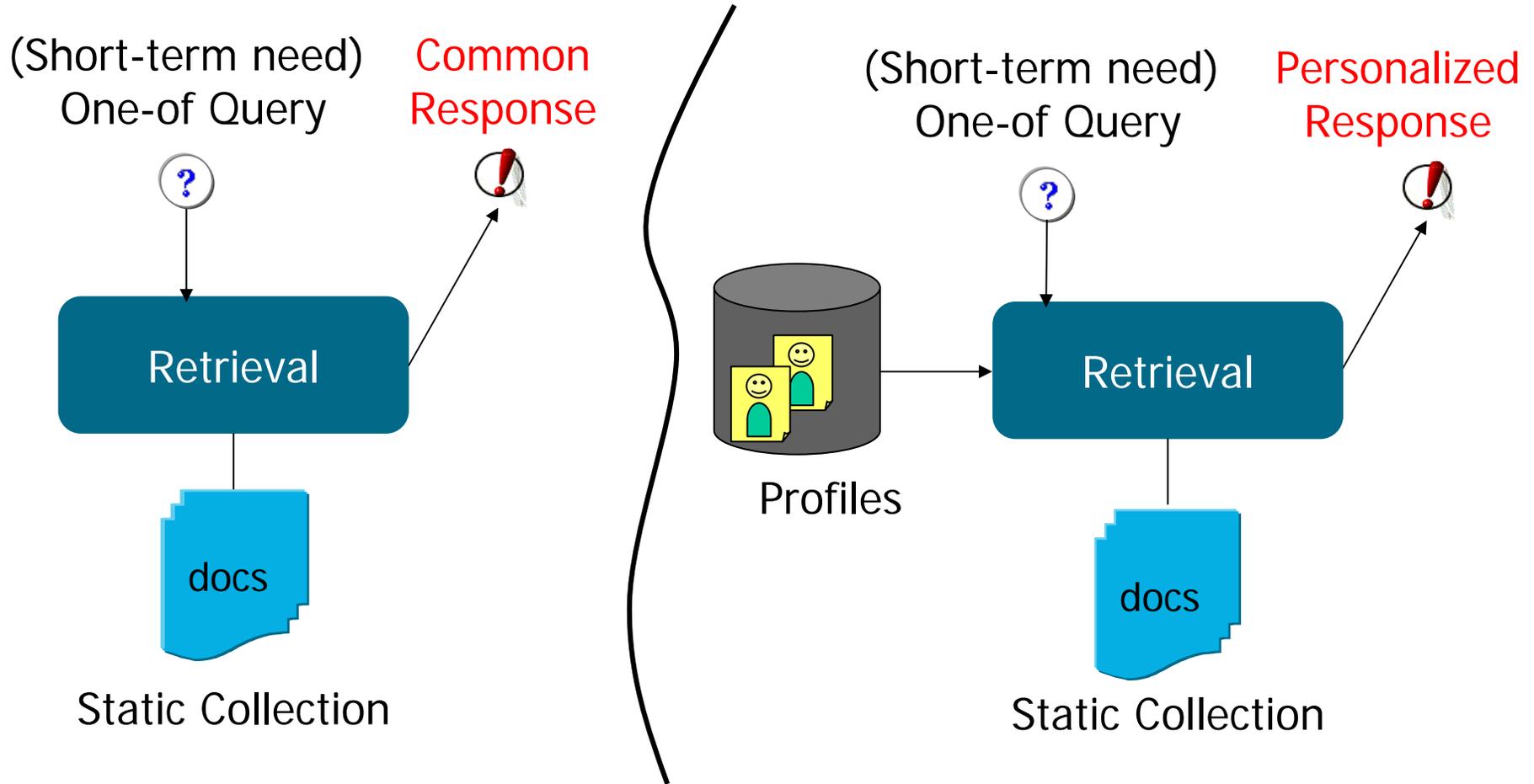
I like movies **without** violence

I'm **interested** in the director of a movie

I **don't care** about the cast

I like N. Kidman **more than** J. Roberts

Personalized Search

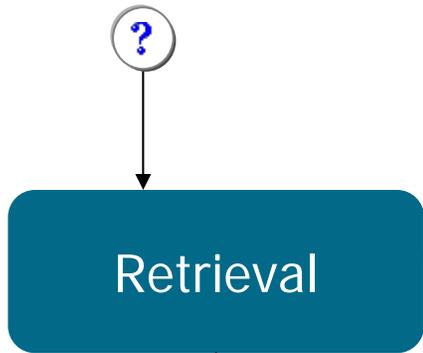


Personalized Notification

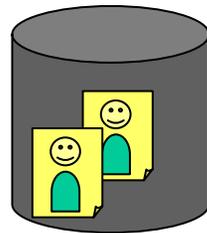
~~(Long-term need)~~
Repeated Query

Explicit
Response

Personalized
Notification



Static Collection

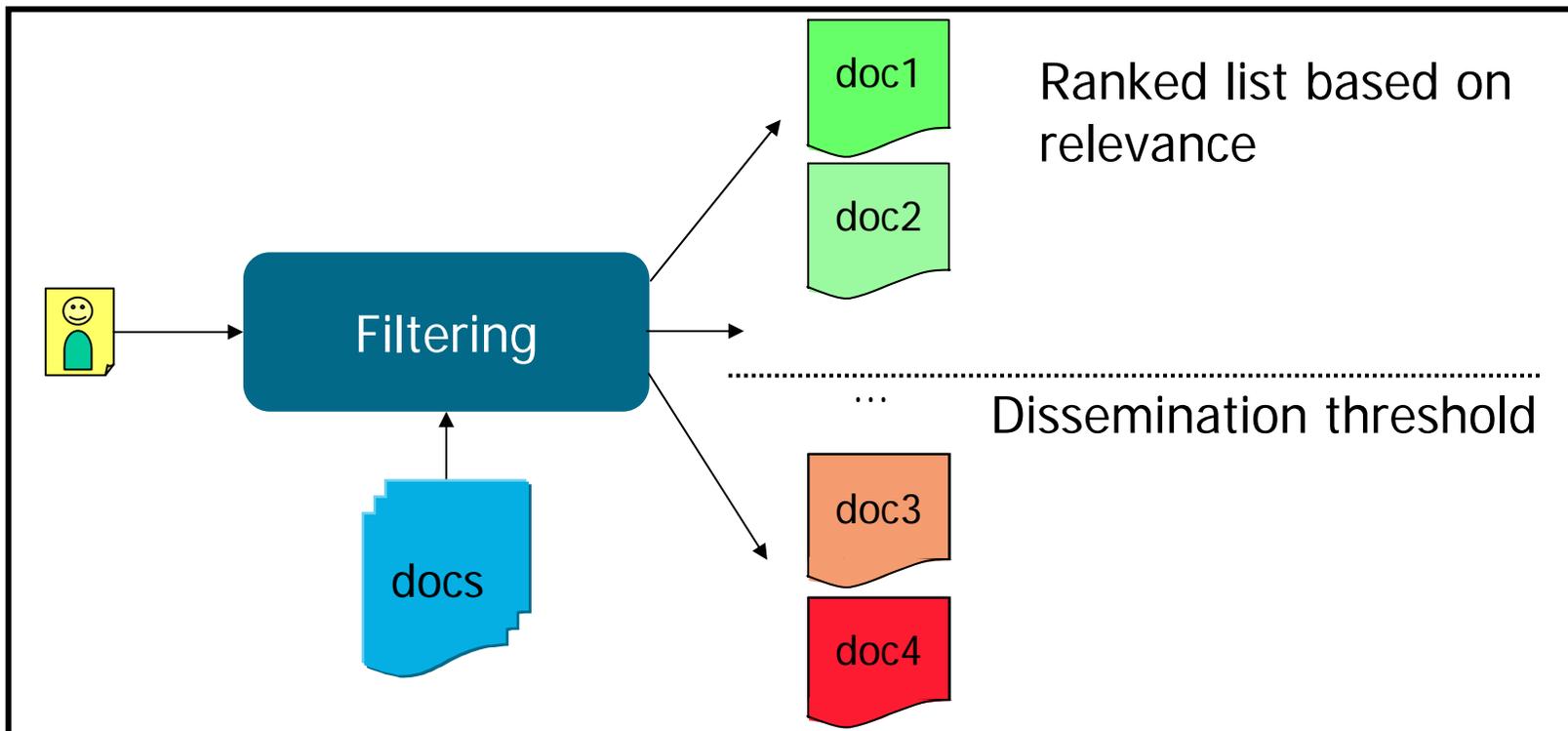


Profiles

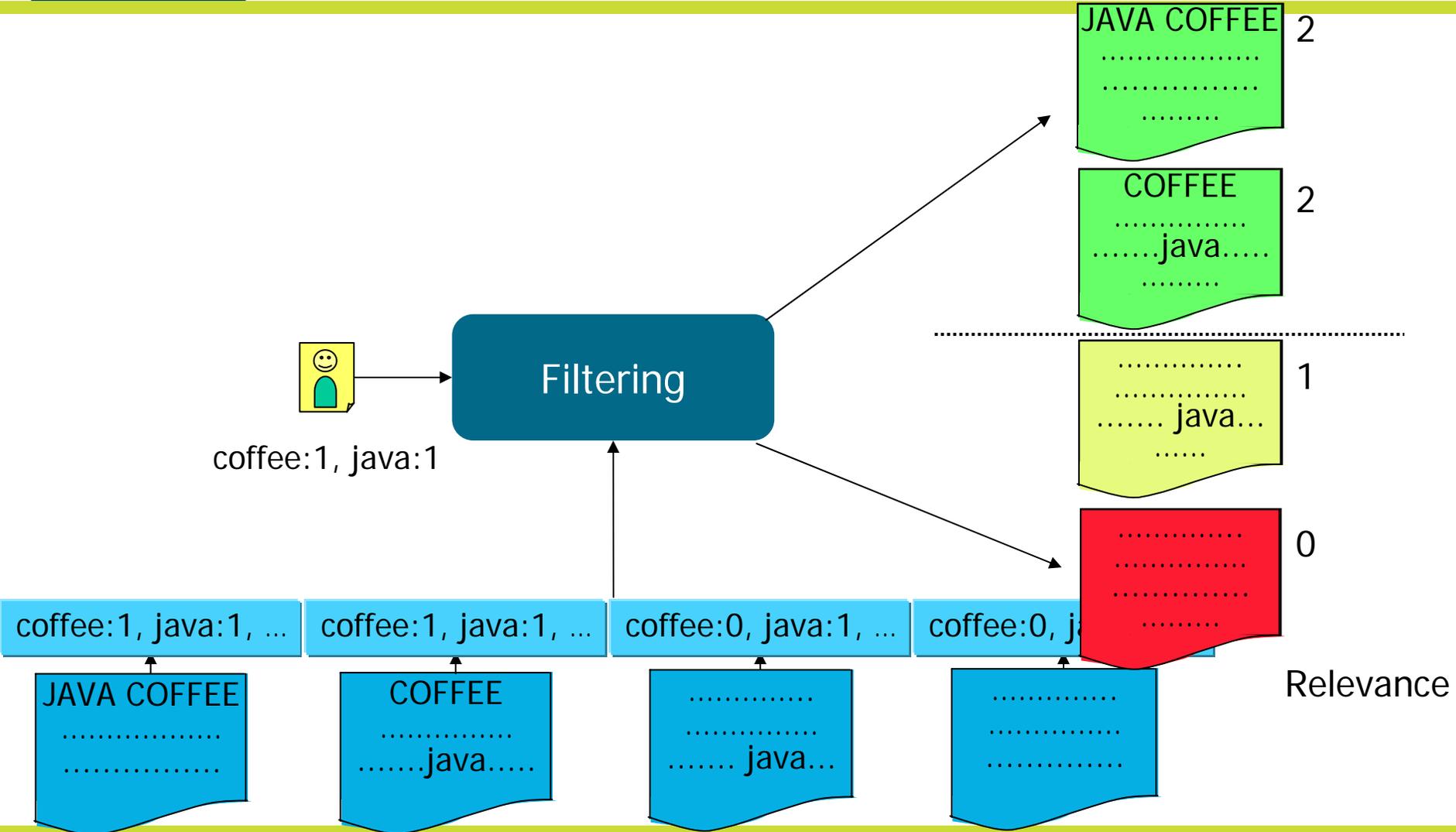


Dynamic Collection /
Stream

Personalized Notification



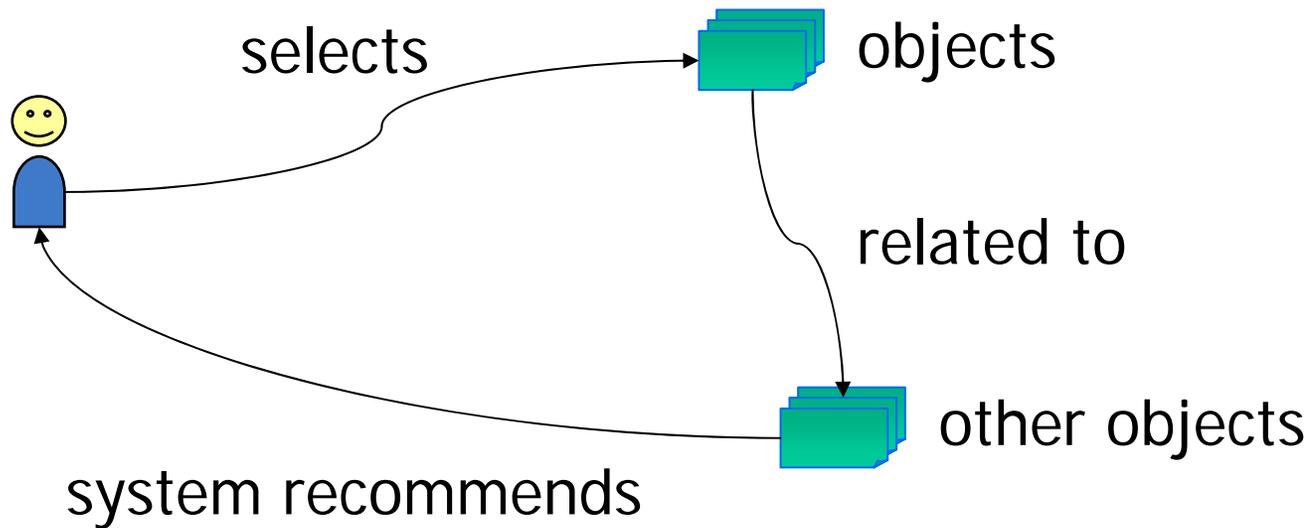
Personalized Notification



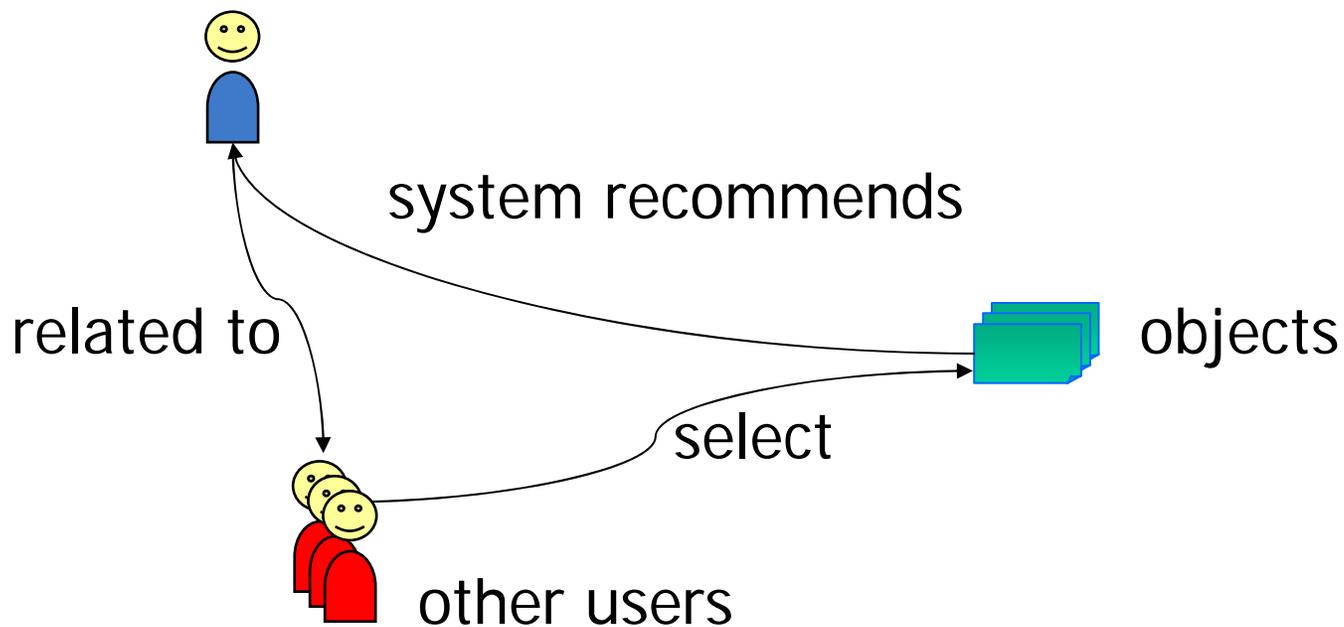
Recommenders

- A **recommender system** is any system that offers information **not requested** by the user but is
- either **similar** information to that requested
 - or information requested by **similar users**

Recommenders

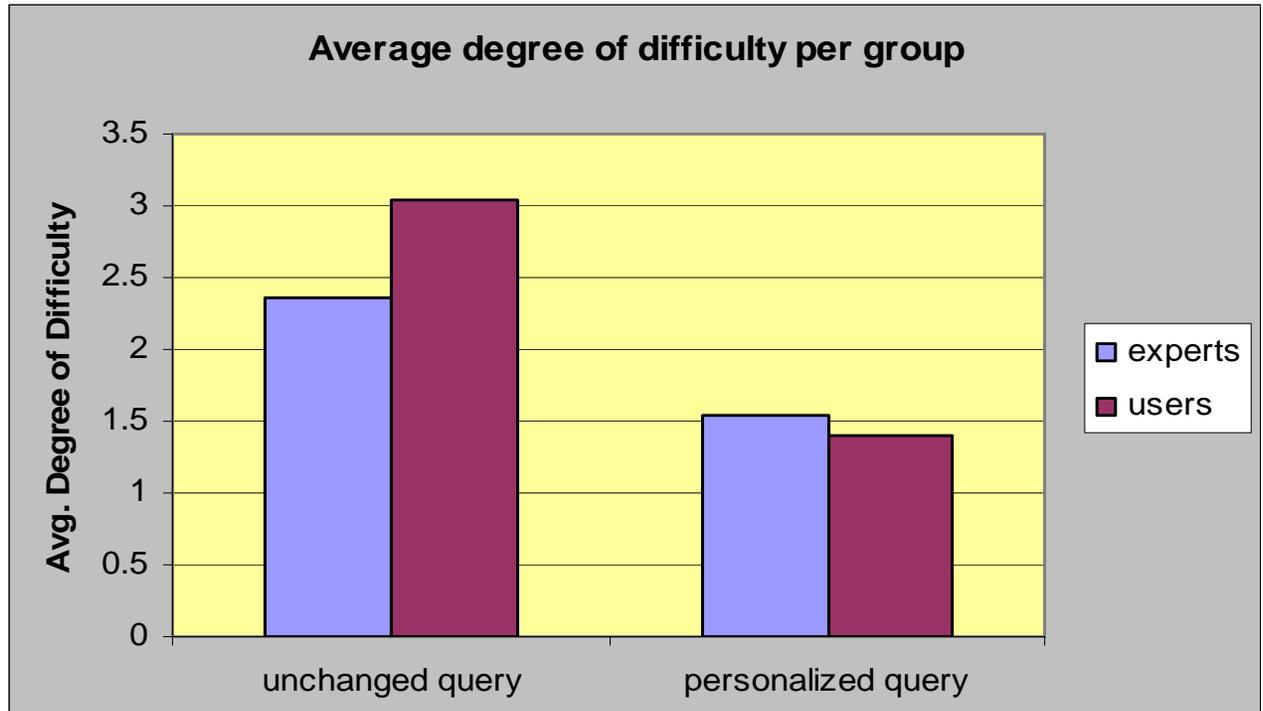


Recommenders



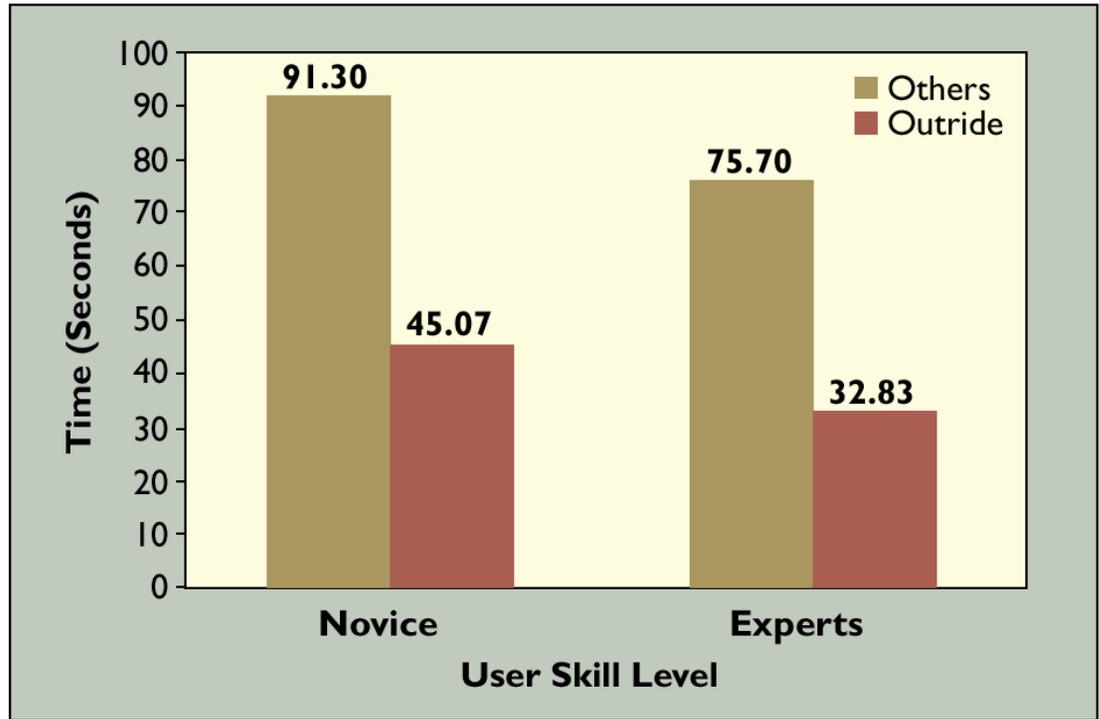
Personalized Search

Evaluation



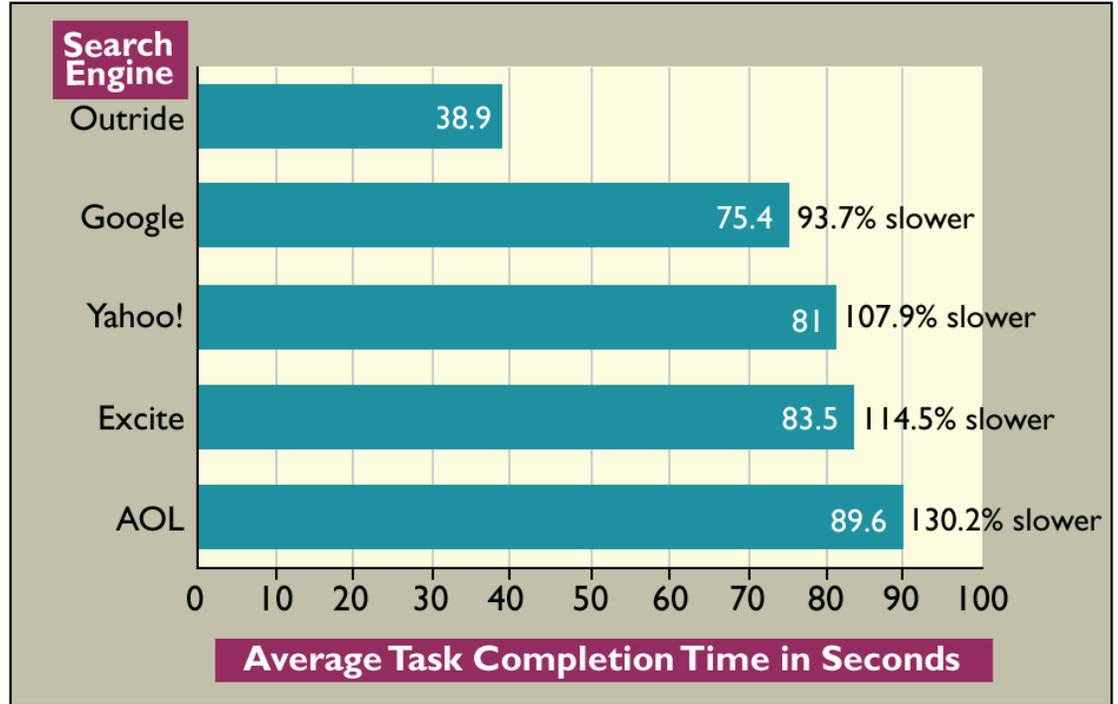
Personalized Search

Evaluation



Personalized Search

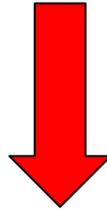
Evaluation



Future Digital Libraries

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Targeted for active communication/collaboration



ANNOTATION