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summer internship@

Middlesex University

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Interactions for people with low literacy and information seeking skills

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Citizens Advice Bureau – in Barnet

What is CAB ?

-- charitable organization

--provides Free, Confidential and Impartial advice

--helps citizens for living a better life

1. Hendon
2. Edgware
3. Finchley
4. Graham Park
5. New Barnet

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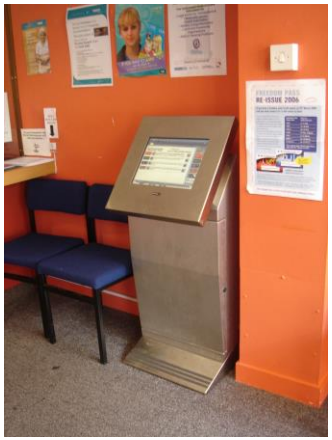
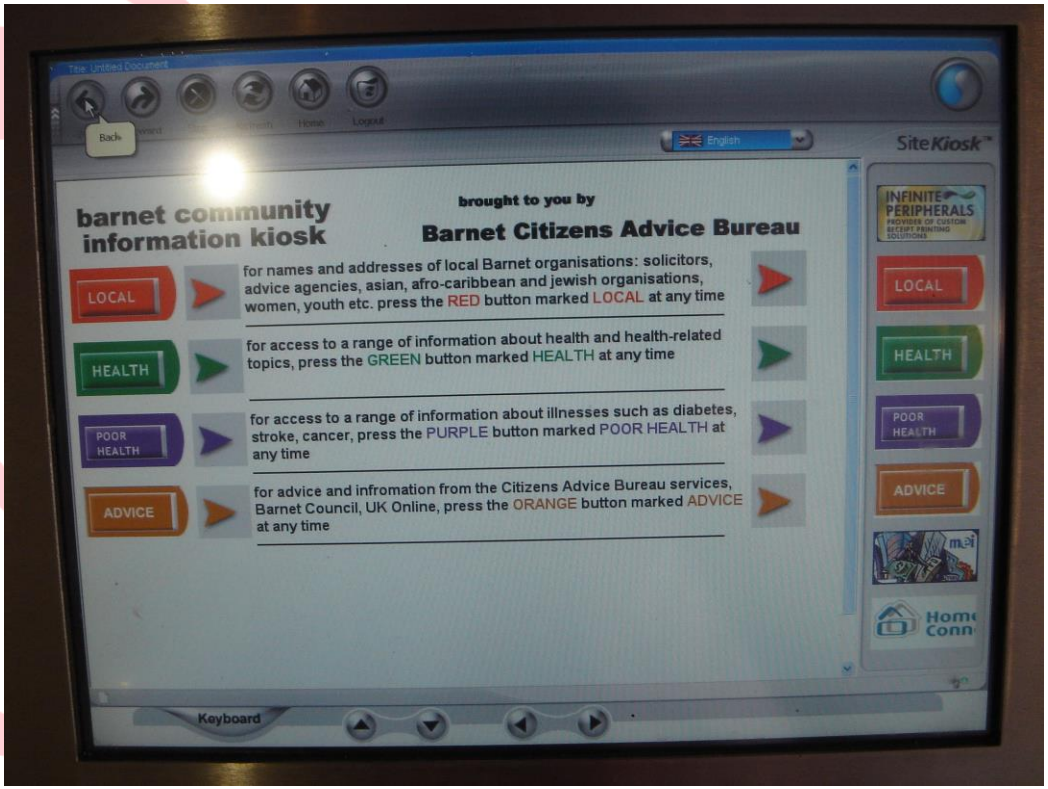
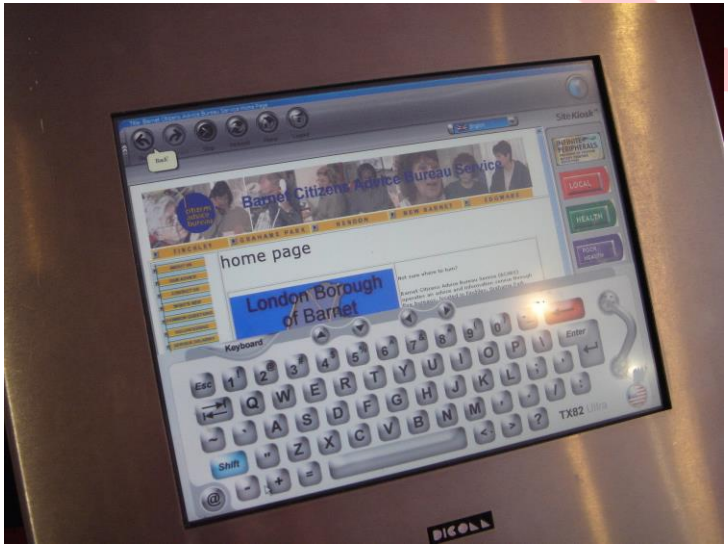
Electronic Advice Kiosk



1. Edgware CommunityHospital
2. Graham Park One-Stop Shop
3. Woodcroft Advice Centre



Information kiosk at Graham Park



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Electronic Advice Kiosk : information Architecture

Works on web portal with links to various information websites

Traditional top down Information Architecture

Higher levels : index and overview information

Lower levels : further details

Information is distribution : 4 levels.

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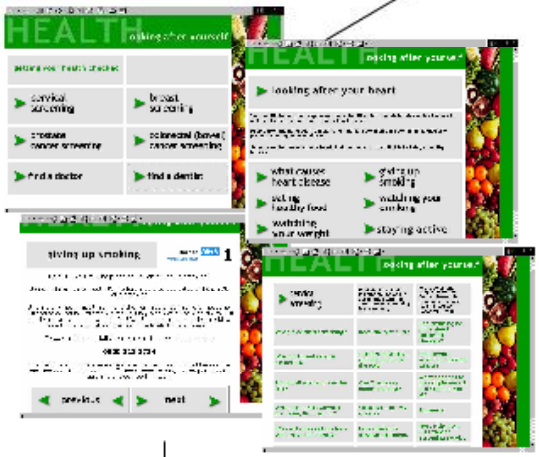
Level 1

Level 2

Level 3



Other organisation websites' homepages

Level 4

Q & A, and Answers

Sub-pages

Q & A, and Answers

Q & A, and Answers

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Information Architecture should have……..

1. Answers rather than link to link approach

The design should be directed at an '**inverted pyramid**' structure, giving answers to questions upfront.

1. Problem oriented information structure as additional navigation mechanism

The client information cluster shows that there are groupings of related and relevant information areas. Hence the navigation system should provide access to **across the silo** information.

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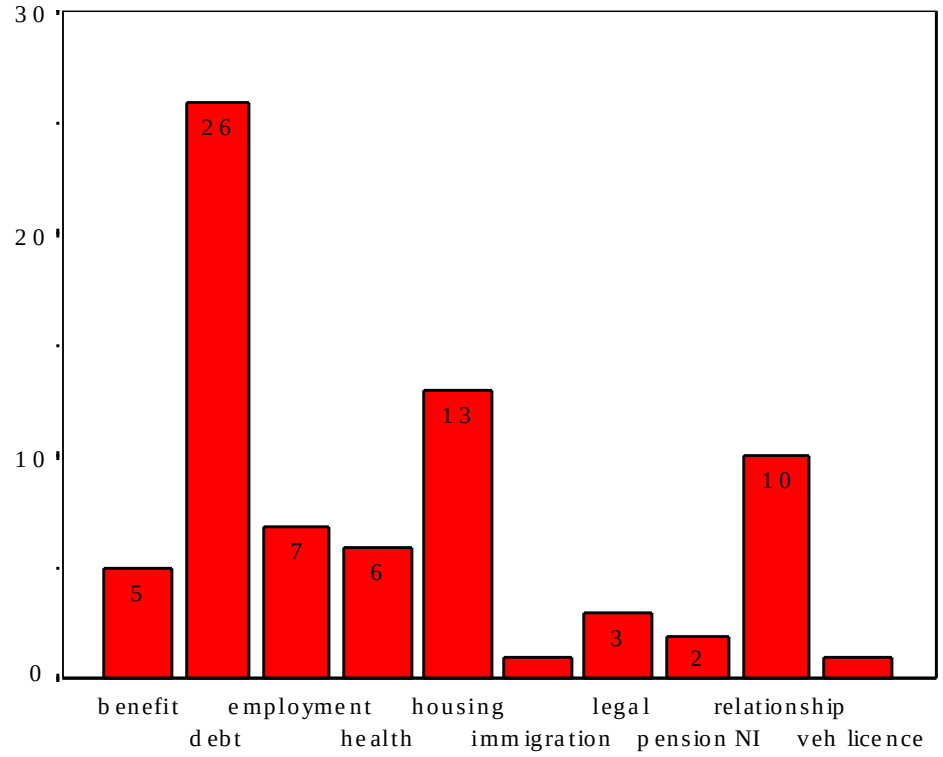
Information Clusters

1. Benefit Cluster
2. Sickness Benefit
3. Unemployment Benefit
4. Debt cluster
5. Employment cluster
6. Housing cluster
7. Relationship cluster
8. Health and benefit
9. Immigration and nationality



Reasons for visiting CAB

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Information Retrieval Models

IR models proposed by (a) T.D. Wilson
(b) Alistair Sutcliffe & Mark Ennis

Most information seeking and retrieval are occasions of uncertainty ---- caused by problem/problematic situation

Search scenario :

a. monitoring
b. following a plan
c. exploratory

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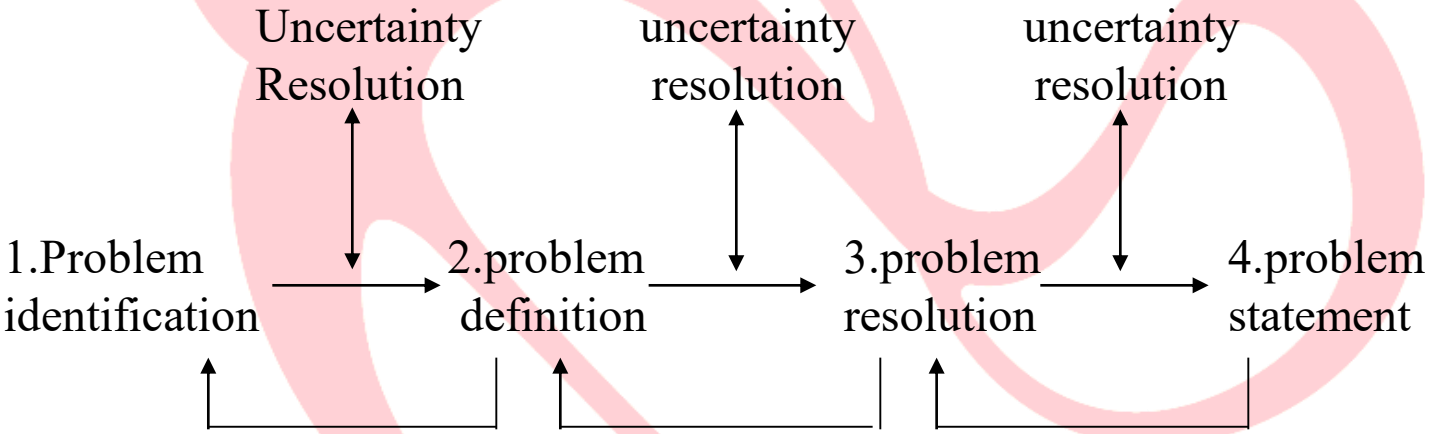
Information Retrieval Models : **T. D. Wilson**



1.What kind of problem do I have?

2.What is a nature of my problem?

3.How do I find answer to my problem?

4.This is an answer to my problem/ this is how I will deal with the problem

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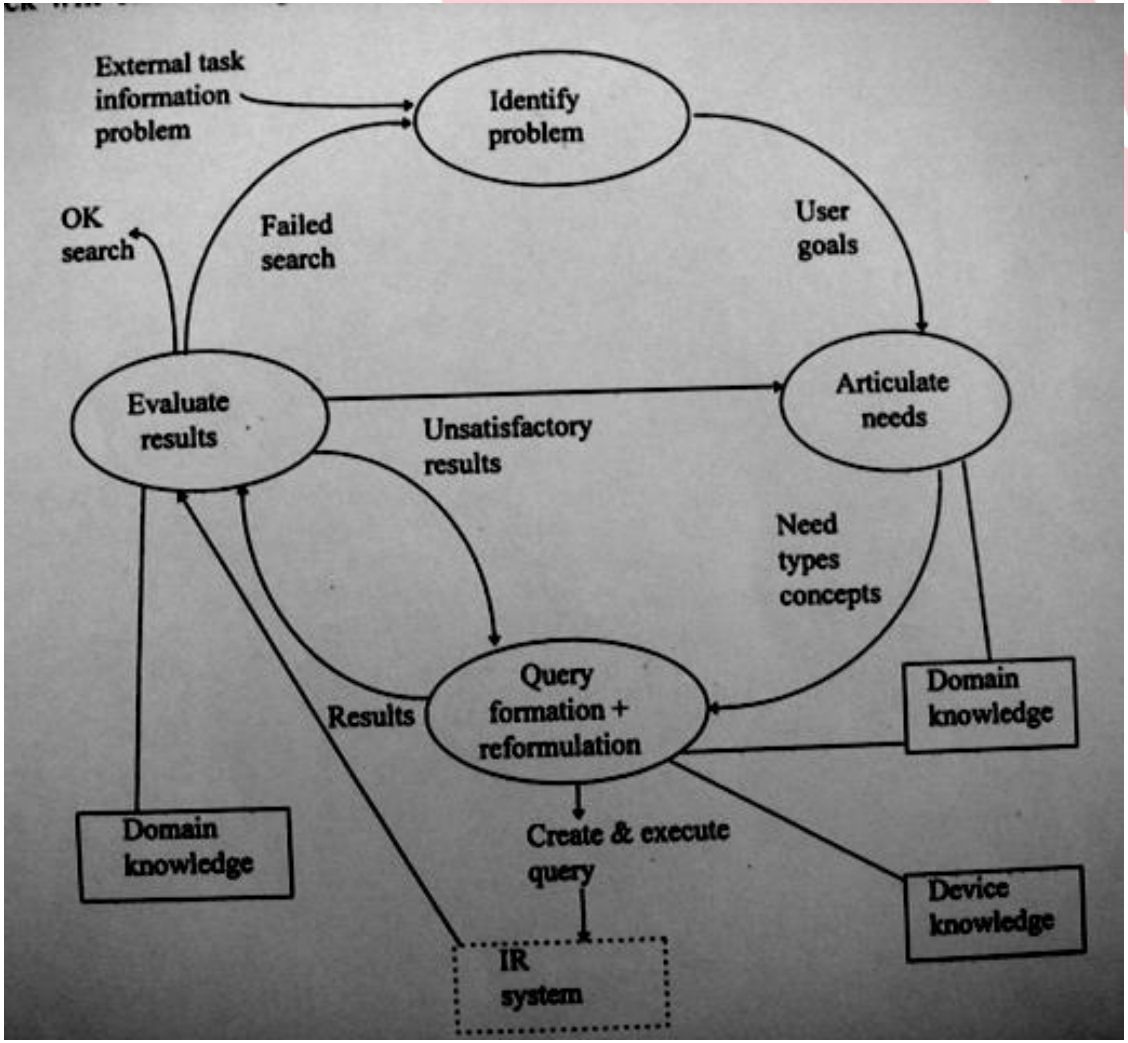
Information Retrieval Models : **Alistair Sutcliffe & Mark Ennis**



1.Problem identification:

Users goal or information needs.

2.Need articulation:

natural language expression of a particular need

3.Query formation:

Transforms conceptual needs into words and keywords.

4.Results evaluation:

Evaluates the retrieved results against the information need.

Usability Guidelines for people with low information seeking skills

1. Users have reading skills below 8th standards and web sites are often written at 10th grade level or higher.

2. Preference to sponsored link since they are **visually distinguished** with background colour & **minimum amount of text**

3. they **plough** text rather than scan it.

4. online behavior -- very different from high literacy users tend to **Satisfice** -- accept something as 'good enough' based on very little information

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Design Guidelines : proposed by Jakob Nielsen

1. Simplify the text
2. Prioritize the information
3. Avoid text that moves of changes
4. Streamline the page design
5. Simplify navigation Optimize searching

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Methodology

1. Understanding the term '**Information Architecture**'.
2. Methods used for deriving the organizations and groupings
3. Adopting the method of **Card Sorting** to our focused task
4. Experiments carried out using Card Sorting
5. Documenting and analyzing the results

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Understanding Information Architecture

a process of creating an underlying organization system for information, the product is trying to convey.

The organization could be (a) **explicit**

(b) **implicit**

Tools and techniques used in Information Architecture ------

- **Analyzing the profile of the potential user**
- **Contextual inquiry and task analysis**
- **Card sorting**
- **Analyzing diaries** kept by users

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Card Sorting Method

Goal : get perspective on how our intended audience understand our proposed information space

Method : On deck of sturdy identical note cards, write names of things to be organized.

Number of cards may vary according to information but 52 strikes a good balance

After user is finished organizing– each category should be labeled by the user

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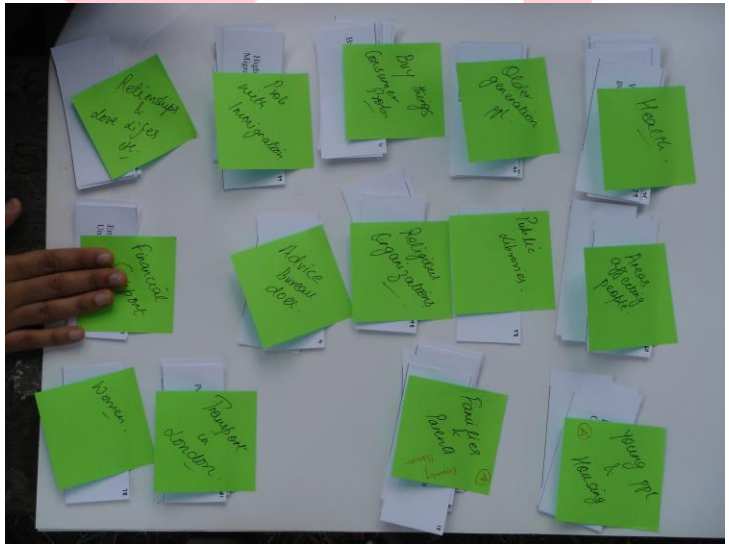
How we carried out card sorting…..

No. of cards : 72 size of cards : 8 x 4.5 cm

Each card contained title of information taken from Information Kiosk

Ex public libraries , financial support, income tax, etc

Sample size : 7 users



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Implementing Card Sorting…..

Experiment I

Aim: extracting information related-**organizational framework** understanding user's perception of information grouping.

Method: all the cards were given to the users and were asked to club them together according to the relationship between information that makes sense to them.

Experiment II

Aim : to find out various information clusters or groups that exist within the information needs of the users.

Method : clients were given the same cards and were asked to remove those cards, which they think are directly or indirectly related to their problems

Implementing Card Sorting…..

Experiment III

Aim : to find out how users navigate through the pre-structures information to find the information related to their problems.

Method : all the cards were pre-grouped according to their structuring on the existing Information Kiosk. Users were taught to think aloud and look for the card with information related to their problem. Then, they were asked to go through all the cards under that particular title and remove the card relation to their problem if it is there.

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Documenting the results(experiment I)

Categories	Client 1	Client 2	Client 3,4….
1. Health	Cancer – general info. Alcohol and drug help	Emotional health Mental health, problem & treatment	
2. Crime /police			
3. Advice			
4. Financial support			
5. Education			
6. Transport			
7. Organizations			
8. Emotional Health			
9. Bills/ pay-bills			

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Results….

Categories with more than 50% overlap : **Advice, Transport, Health, organization, Education and Relationship**

Categories with less than 50% overlap : **Crime/Police, Older generation people, information, emotional health, financial support, consumer problems and community care**

Overall percentage of overlap of information is **51%**

This clearly reflects that only 51% of information is likely to be found by CAB users on existing information kiosk

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Further study….

Carrying out Experiment II and III : documenting the results

Possibilities of design of interface using MLD: multi-layer displays

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