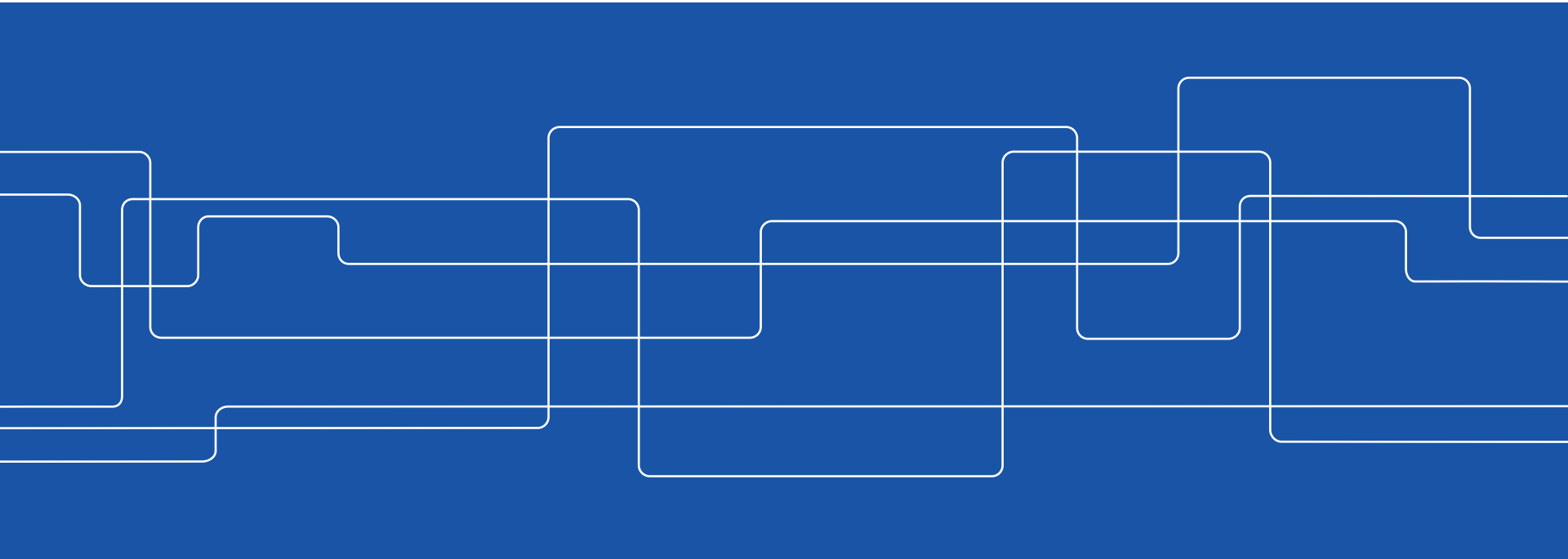




Information Retrieval Session 1

MF2071 2016

Göran Hamrin





Course Details

All information can be found in

KTH Social



How much time does it take to be "good" at doing one thing?




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10 000 hours!?




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How much time does it take to be "good" at doing one thing?

10 000 hours!?

A large red prohibition sign (a circle with a diagonal slash) is superimposed over the text '10 000 hours!?', indicating that this figure is being questioned or negated.

This holds for "good"= "being world class in a highly specialized and competitive field"



How much time does it take to be "good" at doing one thing?

"At least 20 hours."*

*According to Josh Kaufman_ 'The First 20 Hours: Mastering the Toughest Part of Learning Anything.'



How much time does it take to be "good" at doing one thing?

"At least 20 hours."* You need to:

- Deconstruct the skill
- Learn enough to self-correct
- Remove practice barriers
- Practice (at least) 20 hours

*According to Josh Kaufman_ 'The First 20 Hours: Mastering the Toughest Part of Learning Anything.'



How much time does it take to be "good" at doing one thing?

"At least 20 hours."* You need to: =In this course it means:

- Deconstruct the skill: Skill="having sufficient information literacy". Deconstruction=The learning outcomes
- Learn enough to self-correct: ="self-efficacy", 1) knowing general methods and 2) know where u find additional help
- Remove practice barriers =No FB, phone, IM, YT,..and do not prioritize other courses
- Practice (at least) 20 hours=most of the work is done by YOU PRACTICING

*Or watch Josh Kaufman's lecture at TEDx... :

<https://www.youtube.com/watch?v=5MgBikgcWnY>



Labb/Class rules

Class rules:

Lab=> required work by all individuals in the room

Phones off during all lab sessions

Exercises to be completed during class

No computers used (=lids down&screens off) under plenary sessions

Class communication model via the H&H-principle
=> "One individual speaks, everybody else listens."



Lab 1 /Today's schedule

Approximate time schedule, 3 time slots:

45 min: plenary (GH), exercise (develop your information need), plenary (GH), ref demo

Break 15 min

45 min: (exercise), plenary with (iterative search) example(s)

Break 15 min

45 min: own searching and start writing your lab report



Where do you search for information?

Where do you search for

Movies

Music

Articles





Where do you search for information?

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Movies

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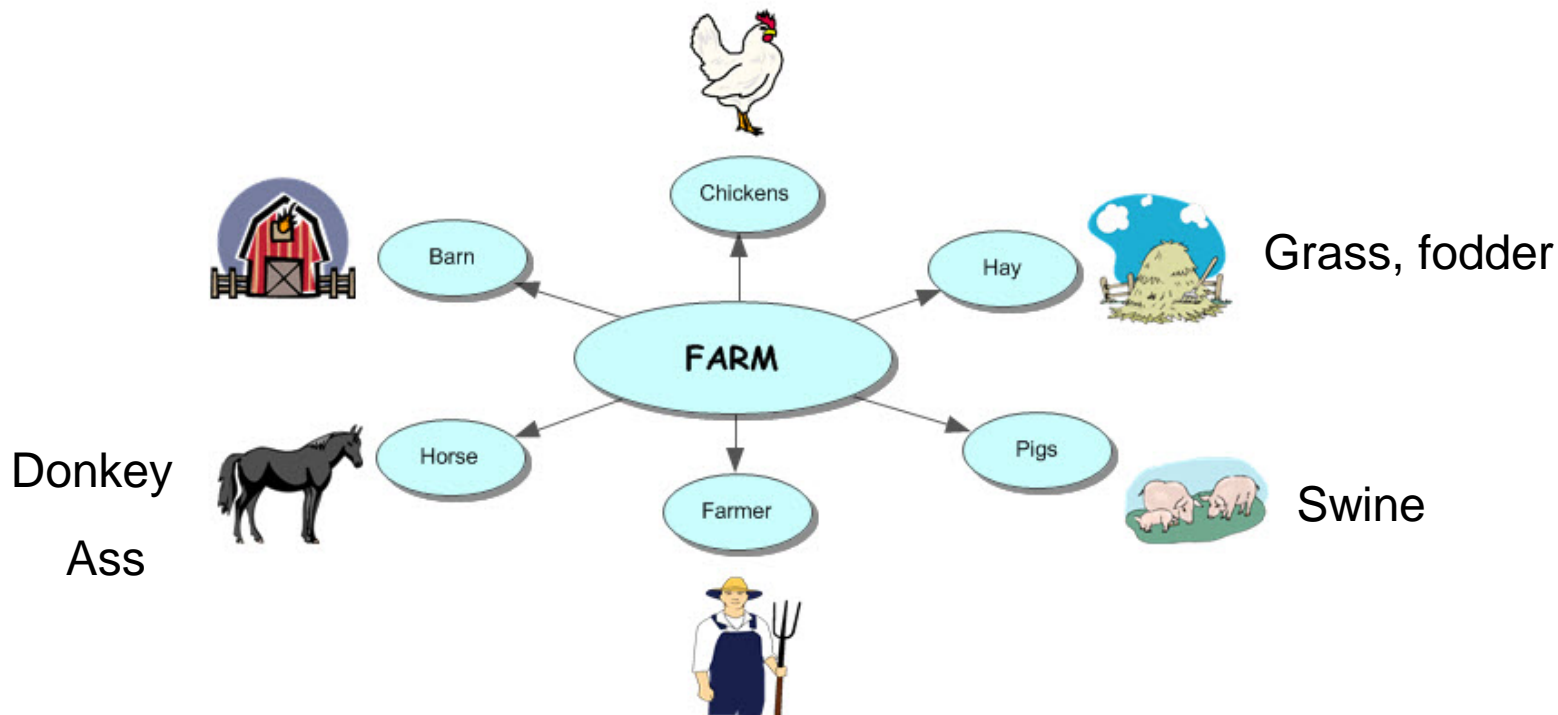
There is one difference between:

- 1) Bibliographic/Reference scientific databases = "used primarily for searching for information" and
- 2) Full-text archives/databases = "used primarily for storing information/articles/books/proceedings/patents/standards/codes/data"

Define your information need

Define, limit, find suitable terms.

Mind-mapping can be useful – map key terms, synonyms, broader perspective





Combine your search terms

(Hay **OR** Grass **OR** Fodder)

AND

(Horse **OR** Donkey **OR** Ass)

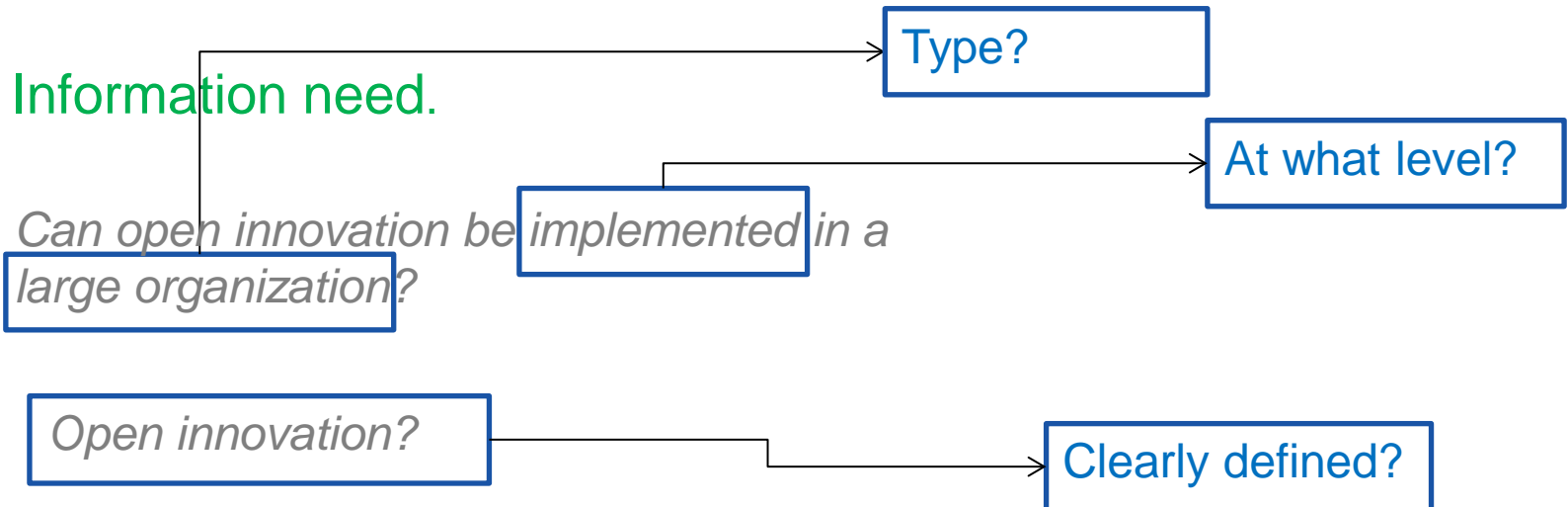


Developing your information need

Information need.

Can open innovation be implemented in a large organization?

What are the problems with this question?



What are the problems with this question?

A "Yes-or-No"-question should be avoided!

Too general? Too specific?



Developing your information need

Redefining the information need.

Discuss different ways of implementing open innovation in a large pharmaceutical R&D organization

I need to know more.



What kind of information do you need?

Depends on:

- Your subject
- Your preference

Take 10 minutes & develop your information need!

Is it well defined?

Define it more precisely and find good search terms

Tip: look at wikipedia or other encyclopedias for inspiration



Where to search?

**Broad, general
information**

Where?

Wikipedia,
Encyclopaedia
Britannica,
Google, SCB

Type of info?

Encyclopedia
articles,
Websites,
statistics

**More
depth**

Broad subject databases:
Google scholar,
Web of Science, Scopus

Scientific
articles
(ex: reviews)

Detail

Specific subject databases:
MathSciNet, Emerald Journals&Books,
Reaxys, Inspec, ACM Digital Library,

Scientific,
research
articles



Why look ?

What reasons to search more than one publicist?



Why look in more than one place?

What reasons to search more than one publicist?

Peer-review of material included in the database

Different voices within science (different publishers, authors, cultural areas, etc.)

A more complete search in more sources

.....



Reference:

- Title
- Author
- Publication year
- Source (where/how was it published)



Book:

- Publisher
- Publishing location
- Volume (if it's divided into parts)
- (ISBN)

Journal:

- Journal name
- Volume, number (issue)
- Pages (where article is located in journal)
- (ISSN)

Web page:

- When page was updated
- When page was read (by you)
- URL
- If possible the organization/web proprietor



You need a reference management program!

- Word
- BibTex/BibLaTeX
- EndNote (Web version free for kth students)
- Zotero
- Mendeley
- ...



Reference Management

Demo: References in Word, Show fields
Endnote:show export/save
Format references



Break 15 min



Search, but for how long?

When to stop?

Ideally: WHEN nothing more happens and the set of search results remains the same.

Pragmatically: WHEN you have iterated your searches in all possible ways you can think of and you cannot find one more relevant hit.

Pragmatically: WHEN you judge that your information need is fulfilled (and the deadline is fast approaching).



Search, but for how long? Grading

When to stop? In this course:

Ideally: WHEN nothing more happens and the set of search results remains the same. You aim for this!

Pragmatically: WHEN you have iterated your searches in all possible ways you can think of and you cannot find one more relevant hit. Your teachers are the judges!

Pragmatically: WHEN you judge that your information need is fulfilled (and the deadline is fast approaching). Your teachers are the judges!



Lab 2/Next time, reminder:

You should write:

A draft for the search report, including a reference list with all the relevant information you have found.

BRING A PAPER COPY to the next lab (two if you're working in a pair). And bring a pencil (an object looking approximately like the picture given below).





Iterative search example



Break 15 min



Search on your own topic



Lab 2/Next time, reminder:

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