



# Creating Future Interfaces to Library Services

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Novo Nordisk Library

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14-17 October 2012, Berlin

knowledge  
inside novo  
nordisk library

value leap



# Novo Nordisk Library

- Novo Nordisk
  - global healthcare company
  - 89 years of leadership in diabetes care
  - leading positions within haemophilia care, growth hormone therapy and hormone replacement therapy
- Headquartered in Denmark
  - 33,300 employees in 75 countries
  - products in more than 190 countries
- Novo Nordisk Library supports Novo Nordisk employees world wide



# Overview

1. Why have we initiated an innovation project
2. What do we want to achieve
3. Alternative working methods
4. Final concept
5. How to get started



# Background



- The innovation project is the response to
  - New physical location
  - Next generation digital interfaces
  - Increase value of Library services



# Why “innovation” project

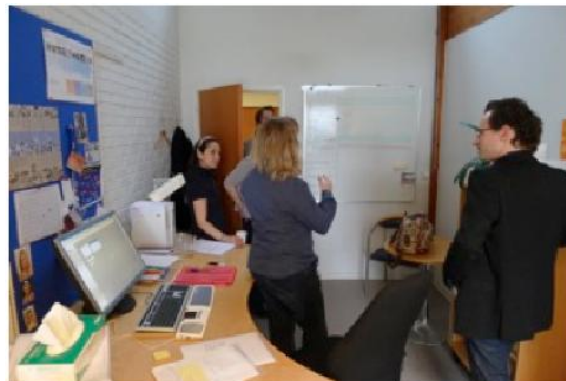
- Ensure long term benefits of upgrade
- Concept that addresses the right issues
- Improve usability based on current and emerging practices of key user groups in Novo Nordisk



We need to know more  
We need to have a better  
understanding  
We need a structured process

# User needs

- 57 qualitative interview and feedback sessions throughout the company
- 11 basic user needs identified, ex:
  - “Easier navigation during explorative searches”
  - “Identification of blind spots regarding highly relevant resources”



# 4 subprojects

- Library Innovation project

**Future  
Interface**

**New HQ Library**

**Personally  
Delivered  
Services**

**Communication  
& PR**

**Service design & integration**

**Stakeholder & employee engagement**

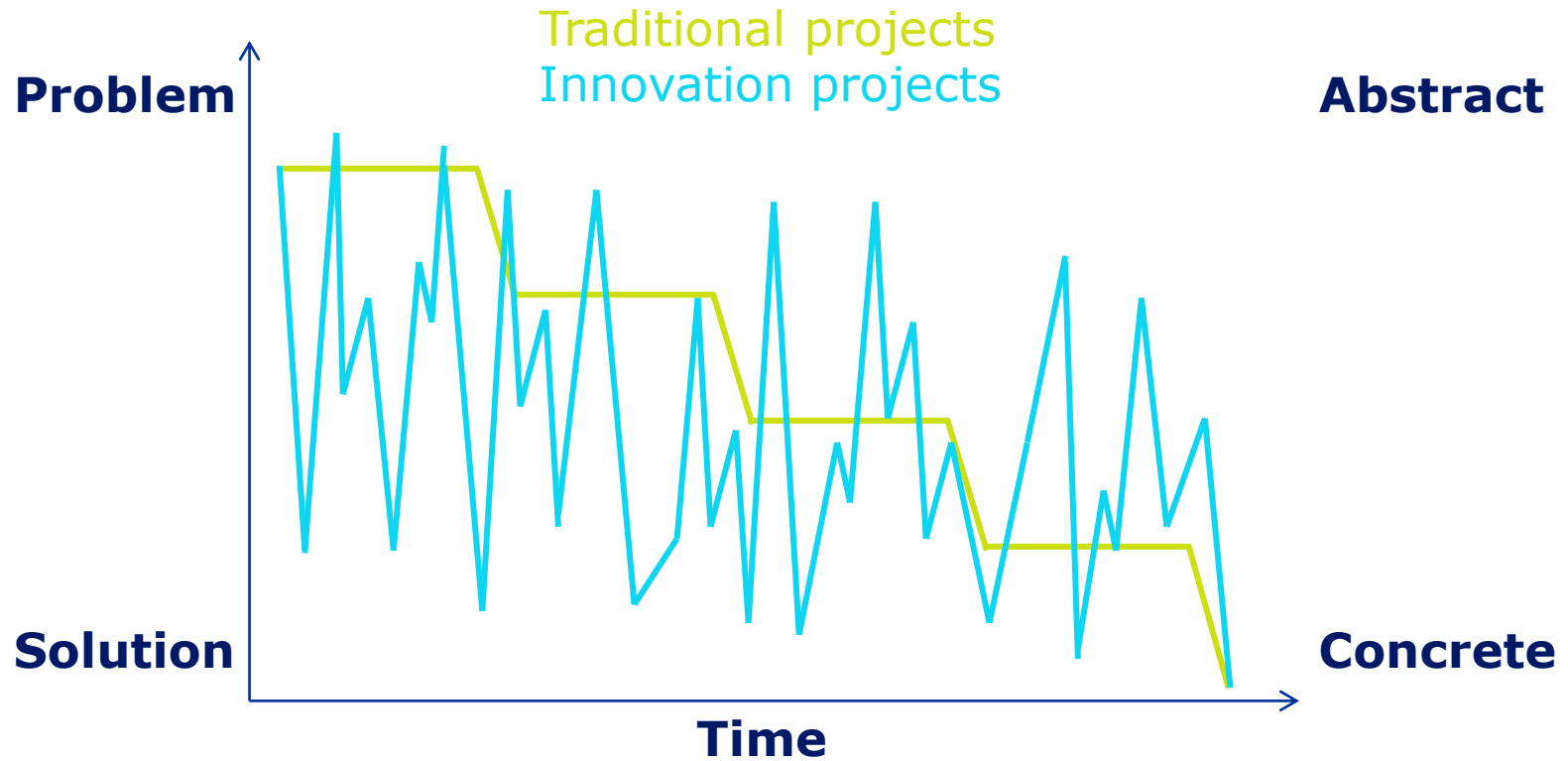
# Future interface subproject

- The vision of the concept is to improve NN employee productivity by:
  - Minimising their effort to stay updated on newly published knowledge within and beyond their field of expertise
  - Optimising their daily and exploratory search tasks
  - Creating a one-stop access to internal and external information sources





# What is different?



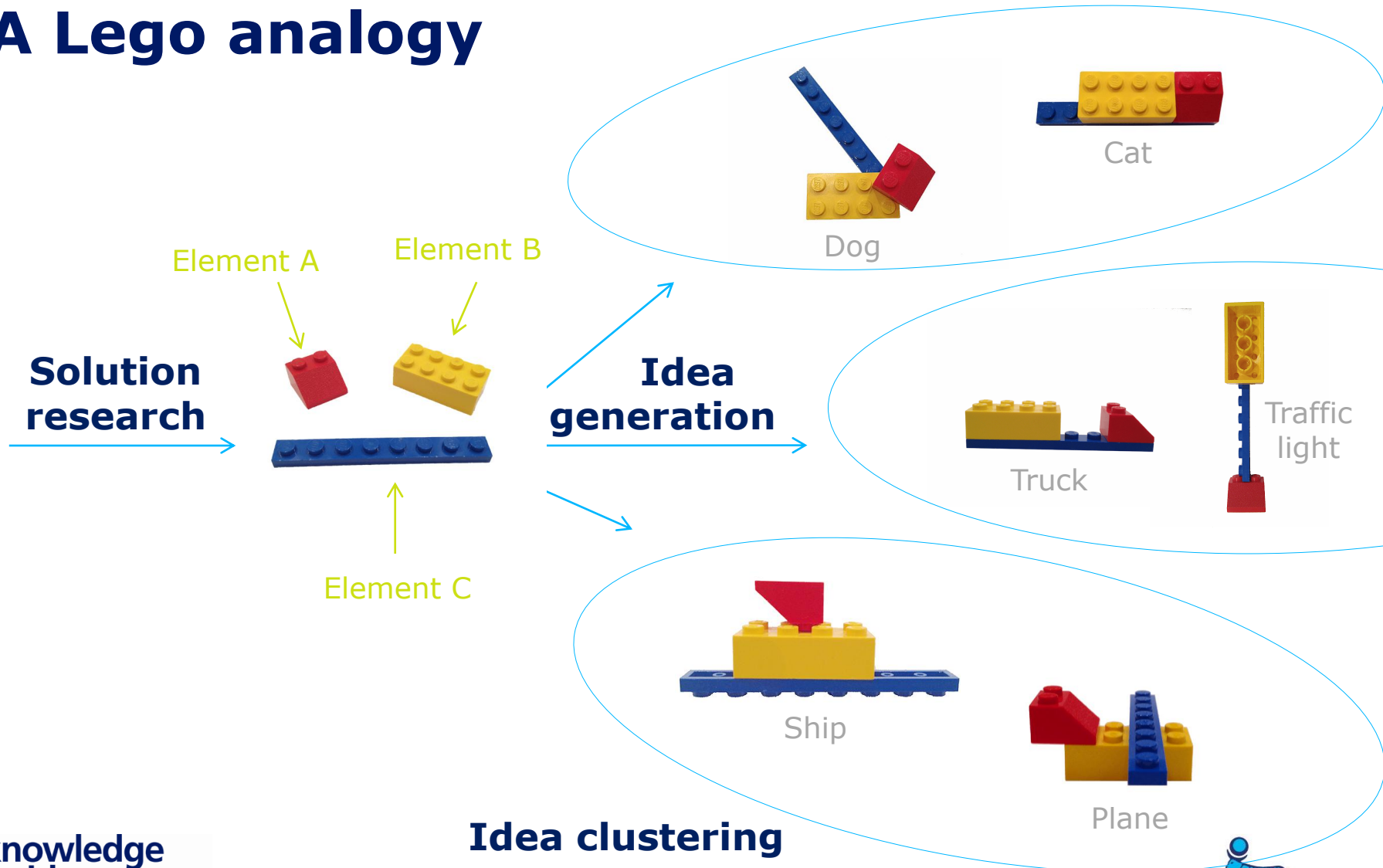
# Process

- Solution research
- Idea generation
- Idea clustering
- Idea refinement
- Idea posters
- Concept development

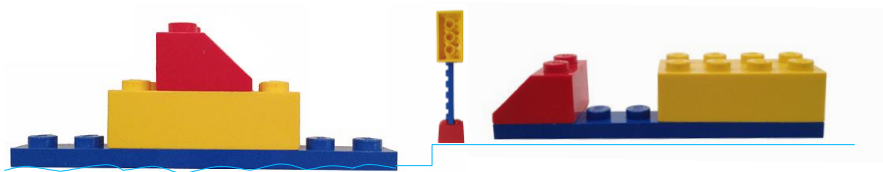


**Continuous  
feedback  
from users**

# A Lego analogy



# A Lego analogy – cont.

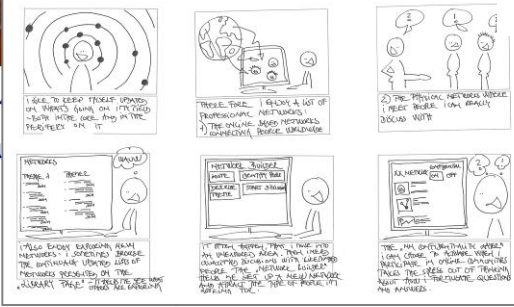


## Concept development

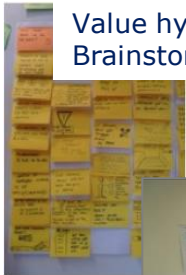
# Mode of operation



Kick  
Value



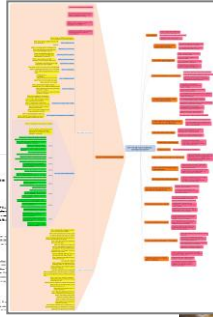
Value hypotheses + user experiences  
Brainstorm



Brainstorm  
New ideas  
insid  
nord



Idea generation based on findings  
Brainstorm

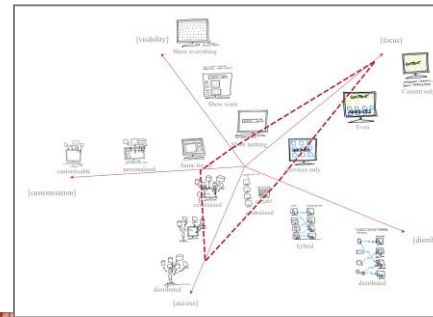


Benefits  
Brainstorm

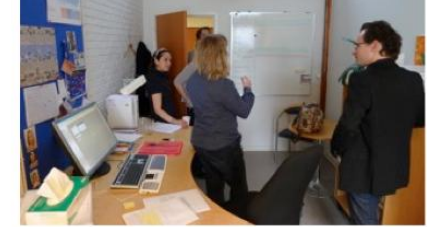


User interviews

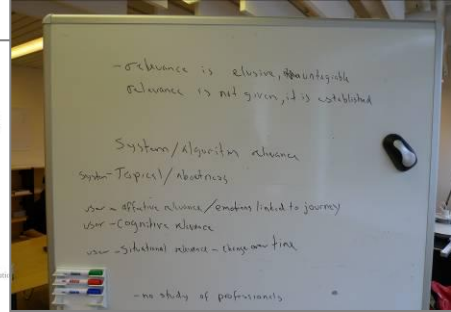
Structural concepts  
Brainstorm



Visualise insights Observations



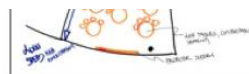
Solution research condensation  
Synthesis



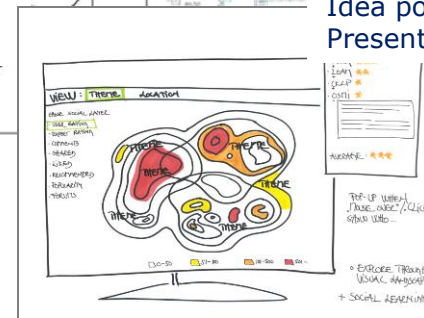
arch



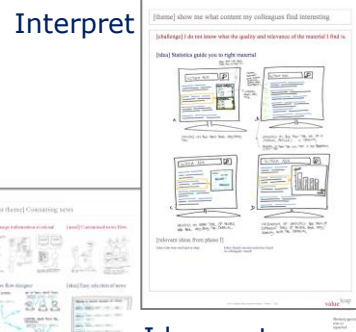
Idea clustering  
Thematic grouping



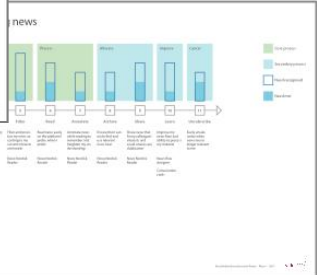
Floor plan  
Combining ideas



Idea refinement  
Sketching



Interpret  
Insights



User journeys  
Putting it together



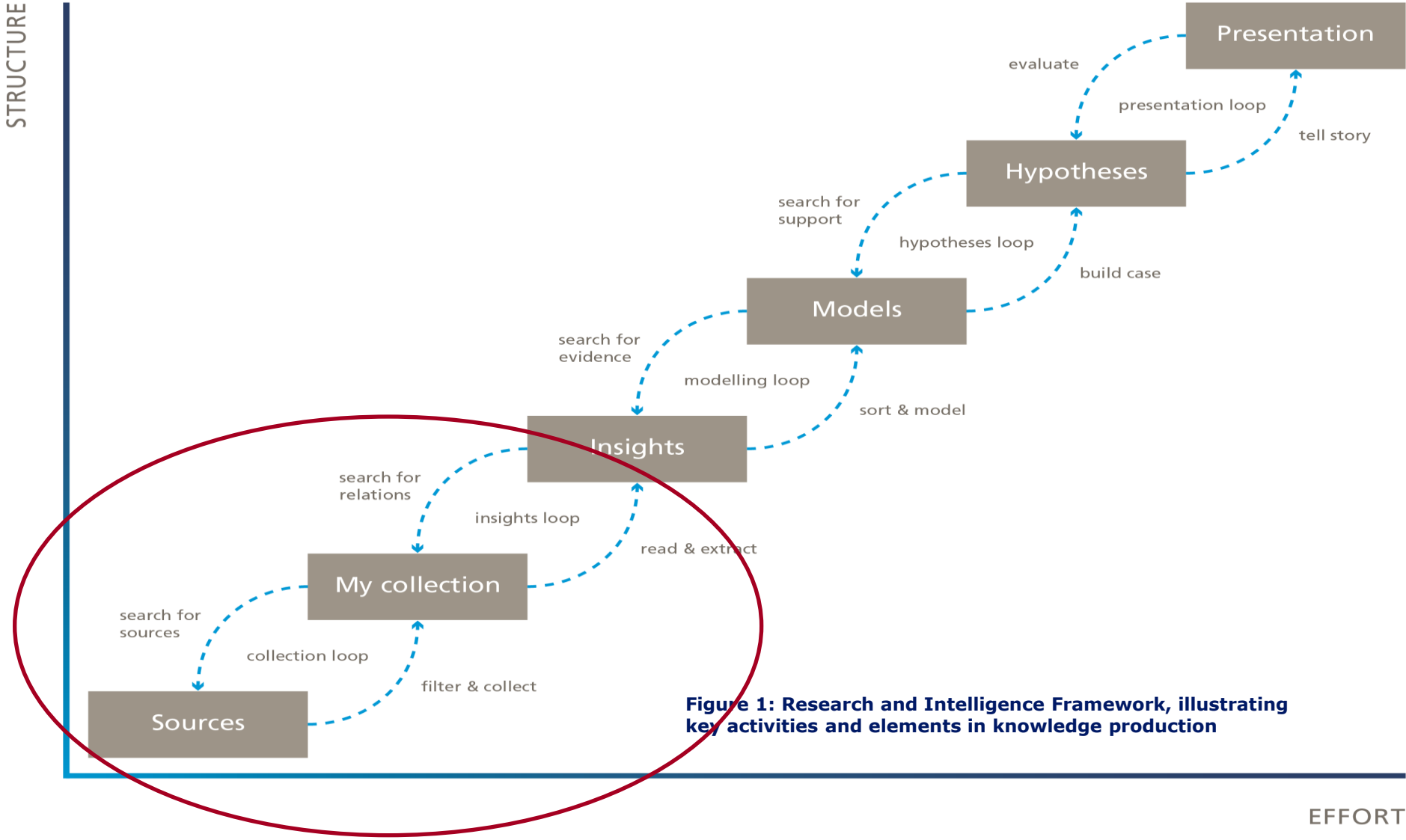
novo nordisk



# The final concept

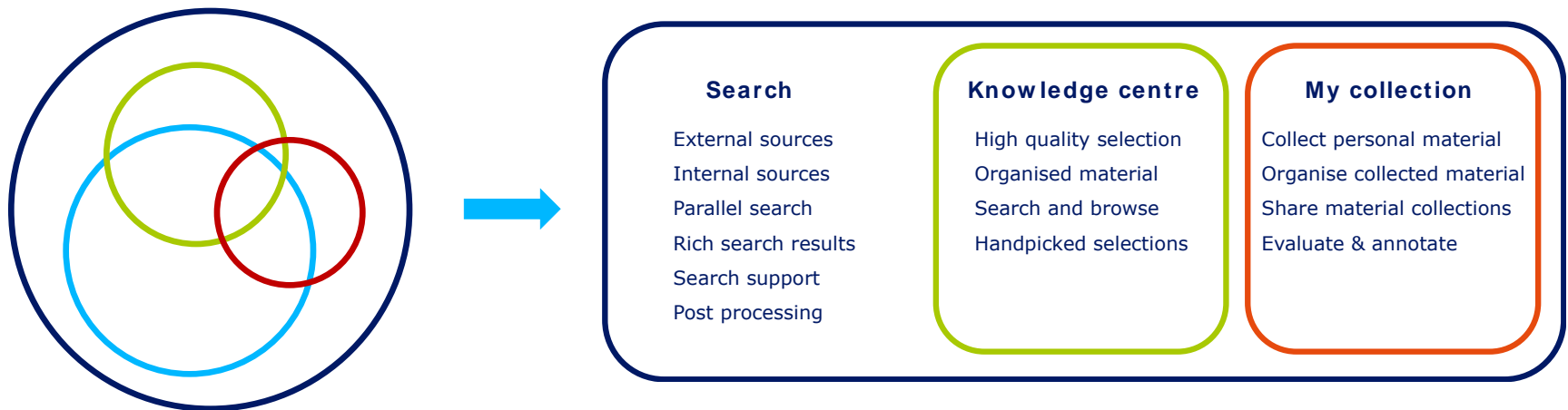
Underlying solution concept  
User challenges solutions examples  
Benefits if implemented

# Focus on sources and collections



**Figure 1: Research and Intelligence Framework, illustrating key activities and elements in knowledge production**

# Solution concept






- MATERIAL ACCESSIBLE BY NN EMPLOYEES
- ACCESS TO MATERIAL PAID BY LIBRARY
- MATERIAL SELECTED BY LIBRARY
- MATERIAL SELECTED BY THE USER



# Mock-up front page

Diabetes Highlights (change edition): 18/6 New articles by your most read researchers 18/6 ADA Scientific Sessions 2012 15/6 MKT recommends 14/6 Diabetes competition monitor - May 2012 13/6 Shared collection from

- Customised spaces
- Medical information Quality & regulatory
- Get your own space

Resources	Services	Learning
<p> <b>Go to Search</b></p> <p>Search inside and outside Novo Nordisk simultaneously. Easy to use tools to support your process.</p> <p>Go to business search Go to scientific search Go to patent search</p> <p> <b>Go to Knowledge centre</b></p> <p>Get and browse new and established knowledge relevant to Novo Nordisk.</p> <p>Go to Monitoring services Go to Shared collections Go to Analyses &amp; reports Go to Library collection Go to Journals Go to Databases</p> <p> <b>Go to My collection</b></p> <p>Your personal and shared collections of</p>	<p><b>Get search assistance</b></p> <p>Library can assist you in a variety of searches from finding a known article or patent to extensive or specialised searches:</p> <p>Ask for known material Make a search request Ask for a structure search</p> <p><b>Ask for information analysis</b></p> <p>Library analyses data on researchers, relationships in texts and citations.</p> <p>Ask for a researcher analysis Ask for a text analysis Ask for a citation analysis</p> <p><b>Ask for project support</b></p> <p>An information specialist can be allocated to your project for a period to support information search, organisation and analysis.</p>	<p><b>Take an introductory course</b></p> <p>I heard answering shouts from the people in the water about me. I could have leaped out of the water with that momentary exultation. The decapitated colossus reeled like a drunken giant; but it did not fall over.</p> <p><b>Take a specialised course</b></p> <p>I heard answering shouts from the people in the water about me. I could have leaped out of the water with that momentary exultation. The decapitated colossus reeled like a drunken giant; but it did not fall over.</p> <p><b>Get some clever ideas for searching</b></p> <p>I heard answering shouts from the people in the water about me. I could have leaped out of the water with that momentary exultation.</p>



Search

Inside and outside Novo Nordisk



General Scientific Patent

celiac ph neutral

Advanced search

Synonyms

Search

Source

	results	highly cited	authors you know
<input checked="" type="checkbox"/> Cross - scientific articles	19	3	5
<input checked="" type="checkbox"/> Web of Science	4	1	2
<input checked="" type="checkbox"/> PubMed	21	3	2
<input checked="" type="checkbox"/> Google Scholar	3340	43	18
<input checked="" type="checkbox"/> Book search	997	-	-
<input checked="" type="checkbox"/> Scopus	12	2	0
<input checked="" type="checkbox"/> Knowledge center	18	5	7

Guided search

Results [Cross - scientific articles]

Sort by: Citation over age ▾

year: 2011 + 2012

- [Resolving Multiple Protein-Peptide Binding Events: Implication for HLA-DQ2 Mediated Antigen Presentation in Celiac Disease](#)  
Wang J, Jin X, Liu J, Khosla C, Xia J. (2012 May) - *Chem Asian J.* (4.188)  
Abstract: ... thus lies at the center of antigen presentation studies in **celiac sprue**.3 In particular, the remarkable antigenicity of gluten peptides to **celiac** patients has been correlated, at least partially, to their unusual binding behavior to HLA-DQ2 at **neutral pH** in the extracellular mife... [see more >>](#)  
Citing 20 See related Copyright note Preview full Direct access
- [Fast and efficient characterization of an anti-gliadin monoclonal antibody epitope related to celiac disease using resin-bound peptides](#)  
Peterson, WNH., Hansen, PR.,... (2011) - *Journal of Immunological methods* (2.340)  
Article: ...**Celiac** disease (CD) is an immune-mediated enteropathy induced by ingestion of gluten proteins, which affects one in every 200 Europeans (Stern et al ... TFA and CH 3 COOH, but other solutions, ie saline with low **pH** level followed by instant washing with **pH neutral** solution... [see more>>](#)  
Cited by 2 Citing 17 See related Copyright note Preview abstract Pay per view
- [Enhanced intestinal absorption of Carcinogens of dietary origin in patients with gastrointestinal disease and in patients receiving Calcium Channel Blockers](#)  
Khan, AG.,... (2011) - *Journal of Postgraduate Medical Institute* (0.052)  
Article: ... carcinogen uptake occurs in intestinal diseases where the normally slightly acidic (**pH** 6.1) mucosal surface **pH** is shifted to **neutral** or to ... In the normal human small intestine, the mucosal surface **pH** is about 6.0 in vivom and is altered to closer to **neutrality** in **celiac** and Crohn'... [see more>>](#)  
Citing 35 See related Copyright note Preview full Direct access
- [Elution of antitransglutaminase antibodies from duodenal biopsies: a novel approach in the diagnosis of celiac disease](#)  
S Rathsman, C Tysk, S Eriksson, O Hultgren... (2012) - *APMIS* (1.944)  
Article: ...**Celiac** disease (CeD) is a gluten dependent inflammatory condition of the small intestine. ... The eluate was collected and immediately **neutral**- ized to **pH** 7 using 0.5 M This solution (C4H11NO3, adjusted to **pH** 10.5 using HCl). ... [see more>>](#)  
 Citing 57 See related Copyright note Preview abstract Restricted access

Download selected to Excell/CSV

Working memory

All Actions Results Notes

[query] celiac ph neutral

[source] Cross - scientific articles (19 results)

[result] Dependence of antibody-mediated presentation of antigen... Qiao, SW, Kobayashi K. (2006 Feb)

[filter] year: 2011 + 2012 (4 results)

Add note

Type your note here

What are you interested in?

- Year
  - 2012 (1)
  - 2011 (3)
  - 2010 (7)
  - More (8)
- Resource type
- Access
- Have I seen this previously?
- Topic
- Author
- Conference
- Organisation / source

Clever ideas for searching

Life science, Patents, Engineering, Manufacturing, Organisation, Sales, Marketing, Products, Competitors, Stakeholders, Regulatory, Patients

# Working memory

“Easier navigation during explorative searches”

- Help users being more systematic during exploratory search
- A combination of a notepad and an action log

▼ Working memory

All Actions Results Notes

[query] celiac ph neutral

[source] Cross - scientific articles (19 results)

[result] Dependence of antibody-mediated presentation of antigen ...  
Qiao, SW., Kobayashi K. (2006 Feb)

[filter] year: 2011 + 2012 (4 results)

[result] Resolving Multiple Protein-Peptide Binding Events: Implication...  
Wang J, Jin X, Liu J, Khosla C...

[result] Enhanced intestinal absorption of Carcinogens of diet...  
Khan, AG.,... (2011) - Journal of... ✓

[note] celiac ph neutral -> zöliakie ph neutral

[20 citing] Resolving Multiple Protein-Peptide Binding Events: Im...  
Wang J, Jin X, Liu J, Khosla C...

Add note

Type your note here

# Find relevant resources

- Knowledge centre
- A workplace for the NN knowledge worker to find material selected by Library or other competences with respect to subject domains of specific interest

“Identification of blind spots regarding highly relevant resources”

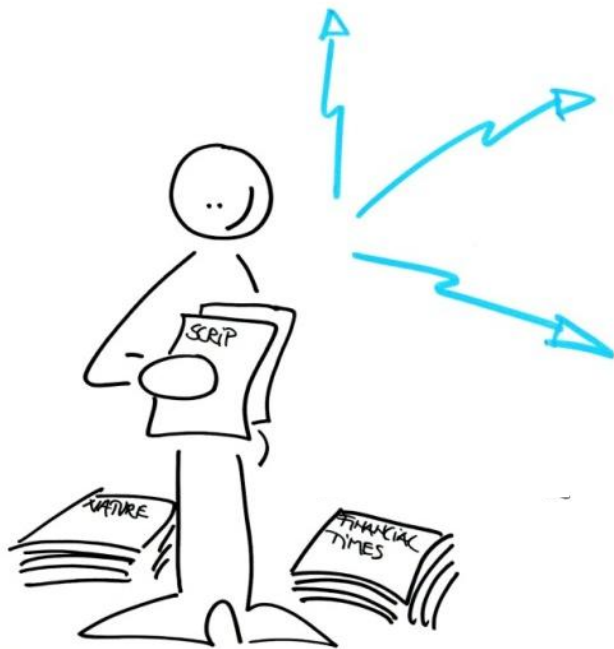
The screenshot shows the Knowledge Centre website interface. The page is titled "Knowledge centre" and features a navigation menu with options like "Resources", "Services", "Learning", and "About Library". The main content area is divided into several sections, each annotated with a red box and a label:

- KCH1** points to the "Subscriptions" section, which lists various journals and newsletters.
- KCH2** points to the "Highlights - Diabetes Selections" section, which displays a list of recent articles and research findings.
- KCH3** points to the "Handpicked selections" section, which features a collection of curated resources.
- KCH4** points to the "New articles by your most read researchers" section, which highlights recent publications by top authors.
- KCH5** points to the "Diabetes Highlights" section, which provides a summary of key news and events.
- KCH6** points to the "Diabetes Taskforce" section, which discusses ongoing research and clinical trials.
- KCH7** points to the "Future Needle Project" section, which focuses on innovative technologies and future research directions.

Other visible sections include "ADA Scientific Sessions 2012", "Technology and Diabetes Care", "MKT recommends", and "Diabetes Competition Monitor". The interface also includes a search bar, a "Live chat" button, and a "Make a search request" button.

# Benefits

- Due to
    - More effective explorative search for information
    - Easy access to newly published knowledge
    - One-stop access to main internal and external information sources
  - Savings if implemented
    - High-intensive knowledge workers: 10 min/week
    - Infrequent users: 5 min/week
  - Optimised usage of the existing investment in information access
- 35 man  
years /  
year**

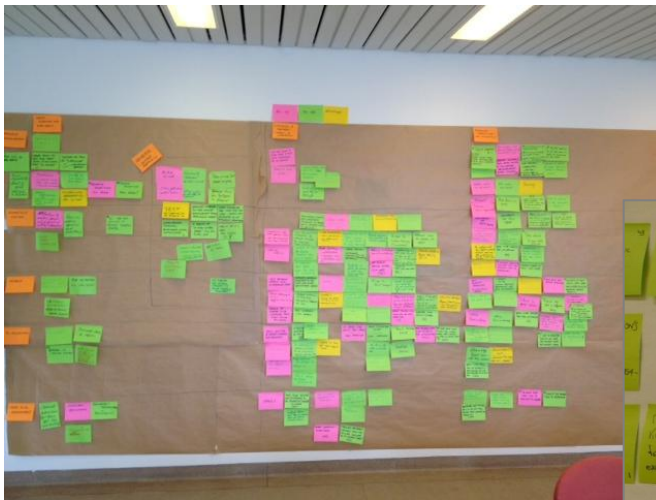


# How to get started?

Process  
Funding  
Allocation  
Clear roles

# Traditional vs. innovation projects

- Frustrating not to follow the traditional path
  - Idea → initiate → analyse → execute → realise
- Expect and accept endless walls with labels!

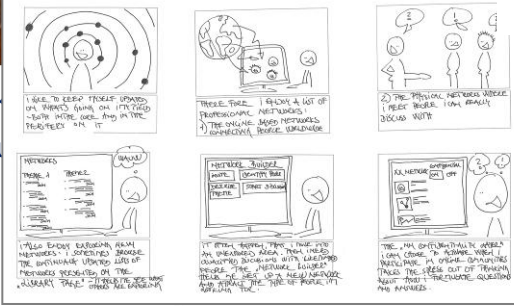




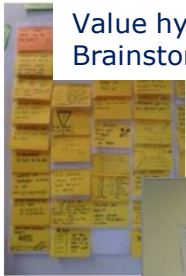
# Get help !



Kick  
Value



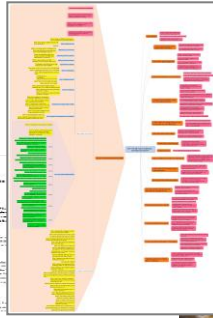
Value hypotheses + user experiences  
Brainstorm



Brainstorm  
New ideas  
insid  
nord



Idea generation based on findings  
Brainstorm



Benefits  
Brainstorm

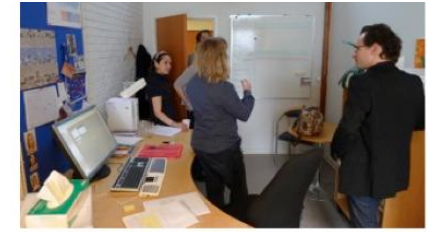


arch User interviews

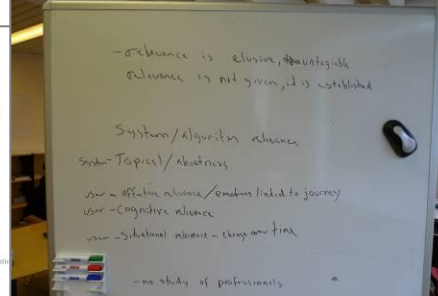
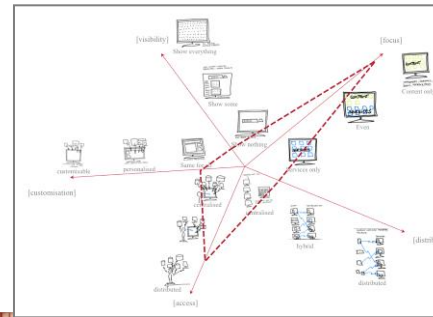
Structural concepts  
Brainstorm



Visualise insights Observations



Solution research condensation  
Synthesis



Solution research condensation  
Synthesis

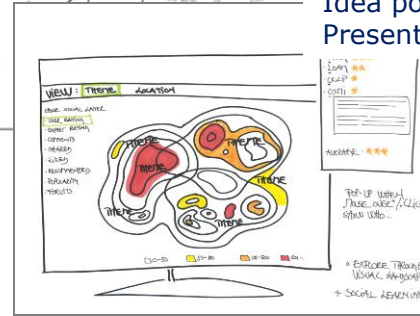
arch



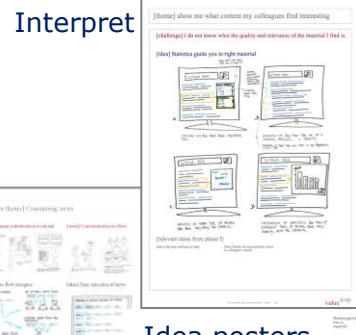
Idea clustering  
Thematic grouping



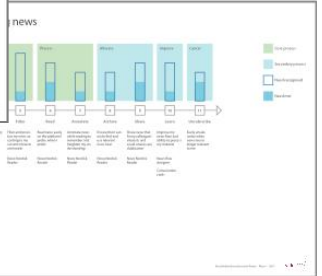
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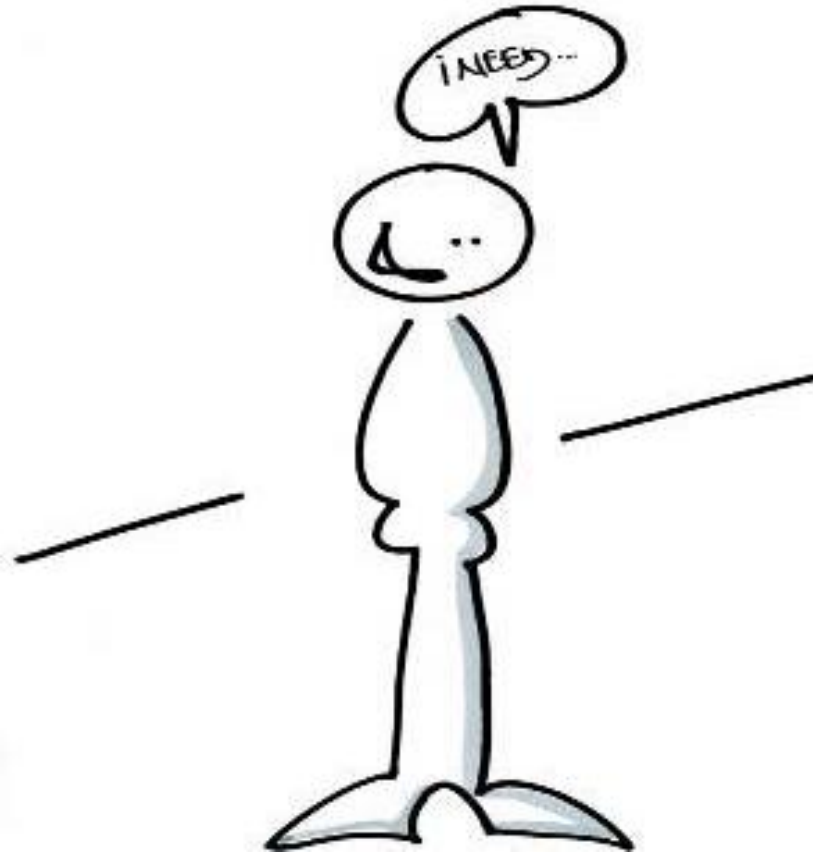


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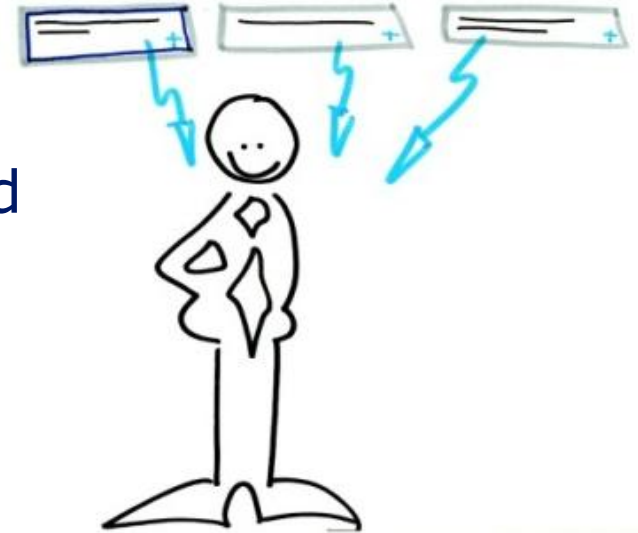
# Get funding

- Stakeholder management is very important
- Difficult to “sell” an incomplete concept



# Resource allocation

- Difficult to predict resources needed
  - Interesting and gratifying – and frustrating for project members
  - Often results in  $>100\%$  allocation

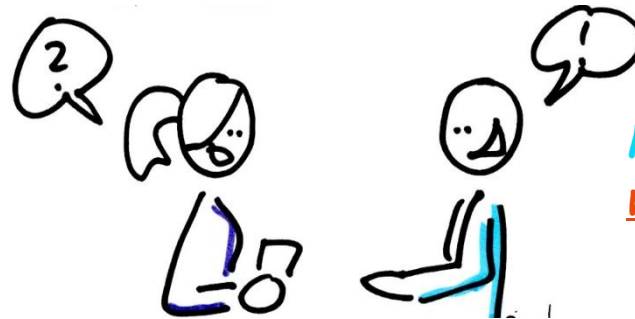


# Clear roles

- Many stakeholders
  - Everybody seems to know the best solution, with or without user sessions, solution research, etc.
- Project group need to understand governance process
  - Less frustration, more focus on delivering management information
- Development vs. decision
  - Project should develop concept
  - Steering group take decisions



Thank you  
for your  
attention!



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