

Day 3 MCKM Fundecor

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June 20, 2018

Day 3 Wednesday

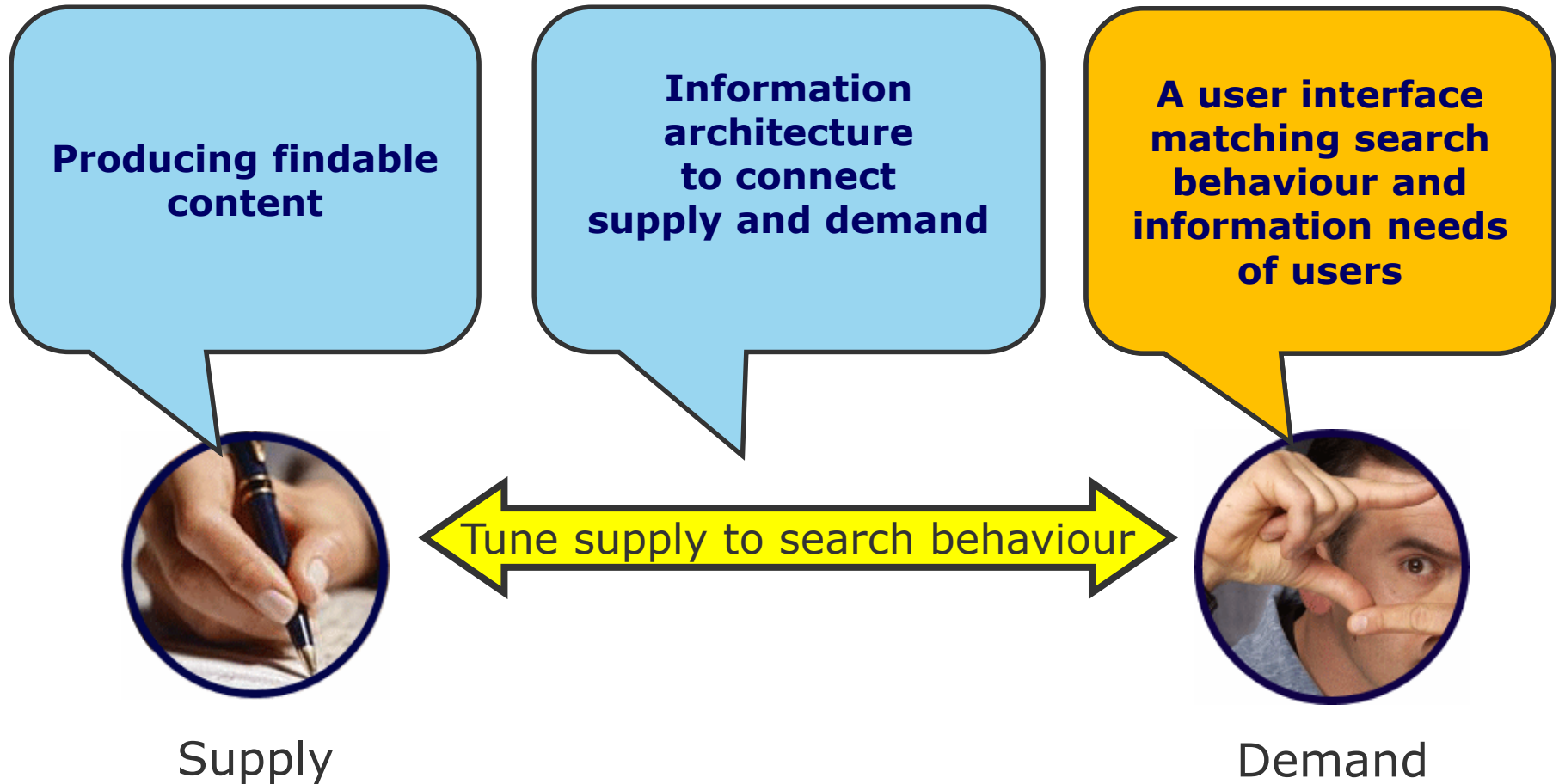
Morning programme

- Is a dolphin a fish? Tune knowledge supply to search behaviour
- Organising knowledge
 - User interfaces matching user needs
 - Search behaviour
- Sprint Design inspired exercise to create FUNDECOR first Green Hub UI concept
- Information architecture
 - Taxonomies, Metadata, Controlled vocabularies
- Creating knowledge artefacts
 - Fit for use

Afternoon programme

- **Intermezzo: Guyana REDD program by Sytze de Bruin (WUR)**
- Technology options overview
 - Search technology: full-tekst search, filtering, semantic search, search similar
 - Content management Systems, content federation
 - Automating tasks: auto-tagging
 - Buy or build
- Option selection for Green Hub (workshop)

Agenda



SEARCH USER INTERFACES

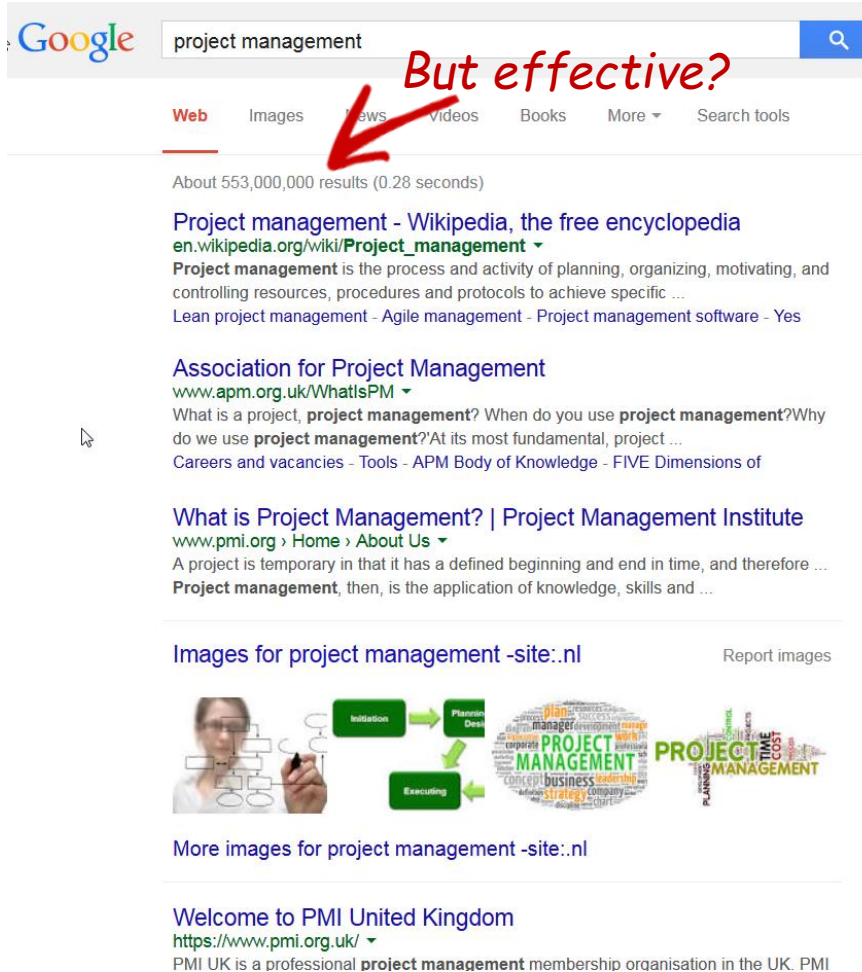
Is a dolphin a fish?



Search & Find: what goes wrong?

- Diversity in sources and systems
 - Users have no insight in content and meaning of all sources
 - Users do not know where all information sources are located
 - Per system different interfaces and methods for search
 - Structured information separated from semi-/unstructured information
- Quality of search results
 - Too many or too few results
 - Wrong results or unclear ranking of result
- User expectation
 - Only one type of search behaviour supported
 - Result does not match expected expertise level or information need

Search is easy...



Google project management

Web Images News Videos Books More Search tools


About 553,000,000 results (0.28 seconds)

Project management - Wikipedia, the free encyclopedia
en.wikipedia.org/wiki/Project_management ▾
Project management is the process and activity of planning, organizing, motivating, and controlling resources, procedures and protocols to achieve specific ...
Lean project management - Agile management - Project management software - Yes

Association for Project Management
www.apm.org.uk/WhatsPM ▾
What is a project, **project management**? When do you use **project management**? Why do we use **project management**? At its most fundamental, project ...
Careers and vacancies - Tools - APM Body of Knowledge - FIVE Dimensions of

What is Project Management? | Project Management Institute
www.pmi.org > Home > About Us ▾
A project is temporary in that it has a defined beginning and end in time, and therefore ...
Project management, then, is the application of knowledge, skills and ...

Images for project management -site:.nl Report images



More images for project management -site:.nl

Welcome to PMI United Kingdom
<https://www.pmi.org.uk/> ▾
PMI UK is a professional **project management** membership organisation in the UK. PMI

...if you know exactly what you're looking for

The screenshot displays the BMJ website's search interface. At the top, there is a search bar for "Search all BMJ Products" and a navigation menu with links for "BMJ", "BMJ Journals", "BMJ Careers", "BMJ Learning", "BMJ Evidence Centre", and "BMJ GROUP". The main header features the BMJ logo with the tagline "helping doctors make better decisions" and a secondary search bar for "Search bmj.com" with an "Advanced search" link. Below the header is a navigation bar with tabs for "Home", "Research" (highlighted in red and labeled "FREE"), "Education", "News", "Comment", "Topics", "Video", "Archive", and "About BMJ".

The search interface includes a "Search" section with a "Full text: 3 October 1840 - present" filter and "Search" and "Clear" buttons. Below this are sections for "Specify Citation" (Year, Volume, First page/locator), "Specify DOI" (10.1136/), and "Specify Authors, Keywords" (Author, Title, Abstract | Title) with search options for "words: any, all, phrase".

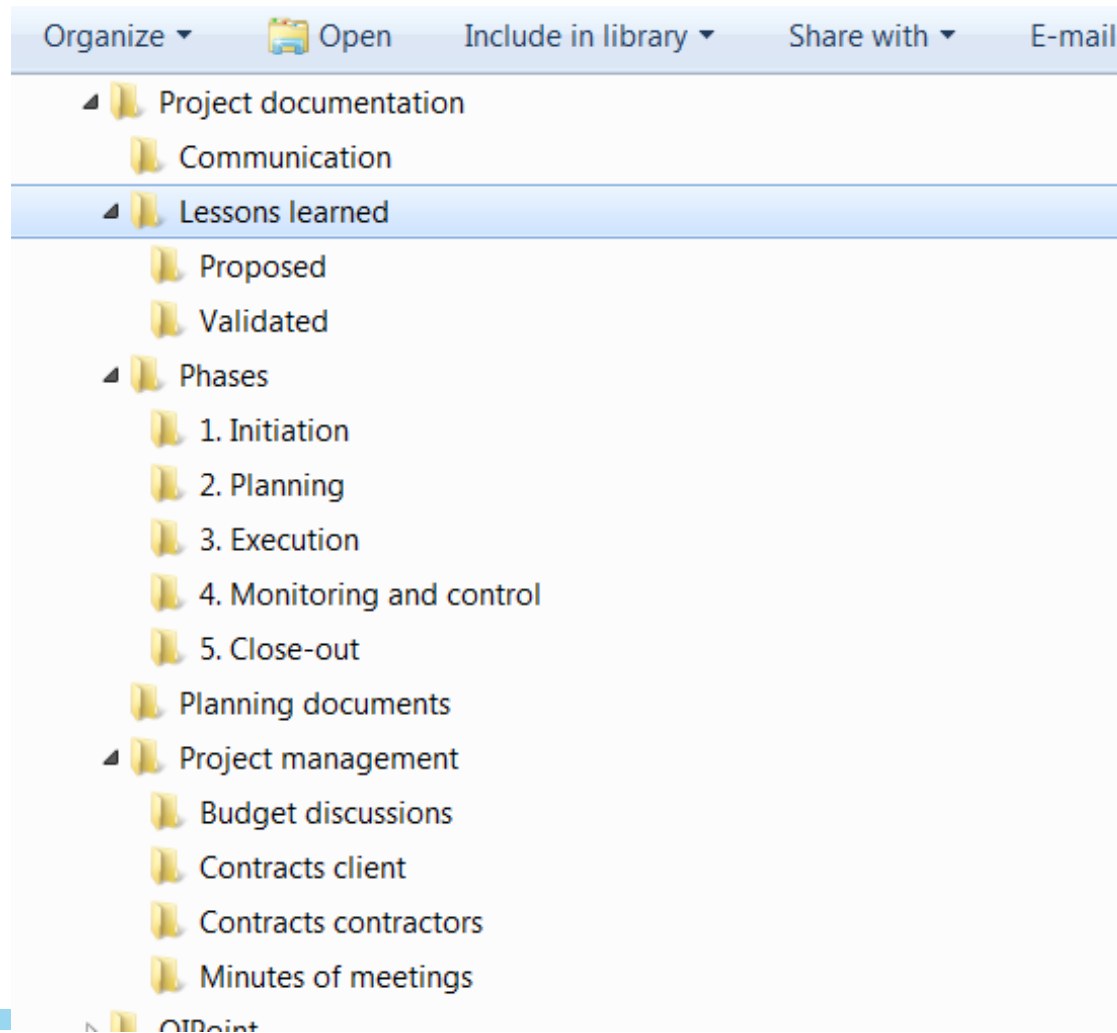
The "Limit Results" section allows filtering by date (From Jan 1981 through Nov 2009) and includes options for "Articles only" or "Articles and electronic communications (eg, rapid responses, Q&A)".

The "Format Results" section offers "standard result format" or "condensed result format" and "View 10 results per page" or "View 25 results per page" options, along with "Sort: best match, newest first".

At the bottom of the search interface, there is a "Medical abbreviations" section with a "Search" button and a "Browse archive by date or topic" section with links for "List of all issues by date: From 1 January 1994", "Topics: List of all articles by topic", "Series: Find articles by series name (ABCs and more)", and "For articles published before January 1994 select this link".

The Windows taskbar at the bottom shows the Start button, taskbar icons for "Inbox - Microsoft Out...", "bmj.com Search - Mo...", "In een dag aan de sla...", and "PowerPoint Slide Sho...", and the system tray with the time "21:00".

Organisational structure, project phasing



Organised by common language

SKYbrary 1270 Articles **203 New** Safety knowledge contributed by [Log in](#)

EUROCONTROL ICAO Flight Safety Foundation

The single point of reference in the network of aviation safety knowledge

Navigation

Join Skybrary and participate in the discussions about articles

Skybrary ICAO

Google™ Search Search

Google

Operational Issues Portal Enhancing Safety Portal Safety Regulations Portal

News Runway Excursion Statistics

EASA issues Runway Excursion statistics for 2008

(posted 10 Oct 08) EASA has issued Runway Excursion (RE) statistics which show that the number of RE events so far in 2008 is in line with previous years. While CFIT and Loss of Control (LOC) are still the major killers worldwide, RE is not far behind.

[read more](#)

Skybrary Solutions **Safety Alerts**

- [All clear? Toolkit](#)
- [Level Bust Toolkit](#)
- [Airspace Infringement Early Action Package](#)

[Privacy policy](#) [About SkybraryWiki](#) [Disclaimers](#)

Internet | Beveiligde modus: ingeschakeld 100%

Overview as result

search

google search

- Google Skybrary

navigation

- Main page
- Operational issues
- Enhancing safety
- Safety regulations
- Book reviews
- Author's articles
- Bookshelf
- Accident and serious incident reports
- ICAO FSIX

work in progress

- Draft articles
- Request an article

information

- About Skybrary
- Contact us
- Help
- Skybrary Mindmap
- Who is who
- Glossary
- Acknowledgements

toolbox

- What links here
- Special pages
- Printable version
- Permanent link

If you wish to contribute or participate in the discussions about articles you are invited to [join Skybrary](#) as a registered user

Portal:Human Factors

(Redirected from [Category:Human Factors](#))

Description

On this page you will find articles on the subject: Human Factors. Human Factors (HF) is the term used to describe the many aspects of human performance which interact with the (aviation) environment to influence the outcome of events. These may be physiological (e.g. the comfort and ergonomic design of the working environment) or psychological (e.g. the way in which the human operator performs in different circumstances). The full article can be read [here](#).



Design Philosophy and Human Factors

- FAA HF Design Guide
- ICAO doc 9758



Human Factors and You

- ATC Task Demand
- ATCO Work-Load
- Complacency
- Crew Incapacitation
- Expectation Bias
- Fatigue
- Information Processing Capabilities
- Interruption or Distraction
- Level of Arousal
- Memory
- Motivation
- Perception in ATC



Models for Human Factors

- ICAO SHELL Model
- James Reason HF Model
- TEM



Organisation and Human Factors

- CRM
- Commercial Pressures
- HF and ATC Systems
- NOSS
- Sterile Cockpit
- TRM



Training and Human Factors

- Line Oriented Flight Training

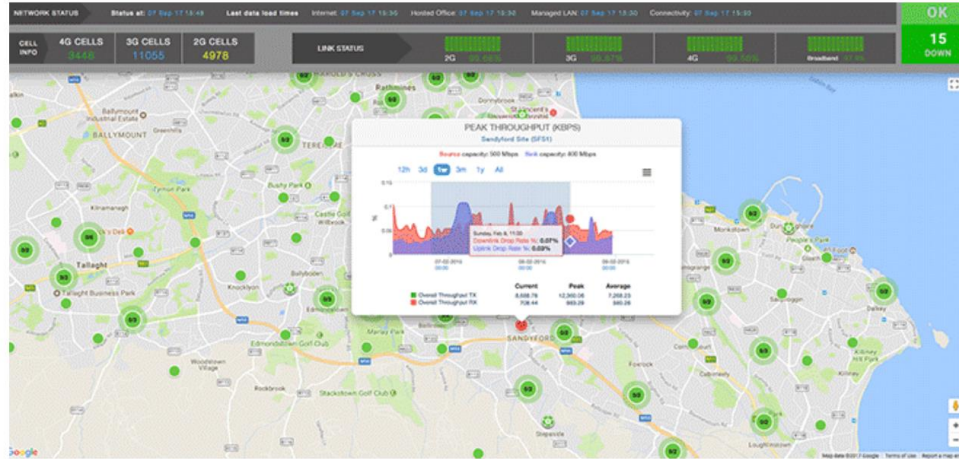


Personal and Team Strategies

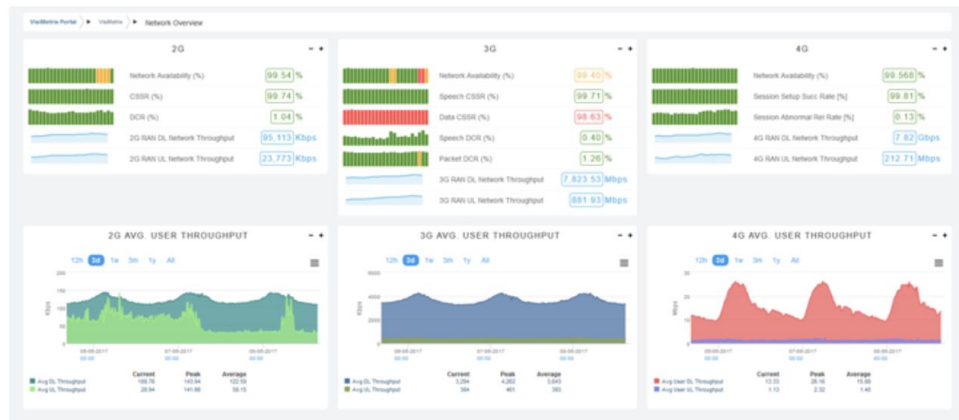
- Active Listening
- Cross-checking Process
- English Language Proficiency
- Non-Technical Competencies
- Task Prioritisation and Task Sharing
- Teamwork in Air Traffic Control
- Technical Competencies
- Vigilance

« Back to news

On the example below we provide high-level overview of cell site performance in a geographic region. The angle is 'how are all sites performing?'. The user has freedom to interact with the visualisation by zooming, panning or selecting a specific cell site.



The user can drill down to see more details of the node or backtrack and choose a different visualisation, for example with an angle: 'how are different technologies (2G, 2G, 4G) performing in this network?'



By topic

coursera

Explore ▾

Q What do you want to learn?

Data Science

See All



Stanford University
Machine Learning
1 course




deeplearning.ai
Deep Learning
5 courses



Google Cloud
Machine Learning with TensorFlow on Google Cloud Platform
5 courses



University of Michigan
Applied Data Science with Python
5 courses



Johns Hopkins University
Data Science
10 courses

Business

See All



Goldman Sachs
10,000 Women: Assessing Your Business Growth Potential
1 course



Yale University
Financial Markets
1 course



Macquarie University
Excel Skills for Business
4 courses




Pontificia Universidad Católica...
Camino a la Excelencia en Gestión de Proyectos
1 course




University of Virginia
Design Thinking for Innovation
1 course

Social Sciences

See All



University of Toronto
Introduction to Psychology
5 courses




Stanford University, The Univer...
Game Theory
1 course



Princeton University
Buddhism and Modern Psychology
1 course



Universidad de Chile
Taller para la Resolucion de Conflictos,
1 course



Universitat Autònoma de Barce...
Primeros Auxilios Psicológicos (PAP)
4 courses



WIKIPEDIA
The Free Encyclopedia

- Main page
- Contents
- Featured content
- Current events
- Random article
- Donate to Wikipedia
- Wikipedia store

- Interaction
- Help
- About Wikipedia
- Community portal
- Recent changes
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Article [Talk](#)

[Read](#) [Edit](#) [View history](#)

Sustainable energy

From Wikipedia, the free encyclopedia

"Green power" redirects here. For the engineering-related charity and its racing activities, see [Greenpower](#).

Sustainable energy is energy that is consumed at insignificant rates compared to its supply and with manageable collateral effects, especially environmental effects. Another common definition of sustainable energy is an energy system that serves the needs of the present without compromising the ability of future generations to meet their energy needs.^[1] Not all renewable energy is sustainable. While renewable energy is defined as energy sources that are naturally replenished on a human timescale, sustainable (often referred to as 'clean') energy must not compromise the system in which it is adopted to the point of being unable to provide for future need. The [organizing principle](#) for sustainability is [sustainable development](#), which includes the four interconnected domains: ecology, economics, politics and culture.^[2] [Sustainability science](#) is the study of sustainable development and environmental science.^[3]

Technologies promote [sustainable energy](#) including [renewable energy](#) sources, such as [hydroelectricity](#), [solar energy](#), [wind energy](#), [wave power](#),^[*citation needed*] [geothermal energy](#), [bioenergy](#), [tidal power](#) and also technologies designed to improve [energy efficiency](#). Costs have decreased immensely throughout the years, and continue to fall. Increasingly, effective government policies support investor confidence and these markets are expanding. Considerable progress is being made in the [energy transition](#) from fossil fuels to ecologically sustainable systems, to the point where many studies support [100% renewable energy](#).

Contents [hide]

- 1 Definitions
- 2 Renewable energy technologies
 - 2.1 First-generation technologies
 - 2.2 Second-generation technologies
 - 2.3 Third-generation technologies
 - 2.4 Enabling technologies for renewable energy

Part of a series about Sustainable energy



Energy conservation

- Cogeneration · Efficient energy use
- Green building · Heat pump · Low-carbon power · Microgeneration · Passive solar building design

Renewable energy

- Anaerobic digestion · Biofuel · Geothermal · Hydroelectricity · Solar · Tidal · Wave · Wind

Sustainable transport

- Carbon-neutral fuel · Electric vehicle · Fossil fuel phase-out · Green vehicle · Plug-in hybrid

- [Sustainable development portal](#)
- [Renewable energy portal](#)

By information characteristics

pasta  

RECIPES [VIEW ARTICLE RESULTS](#)

1-20 OF 1877 RECIPES MATCHING "PASTA" IN ALL CATEGORIES SORT BY [Relevance](#) 

FILTER BY

MEAL/COURSE

- Main Course (1415)
- Dinner (548)
- Side (261)
- First Course (251)
- Lunch (206)

[See More](#)

DISH TYPE

- Pasta/Noodle Dish (933)
- Soup/Stew (119)
- Salad (110)
- Sauce (37)
- Casserole/Gratin (36)

[See More](#)

DIETARY CONSIDERATION

- Vegetarian (507)
- Healthy (218)
- High Fiber (156)
- Low Fat (90)
- Low Cal (53)

[See More](#)



Fresh Pasta
BON APPÉTIT / SEPTEMBER 2013



Pasta All'Amatriciana **2.5/4** 
BON APPÉTIT / JUNE 2013



Pasta Bolognese **3.5/4** 
EPICURIOS / AUGUST 2009



Antipasto Pasta **3.5/4** 
BON APPÉTIT / MARCH 2005



Pasta Primavera **3.5/4** 
GOURMET / APRIL 2003



FROM OUR FRIENDS



A Mexican Recipe You'll Make Over and Over
FOOD52.COM



3 Ways to Keep an Avocado from Browning
FOOD52.COM



10 Slow-Cooker Breakfasts You Can Cook Overnight
TODAY.COM



Nurse Wins \$1M For New Potato Chip Flavor
TODAY.COM

POWERED BY ZERGNET



Understanding the question



rembrandt



Alle Afbeeldingen Nieuws Video's Maps Meer Instellingen Tools

Gerelateerd aan Rembrandt van Rijn en Leonardo da Vinci > Rembrandt van Rijn



Rembrandt van Rijn



Vincent van Gogh



Caravaggio



Claude Monet



Pablo Picasso



Michelangelo Buonarroti



Titian



Leonardo da Vinci

Rembrandt van Rijn - Wikipedia

https://nl.wikipedia.org/wiki/Rembrandt_van_Rijn

Rembrandt Harmenszoon van Rijn (Leiden, 15 juli 1606 – Amsterdam, 4 oktober 1669) was een Nederlandse kunstschilder, etsen en tekenaar. Hij geldt algemeen ...

[Levensloop](#) · [Naam en handtekening](#) · [Rembrandt als etsen](#) · [Werk](#)

Rembrandthuis - Amsterdam

<https://www.rembrandthuis.nl/>

In dit monumentale pand in het hart van Amsterdam, dat nu een museum is, heeft **Rembrandt** tussen 1639 en 1658 gewoond en gewerkt. Aan de hand van een ...

Rembrandt van Rijn - Kunstenaars - Rijksstudio - Rijksmuseum

<https://www.rijksmuseum.nl/nl/rijksstudio/kunstenaars/rembrandt-van-rijn>

Rembrandt van Rijn (1606-1669) werd als molenaarszoon geboren in Leiden. Na de Latijnse school schreven zijn ouders hem in 1620 in aan de universiteit.

Voorpaginanieuws

Nieuwe Rembrandt trekt 25.000 bezoekers naar Hermitage

Nu.nl · 2 dagen geleden

Nieuw ontdekte Rembrandt twee dagen langer te zien in Hermitage - Stadsqids



Meer afbeeldingen

Rembrandt van Rijn

Kunstschilder

Rembrandt Harmenszoon van Rijn was een Nederlandse kunstschilder, etsen en tekenaar. Hij geldt algemeen als een van de grootste schilders en etsers in de Europese kunst, en als de belangrijkste Nederlandse meester van de 17e eeuw. [Wikipedia](#)

Geboren: 15 juli 1606, Leiden

Overleden: 4 oktober 1669, Amsterdam

Tentoongesteld: National Gallery of Art, MEER

Perioden: Barok, Gouden Eeuw, Barokschilderkunst

Echtgenote: Saskia van Uylenburgh (geh. 1634–1642)

Kinderen: Titus van Rijn, Cornelia van Rijn, Rumbartus van Rijn



Ouders: Neeltgen Willemsdochter van Zuytbrouck, Harmen

feSe






view:

By of A. h Av

By semantics

knowledge

  [see definition of knowledge](#)    show

awareness	observation	apprehension	enlightenment	schooling
education	philosophy	attainments	erudition	scoop
expertise	power	cognition	facts	substance
familiarity	proficiency	comprehension	goods	tuition
grasp	recognition	consciousness	instruction	inside story
insight	science	dirt	light	
intelligence	theory	discernment	lore	
judgment	wisdom	doctrine	picture	
know-how	accomplishments	dogma	principles	

Antonyms for knowledge


clumsiness	inability	ineptness	misunderstanding
ignorance	inanity	stupidity	unbelief
impotence	incompetence	weakness	

Roget's 21st Century Thesaurus, Third Edition Copyright © 2013 by the Philip Lief Group.
[Cite This Source](#)

Concept Thesaurus for word knowledge

Synonyms - noun

knowledge	cognizance	cognition	cognoscence
acquaintance	experience	ken	privity
insight	familiarity	comprehension	apprehension
recognition	appreciation (judgment)	intuition	conscience

 EXPAND

Other adjectives related to knowledge

People and content

The screenshot displays a search interface with a top navigation bar including 'Inside | My Site | Groups | Meeting places | Search | Search Results' and a user profile 'Berndsen, Marco'. A search bar contains the query 'knowledge management'. On the left, a 'Refine Search' sidebar lists categories: 'People (1000)', 'Any Content (39151)', 'Intranet and Collaboration (36855)', 'Technical (1506)', 'Projects (337)', and 'Marketing & Sales (442)'. The main area shows 'People results for knowledge management > View all 1,000'. Four profiles are visible: Rob van der Spek (Director of knowledge management), Jeroen Alberts (Senior Consultant), Eelco Kruizinga (Principal Consultant), and Pieter Verhoeven (Senior Consultant). Below the profiles, 'Content results for knowledge management > View all 38477' are listed, including documents like 'Inside DNV GL - Knowledge Management Workshop in Energy', 'Knowledge Management in Electric Utilities', and 'Managing KM in Oil and Gas companies'. A purple callout box with a white arrow points to the search results area, containing the text 'Shortest social distance'. The bottom of the image shows a Windows taskbar with various application icons and a system tray displaying the time '11:55' and date '8-4-2014'.

Shortest social distance

Users needs differ

- Knowledge and information needs
 - Which topics are important
 - Which type of knowledge?
- Search behaviour
 - Terminology used
 - Familiarity with the domain
 - Need inspiration or something specific

Users search differently

Task	Need	Behaviour
Discover	No specific area of interest. Information need not (yet) clear	Surfing. Scanning variety of sources Select what is offered and easy accessible
Topic selection	Increase knowledge level on one or more areas of interest	Scanning known or selected sources. Able to recognise relevant areas of interest.
Select	Increase knowledge level on a specific topic	Able to formulate search query within an given area or topic. Results need to be good, not necessarily 'perfect'
Locate	Specific knowledge or information on a specific topic	Can formulate specific and detailed search query. Use of jargon. Looking for a specific result.

Excercise

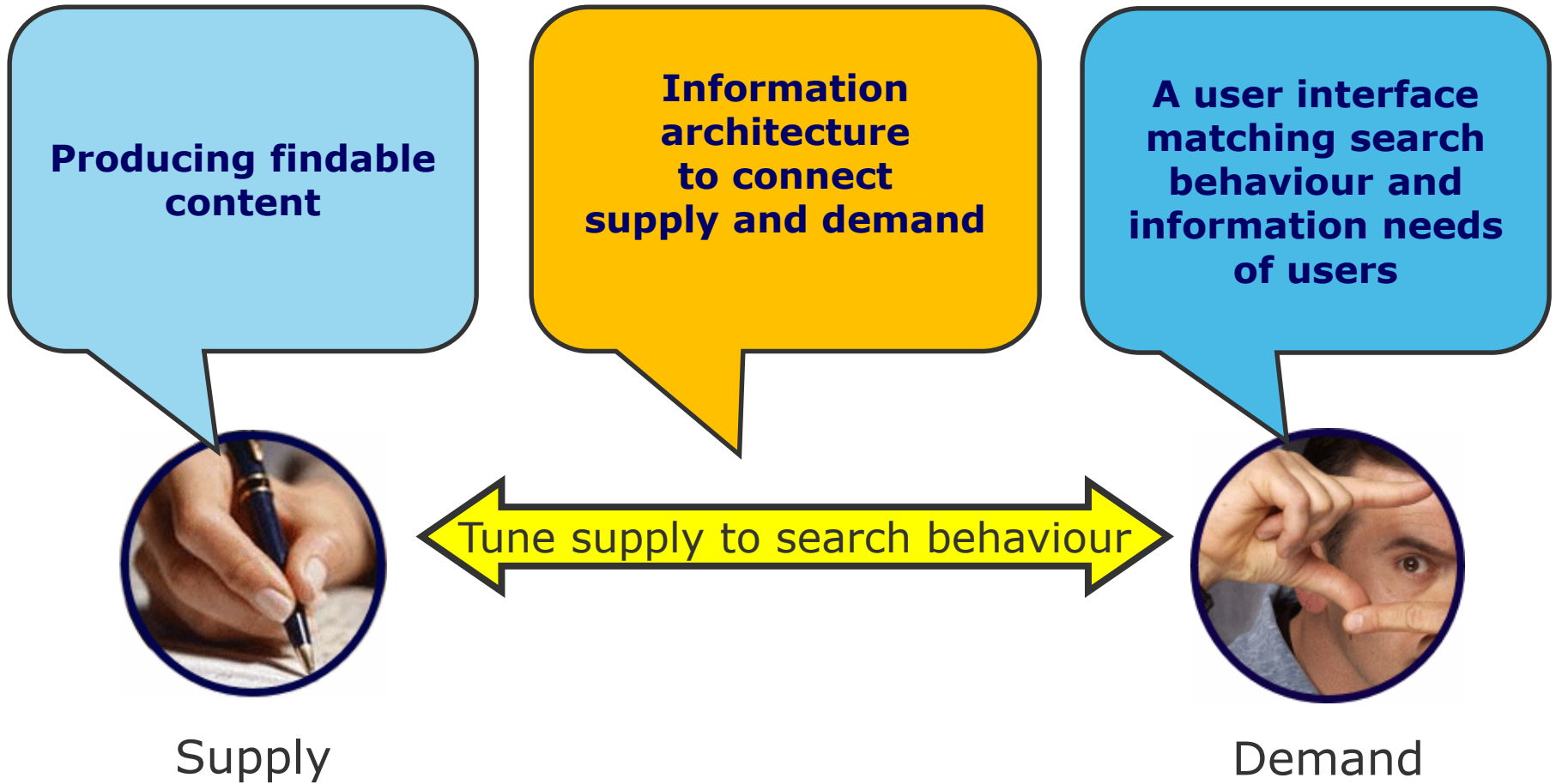
Individually

- Fundecor/Green Hub context: list different target groups, each having different knowledge and information needs
- Choose one

In small groups

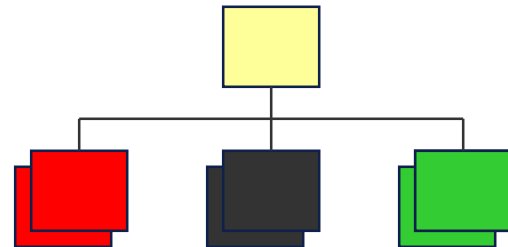
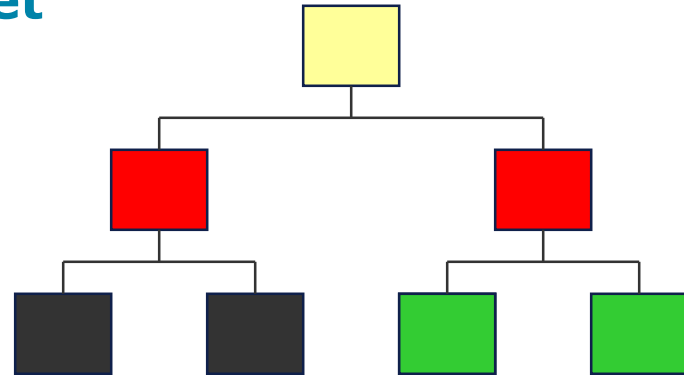
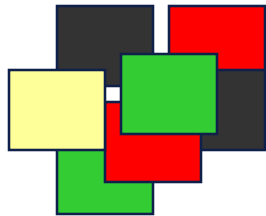
- Describe the content this target group needs:
 - Topics, size, type, complexity
- Describe the search behaviour of the target group
 - Knowledge of the domain
 - Search competence
- Make a first sketch for a user interface
- Plenary discussion

Agenda



An information architecture gives flexibility to organise

Organising a collection of document to in different ways to meet target groups needs



Metadata

- Data describing data
 - Characterising information (documents, data, person, video clip, ...) by a limited number of terms

Pride and Prejudice, Jane Austen,

The story follows the main character, Elizabeth Bennet, as she deals with issues of manners, upbringing, morality, education, and marriage in the society of the landed gentry of the British Regency

Published T. Egerton, Whitehall , United Kingdom, 28 January 1813

Language English

Genre Novel of manners, satire

Media type Print (Hardback, 3 volumes)

OCLC 38659585

Dewey Decimal 823.7

Followed by Mansfield ParkCouperus, Louis M.A.

Preceded by Sense and Sensibility

Different types of metadata

Metadata type	Elements
Asset metadata <i>About the document itself</i>	Author, Date of creation, Location, Type, Language, ...
Subject metadata <i>What is the document about</i>	Keywords characterising the content
Relational metadata <i>Relations between documents</i>	Related subjects
Use metadata <i>Access to documents</i>	Authorisations, security, confidentiality levels

The use of metadata

Work in Progress - Project reference showcase.docx

Edit

Save Cancel Paste Copy Delete Item

Commit Clipboard Actions

Content Type Oil And Gas KnowledgePortal Document
All records with this content type appear in the O&G Knowledge Portal. Must be declared as a record to appear in the O&G Knowledge Portal.

Name * Project showcase template .docx

Title * Project showcase template

Description Template to be used for projec showcase references.

Business Area * O&G;

Knowledge Type * Sales and marketing materials; Project outcomes;

Service Area * Risk Management Advisory;

Service Line * Safety Risk Management; Enterprise Risk Management; Environmental Risk Management;

Practice

Segment * Gas Value Chain; Pipelines; Subsea and Floaters;

Customer Category * Equipment suppliers; Governmental bodies; NOCs; Oil service suppliers; Petrochemical;

Objects/Assets

Owner

Enterprise Keywords
Enterprise Keywords are shared with other users and applications to allow for ease of search and filtering, as well as metadata consistency and reuse

Version: 0.2
Created at 11/1/2013 11:18 AM by Alberts, Jeroen

Save Cancel

Refine your search:

Segment

Any Segment

[Pipelines \(63\)](#)

[Gas Value Chain \(16\)](#)

[Subsea and Floaters \(9\)](#)

Service Area

Any Service Area

[Risk Management Advisory \(71\)](#)

[Technical Assurance Verification \(40\)](#)

[Technical Advisory \(34\)](#)

[Technical Assurance Inspection \(3\)](#)

[show more ▾](#)

Service Line

Any Service Line

[Safety Risk Management \(66\)](#)

[Verification and Certification of Assets \(40\)](#)

[Asset Risk Management \(39\)](#)

[Enterprise Risk Management \(32\)](#)

[show more ▾](#)

Practice

Any Practice

[Quantitative safety studies \(39\)](#)


[Certification and verification of offshore pipel... \(30\)](#)

[Safety management systems \(27\)](#)




The term "pipelines" returned 217 results :

Sales and marketing materials

 [Project references for flexible pipelines](#)

Project references for flexible pipelines to be used in bids/proposals


 [DNV GL JIP Collapse of offshore pipelines with D/t <20](#)

Presentation about the JIP Collapse Scope of Work.

[Show more sales and marketing materials](#)

Work instructions, processes and methods


 [JIP - Fracture control offshore pipelines](#)

 [Welding on in-service gas pipelines using low-yield electrodes](#)


Article in the Journal of Pipeline Engineering

[Show more work instructions, processes and methods](#)


Learning materials and courses

 [Training Module - Risk Assessment of Pipelines and Risers](#)

Theory and technical presentations


 [Challenges and Risks associated with deep water pipelines](#)


DNV GL Rio Pipeline Day presentation DNV GL Challenges and Risks associated with deep water pipelines

 [JIP - Fracture control offshore pipelines](#)

[Show more theory and technical presentations](#)


Project outcomes

 [Operating Instructions \(word doc\)](#)

 [Amsterdam](#)
test for UAT Feb 2015

[Show more project outcomes](#)

Internal and external standards

 [Welding on in-service gas pipelines using low-yield electrodes](#)

Article in the Journal of Pipeline Engineering



 [DNVGL-RP-0002_2014-11](#)

Key contacts



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HEEH

[Show more key contacts](#)

Communities

No results in this category.

Controlled vocabulary

- Types
 - Keyword list
 - Taxonomy
 - Thesaurus
 - Ontology/Semantic network

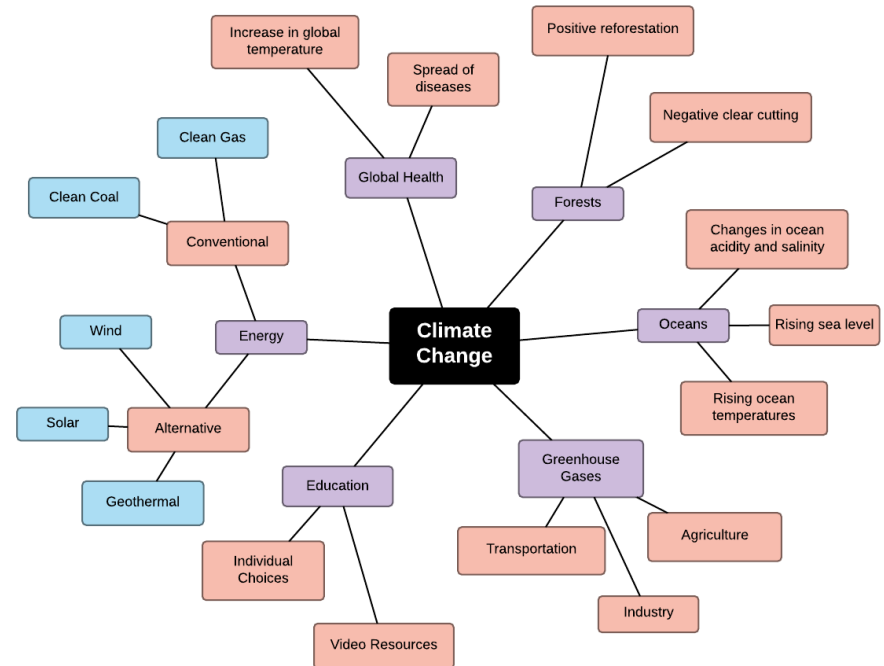
- Criteria
 - Size (number of terms)
 - Richness of relations between terms

Controlled vocabulary

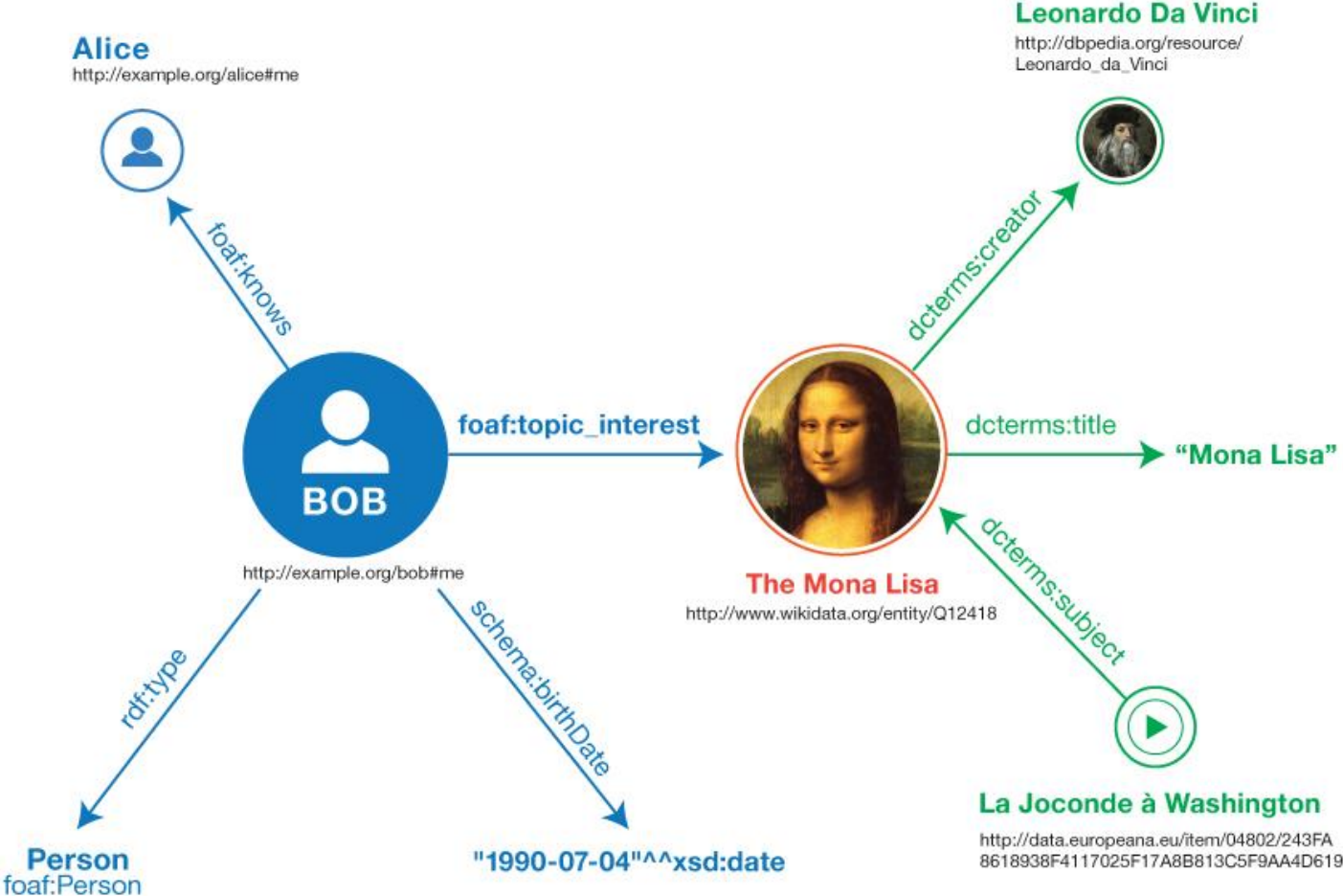
- Use and feasibility
 - Fixed set of terms limits flexibility
 - Artificial language? (usability)
 - Is there something like a 'corporate' or 'domain' language?
- Costs and capabilities
 - Who assigns metadata? Everyone? Dedicated staff?
 - Who can (time and capabilities) build and maintain a controlled vocabulary?

Taxonomy

- Used as controlled vocabulary
 - Organising terminology in groups and hierarchy
- Used as navigation structure
 - Intuitive structure to access underlying content
- What makes a taxonomy good?
 - Terms match target groups search behaviour
 - Fits size and complexity of underlying content



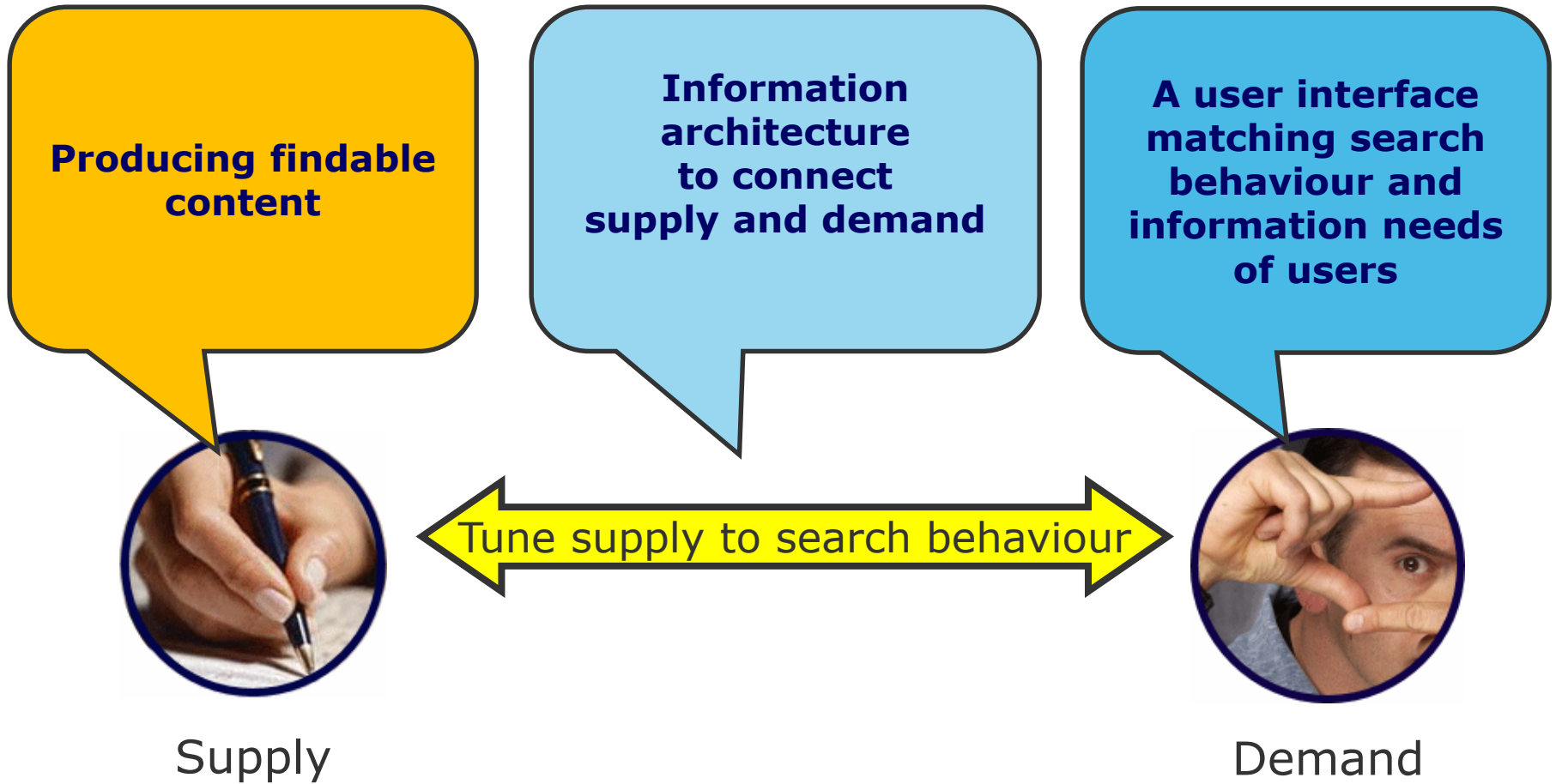
Expressing semantic relationships



Social tagging

- Use and feasibility
 - Flexible, no control on quality
 - Hardly any structure between tags or content
 - Inconsistencies in spelling, meaning, use of homonyms, language, etc.
 - Often supplier-oriented instead of user/demand-oriented
- Costs
 - Cheap: no maintenance, no capacity needed
- Knowledge and capabilities
 - Use of own terms or (suggested) re-use of existing terms

Agenda



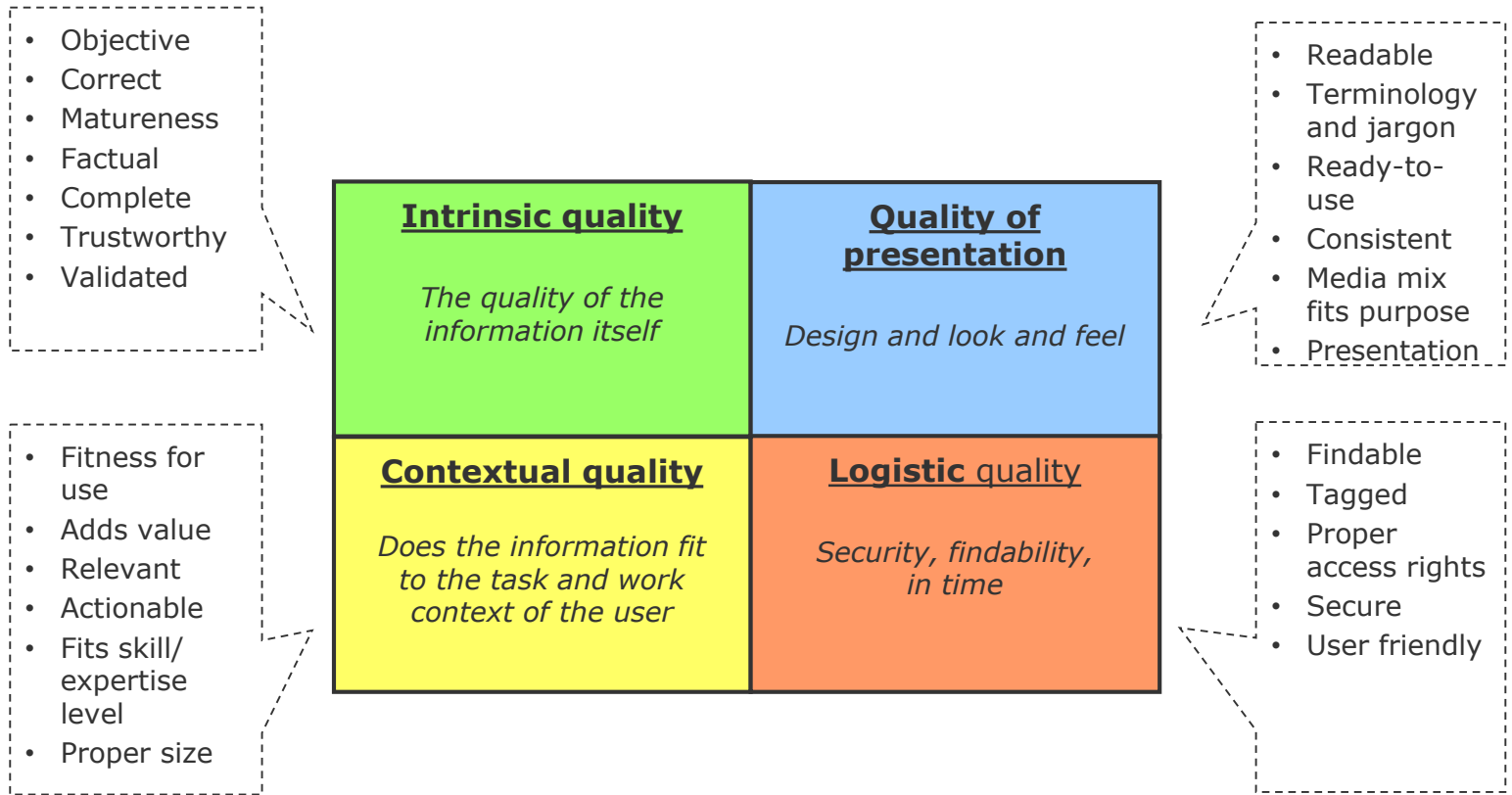
CREATING KNOWLEDGE ARTEFACTS

Creating knowledge artefacts

- The quality of knowledge artefacts is a crucial factor for re-use.
- The quality of a knowledge artefact is determined by its *Fitness for use*
 - *The intrinsic quality*
 - *The contextual quality*
 - *The quality of presentation*
 - *The logistic quality*

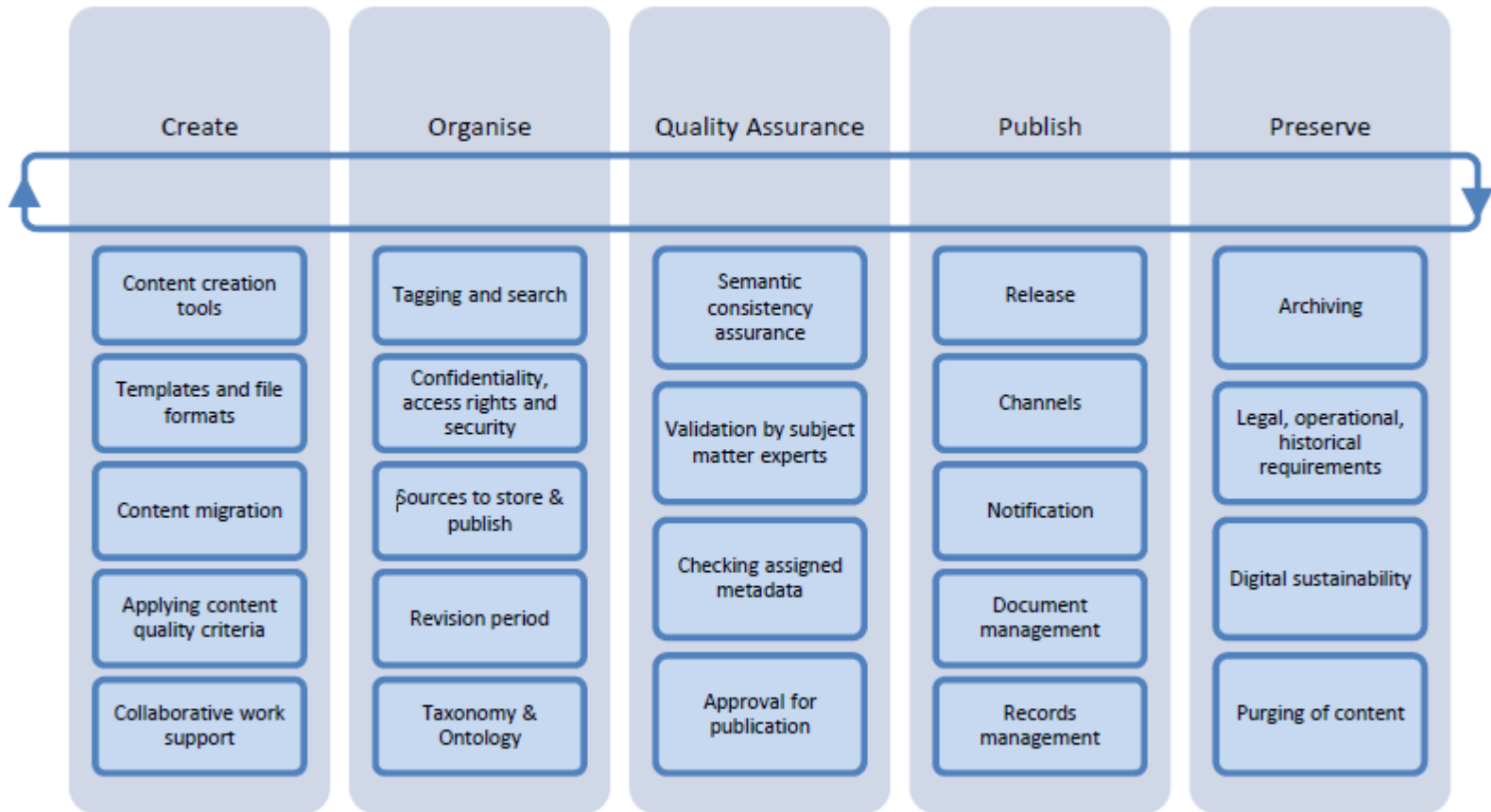


Quality criteria



Content Life Cycle

- Delivering content tailored to the users' needs



Excercise

In groups

- Write down on Post-It's the typical knowledge artefacts that are produced on behalf of the Green HUb environment
- Group similar knowledge artefacts
- Determine for each group which quality criteria are crucial for delivering quality artefacts
- Discuss how you can achieve within your organisation that the quality criteria are actually met

TECHNOLOGY OPTIONS OVERVIEW

Core functionalities

- Search and navigation
- Handling knowledge artefacts
 - Document and media handling
 - Retrieval, streaming, data visualisation
 - People profiles
- Content Life Cycle
- User interaction, user contribution

Content management systems

- Advanced search and navigation
- Semantics
- Workflow management
- Webshop

Plugins

- Advanced semantics, like auto-classification
- Interfacing (back office) systems

(often) custom

Selection process considerations

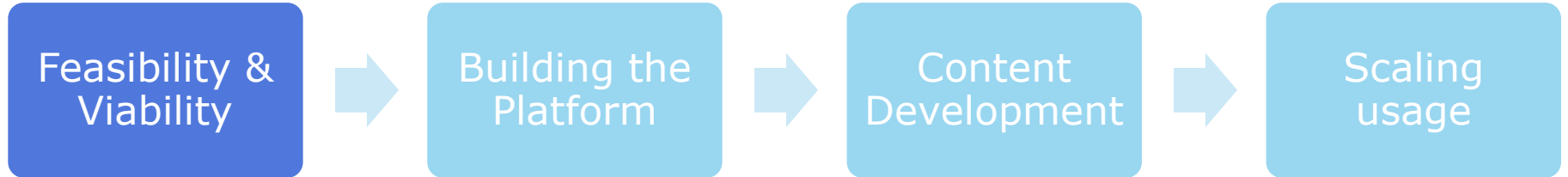
- Configure, not build
- Common, not proprietary
- Consider options that are supported by local expertise
- Hosting included
- Security schema matching admin setup

Outline day 4 MCKM Fundecor

Pieter Verhoeven (pieter.verhoeven@dnvgl.com)

June 21, 2018

4 phases



Phase 0: Feasibility and Viability phase

Learning goals:

Learn about modern development methodologies and practice with elements like:

Persona's

GV Sprint

Use Cases / User Stories

....by co-creating with the Green Hub as central case study

Phase 0: Feasibility and Viability phase

Question at the very beginning of your roadmap:

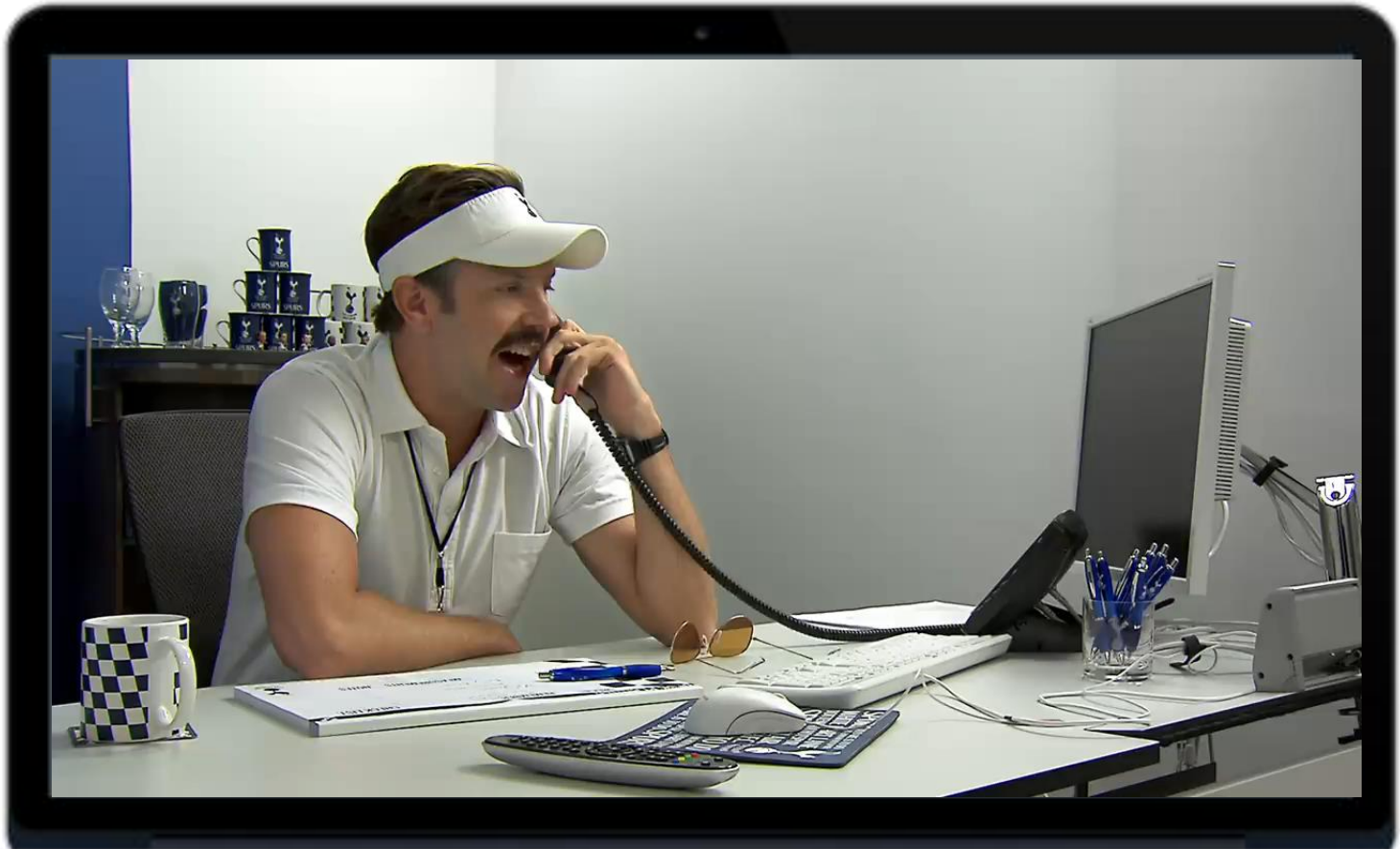
Can we build it?

Or

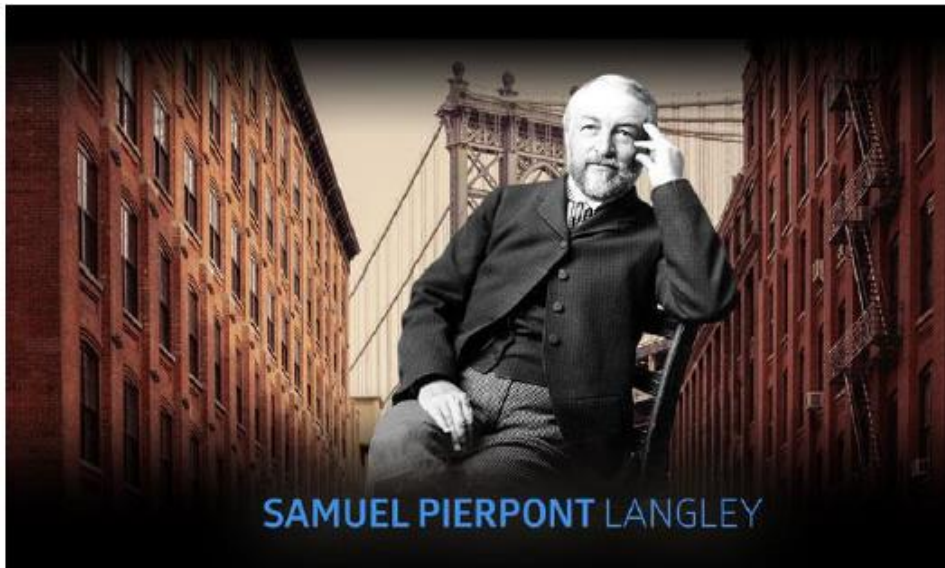
Should we build it?

Run the Green Hub as an experiment!

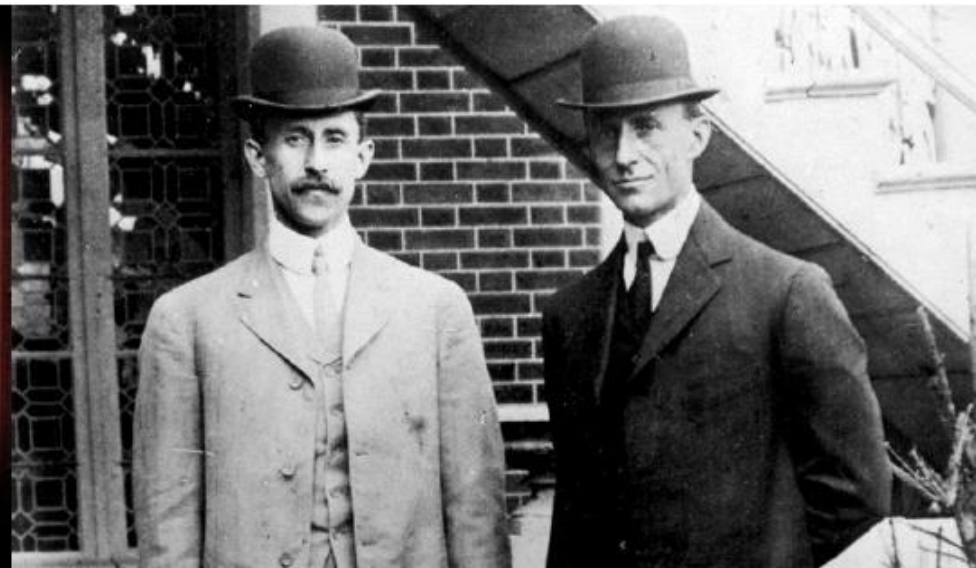
Common Trap innovation: Leaping to solutions



Common Trap Innovation: building full featured products



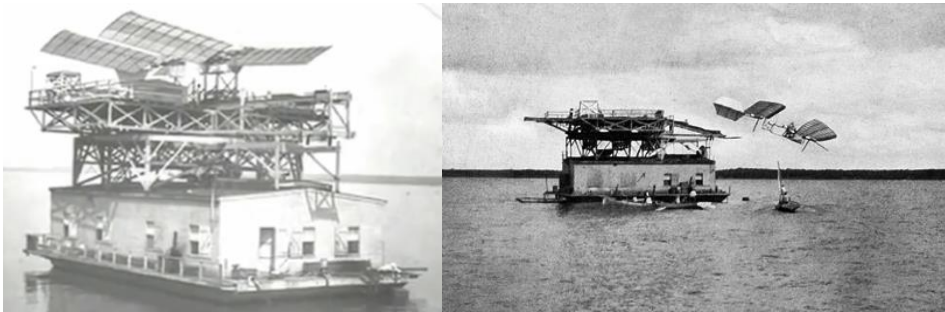
<https://youngandceo.wordpress.com/tag/samuel-pierpont-langley/>



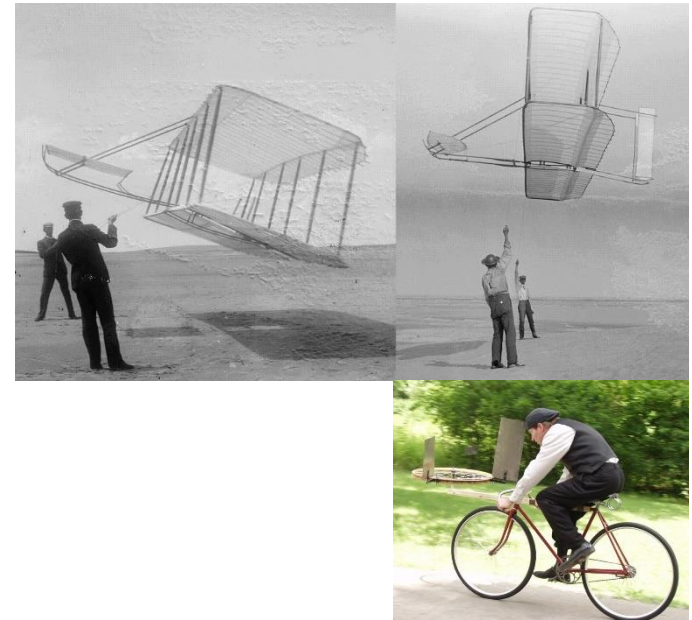
<http://www.whio.com/news/local/the-wright-brothers-new-book-pulitzer-prize-winning-historian-david-mccullough-will-turned-into-hbo-miniseries/G8u9pfZrjkHoTE0SFU5MN/>

Common Trap: building full featured products

Samuel Langley (Gov) vs. Wright Brothers (Prvt. Enterprise)



Budget: 1 MIO \$
Attempt 1: 1897
Attempt 2: 1903

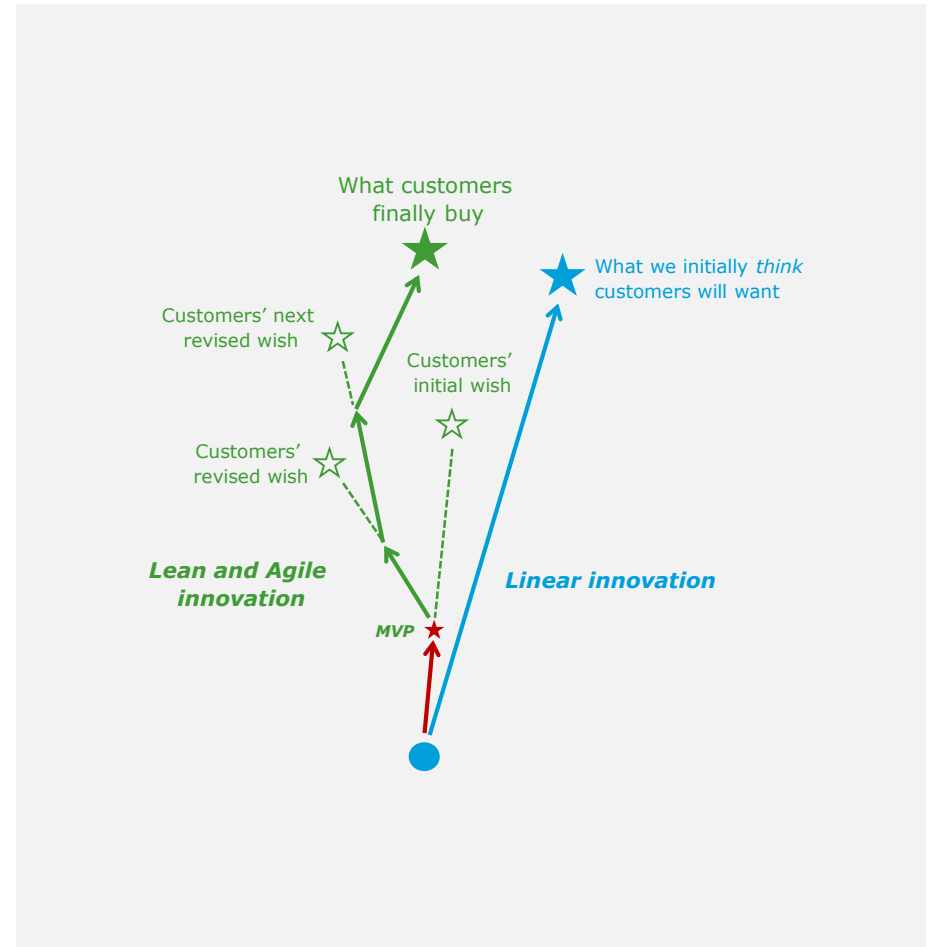


Budget: very limited
5 attempts / day

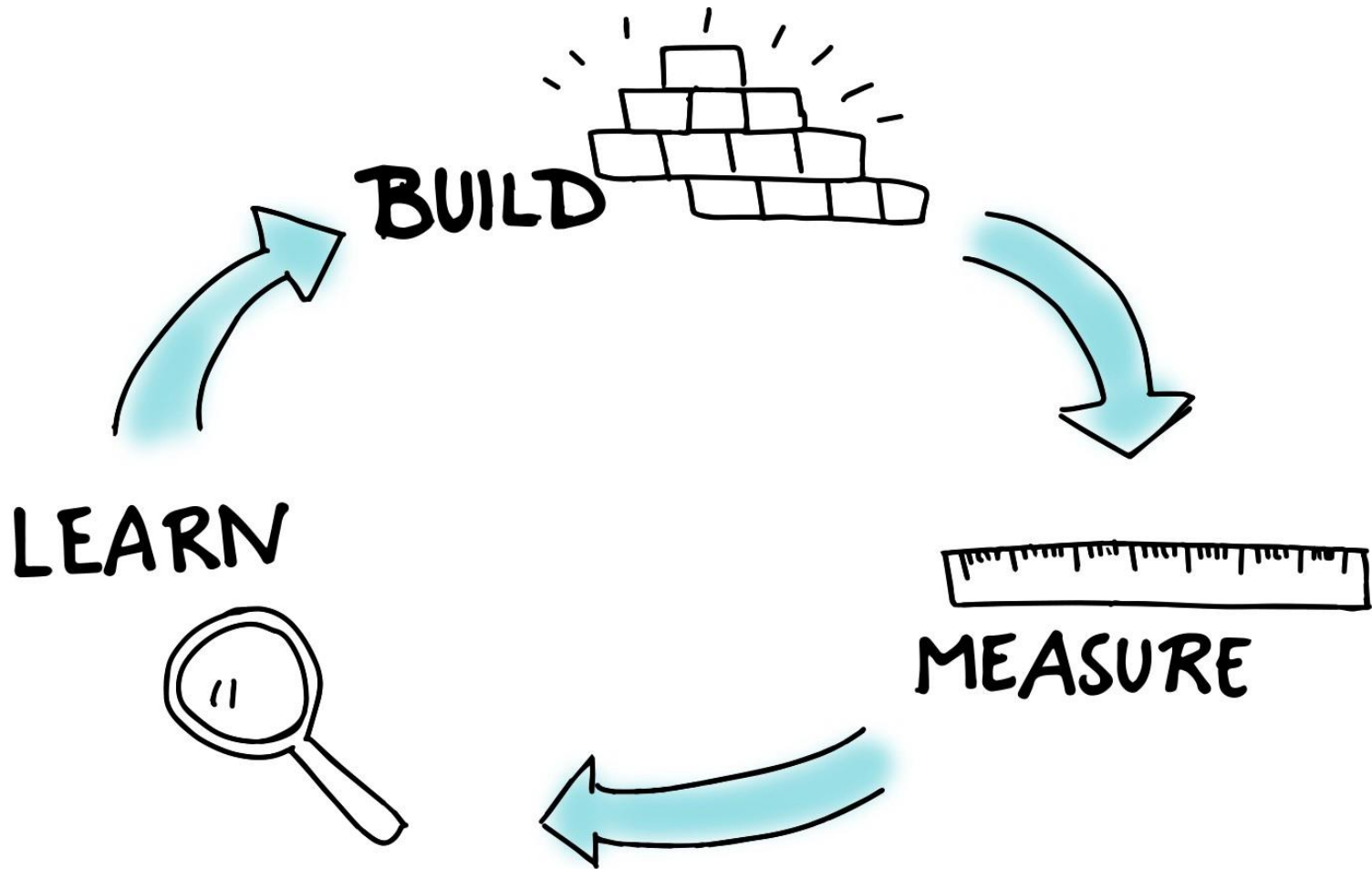


Modern development methodologies

- **Design Thinking (GV Sprint)** is problem solving, concept developing and user validating approach done by a multidisciplinary team in short time frame
- It validates if you should build the product and what it should be.
- **Agile Sprint:** refers to a team of developers working a certain feature during a limited period of time.
- It is about how to build the product



The lean Startup: Build – measure - Learn



Let's practice some tools and methodologies

- Persona's
- GV Sprint process
 - Mapping exercise
 - Sketching exercise
- Use Case & User Journey

Persona's

Understand the job to be done



People don't want to buy a quarter inch drill....



... they want a quarter inch hole”!

Understand the Job to be done



Are Motorcycles just to provide transportation?



Functional Job
What does it do?

"It gets me from A to B"

Social Job
How does it make me look?

"My friendship is based on mutual interest for old motorcycles"

Emotional Job
How does it make me feel?

"I feel freedom when I ride my motorcycle"



Persona's

- *Personas are fictional characters, which you create based upon your research in order to represent the different user types that might use your service, product, site, or brand in a similar way.*
- *Creating personas will help you to understand your users' needs (**jobs to be done**) , experiences, behaviours and goals.*
- *Persona's help you to develop a new product or service that scales across many users by weighing the needs of a Persona segment more than the needs of an individual.*

	The researcher	The Sysadmin	The OSS developer	The CS student
				
Name	Alexander Weiß	Donald M. Berry	Kristian Larsson	Eric Neville
Age	30	30	26	24
Location	Germany	US	Sweden	France
Social Life	Alexander lives with his girl-friend in a flat in Hamburg.	Donald lives with his wife and 1-year old daughter in a house in Portland.	Kristian shares an apartment with two friends in Stockholm. His girl-friend lives in Uppsala. They see each other every weekend.	Eric lives with his parents in a small city close to Lyon. He visits the university there. Often, he stays at his friend's apartment for playing PC games and programming.
Work Life	He works at centre for environmental systems research and designs plans for replacable energies in a EU-funded project.	He is a lead system administrator in a huge network solutions company in Portland.	A software developer with a dayjob in a medium-sized software company. Works on KDE in his spare time.	He is a student of computer science. Besides university, he performs small programming jobs for people in his neighbourhood.
Computer Experience	All are highly experienced with computers.			
Time at a computer per week	26-50 hours per week	35-50++ hours per week	30-50++ hours per week	25-45 hours per week
Computer tasks	Office tasks and Field-dependent. Also educational and recreational. No development.	Development and network administration. Does not use PC for office tasks, educational, and even recreational.	Mostly development and recreational. Also network administration and office.	Mostly development. Also educational, recreational, and network administration. Does not use for office work.
Relation to OSS.	He is not passionate about OSS.	He is a convinced user of OSS.	He is involved with OSS development.	He is a convinced user of OSS.
Requirements wrt diagramming	office requirements	highest claims	easy-going	eager beaver
Frequency of drawing diagrams	Each 2 nd month	Twice per month	Once a month	Each 2 nd month
Diagram main type	Flowcharts. Also visualising thoughts. No technical ones.	All, except sitemap	Visualising thoughts	Diagrams mostly UML
Size and complexity	15-20 elements, 2-3 levels, 3-7 shapes	15-30 elements, 2-5 levels, 4-9 shapes	15-20 elements, 2-3 levels, 3-7 shapes	15-20 elements, 2-3 levels, 3-7 shapes
Diagram purpose and context.	For non-IT job.	Diagrams are for the IT-Job, never for himself.	Diagrams are mostly for himself but, also for formally presenting.	For formally presenting in university. Not for himself, as work input or for any jobs
Current diagramming	Power Point or OOo.	Visio.	Pen and Paper.	Dia, Umbrello.

Persona template

picture	Three specific behavioural or personal traits • • •	Three pain points / fears • • •
Name & Title		
Top Functional jobs to be done	Top Functional jobs to be done 1 "I need to report on new initiatives on a monthly basis" 2 3	
Top emotional jobs to be done	Top emotional jobs to be done 1 "My personal ambition is to safeguard the ecosystem for the future generation" 2 3	
Top social jobs to be done	Top social jobs to be done 1 "I would like to be seen as an authority on sustainability" 2 3	

Exercise: Create Persona's for the Greenhub

- Creating Persona's is an iterative process. As you learn more about your product, you will learn more about your personas.
- Work in small groups to create some persona's (e.g. Expert, local Forester, regional policy maker) based on the elements in the template (see next slide)
- Talk for a couple of minutes about each Persona to paint a picture. Take note on a flip over.
- Walk the rest of the team through a day in the life of 'Esmiralda' or 'Juan''



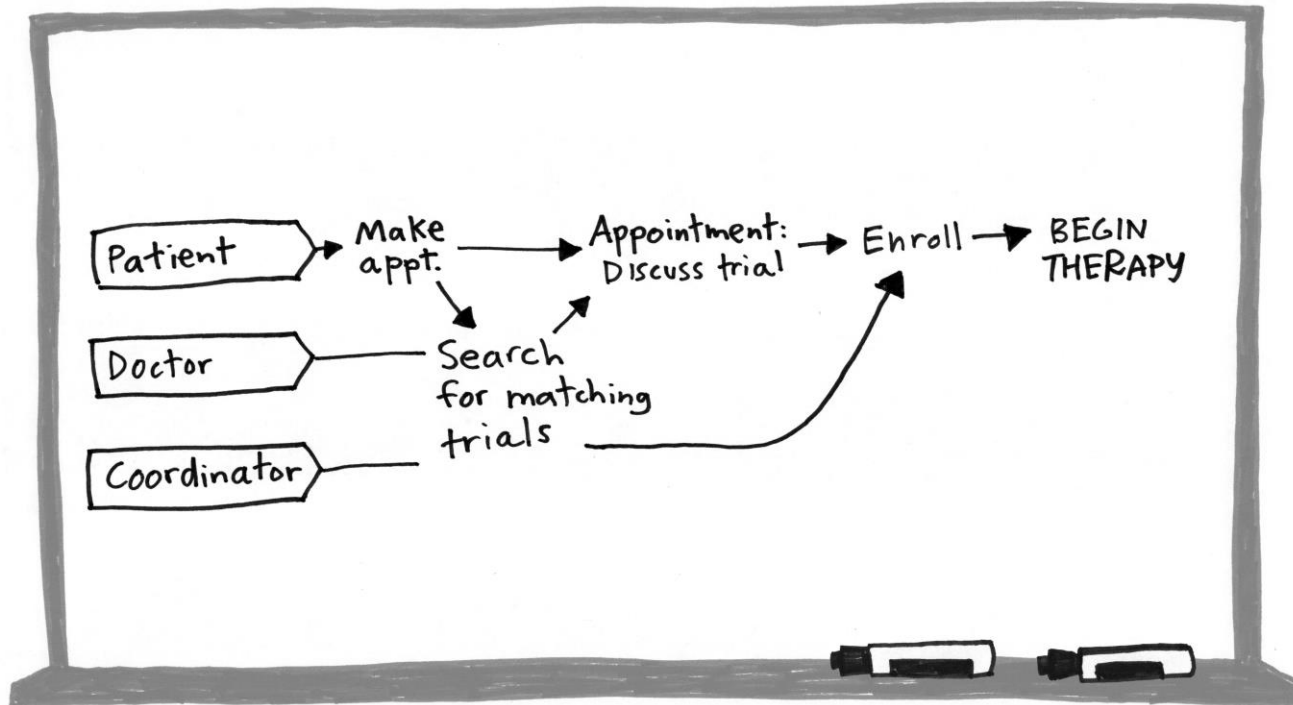
SPRINT: HOW TO SOLVE BIG PROBLEMS AND TEST NEW IDEAS IN JUST 5 DAYS

DAY 0: SETUP	DAY 1: MAP	DAY 2: SKETCH	DAY 3: DECIDE	DAY 4: PROTOTYPE	DAY 5: TEST
<ul style="list-style-type: none"> Choose Team of ~7: <ol style="list-style-type: none"> 1. Decider 2. Finance 3. Marketing 4. Customer (Sales) 5. Tech/Logistics 6. Design 7. Facilitator (External) Schedule the Sprint: 	<ul style="list-style-type: none"> Start at the End: <ul style="list-style-type: none"> • Set Long Term Goal • List Sprint Questions Map (Process & Stakeholders): Ask the Expert <ul style="list-style-type: none"> • Check the Process by asking HMW (how might we) questions. Target <ul style="list-style-type: none"> • Pick a Target on the Map to focus for Sprint Goal and Questions 	<ul style="list-style-type: none"> Remix & Improve: <ul style="list-style-type: none"> • Lightning Demos (3m) • Pick Inspiring/Creative solutions from other Products, Services, Apps, Websites, etc. • Capture Big Ideas Sketch: Work Alone Together <ul style="list-style-type: none"> • Notes: review Day 1-2 notes individually 20m • Ideas: Doodle rough Solutions 20m • Crazy 8s: Try 8 variations in 8m • Solution Sketch: Draw Details 30m 	<ul style="list-style-type: none"> Art Museum: <ul style="list-style-type: none"> • Sketch Reviews Heat Map: <ul style="list-style-type: none"> • Dot Voting for most interesting ideas Speed Critique: 3m <ul style="list-style-type: none"> • Creator Speaks last Straw Poll Super Vote <ul style="list-style-type: none"> • Decider Decides Storyboard ~15 panels <ul style="list-style-type: none"> • Choose Opening Scene • Fill-out Storyboard 	<ul style="list-style-type: none"> Faking It: <p>When prototyping, you need Goldilocks quality. Not too high, not too low, but just right</p> Pick the Right Tools <ul style="list-style-type: none"> • Maker • Asset • Stitcher • Collector • Writer • Interviewer Stitch It Together Trial Run <ul style="list-style-type: none"> • Web Search • App Store • Magazine Ad • News Article • Store Shelf • FB or Twitter 	<ul style="list-style-type: none"> 5 the Magic Number <ul style="list-style-type: none"> • 85% of problems were observed after 5 people 5 Act Interview <ul style="list-style-type: none"> • Welcome • Context Questions • Introduce Prototype • Detailed Tasks • Quick Debrief Learn <ul style="list-style-type: none"> • Watch Together, Learn Together • Take Interview Notes Together • Look for Patterns • Review / Revisit

<http://www.strategyppt.com>

1

Day one: Make a Map



This will be a simple diagram with around 5-15 steps.

Make a Map

User segment / stakeholders	Discovery	Learning	Using
Farmers			
Forrester / ranger			
Green hub			
Persona's			

Long Term Goal
preserve natural protected areas and their biodiversity.

This will be a simple diagram with around 5-15 steps.

Make a Map

User segment / stakeholders	Discovery	Learning	Using
Farmers	Googe search	Select the relevant Topic of Interest	
Forrester / ranger			
Green hub	Find Green Hub		
Technical advisor			Select the relevant Topic of Interest

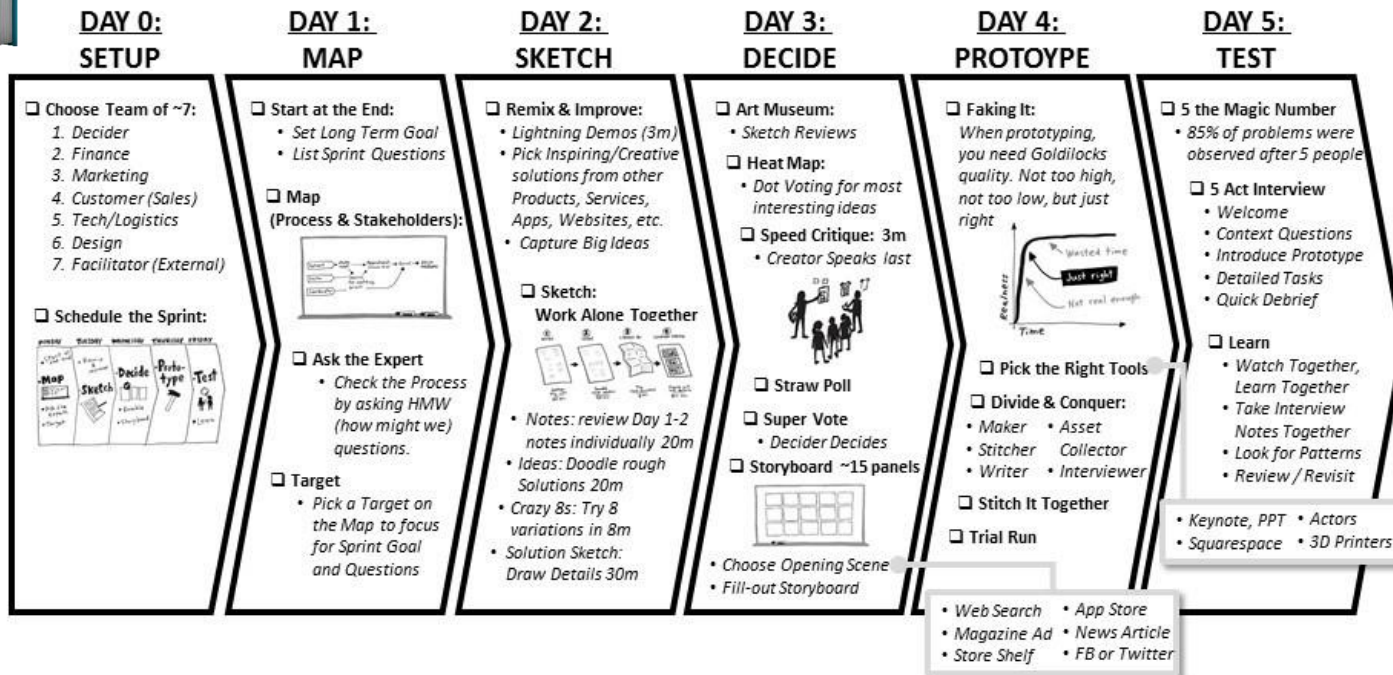
Long Term Goal
 preserve natural protected areas and their biodiversity.

This will be a simple diagram with around 5-15 steps.

Rest of the GV Sprint



SPRINT: HOW TO SOLVE BIG PROBLEMS AND TEST NEW IDEAS IN JUST 5 DAYS

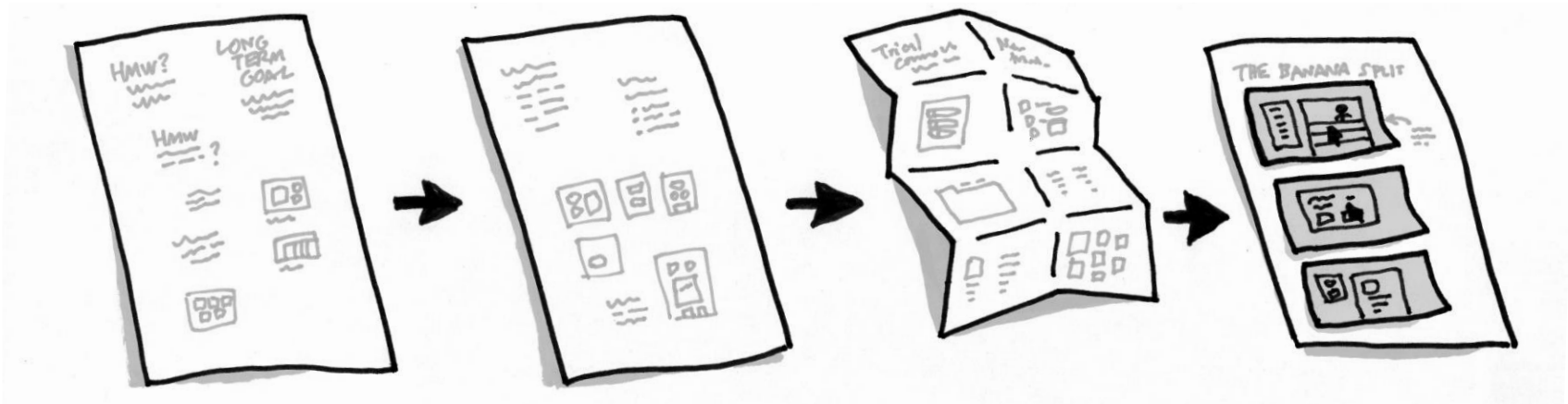


<http://www.strategyppt.com>

1

**Group
brainstorms
don't work, so
you'll sketch
alone.**

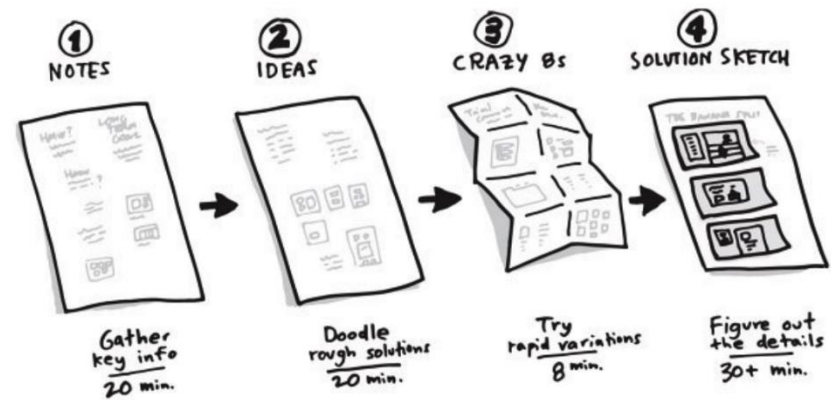
Sketch



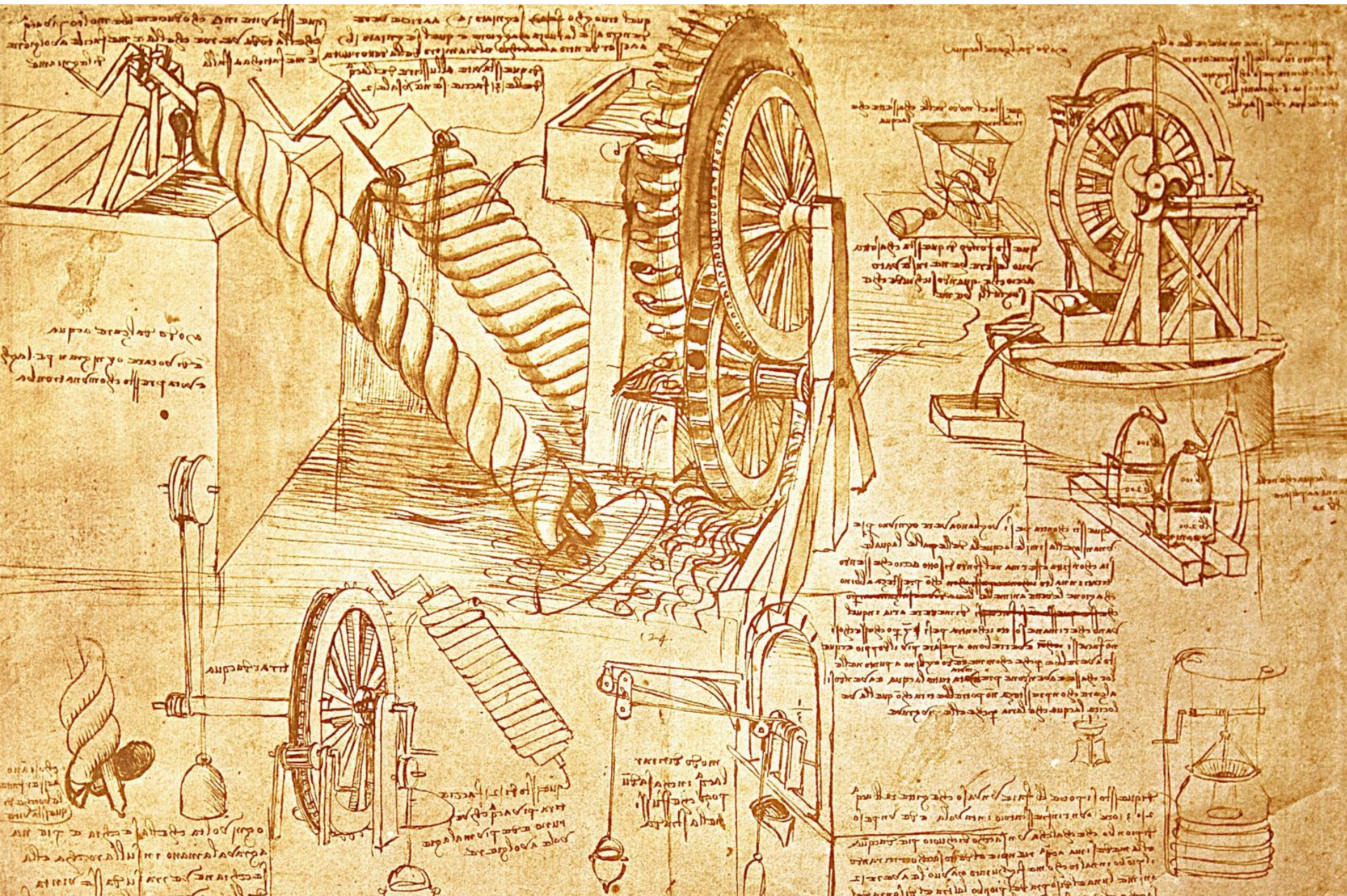
The process goes step-by-step to make it easy.

Sketch in 4 steps

- Make Notes
 - Starting Point: Long Term Goals
- Generate ideas
 - Generate solution ideas based on your notes (roughly! It is a thinking process)
- Crazy eights
 - 3 times folded a A4: Take one idea and Sketch 8 alternative variants in 8 minutes
- Solution Sketch
 - Sketch one concept in 3 'screens'
 - Ugly is ok!
 - Words are important! Explain the concept!
 - Use an appealing title for your idea.



**Your
sketches
will look like
this:**



הנה תראה כי המים יורדים
באמצעות המעלה והמטה
והמכונה הזאת היא
לעבודת המים והאש

מכונה לזרימה

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והמכונה הזאת היא
לעבודת המים והאש

**Haha!
Just
kidding.
More like
this:**

Result:

WELCOME BACK

QUICK REORDER
w/ 3 clicks

SHOWN IN HOME

QUICK ORDER

- GIANT STEPS
- BLUEBON
- DECAF BLEND

1st CLICK
TELL US WHAT YOU WANT

2nd CLICK
QUANTITY, KEEP SHIPPING?

3rd CLICK
CONFIRM, DONE!

CONFIRM ORDER

GIANT STEPS
-SMA, TRAY, FRESH POLICY AND MORE

QUANTITY	SHIPPING	TOTAL
1	\$5.00	\$10.00

PURCHASE

SOCIAL SCENE

See the famous BB line on screen —
Click on each person so you can see what they are ordering - whats hot!

Byron Paul Samuel You Sarah

likes remember

can I help next in line?

British
You can close tags to chat on line

CHOOSE YOUR LEVEL Just like skis

Easy → - Filter
- Drip
- Espresso

Advanced looking for something → Smooth → Bold
Destructive → Bold
Finely → Earthy

List best-sellers by use with ~~tags~~ images of use + product

Go deeper into:

- Single origin
- Small lots
- Whats Hot

 This week Diver/strand → Trust choice

THE "CART CONVERTER"

HTTP://BBC.COM/CART

Shopping cart Page

Shipping selector

2 x 2 = \$35

HEY! Turn this order into a subscription. We'll send this to you every 4 wks.

HTTP://BBC.COM/CONFIRM

OK Byron, we got you down for 2 lbs of stans very Easy 4 wks. We'll ship your first order today; your next Friday morning or latest 4 wks from now.

adjust | Confirm

HTTP://BBC.COM/SUCCESS!!

Success! You're now signed up for the ultimate in fresh coffee subscription.

Click here to adjust

Click here to cancel anytime

Click here to tell a loved one about our subscription & earn credit!

George 's homepage with his chosen portlets

imited

Back Home Search Favorites Media

Address

effect ve global solutions to business risks

WELCOME BACK GEORGE TO PORTAL PORTAL CONTROL PANNEL: [ADD PORTLET](#) [DELETE PORTLET](#) [CONFIGURE](#) [HELP](#)

cover

POLICY NAME	TYPE	INSURER	EXP
Czech Plant	PROPERTY	XYZ LIMITED	18:12:2003
Just In Time	PLANNING	ABC CORP	21:04:2004
Fleet Service	STRATEGIC	EUROFLEET	30:12:2003
Products	LIABILITY	LLOYDS	30:12:2003

links and messages

My Links:

[Shipping to Iraq](#) [Risk seminar](#) [New Car Scheme](#)

RISK CONF 03

Paris! REGISTER NOW

[ADD LINK](#) [DELETE LINK](#) [REQUEST INFO](#)

analysis

SHIPPING

OFFSHORE LOCATIONS FAVOURED FOR FAVORABLE TAXATION REGIMES. [IN FULL](#)

CLASSIC CARS

AGREED VALUE COVER NOW AVAILABLE FOR CLASSIC CARS OVER 10 YEARS OLD. [FIND OUT MORE](#)

RISK MANAGEMENT

EFFECTIVE RISK MANAGEMENT IS CRITICAL COMPONENT OF WINNING MANAGEMENT COMPANY. [READ REPORT](#)

[ADD SUBJECT](#) [DELETE SUBJECT](#) [CONFIGURE](#)

programme plan

PROGRAMME	Q1	Q2	Q3	Q4
Health and Safety	Progress bar	Progress bar	Progress bar	Progress bar
Marine and Cargo Renewal	Progress bar	Progress bar	Progress bar	Progress bar
European Employee Benefits	Progress bar	Progress bar	Progress bar	Progress bar

[ADD PROGRAMME](#) [DELETE PROGRAMME](#) [CONFIGURE](#) [READ REPORTS](#)

Internet

SCENARIO: September '04

George's boss the Global Risk Manager, is bringing a SAM over for a half-year review. George has a 1 hour presentation to give on the European risk position and his view of Aon's performance.

What's happening?

George has a view on the various different aspects of his relationships with X, he has a list of Cover he has with X, he can see a high level view of his Programme Plans. As well as that he has personalised news and analysis provided by X.

The Links and messages Portal enables X to communicate with George about things that will interest him and is an opportunity for X to cross-sell products and services.

In this instance George wants to get the latest on the European Risk Program that he has been working on with X



Use Cases / User Stories

Use case

- A **use case** describes a system's behavior from the user's perspective and provides a highlevel view of the intended functionality. It helps identify functional requirements by clarifying the goals (Jobs to be done) that a stakeholder needs to accomplish while interacting with a particular system
- **User story.** A user story is a statement written in everyday language from the viewpoint of a user. It is intended to capture the new functionality or capability of a solution. A user story may contain many requirements; therefore, it can serve as a functional grouping of requirements



High level “User Stories” (needs and requirements statements)

- As **parents** we want the city to be safe and family friendly so that we can raise our children and see them prosper
- As a **business owner** I want to establish and grow my business so that I can earn enough money and secure my employees’ and my own future
- As an **citizen** I want to have easy access to goods, services, recreation, good neighbours, and anything else I need to live a meaningful and rewarding life.
- As an **employee** I need easily available transportation to avoid wasting time in commuting between work and home.
- As a **visitor** I want accommodation, transportation, entertainment, points of interest to make my stay worthwhile, interesting and easy.
- As an **authority** we want good tax income, good infrastructure, prospering businesses, happy citizens and opportunities to expand and build our society.
- As a **city founder** I want to be remembered in a positive way
- As a **city founder** I want the city to be located by a river and lake/sea since I love water sports.
- Other?

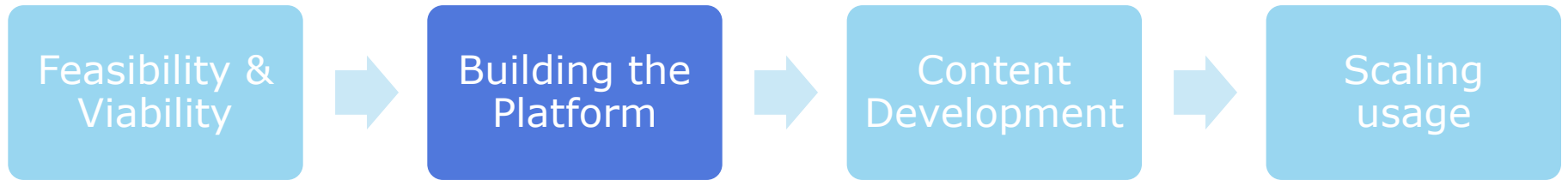
Example of a User Story



Exercise: Create User Journey

- Take one of the Persona's
 - Draft the user journey of the persona through the concept of the Green Hub
 - Reflect on the process, result and learning
-
- Tips:
 - Focus on the motivation of the user, what 'job' he/she is trying to get done without. -> this will translate in the needs of the user
 - Describe how the solution is envisioned to help the user.

4 phases



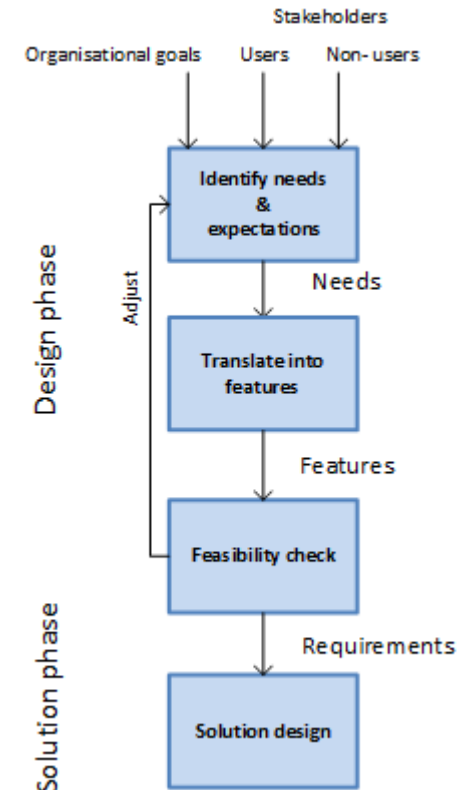
Requirements analyses / engineering

- In systems engineering and software engineering, requirements analysis encompasses those tasks that go into determining the needs or conditions to meet for a new or altered product or project, taking account of the possibly conflicting requirements of the various stakeholders, analyzing, documenting, validating and managing software or system requirements.
- Requirements analysis is critical to the success or failure of a systems or software project. The requirements should be documented, actionable, measurable, testable, traceable, related to identified business needs or opportunities, and defined to a level of detail sufficient for system design.

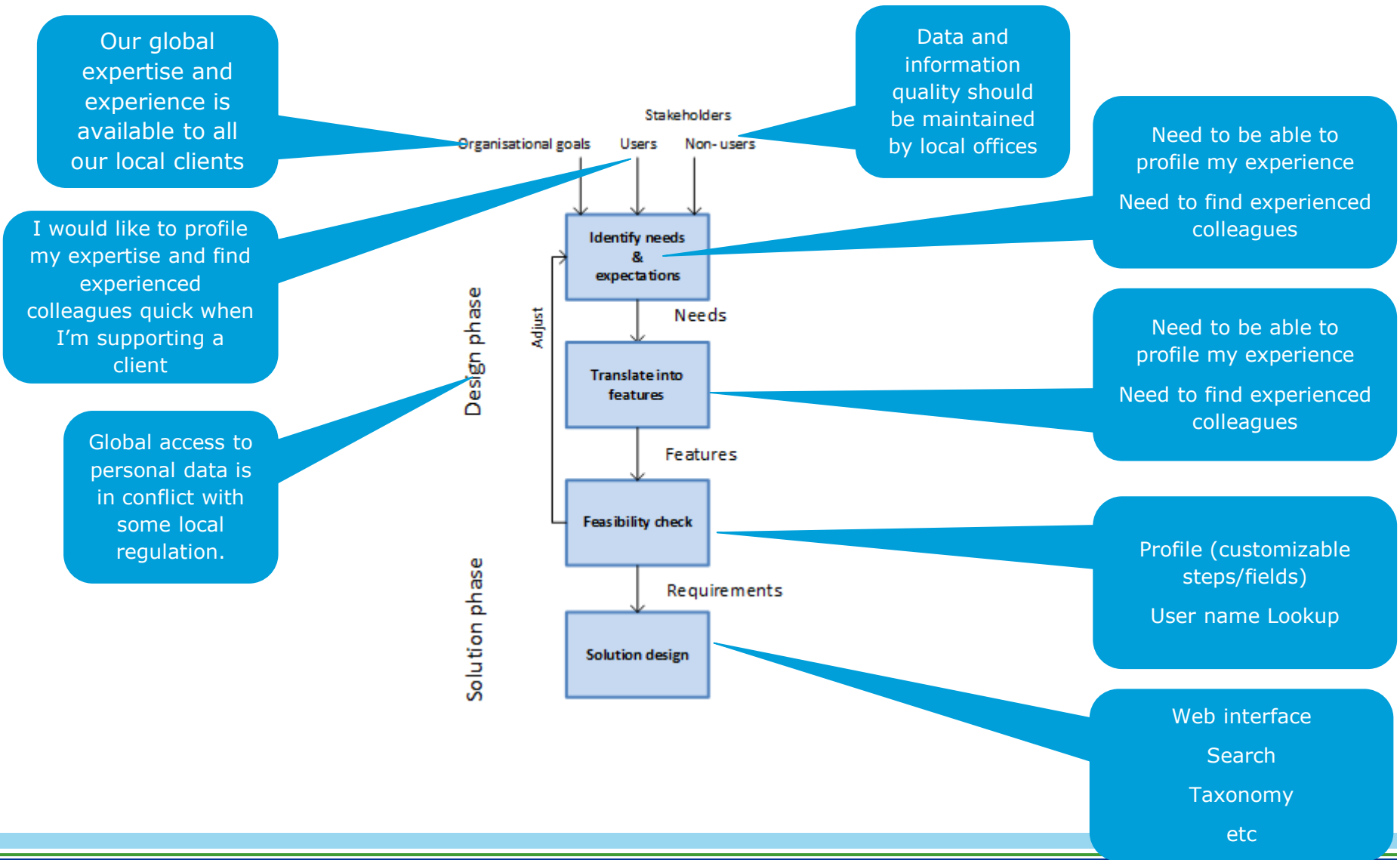
Requirements analysis

Principles:

- **Needs** are system-independent and should change only as usage, work or the work context changes (e.g. User story). User needs do not change when underlying IT-systems change.
- Needs are translated into features (distinguishing characteristic of a software item (e.g., performance, portability, or functionality))
- A feasibility check is done to assess the match between the needs and the system's capabilities.
- Depending on the fit (or misfit) you can decide on either changing the priority of needs versus changing the underlying IT system.
- This approach assures stakeholders develop the right expectation level regarding the functionality that can and will be delivered.

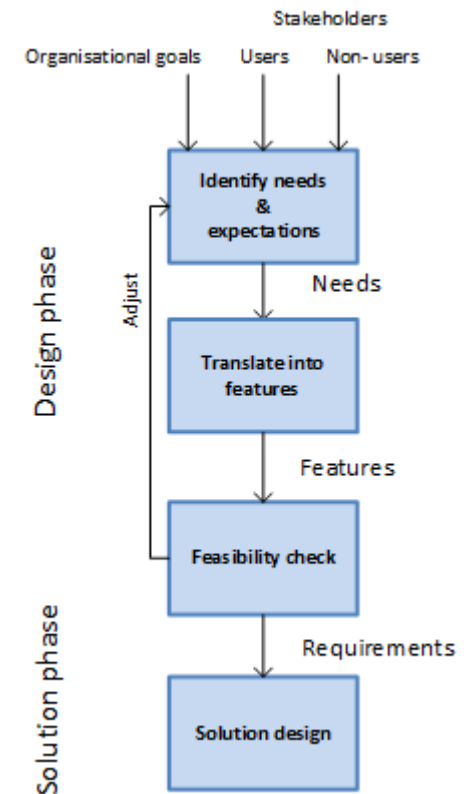


Requirements analysis: Example

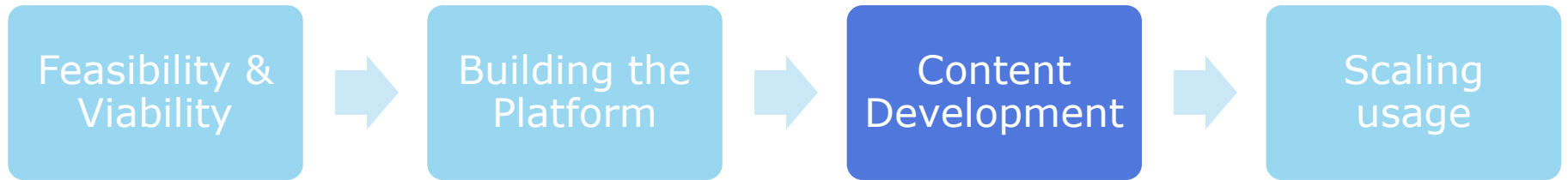


Requirements analysis: Exercise

Fill in the requirements analyses model for a need as identified in the "green hub" use case.

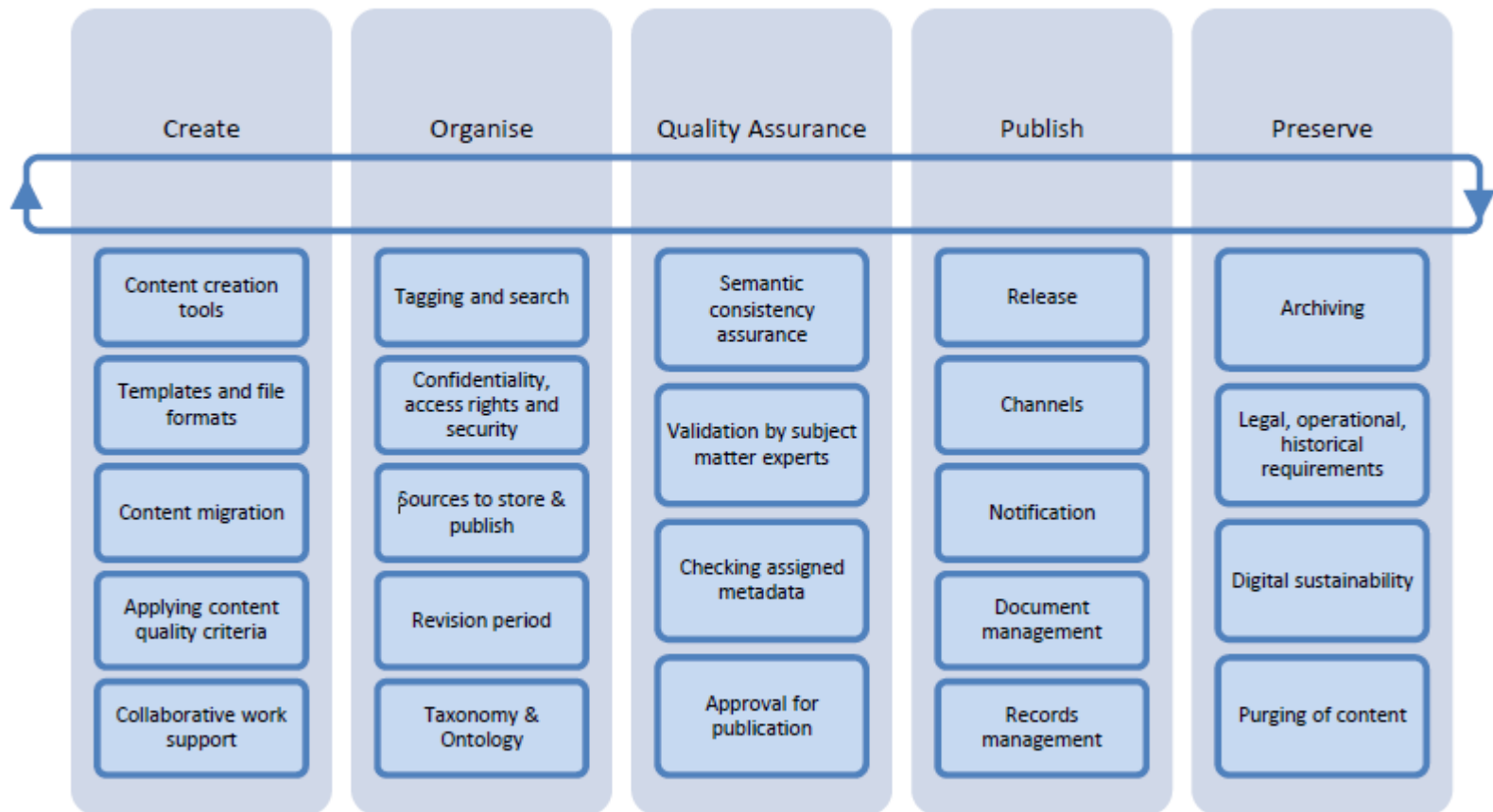


4 phases



Phase 2: Content creation & content management

- Content Life Cycle Model: Delivering content tailored to the users' needs



Roles and Responsibilities

- **Content creator**

write documents or explicit knowledge using other media

- **Content manager**

is like the spider at the centre of its web, overseeing all activities. Provides tools (templates, criteria, ...), assistance (how to use content creation tools, tagging, publishing, ...) and guards/ enforces agreed ways of working

- **Quality assurance**

validates the content's quality and ensures usability and findability of the content

- **Document/record manager**

ensures content to be preserved and/or archived, compliant to legal, operational or historical requirements

Exercise content management

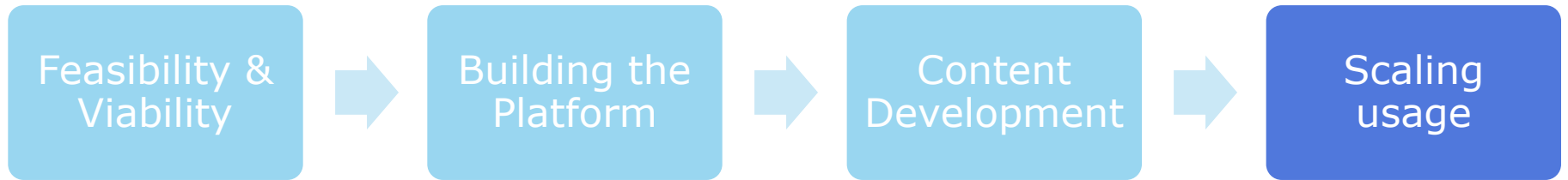
Take the aforementioned content life cycle model and translate each step in a need as part of the Green Hub prototype:

- What feature(s) should be in place?
- Which roles should be in place and how would you define them?
- How would you define 'success'?

Extra:

- Research has resulted in a ground breaking technology to identify deforestation early. How would an article on deforestation be handle by your content life cycle?
- Overleg met Marco, wat zou een nuttige oefening zijn?

4 phases



6 Ways to Create Community-Driven Content

1. Create a Real Community Around Your Focus Topic

- Connect with network(s) of experts or interest groups seeking for a platform to share their content

2. Listen to Your Audience

- (social) Media monitoring is an effective way to pinpoint topics of interest.

3. Give Your Community the Spotlight

- Inviting a person to contribute to your content is inviting them to become a member of your community.

4. Develop content for Someone, Not Anyone

- Keep your Persona's up to date and use them to target content

5. Collect Opinions from Your Community

- Ask your community to contribute their thoughts and opinions.

6. Ask Your Community What They Want to Hear About

- Reach out to some of your most active community members asking what they want to hear more about.

Exercise Scaling Usage

- Suggestion not to introduce more theory but facilitate a group dialogue / expert debrief with

Reflection on the 4 phases

