Day 3 MCKM Fundecor

Marco Berndsen (Marco.Berndsen@dnvgl.com)
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

- Producing findable content
- Information architecture to connect supply and demand
- A user interface matching search behaviour and information needs of users

Tune supply to search behaviour
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...

But effective?
...if you know exactly what you’re looking for
Organisational structure, project phasing

- Project documentation
  - Communication
- Lessons learned
  - Proposed
  - Validated
- Phases
  1. Initiation
  2. Planning
  3. Execution
  4. Monitoring and control
  5. Close-out
- Planning documents
- Project management
  - Budget discussions
  - Contracts client
  - Contracts contractors
  - Minutes of meetings
Organised by common language
Overview as result
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?’
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

1 Definitions
2 Renewable energy technologies
   2.1 First-generation technologies
   2.2 Second-generation technologies
   2.3 Third-generation technologies
   2.4 Fourth technologies for renewable energy
By information characteristics
Understanding the question
People and content

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

Producing findable content

Tune supply to search behaviour

Demand

Information architecture to connect supply and demand

A user interface matching search behaviour and information needs of users
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 Park, Couperus, Louis M.A.
Preceded by: Sense and Sensibility
## Different types of metadata

<table>
<thead>
<tr>
<th>Metadata type</th>
<th>Elements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asset metadata</td>
<td>Author, Date of creation, Location, Type, Language, …</td>
</tr>
<tr>
<td><em>About the document itself</em></td>
<td></td>
</tr>
<tr>
<td>Subject metadata</td>
<td>Keywords characterising the content</td>
</tr>
<tr>
<td><em>What is the document about</em></td>
<td></td>
</tr>
<tr>
<td>Relational metadata</td>
<td>Related subjects</td>
</tr>
<tr>
<td><em>Relations between documents</em></td>
<td></td>
</tr>
<tr>
<td>Use metadata</td>
<td>Authorisations, security, confidentiality levels</td>
</tr>
<tr>
<td><em>Access to documents</em></td>
<td></td>
</tr>
</tbody>
</table>
# The use of metadata

[Image of a document template with metadata fields filled out]

## Content Type
- Oil And Gas KnowledgePortal Document

## Name
- Project showcase template

## Title
- Project showcase template

## Description
- Template to be used for project 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;

## 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.

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

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DNV GL © 2018
Refine your search:

Segment
- Any Segment
- Pipelines (52)
- 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)

Service Line
- Any Service Line
- Safety Risk Management (56)
- Verification and Certification of Assets (40)
- Asset Risk Management (39)
- Enterprise Risk Management (33)

Practice
- Any Practice
- Quantitative safety studies (39)
- Certification and verification of offshore pipelines (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

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
- DNVGL-RP-0002_2014-11

Show more learning materials and courses

Theory and technical presentations
- Challenges and Risks associated with deep water pipelines
- DNV GL JIP 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

Show more internal and external standards

Key contacts
- Guo, Yuan Gavin
  - Business Development Manager
  - Business Development China (OPCN002)
  - +86 10 65627784 (D)
  - China, Shanghai (SHA)
  - Guo.Guo@dnvgl.com
  - GUO
- Hashmati, Ehsan
  - Principal Consultant Pipelines, Subsea & Structures (OPOAU990)
  - +61 8 92154612 (D)
  - Australia, Perth (PWB)
  - Ehsan.Hashmati@dnvgl.com
  - HEHE

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

Alice
http://example.org/alice#me

Leonardo Da Vinci
http://dbpedia.org/resource/Leonardo_da_Vinci

The Mona Lisa
http://www.wikidata.org/entity/Q12418

La Joconde à Washington
http://data.europeana.eu/item/048c2/243FA8818938F4117025F17A88813C5F9AA4D619

BOB
http://example.org/bob#me

foaf:knows

foaf:topic_interest

dcterms:creator

dcterms:title

"Mona Lisa"

"1990-07-04"^^xsd:date

Person
foaf:Person
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
Tune supply to search behaviour

Supply

Producing findable content

Information architecture to connect supply and demand

A user interface matching search behaviour and information needs of users

Demand

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

- **Intrinsic quality**: The quality of the information itself
  - Objective
  - Correct
  - Matureness
  - Factual
  - Complete
  - Trustworthy
  - Validated

- **Contextual quality**: Does the information fit to the task and work context of the user
  - Fitness for use
  - Adds value
  - Relevant
  - Actionable
  - Fits skill/expertise level
  - Proper size

- **Quality of presentation**: Design and look and feel
  - Readable
  - Terminology and jargon
  - Ready-to-use
  - Consistent
  - Media mix fits purpose
  - Presentation

- **Logistic quality**: Security, findability, in time
  - Findable
  - Tagged
  - Proper access rights
  - Secure
  - User friendly
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
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

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

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

Content management systems

Plugins

(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

Feasibility & Viability → Building the Platform → Content Development → Scaling usage
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
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.
<table>
<thead>
<tr>
<th>Name</th>
<th>Alexander Weiss</th>
<th>Donald M. Berry</th>
<th>Kristian Larsson</th>
<th>Eric Neville</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>30</td>
<td>30</td>
<td>26</td>
<td>24</td>
</tr>
<tr>
<td>Location</td>
<td>Germany</td>
<td>US</td>
<td>Sweden</td>
<td>France</td>
</tr>
<tr>
<td>Social Life</td>
<td>Alexander lives with his girlfriend in a flat in Hamburg.</td>
<td>Donald lives with his wife and 1-year old daughter in a house in Portland.</td>
<td>Kristian shares an apartment with two friends in Stockholm. His girlfriend lives in Uppsala. They see each other every weekend.</td>
<td>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.</td>
</tr>
<tr>
<td>Work Life</td>
<td>He works at a centre for environmental systems research and designs plans for renewable energies in a EU-funded project.</td>
<td>He is a lead system administrator in a huge network solutions company in Portland.</td>
<td>A software developer with a day job in a medium-sized software company. Works on KDE in his spare time.</td>
<td>He is a student of computer science. Besides university, he performs small programming jobs for people in his neighborhood.</td>
</tr>
<tr>
<td>Computer Experience</td>
<td>All are highly experienced with computers.</td>
<td>All are highly experienced with computers.</td>
<td>All are highly experienced with computers.</td>
<td>All are highly experienced with computers.</td>
</tr>
<tr>
<td>Time at a computer per week</td>
<td>26-50 hours per week.</td>
<td>35-50++ hours per week.</td>
<td>30-50++ hours per week.</td>
<td>25-45 hours per week.</td>
</tr>
<tr>
<td>Computer tasks</td>
<td>Office tasks and Field-dependent. Also educational and recreational. No development.</td>
<td>Development and network administration. Does not use PC for office tasks, educational, and even recreational.</td>
<td>Mostly development and recreational. Also network administration and office.</td>
<td>Mostly development. Also educational, recreational, and network administration. Does not use for office work.</td>
</tr>
<tr>
<td>Relation to OSS</td>
<td>He is not passionate about OSS.</td>
<td>He is a convinced user of OSS.</td>
<td>He is involved with OSS development.</td>
<td>He is a convinced user of OSS.</td>
</tr>
<tr>
<td>Requirements wrt diagramming</td>
<td>Office requirements</td>
<td>Highest claims</td>
<td>Easy-going</td>
<td>Eager beaver</td>
</tr>
<tr>
<td>Frequency of drawing diagrams</td>
<td>Each 2nd month</td>
<td>Twice per month</td>
<td>Once a month</td>
<td>Each 2nd month</td>
</tr>
<tr>
<td>Diagram main type</td>
<td>Flowcharts. Also visualising thoughts. No technical ones.</td>
<td>All, except sitemap</td>
<td>Visualising thoughts</td>
<td>Diagrams mostly UML</td>
</tr>
<tr>
<td>Size and complexity</td>
<td>15-20 elements, 2-3 levels, 3-7 shapes</td>
<td>15-30 elements, 2-5 levels, 4-9 shapes</td>
<td>15-20 elements, 2-3 levels, 3-7 shapes</td>
<td>15-20 elements, 2-3 levels, 3-7 shapes</td>
</tr>
<tr>
<td>Diagram purpose and context</td>
<td>For non-IT job.</td>
<td>Diagrams are for the IT job, never for himself.</td>
<td>Diagrams are mostly for himself but also for formally presenting.</td>
<td>For formally presenting in university. Not for himself, as work input or for any jobs</td>
</tr>
</tbody>
</table>
### Persona template

<table>
<thead>
<tr>
<th>Name &amp; Title</th>
<th>Top Functional jobs to be done</th>
<th>Top emotional jobs to be done</th>
<th>Top social jobs to be done</th>
<th>Three specific behavioural or personal traits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Three pain points / fears</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Top Functional jobs to be done**
- “I need to report on new initiatives on a monthly basis”
- 2
- 3

**Top emotional jobs to be done**
- “My personal ambition is to safeguard the ecosystem for the future generation”
- 2
- 3

**Top social jobs to be done**
- “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’
**GV Sprint**

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

**DAY 0: SETUP**
- Choose Team of ~7:
  1. Decider
  2. Finance
  3. Marketing
  4. Customer (Sales)
  5. Tech/Logistics
  6. Design
  7. Facilitator (External)
- Schedule the Sprint:
  - **Map** (Process & Stakeholders)
    - Ask the Expert
      - Check the process by asking “WHAT” (how might we) questions.
    - Target
      - Pick a Target on the Map to focus on the Sprint Goal and Questions
- **Sketch** Work Alone Together
  - Notes/Read Day 1-2 notes individually 20m
  - Ideas: Depiction rough Solutions 20m
  - Crazy 8: Try 8 variations in 8m
  - Solution Sketch: Draw Details 30m

**DAY 1: MAP**
- Start at the End:
  - Set Long Term Goal
  - List Sprint Questions
- **Map** (Process & Stakeholders)

**DAY 2: SKETCH**
- **Sketch** Work Alone Together
  - Notes/Read Day 1-2 notes individually 20m
  - Ideas: Depiction rough Solutions 20m
  - Crazy 8: Try 8 variations in 8m
  - Solution Sketch: Draw Details 30m

**DAY 3: DECIDE**
- **Art Museum**:
  - Sketch Reviews
- **Heat Map**
  - Dot Voting for most interesting ideas
- **Speed Critique** 3m
  - Creator Speaks last

**DAY 4: PROTOTYPE**
- **Faking It**
  - When prototyping, you need Goldilocks quality. Not too high, not too low, but just right
- **Straw Poll**
  - Decider/Decides
- **Super Vote**
  - Decider/Collector
- **Storyboard ~15 panels**
  - Choose Opening Scene
  - Without Storyboard

**DAY 5: TEST**
- **Faking It**
  - When prototyping, you need Goldilocks quality. Not too high, not too low, but just right
- **5 the Magic Number**
  - 85% of problems were observed after 5 people
- **5 Act Interview**
  - Welcome
  - Context Questions
  - Introduce prototype
  - Detailed Tasks
  - Quick Debrief
- **Learn**
  - Watch Together, Learn Together
  - Take Interview Notes Together
  - Look for Patterns
  - Review/Revise

- **Web Search**
- **App Store**
- **Magazine Ad**
- **News Article**
- **Store Shelf**
- **FB or Twitter**
Day one: Make a Map

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

<table>
<thead>
<tr>
<th>User segment / stakeholders</th>
<th>Discovery</th>
<th>Learning</th>
<th>Using</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forrester / ranger</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green hub</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Persona’s</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Long Term Goal: preserve natural protected areas and their biodiversity.

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

<table>
<thead>
<tr>
<th>User segment / stakeholders</th>
<th>Discovery</th>
<th>Learning</th>
<th>Using</th>
</tr>
</thead>
<tbody>
<tr>
<td>Farmers</td>
<td>Googe search</td>
<td>Select the relevant Topic of Interest</td>
<td></td>
</tr>
<tr>
<td>Forrester / ranger</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Green hub</td>
<td>Find Green Hub</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Technical advisor</td>
<td></td>
<td></td>
<td>Select the relevant Topic of Interest</td>
</tr>
</tbody>
</table>

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

**Long Term Goal**

Preserve natural protected areas and their biodiversity.
## Rest of the GV Sprint

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

<table>
<thead>
<tr>
<th>DAY 0: SETUP</th>
<th>DAY 1: MAP</th>
<th>DAY 2: SKETCH</th>
<th>DAY 3: DECIDE</th>
<th>DAY 4: PROTOTYPE</th>
<th>DAY 5: TEST</th>
</tr>
</thead>
<tbody>
<tr>
<td>Schedule the Sprint:</td>
<td></td>
<td>Sketch: Work Alone Together</td>
<td></td>
<td></td>
<td></td>
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<td>Art Museum: 1. Sketch Reviews 2. Meet Max: 1. Dot Voting for most interesting ideas Speed Critique: 3m 1. Creator Speaks last</td>
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Source: [www.strategyzer.com](http://www.strategyzer.com)
Group brainstorms don’t work, so you’ll sketch alone.
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:
Haha!
Just kidding.
More like this:
Result:
George’s homepage with his chosen portlets

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 high-level 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.

![Image of Dilbert comic strip discussing user stories](image-url)
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 the get done without. -> this will translate in the needs of the user
- Describe how the solution is envisioned to help the user.
4 phases

Feasibility & Viability → Building the Platform → Content Development → Scaling usage
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.
Our global expertise and experience is available to all our local clients.

I would like to profile my expertise and find experienced colleagues quick when I'm supporting a client.

Global access to personal data is in conflict with some local regulation.

Data and information quality should be maintained by local offices.

Need to be able to profile my experience
Need to find experienced colleagues

Need to be able to profile my experience
Need to find experienced colleagues

Profile (customizable steps/fields)
User name Lookup

Web interface
Search
Taxonomy
etc
Requirements analysis: Exercise

Fill in the requirements analyses model for a need as identified in the “green hub’ use case.
4 phases

- Feasibility & Viability
- Building the Platform
- Content Development
- Scaling usage
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, overviewing 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

Feasibility & Viability → Building the Platform → Content Development → Scaling usage
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

Feasibility & Viability

- Run the Green Hub as an experiment using the ‘build, measure, learn’ approach
- Persona’s help you with insight on the jobs to be done
- Use the GV Sprint to build a prototype and test with end users
- Use user Journey’s and use cases to describe the needs

Building the Platform

- Requirement Engineering as an approach to translate the user needs into system requirements
- Input to tech stack / platform selection

Content Development

- Requirement Engineering as an approach to translate the user needs into system requirements
- Input to tech stack / platform selection

Scaling usage

- Build a community with mutual interest in an credible online platform of validated information, knowledge and access to a network of key experts