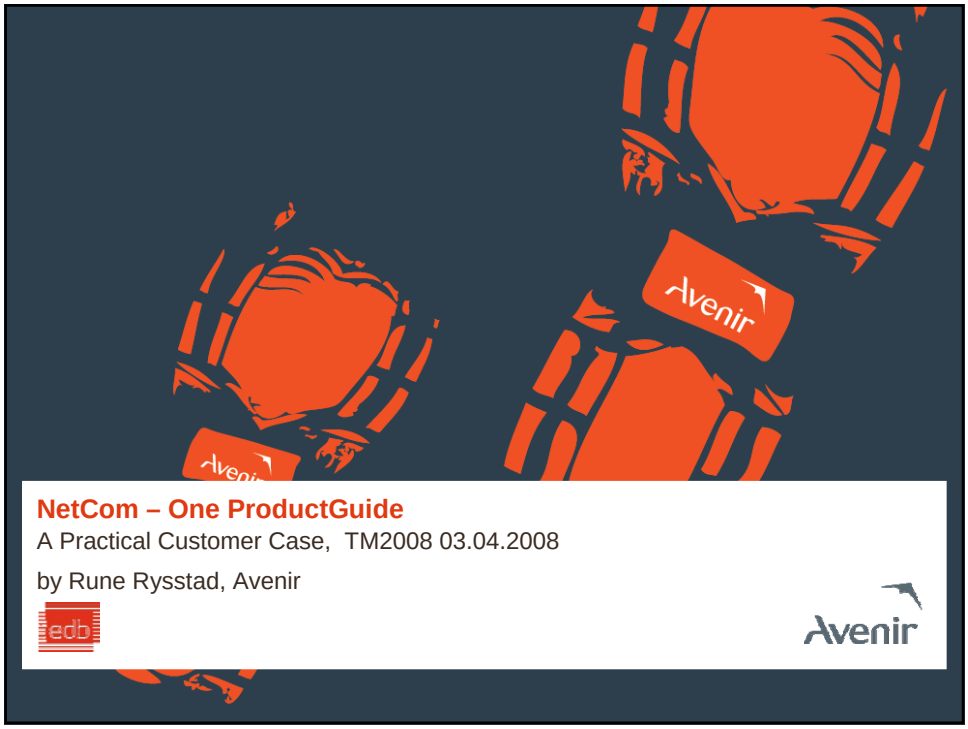


NetCom – One ProductGuide

A Practical Customer Case, TM2008 03.04.2008

by Rune Rysstad, Avenir

About the author

- Senior Developer/Architect at Avenir, System Development department, .NET & Design
- My role at ”NetCom – One ProductGuide”:
  - Technical Planning and implementing (startup in March 2007)

About NetCom

- Norway's second largest Mobile Operator, the first company to take up competition with Telenor
- Delivers a broad range of products and services both for private users and for the business world
- NetCom is a subsidary of TeliaSonera

Why was this project initiated?

- NetCom's Customer Support [KS] department needed a more user friendly and "all-in-one" system when working with customers by telephone, hence reducing the time to find the correct answer.
- 3-5 separate systems had to be browsed to find the same information as in "One ProductGuide".
- NetCom overall needs a web site where they could find ALL relevant information about their subcriptions, services, routines, marketing campaigns, etc.
- "One ProductGuide" goal is to be **THE MASTER**

”One ProductGuide” gives quick answers to e.g.:

- What kind of services and products do we sell? What has previously been available? What is soon comming to the market?
- Which services are included in a subscription? What extra can be ordered?
- Related routines to follow, e.g. when upgrading a subscription
- Related FAQ’s
- Sales arguments for a certain service or subscription
- Important operative messages and news, related to products/services
- What kind of marketing is done this month/week?
- Who is reponsible for what?
- How to give feedback to the correct person if some information is missing or wrong?

Platform choices and constraints

- TeliaSonera was already using **Sharepoint 2007** [MOSS2007] as a common corporate Intranet-platform.
- ”One ProductGuide” should visually feel like the user was still at the Intranet, hence we had **design constraints.**
- ”One ProductGuide” is sharing design elements from the corporate Intranet site.
- ”One ProductGuide” runs as a separate Sharepoint Application (in one Site Collection).
- Indexing and search is done centrally (Google Search Appliance) by the GSA team in Finland.

The process – why we ended up using Topic Map in MOSS2007!

- In the planning phase, we soon realised that there was a lot of related data that had to be presented and glued consistently together.”Topic Map” patterns evolved!
- The best way to model the needs of the customer, was to draw a Topic Map Model, and discuss this.
- Conclusion: Topic Map appeared to be **the best solutio**n to **model** and **implement** the described business demands found

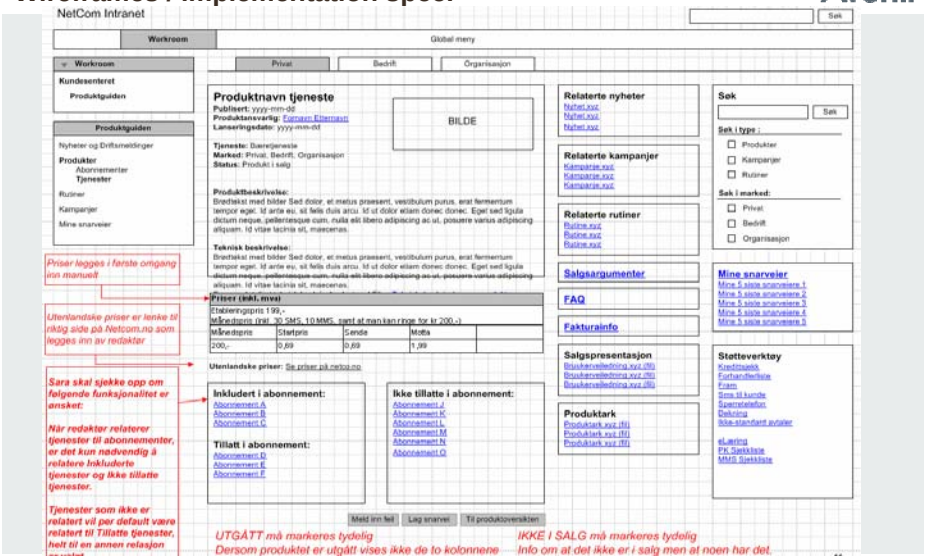
Implementing TM functionality in MOSS2007:

- Sharepoint is ”Jack of all trades, master of none”.

  Hence, it did’t contain any features good enough for us to easy relate content in the manner and scale we needed.
- Sharepoint is thinking hierarcial, not **relations** between **topics**.
- Technology choice for implementing TM:

  A 3rd party Topic Map engine TMCore from **NetworkedPlanet** was selected together with the**TMCore Sharepoint Topic Map** module (v2).

Wireframes / implementation spec.

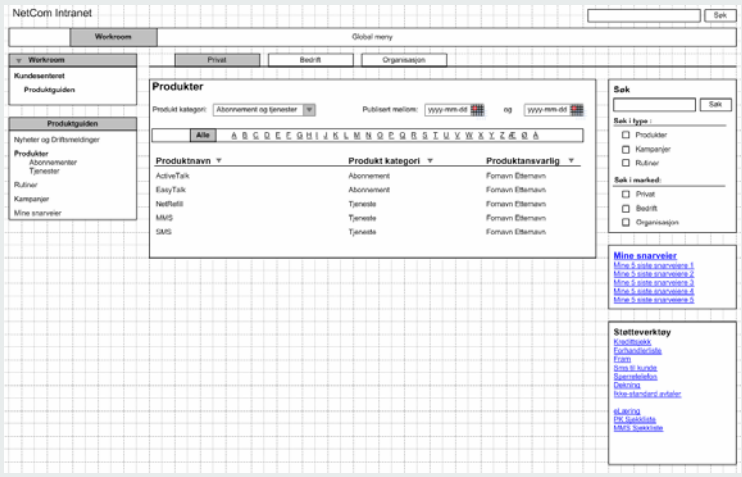


Wireframes / implementation spec. cont.

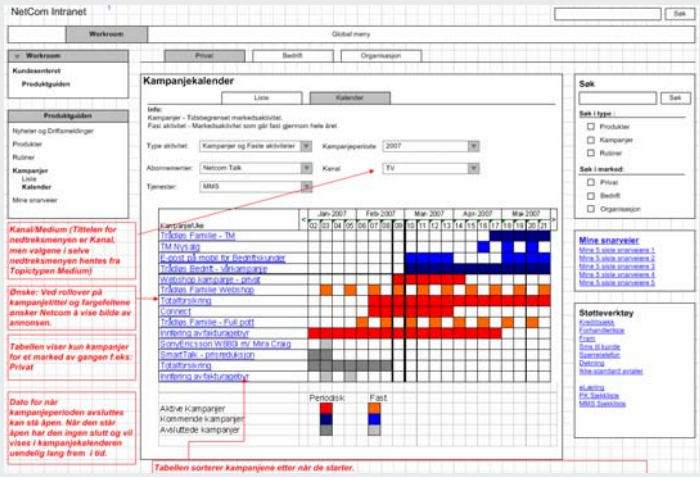
Tjeneste

Felter og relasjoner hovedfelt	
Tittel	
Publisert	Kalenderfunksjon for å velge publiseringsdato
Produktansvarlig	Relater til Topic: Default forfatter er current user- mulighet til å velge annet person som produktansvarlig fra AD.
Lanseringsdato:	Kalenderfunksjon for å velge lanseringsdato
Tjeneste:	Tekstfelt uten formatering
Marked	Relater til Topic:
Status	Relater til Topic: Status bør være markeres visuelt på siden ikke bare som tekst
Bilde	Egetfelt for å laste opp bilde til fast plassering
Produktbeskrivelse	Redigerbart tekstfelt med mulighet for formatering og bilder
Teknisk beskrivelse	Redigerbart tekstfelt med mulighet for formatering og bilder
Pristabell	Felter for pris et felt pr celle i skissen
Utenlandske priser	Felt hvor redaktør legger inn lenke til utenlandsprisene på netcom.no
Relasjoner i 2. kolonne fra høyre	
Inkludert i abonnement	Relater til Topic:
Tillatt i abonnement	Relater til Topic:
Ikke tillatt i abonnement	Relater til Topic:
Relaterte nyheter	Relater til Topic:
Relaterte kampanjer	Relater til Topic:
Relaterte rutiner	Relater til Topic:
Salgsargumenter	Relater til Topic: En til en relasjon
FAQ	Relater til Topic: FAQ er lenke til en listeside som inneholder spørsmål med lenker til svaret
Fakturainfo	Relater til Topic: En til en relasjon
Salgspresentasjon	Relater til Topic:
Produktark	Relater til Topic:

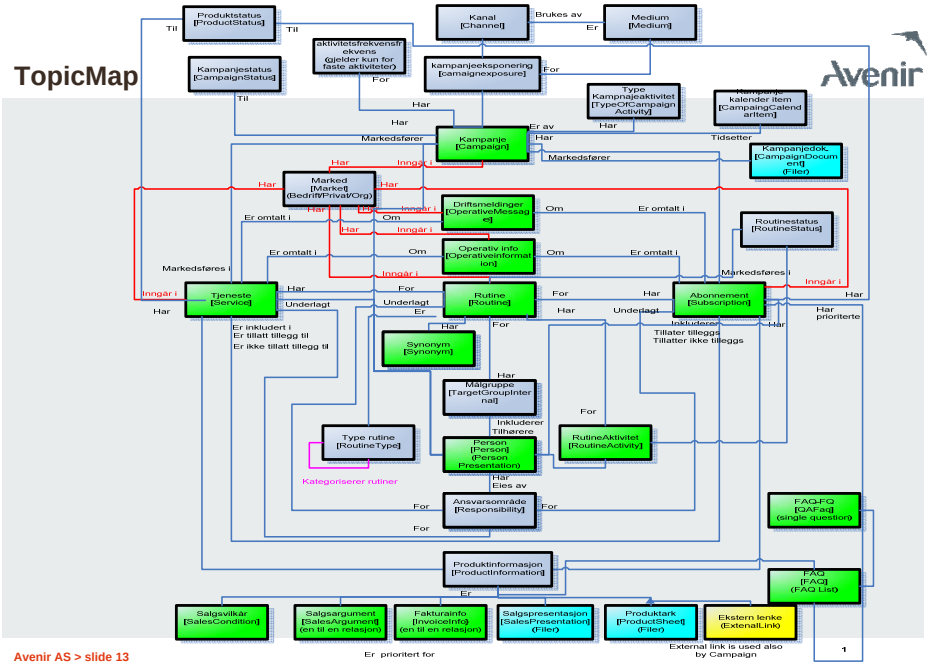
Startpage – Products & Services



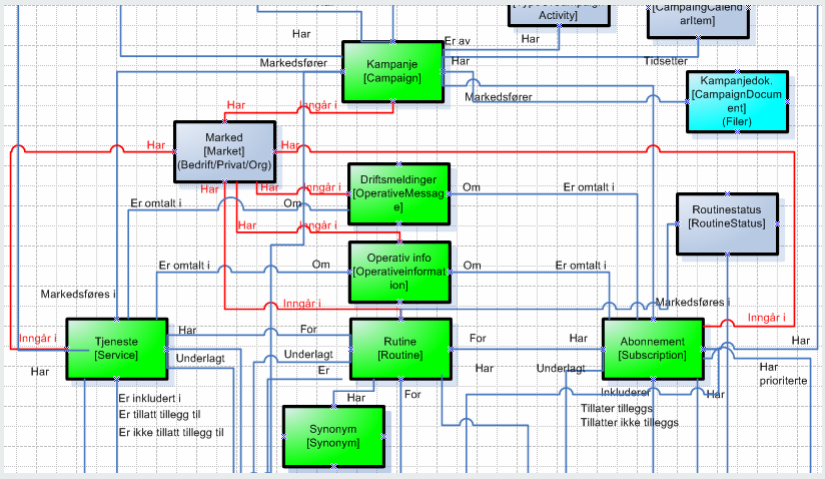
Wireframe – Campaign calendar



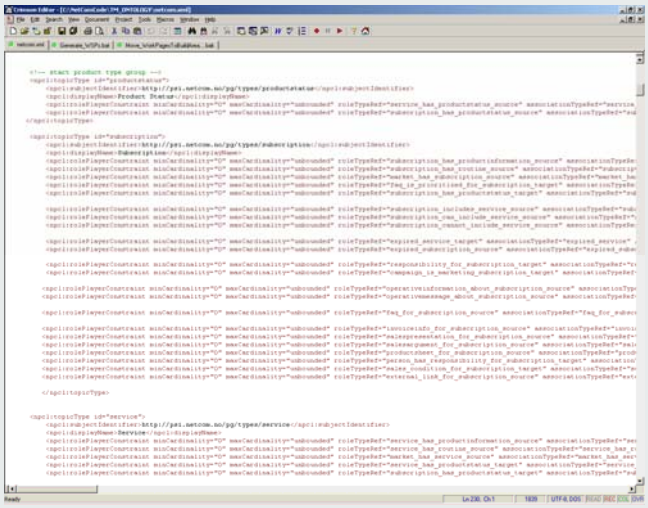
TopicMap



TM Zoom Up



The NPCL [NetworkedPlanet Constraint Language for topic maps] was hand coded in our case - but with GUI tools....



Current Status

- Development finished December 2007
- Ca. 70 persons have been trained as Editors.
  - Every editor is responsible for his/her data and made accountable.
- **Not live in active use yet. Data is still added.**
  - NetCom needs to add enough data so that KS can use it completly from day one – hence get the good feeling from the start!

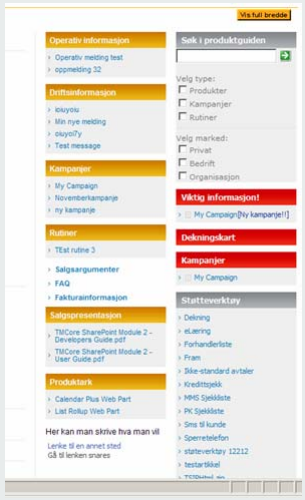
Some numbers after implementation

- Content Types: 49
- Relational page columns: 129
- Other page custom page columns (properties): 137

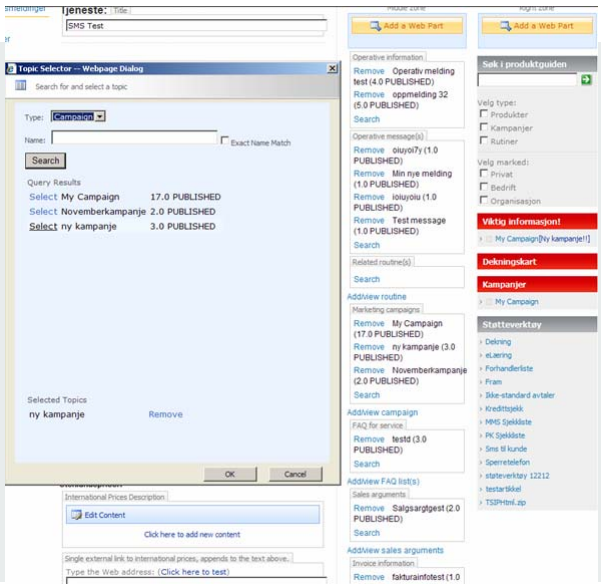
- Master pages: 5
- Page Layouts: 21

- Custom web parts: 10

Example right column for a service:



Editing a page



Summary – main technical issues

- Deployment to various environment (development, test, staging, production). Solved.
- Performance (quite a lot of db requests + xslt transformation for the most advanced pages). Partially solved with page caching

Summary - lessons learned

- End users have to be involved in all parts of the process.
  - **We used an Agile approach** that changed the product substantially from the initial spec. / wireframes.
- Most difficult is the introduction / traning of persons **to understand the topic map concepts**!
- Starting with a smaler model, and then scaled out after need, could have been an alternative.

Possible future extentions?

- Add some folksonomy features
  - Tag cloads
  - Possibility for collaborative tagging, categorizing, etc.
  - WIKI features so that everyone can contribute
- Add some Ajax features where useful
- More use of the search options that the TM model provides us.

Q & A

- any ?