

Topic Maps 2008 Enterprise Knowledge Integration Using Topic Maps Heimo Hänninen*

* a founding member of WSSSL

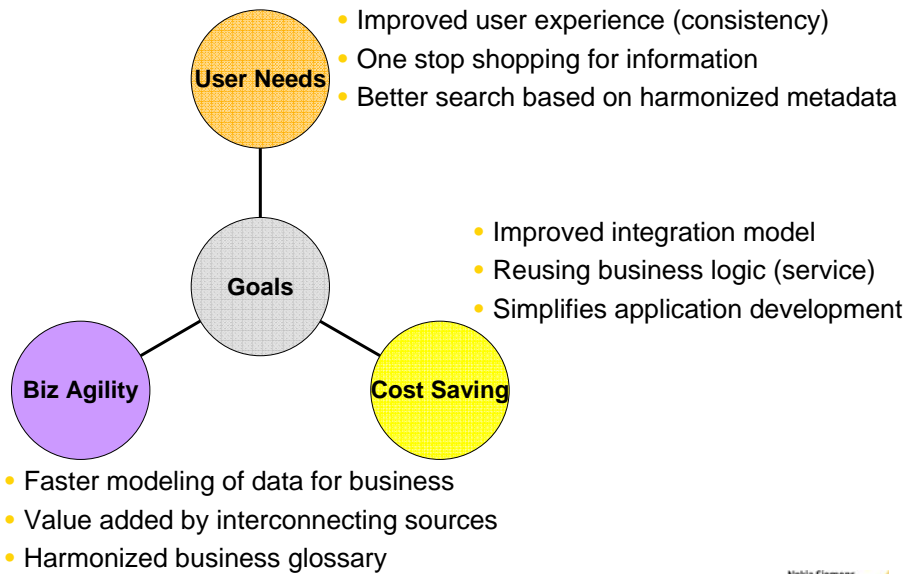
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Goals (other than “go try Topic Maps”...)



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Business viewpoint: Pain points in current portal (Portal supports users in operating and maintaining their telecom network)

- Users complain they cannot find the information they need
- Search is poor
- Users are used to more advanced functionalities on consumer portals and expect to have them in our portal as well
- Inflexibility of the architecture to provide
 - Different views (dynamic views based on context)
 - Linking capabilities – linking is mostly hard-coded
- Portal does not guide the users in any way
- High development costs because of inflexible system architecture
 - one-to-one integration model
 - no business logic reuse (redundancy)

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Business goals 1/2

- Increased customer satisfaction and productivity through content discovery
 - Not only the users can find the information but they will discover information that they did not know of
- Enhanced user experience: information is presented in a user-friendly way and information access methods are user-friendly
 - Seamless user journeys from topic to topic, irregardless of “content domain” and owning organization
 - Customization: user sees only their products (but can also access full product portfolio if so wish)
 - Personalization: user can indicate which products (and releases) they are working on and will see personalized views
 - Filtering and sorting capabilities to drill down to desired information
 - Guiding the user to find the essential data rather than trying to provide all the possible data
 - Intelligent search (ontology-savvy search)

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Business goals 2/2

- Process benefits
 - People who produce the contents for distribution do not have to be aware of all possible content that can be linked to their content – linking patterns can be automated
 - Navigation can be automatically populated
- System benefits
 - Data integration and mappings
 - No point-to-point integrations

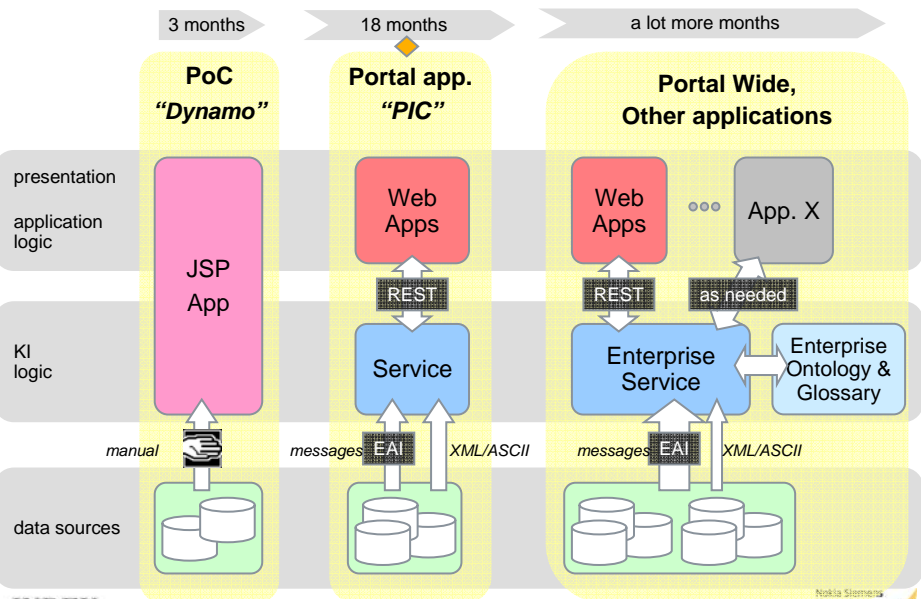
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Knowledge Integration System evolution



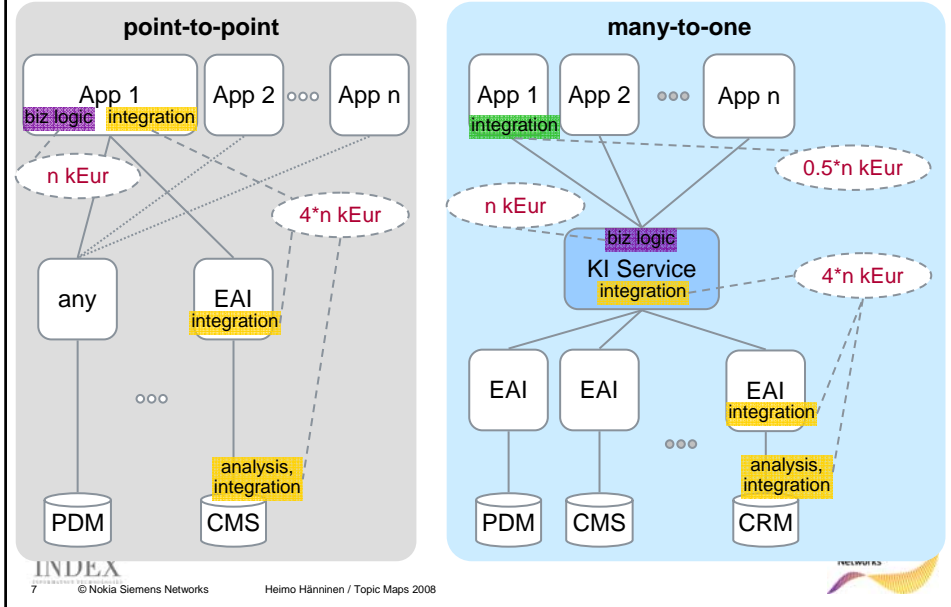
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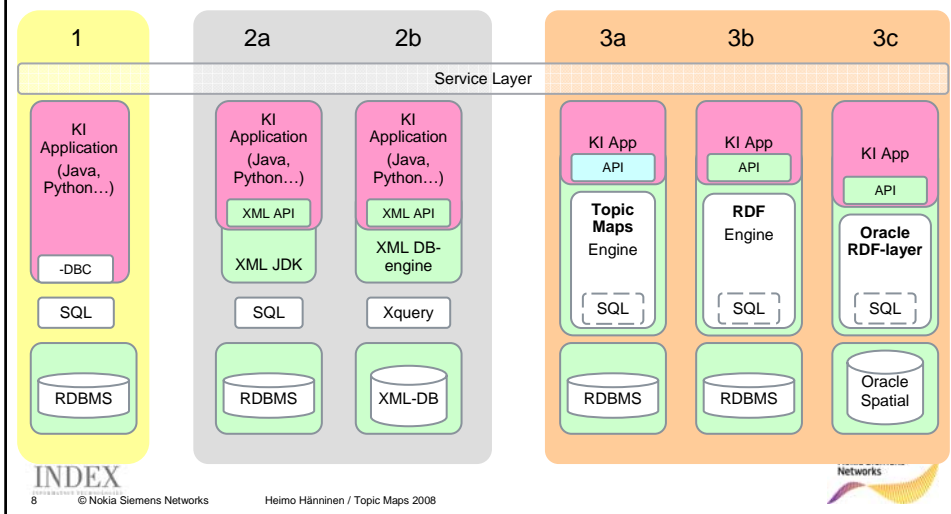


Cost savings by integration model and service approach



Selecting technology to build KI application

1. complete In-house: build application on top of RDBMS
2. mid effort In-house: application & XML abstraction on RDBMS or XML-DBMS
3. lower effort In-house: application on "KI savvy engine/ technology" ← way to go



Lessons learnt

- Topic Maps are flexible yet easy to understand and model
 - PSI type of concept is mandatory in a large company
- Back-end integrations are always more laborious than you think
 - policies, security, data ownership, pipelines, mapping, data quality...
- Invest in services, create interfaces as needed
- Colliding interests – gap between EA and business:
 - EA focuses on governance – top down
 - Innovations are made in grassroots projects to fulfill biz needs – bottom up
- Iterative mode of work, make mistakes early, find right people
- Creating a KI system takes two years – maturing process and changing mind set takes a decade
- Working ontology is a bottom-up effort, yet must keep in synch with corporate guidelines
- Demand SW vendors to support “Subject-centric computing”

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Predicting future of semantic technology – Blue Ray or HD DVD dilemma ?

- Google “study” - how unscientific is that? ☺

RDF vs. Topic Maps = 10:1

RDF: google for "RDF software" = 10 800 hits

1st: Welcome to RDF Software, home of the Structural Pest Control System for Windows ☺

Topic Maps: google for: "Topic Maps software" = 938 hits

at Microsoft 20:1

"RDF" site:microsoft.com = 1140 hits

"Topic Maps" site:microsoft.com = 59 hits



at IBM 22:1

"RDF" site:ibm.com = 5 350 hits

"Topic Maps" site:ibm.com = 248 hits



at Oracle 450:1

"RDF" site:oracle.com = 3 600 hits

"Topic Maps" site:oracle.com = 8 hits



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... or perhaps some day a semantic gadget by

Ontology technology choices LIFE IS HARD, BUT WE FEEL GOOD

	Topic Maps	RDF
Matching our business needs and capability	😊	😊 ?
Technology maturity	😐	😐
Acceptance in market place	😞	😞
Trend Which will be the winning standard	?	?

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... most likely both Topic Maps and RDF will have their place in the sun

**Thank you
and questions, please**

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