

# Knowledge Hives

Recommendations for e-commerce and  
knowledge bases

dr. Sebastian R. Kruk, Mariusz Cygan, Arkadiusz Kwoska





# Outline

- \* Knowledge Hivies - who are we ?
- \* Our vision
- \* Our business model
- \* Helping to build Semantic Web ecosystem
- \* digi.me - social semantic recommendation solutions testbed
- \* Why Knowledge Hives ?





# Knowledge Hives



- \* Goal: deliver social semantic recommendation solutions for knowledge bases and e-commerce
- \* Web 3.0 startup that grew out of research on prototype products:
  - \* semantic digital library - JeromeDL
  - \* social semantic bookmarking - notitio.us
- \* The team:
  - \* dr. Sebastian Kruk, cutting edge research
  - \* Mariusz Cygan, getting things done
  - \* Arkadiusz Kwoska, pumping revenue stream





# Recommendations

- \* Various search goals (*Rose and Levinson*):  
resource seeking, navigational, informational
- \* People (in general) are too lazy to search or lost in the hyperspace (*Kruk et al, 2008: Evaluation of JeromeDL*)
- \* “Semantics” are not quite the same as “Semantic Web”
  - \* Social interaction and contribution
  - \* Linked data





# Recommendations for e-commerce

- \* People are looking for goods and services not links
- \* Search goals: resource seeking, navigational
- \* Solution:
  - \* recommend matching profile and resource similarities,
  - \* help to navigate towards purchase





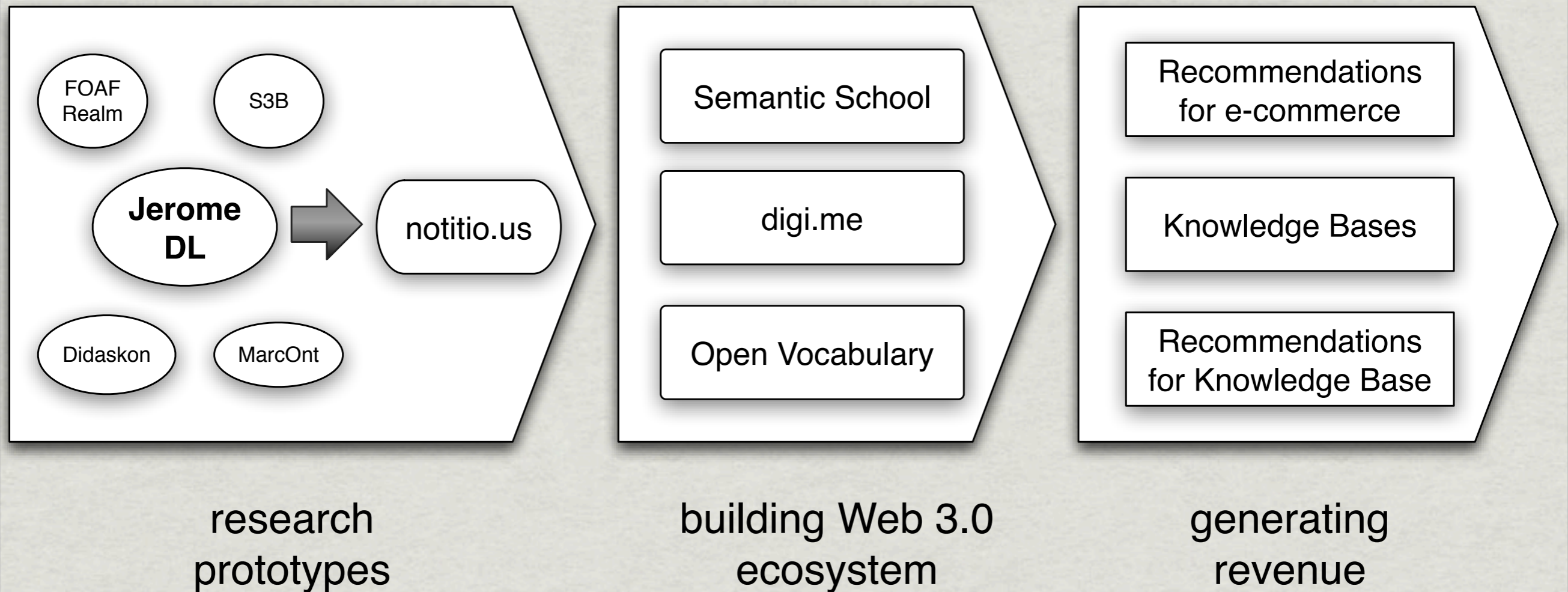
# Recommendations for knowledge bases

- \* People are looking for answers not set of links
- \* Questions are hard to define
- \* Search goal: informational, navigational
  
- \* Solution:
  - \* recommend on the current context
  - \* help to navigate towards the answer





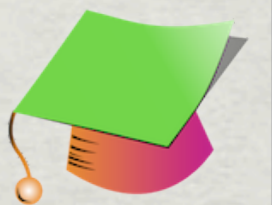
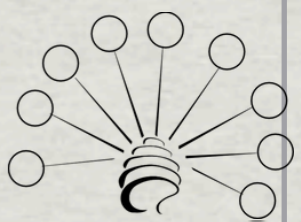
# Roadmap to success





# Building Web 3.0

- \* Partnership with research institutes:
  - \* **Ireland:** DERI Galway, University College Dublin
  - \* **Poland:** Technical University of Wroclaw, Gdansk University of Technology
  - \* **USA:** Western Kentucky University
- \* Initiating and supporting open source projects:
  - \* JeromeDL, MarcOnt, FOAFRealm, S3B
  - \* Vulcan, Hermes, OpenVocabulary
- \* OpenVocabulary.info - bringing more semantics into the Web
- \* SemanticSchool.com - building awareness of semantic solutions (and needs!)







## \* the product

- \* bookmarking with semantic annotations
- \* social sharing, **recommendations** and privacy
- \* internationalization and localization
- \* based on research on: semantic technologies, knowledge sharing, e-learning, social networks, semantic digital libraries, HCI

## \* the technology

- \* semantic web infrastructure: RDF, interconnected annotations, expressivity, vocabularies, reasoning
- \* social networking: FOAF, interconnected users, sharing
- \* enterprise-ready solution: JEE platform





# Why Knowledge Hives ?

- \* core competence: innovative business solutions based on advanced research
- \* clearly defined business model
- \* **everyone says they do it - WE DELIVER**
- \* solutions for wide range of potential customers from e-commerce through corporate and knowledge workers

