S4 Group
Service & Software Engineering Group
VU University Amsterdam
People at S4

• Dr. Patricia Lago, associate professor (leader)
• Dr. Jaap Gordijn, associate professor
• Dr. Pieter De Leenheer, assistant professor
• Maryam Razavian, PhD candidate
• Ivan Razo-Zapata, PhD candidate
• Damian Tamburri, PhD candidate
Research Areas
Research Areas

• **Social**

• Open innovation on the Web – wisdom of the crowd

• Enterprises and research institutions have to **share** or **trade** ideas and results to achieve a greater benefit to themselves and others.

• Research: conception of **value of information**; and building **service networks** supporting the life cycle of information
Research Areas

• **Sustainable**
• De kip wordt groen!!
• Innovation should be sustainable
• Innovation ecosystems (like businesses) should be **profitable** and **energy-efficient**
• Green strategies for sustainable software services and IT systems
Research Areas

- **Software**

  - How can we build social and sustainable service-based innovation systems using software technologies?
  
  - Software services and IT systems should support *environmental goals*
  
  - Goals be made explicit in terms of *green strategies*
  
  - Strategies provide guidance for decision making, for *aligning IT with business goals*, and for designing and developing *energy efficient* software-intensive systems
Research Areas – Our view
Research Areas – The environment

Complexity of Service Value Networks: Conceptualization and Empirical Investigation
Author(s): Rahul C. Basole and William B. Rouse
Journal Article, 2008, IBM Systems Journal
Projects

• **SOA**
  - Architecture design reasoning
  - Design reasoning techniques help in better structuring the reasoning process so that decisions are explicit and conscious

• **Value Webs**
  - Sustainability of self-organising service-based networks on the Web
  - Value-cocreation

• **Social**
  - Enterprise information management
  - The role of social analytics in enterprise information modelling
  - Ontologies in Enterprise Modelling
Projects

• Qing Gu “Guiding Service-Oriented Software Engineering - A View-Based Approach (Oct. 2011) “

• Victor Clerc “Architectural Knowledge Management in Global Software Development”, Dec ’11

• Maryam Razavan: Guiding Knowledge-driven SOA Migration

• Tamburri: Agile Service Networks in Global Software Engineering

• Razo-Zapata: “Value-driven Service Composition”
Projects

• Service Value Networks – Design & Composition

Complexity of Service Value Networks: Conceptualization and Empirical Investigation
Author(s): Rahul C. Basole and William B. Rouse
Journal Article, 2008, IBM Systems Journal
Projects

• Service Value Networks – Design & Composition

Complexity of Service Value Networks: Conceptualization and Empirical Investigation
Author(s): Rahul C. Basole and William B. Rouse
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Projects

- Supporting Global Software Development with Agile Service Networks
Projects

• Supporting Global Software Development with Agile Service Networks

Pre-Condition: When “NY” is clicked...

“Sean” – Software Analyst
Current Task: Assess Traceability
ETA: 2 days

“Mike” – Software Architect
Current Task: Regression Testing
ETA: 4 days

“Cynthia” – Coder
Current Task: Interface 11A
ETA: 6 days

“Derek” – Coder
Current Task: Interface 10Z
ETA: 2 hours 46 minutes

URGENT: who else is working on this interface? I have found a problem
Partners

- Collibra nv/sa
- IBM Research
- KU Leuven
- Knowledge Network Green Software
- Green IT Amsterdam
- IFIP WG – (Software Architecture, Service-based Systems, Social Networking Semantics and Collective Intelligence)
- Swinburne University of Technology
- Curtin University Perth – DEBII
- Logica
- Flemish Government
- SENA
- Vumc
- KLM*
Thanks, questions?

- [http://www.pieterdeleenheer.be](http://www.pieterdeleenheer.be)
- [http://www.e3value.com](http://www.e3value.com)
- [http://www.cs.vu.nl/~patricia](http://www.cs.vu.nl/~patricia)