IARIA WebTel Conference
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St Maarten

Panel Discussion

Service Science: Hype or Reality

Moderator:

Dr Zaigham Mahmood

University of Derby, UK

Service Science

- Service:
  - Is something, provided by someone for consumption by others …
  - Generally: hospitality, financial, legal, … , web, cloud, grid, …
- Service Science:
  - Using scientific approach to provision/maintenance/… of services

Services – hype or reality?

- Hype:
  - A *silver bullet* ?
- Reality:
  - SOA !
  - Grid/Cloud/Enterprise computing !
- Future:
  - Services → *smart* services ?
  - Quality → authenticity [Prof Miranda] ?
  - …

Panellists

- Mihhail Matskin
  KTH, Sweden
- Vijay Varadharajan
  Macquarie Uni, Australia
- William-Jan van den Heuvel
  Tilburg Uni, Netherlands
- Jo Gao
  Zhejiang Shureng Uni, China

Discussion Format

- Panellists' presentations (short)
- Open discussion
  - Amongst panellists
  - With audience – Q&A session
- To answer questions
  - How much is the hype?
  - How much is the reality?
  - What is the future?

And Now:

Thank you

and

Over to the panel and audience

Service Science: Hype or Reality

Mihhail Matskin
Norwegian University of Science and Technology (NTNU), Trondheim, Norway

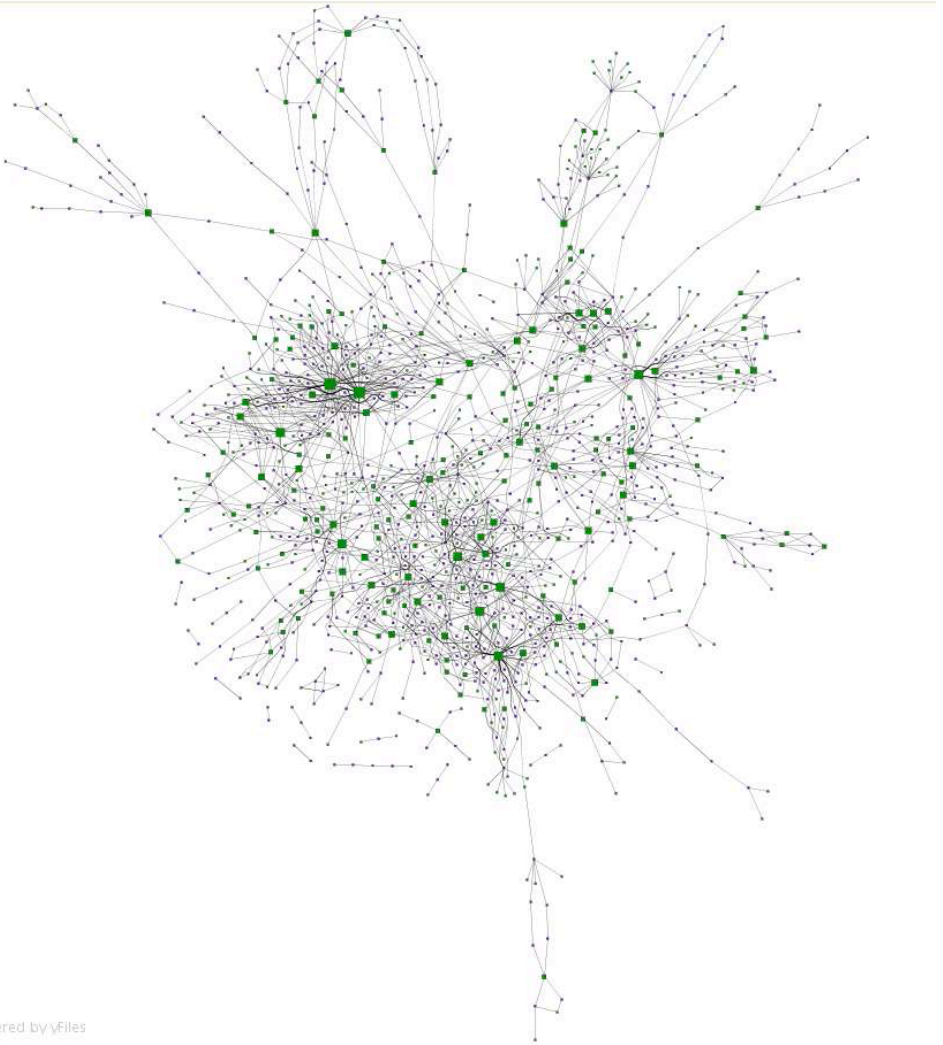
Royal Institute of technology (KTH), Stockholm, Sweden.

Hype or Reality?

- Web services – already not hype but not complete reality
- Software As A Service (SaaS) –hype and (close to) reality
- Service science – not hype and not reality

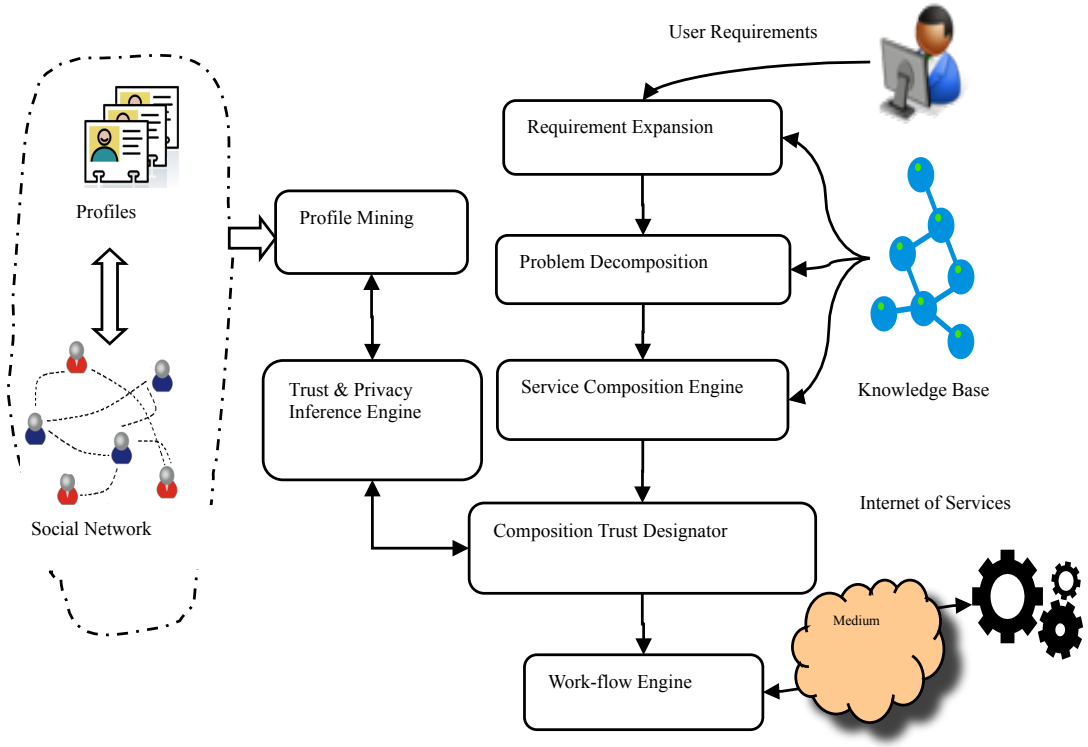
Possible research issues in service science

- Service analysis – what is missing and what is wrong
- Automated Service annotation



Possible research issues in service science

- Service selection
- Trust and privacy
- Recommendations based on social relations



Possible research issues in service (science)

- Services provided by technical devices

ROBOSWARM project

Adaptive Service Cooperation Based on MAS Technology

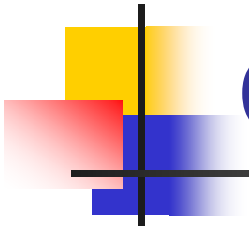
Ji Gao

College of Information Science & Technology

Zhejiang Shureng University

Cover

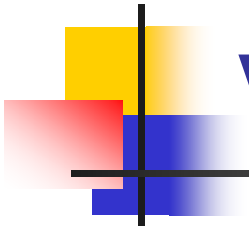
- The development of SOC and SOA
  - facilitates the service-oriented innovation of enterprise information systems, and therefore
  - enables the application systems (VOs) to be composed of services across multiple management domains.
- However, the current techniques for service cooperation
  - are faced with severe limitation: lack of autonomy
- The main cause is the inherent non-controllability
  - of services across management domains
- Thereby, eliminating the non-controllability and proposing innovative ideas
  - have important theory and application value.



Current Status

- Self-adaptation has been being one of research focuses
  - control theory / engineering and AI
  - software engineering and network / distributed computing
- this area is still in its infancy
  - The systematic theory and methodology have not been formed.
  - Some methods for developing self-adaptive systems

    feedback control cycle, model-driven reflection computing
  - Those methods, unfortunately, are all oriented to the application systems created statically in the single management domains
  - Not suited to VOs with the features of “across management domains” and “created dynamically and on requirement”.



View and Perspective

- We propose to research
  - Macro-Governed, Contract-Directed, and Circumstance-Driven Self-Adaptive Service Cooperation
  - Create the method system including the following key technologies:

1) Macro-Governed, Contract-Directed, and Micro-Supported Self-Adaptation Model for Service Cooperation.

2) Cooperation Circumstance-Driven Open Joint Reflection and Flexible Self-Adaptation Mechanism.

3) Two-Level Contract Running Mechanism for Normalizing Behavior of Service Cooperation and Self-Adaptation.