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
Adaptive Service Cooperation Based on MAS Technology

Ji Gao

College of Information Science & Technology
Zhejiang Shureng University
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”.
We propose to research

1. Macro-Governed, Contract-Directed, and Circumstance-Driven Self-Adaptive Service Cooperation
2. Create the method system including the following key technologies:
   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.