

Industry involvement in Grid standardization

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Overview

- Objective
- Commercial developments
 - Competition within the commercial community
 - Collaboration between commercial and academic world
 - Shifting boundaries
- Conclusions

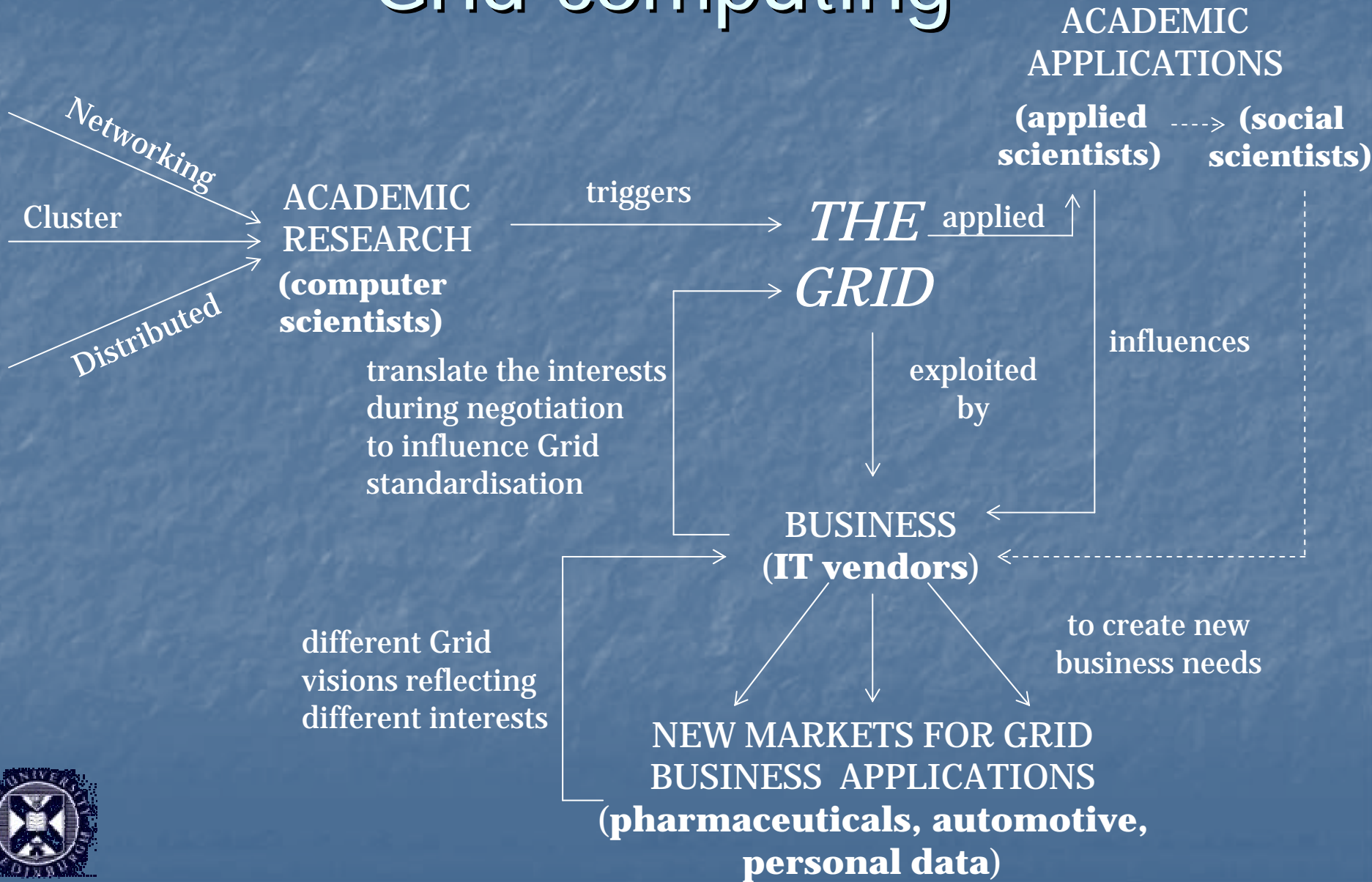


Objective

- Study the expansion of the Grid community to include commercial participation
- Investigates tensions & alliances between the 2 constituencies in the global Grid community: industry and academia



Grid computing



Competing Grid visions

Vendor	Vision
IBM	Outsourcing of computing power - evolution from intra-grids to global grids or on demand computing based on WebSphere/eServers
Oracle	Extensions of its database clustering capabilities (Oracle 10i database)
Sun	Outsourcing of computer power – evolution from cluster grids to global grids based on their Grid Engine software
HP	Facilitating data storage - StoreWork
Microsoft	Tools to enable developers to create sets of loosely coupled, distributed operating systems



Competing visions => a range of consortia

Consortia	Characteristics
NPi	April 2000, HP & Compaq, distributed resource management. Merged with GGF in 2002
DCML	October 2003, small vendors, IT management systems & management policies. Moved to OASIS in 2004
UCWG	February 2004, IBM & Veritas, object models for utility computing services
EGA	April 2004, Oracle, Sun & HP, enterprise data centres
Globus Consortium	January 2005, IBM, HP & Sun, to accelerate Grid commercial development



Collaboration

- industry-academic Grid projects (e.g. D-Grid)
- industry-academic collaboration in Grid standardisation arena – Globus Alliance, GGF and Oasis



Shifting Boundaries

- Academic driven efforts are transported into the commercial world:
 - **INDIRECTLY:** IT vendors adopting academic led standards (Platform Computing incorporating Grid standards in its products)
 - Requirements evolve e.g. security requirements and billing.
 - **DIRECTLY:** academic researchers creating commercial organisations to support academic born Grid standards (Tuecke, Foster and Kesselman last year founded Univa Corporation to commercialise Globus Toolkit)
 - Similarity to Andreeson spinning off Netscape from University of Illinois



Grid Analysis of Personal Data

- Why the lack of academic Social Scientist engagement?
 - Lack of awareness
 - Focus on how Grid can help social science rather than how social science can help the application of the Grid
 - Ethical objections to massive surveillance systems



Conclusions

- 3 trends in the Grid world:
 - Large Grid commercial players compete to define the market
 - Grid commercial and academic players collaborate to drive the development of Grid and Grid standards
 - There is a shift in the boundaries between the academic and the commercial communities

