

# The White Rose Grid

Grid Technology Conference

Strategic Impact on UK Business

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# Presentation Outline

- Business Drivers
- Electricity Network Comparison
- Strategic Impact
  - Enterprise
  - Industry
  - Grid

# Business Drivers

- Typically, servers running at 20 – 30% of capacity and workstations at 5 to 20%.
- UK businesses spend £23bn a year (20%) of their IT budget on capacity they don't need. *"Gartner"*
- Investment by Sun, IBM, Microsoft, Dell, Gateway
- Private grid vendor announcements rose from 7 in 2001 to 26 in 2002.
- Major benefits, e.g. Novartis. \$400k investment has saved > \$2m.

**Expected to grow from \$180m in 2002 to \$4.1Bn by 2005. *"Grid Technology Partners"***

# Electricity Network Comparison

## Similar

- Utility service
- Need standards
- Share spare capacity
- Users take as needed
- Scale economics
- Network design is key
- Owners, operators and service providers

## *Different*

- *Market created in different ways*
- *Multiple systems environments*
- *High interaction between compute + data + app*
- *User determines elements*
- *Multiple business activities*

**The key difference lies in the user's ability to drive dynamic services and virtual business models**

# Enterprise Level Impact

## Infrastructure

- Server / storage consolidation and aggregation
- Distributed resource and workload mgt
- Batch processing
- Maximising CPU power at dept / enterprise level

## Increased Capabilities

- Collaborative / peer to peer computing
- Database decision support / data mining
- Grid enable legacy software and services
- Cutting time to market for products

# Industry Level Impact

- Core industries of Life Sciences, Research, Industrial Mfg, Oil & Gas and Financial Services impacted
- New research products, services and applications
- Data depth creates new “knowledge” industries
- Monetisation of University Research and Expertise
- Multiplier effect on related technologies e.g. web services
- Redefinition of Systems / BPO Outsourcing market
- Wider opportunities for the ASP market

# Grid Level Impact

## Compute + Data + Application

### Today

- Distributed Resource Management
- Development Tools
- Infrastructure
- Security
- Systems Management

### *Future*

- *Service Provision / Brokerage*
- *Pricing, Billing and Contract Mgt*
- *Independent SLA monitoring*
- *Virtual Data Tools / Services*
- *Data / Knowledge Repositories*
- *Application Portfolios*
- *Consult, Design and Implement*

These services will need to support the dynamic formation and management of virtual organisations

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