Future Technology Landscape

Dr Carsten Sørensen
London School of Economics and Political Science
Department of Management
Information Systems and Innovation Group
c.sorensen@lse.ac.uk
www.carstensorensen.com

Robin Gear
PA Consulting Group
IT Innovation Unit
robin.gear@paconsulting.com
www.paconsulting.com
Unpacking Innovation with IT

- IT as productivity booster (Saunders & Brynjolfsson)
- IT as utility (Carr)
- So what is it?
- Executive innovation challenges
- Joint LSE - PA Consulting research project
- In-depth conversations with 22 executives 2006/07
- Follow-up on similar research in 2001- Post-dot-com
- Understanding the business value of IT amplification based on theory of information services diversity
- Innovating organisation of decisions and IT support
- Complex socio-technical relationships
It Takes Four To Change!

“We are 49% business, 51% IT”

Jonathan Smart, Deutsche Bank
### Concurrent Survival Patterns

<table>
<thead>
<tr>
<th>Strategic (environment)</th>
<th>Improvement</th>
<th>Innovation</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Stable</td>
<td>Dynamic</td>
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<tr>
<td>Tactical (organisation)</td>
<td>Supportive</td>
<td>Flexible</td>
</tr>
<tr>
<td>Operational (behaviour)</td>
<td>Deliver</td>
<td>Network</td>
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“The macro-economy seems reasonably good but nobody feels comfortable because within this macro-picture, any individual element at any time is subject to volatility, which makes people feel uneasy”

Steven Warrington, Diamond Consultants

(Holmberg & Mathiassen, 2001)
### Diversity of Decision Support

<table>
<thead>
<tr>
<th>Equivocal</th>
<th>Adapting</th>
<th>Collaborating</th>
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<tbody>
<tr>
<td></td>
<td>Relationships</td>
<td>Relationship</td>
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<tr>
<td></td>
<td>Negotiating</td>
<td>Supporting</td>
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<td></td>
<td>Standard information</td>
<td>Mutual adjustment</td>
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<td></td>
<td>Information</td>
<td>Workspace</td>
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<tr>
<td>Unequivocal</td>
<td>Computing</td>
<td>Networking</td>
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<tr>
<td></td>
<td>Encounters</td>
<td>Encounters</td>
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<tr>
<td></td>
<td>Automating</td>
<td>Obtaining</td>
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<tr>
<td></td>
<td>Decisions</td>
<td>Information</td>
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<tr>
<td></td>
<td>Process</td>
<td>Connection</td>
</tr>
</tbody>
</table>

| Certain      |                                      | Uncertain                           |

(Mathiassen & Sorensen)
Phases of Capitalism

19th Century
- Early Modern Consumption
- New Middle Class
- Products

20th Century
- Mass Consumption
- Mass Society
- Products and Services

21st Century
- New Society of Individuals
- Individuated Consumption
- Support

Encounters through Relationships & support

(Zuboff & Maxmin)
Efficiency Through Standardising & Streamlining

Complex

Adapting

Collaborating

Computing

Networking

Simple

Certain

Uncertain

Streamline

Standardise

(Sørensen & PA Consulting, 2007)
Value Through Listening and Engaging

Simple

Complex

Certain

Uncertain

Adapting

Collaborating

Computing

Networking

Adapting to user demands

Support collaboration

Simple processing (Sørensen & PA Consulting, 2007)
Innovating with Information Services

1. Manual
2. Standardised
3. Automated
4. Flexible
5. Adaptive
6. Collaborative

Amplifying with Information Services

Efficiency Focus
- ERP Streamline
- Forms Standardise
- Standardise

Customer Focus
- Email & Mobile Connect
- Amazon Listen
- YouTube Engage
- Engage

Customer Focus

Streamline
- Connect
- Connect

Amazon
- Listen
- Listen

YouTube
- Engage
- Engage
Value and Efficiency

• Increasingly executives must address the improvement and innovation survival pattern

• Continue automating processes, but...

• Innovate with IT by adaptive and collaborative relationships for increased individualised support

“IT is an anvil for simplification. If you have 29 different choices from the database, that's no use. It's got to be really easy to use”
Paul Coby, British Airways

“Technology is only a utility when you stop innovating, and obviously we’re not going to stop!”
Jonathan Smart, Deutsche Bank
Emerging Technologies

- Web 2.0 and Mobile 2.0
- Collaborative technologies
- Profiling technologies
- Time- and project- management technology
- Professional Services Automation
- Mobile and wireless technologies
- Digital footprints in the snow
- AwareWare
- Location- and activity-based services
Issues & Questions

- How does IT matter for innovation?
- What can be automated and where is discretion essential?
- What are the challenges for organisations in terms of: Standardising, Streamlining, Connecting, Listening, and Engaging?
- How can organisations establish a flexible and scalable infrastructure for services innovation?
- What are the challenges of centralisation versus decentralisation of work?
- How can technological and organisational innovations help balance the need for support with the need for innovation (competing survival patterns)
- What are the possibilities and limits of remote and flexible working?
- Will IT polarise activities further?
- How will the relationship with customers and the organisation of work mutually adjust?