

**Results from exercise carried Bedford BCS meeting on 23<sup>rd</sup> June 2009 titled:  
Gaining sustainable business value from IT through continuous innovation**

At the meeting a group of 20 participants were asked to define blockers to innovation using information technology in an organization under the following categories:

- Organisation
- People
- Process
- Technology

A summary of the themes that were identified in each category are detailed in Table 1.

Organisation	People	Process	Technology	Other
<ul style="list-style-type: none"> <li>- Culture</li> <li>- Delivery capability</li> <li>- Leadership/ Management/ Support for innovation</li> <li>- Incentives</li> <li>- Organisational hierarchy</li> <li>- IT department</li> <li>- Training</li> <li>- Interaction between departments</li> <li>- Contradicting /overlapping requirements of projects</li> </ul>	<ul style="list-style-type: none"> <li>- Culture</li> <li>- People attitudes to innovation</li> <li>- Resistance</li> <li>- Time &amp; Capacity</li> <li>- Training</li> <li>- Risk</li> </ul>	<ul style="list-style-type: none"> <li>- People habits</li> <li>- Standardisation</li> <li>- Complexity</li> <li>- Compliance</li> <li>- Poor analysis and definition</li> <li>- Attitude to process</li> <li>- Risk</li> </ul>	<ul style="list-style-type: none"> <li>- Standardisation</li> <li>- Compatibility</li> <li>- Funding</li> <li>- Availability of technology</li> <li>- Architecture</li> <li>- Complexity</li> <li>- Legacy systems</li> <li>- Maturity</li> <li>- People</li> <li>- Vision</li> <li>- Training</li> </ul>	<ul style="list-style-type: none"> <li>- Budgets</li> <li>- Projects delivery – ability to coordinate and delivery of benefits</li> <li>- Technical issues – interfaces; specific technologies</li> <li>- Data</li> <li>- Fear to succeed</li> <li>- Fear of failure</li> <li>- Culture</li> <li>- Organisational Structure not conducive to innovation</li> <li>- Individual bandwidth to undertake additional tasks</li> <li>- Security</li> </ul>

Table 1 : Main themes by category

The output showed some themes overlapped across categories, for example training appears in technology, people and organisation. This indicates that certain themes go across the categories and may have multi-faceted elements to be considered.

In order to gain further insights on the data, explore the overlaps and gain more granularity a further classification was undertaken.

The data has therefore was further classified into the following categories :

- Standardisation / compatibility
- Budgets

- Capability
- Complexity
- Compliance
- Culture
- Management
- Maturity
- Organisational Design
- People
- Risk
- Security
- Strategy
- Training

The full set of data is attached at the end of the document in Appendix A detailing the original category and the further classification area.

Figure 1, below gives a pictorial indication of the areas identified as having the most challenges from the data gathered during the exercise. Duplication has been removed to allow for a clearer picture of the issues identified.

### Blockers to innovation using IT

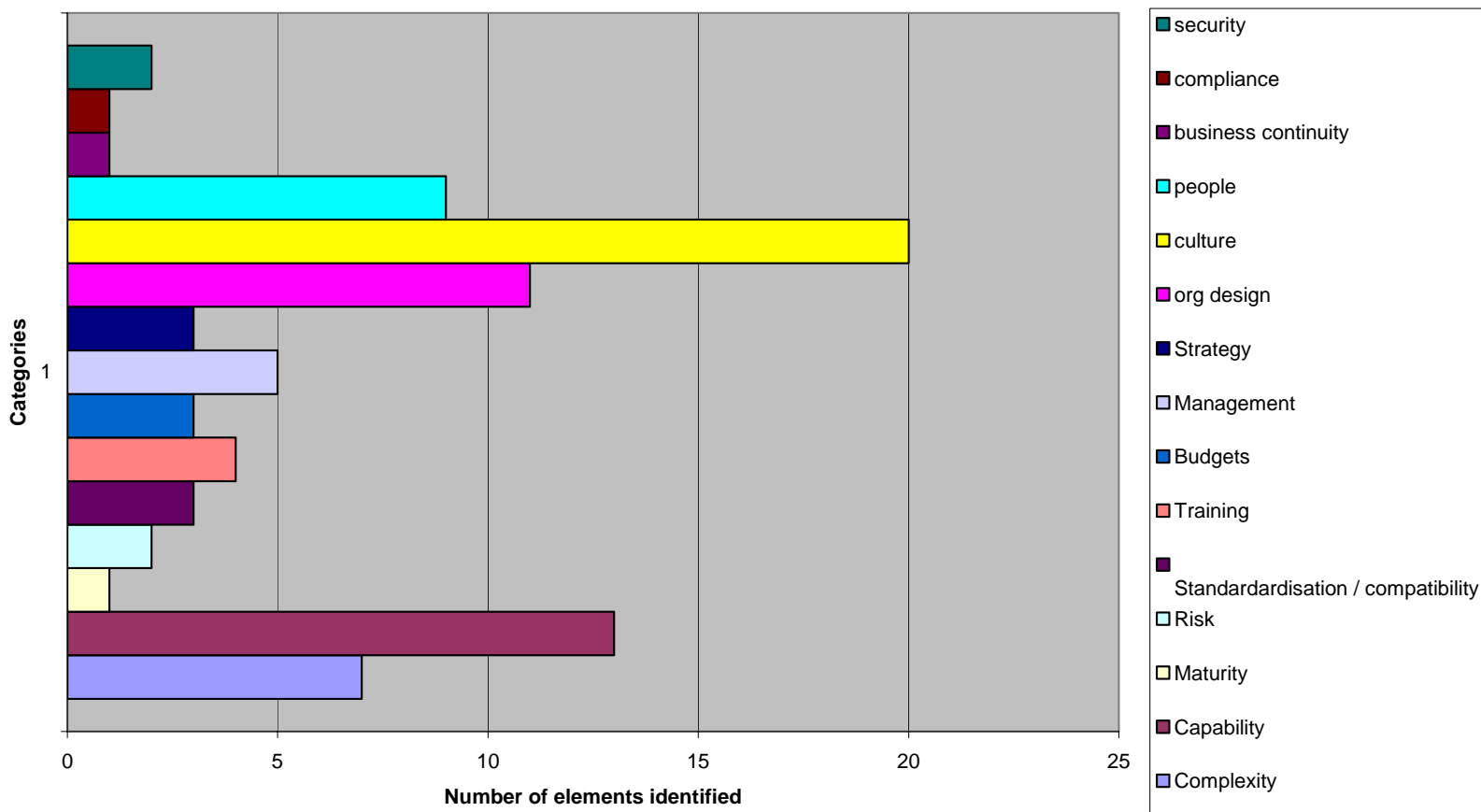


Figure 1 – Categorized Blockers to innovating with technology as identified in the exercise undertaken on 23<sup>rd</sup> June 2008

### **Summary of Findings**

Most of the challenges identified were in the cultural aspects, followed by organizational design, capabilities and people. Complexity was also a factor although it did not feature as highly as people.

In this short exercise, the data collected provides an interesting initial insight into the areas where organizations may face challenges when looking to innovate using technology.

**Appendix A**

**Details of elements defined by categories**

<b>Category</b>	<b>Element Defined</b>	<b>Author</b>	<b>Further Classification</b>
Technology	Lack of standard compatibility	Lyndon Lee	Standardardisation / compatibility
Technology	Compatibility	Ian Wilson	Standardardisation / compatibility
Organisation	Organisation Culture does not support standardisation - as it likes quirky individuals in the business	Anthony Bodle	Standardardisation / compatibility
Process	People habits	N Sorokin	Standardardisation / compatibility
Process	Not all depts use the same software/want to use the same software for process development - difficult to coordinate		Standardardisation / compatibility
Technology	Lack of funding for new technology so that all users can be involved. Different platforms eg Apple vs MS		Budgets
Organisation	Budget Pigeon Holes	Ian Wilson	Budgets
Other	Budgets Tight	John Tabearth	Budgets
Organisation	Lack of Money	Bob Lincoln	Budgets
Organisation	Opportunity Costs	Paul Lidbetter	Budgets
People	Lead time to achieve productivity	David Lee	Capability
Other	Project assumes other project will provide xx capability. It may not	Cliff Burnet	Capability
Technology	Technology not readily available	John Tabearth	Capability
Technology	Not part of our IT architecture	Martin Lockett	Capability
Organisation	Professional Culture eg. Expert professions	David Lee	Capability

Organisation	Technology highly controlled & constrained so hard for non-IT to modify or add to(compare non-finance person trying to innovate by changing accounting processes)	Ray McLean	Capability
Organisation	Low confidence in IT ability to deliver	Martin Lockett	Capability
People	Business reqmnts awareness(technology experts)	Anthony O'Neil	Capability
People	Lack of understanding of technology (both business & IT people)	Martin Lockett	Capability
Process	Poorly defined Process	Cliff Burnet	Capability
Process	Poor Analysis	Bob Lincoln	Capability
Process	Overall processes invisible to most people(except IT,...)	Ray McLean	Capability
Other	Poor Interface Design	Cliff Burnet	Capability
Other	Apps designed for LAN not WAN	Cliff	Capability
Technology	Complexity:Too difficult to adapt what's in place	Simon Woods	Complexity
Technology	Legacy systems - Burden of Integration & support	John Tabeart	Complexity
Technology	My PC is too old for this new stuff	Ian	Complexity
Organisation	Poor Data Defintion	Cliff Burnet	Complexity
Process	Process Complexity	Lyndon Lee	Complexity
Process	Processes not understood - complexity	Paul Lidbetter	Complexity
Other	Too much information	Ian	Complexity
Other	Reliability of data(how to use wikipedia eg)	Ian	Complexity
Process	Compliance	Roger Smith	Compliance
Other	Legislative Compliance ' we have to do it that way because .....'	Simon Woods	Compliance
Organisation	Change/innovation usually requires cross-functional change so difficult for individuals to initiate	Ray McLean	Culture
Organisation	Culture - Risk/Investment/Rewards/Sponsor	Paul Lidbetter	Culture
Organisation	Fear of failure	Paul Lidbetter	Culture
Organisation	Org politics	Lyndon Lee	Culture

Organisation	Lack of urgency - its OK now	Martin Lockett	Culture
People	Culture	Mark Blowers	Culture
People	But we've always done XYZ	Ian	Culture
People	If its free it aint worth nuffin	Ian	Culture
People	Mistrust of Technology	John Tabear	Culture
People	Fear of Success	Richard Williams	Culture
People	People set in ways of working	Cliff Burnett	Culture
People	We tried something similar 5 years ago	Martin Lockett	Culture
People	Peope inertia	Lyndon Lee	Culture
People	Not my job	Ian	Culture
People	Self interest - maintain barriers to entry of proprietary knowledge/processes	David Lee	Culture
People	Tradition	Ian Wilson	Culture
Process	Incomplete Feedback Loops	John Tabear	Culture
Process	Culture doesn't encourage innovation	John Tabear	Culture
Process	Delviered that now what	Ian	Culture
Other	I'll get fired if it fials	Martin Lockett	Culture
Other	Culture frowns on innovation	John Tabear	Culture
Other	It seemed like a good idea	Ian	Culture
Organisation	Senior Management Teams focus on the new NOT review the exisiting	Simon Woods	Management
Organisation	Technology not well understood at board level	John Tabear	Management
Organisation	Lack of Executive Support	John Tabear	Management
Organisation	No 'Champion' at sufficient seniority	Bob Bethell	Management
Organisation	Lack of High Level Commitment	Bob Lincoln	Management
Organisation	Org/Ownership/Sponsor	Lyndon Lee	Management
Organisation	Lack of Leadership (in innovation)	Lyndon Lee	Management
Organisation	CEO will lose 'control'	Ian	Management
Technology	Technology maturity	Mark Blowers	Maturity

Technology	Immature Technology	Lyndon Lee	Maturity
Organisation	Not incentivised to innovate	Paul Lidbetter	Organisational Design
Organisation	Incentives to think about innovation	Anthony O'Neil	Organisational Design
Organisation	Requires organisational change to work/get benefits	Martin Lockett	Organisational Design
Organisation	Organisation Managers prefer to leave of risk benefits realisation with project team or others - a ready scapegoat	Anthony Bodle	Organisational Design
Organisation	Demarcation of authority	Roger Smith	Organisational Design
Organisation	Rigidity of Company Hierarchy	Ian	Organisational Design
Organisation	Incentives don't promote innovation	Martin Lockett	Organisational Design
Organisation	silos issue	Lyndon Lee	Organisational Design
Organisation	IT Departments	Richard Williams	Organisational Design
Process	Ownership - Lack of innovation process & maturity	Paul Lidbetter	Organisational Design
Other	Organisation structure is wrong	John Tabbeart	Organisational Design
Technology	Not as good as what I've got at home	Anthony Bodle	People
Technology	Curiosity of people	N.Sorokin	People
People	Resistance to Change	John Tabbeart	People
People	The 'Luddites' who don't like change	Bob Bethell	People
People	Resistance to Change	Bob Lincoln	People
People	People risk averse(safer to not try & fail). Organisations don't incentivise to overcome this	Ray McLean	People
People	People resistance to change	Lyndon Lee	People
People	Too busy with day-to-day operational activities	Simon Woods	People
People	Lack of staff able to bridge the gap between ICT & the business	Simon Woods	People
People	Users see no need to change - so they resist new system - the old way has always worked	Anthony Bodle	People
People	People don't always welcome change		People

People	Resistance to Change - efficiency = reduced staff (perception)	Simon Woods	People
Other	Lack of bandwidth	Cliff Burnet	People
Other	No space on desk for anything else	Ian	People
Other	My PC's user is too old for this stuff		People
Technology	Risk of new technology	Lyndon Lee	Risk
Process	Exposure to new risks	Roger Smith	Risk
Other	Risks/Perceptions of risks	N. Sorokin	Risk
Other	Security	Ian	Security
Other	Access Control	Ian	Security
Technology	No vision of possibilities	Bob Lincoln	Strategy
Organisation	Overlapping and contradicting requirements between projects	Cliff Burnet	Strategy
Organisation	Lack of agreement between org units		Strategy
Technology	Training technology without gaining understanding of process(i.e.how, not why)	Bob Bethell	Training
Organisation	Too Little Training	Cliff Burnet	Training
People	Functionality Awareness(users)	Anthony O'Neil	Training
People	Physical Ability and interface to technology	Cliff Burnet	Training
People	Lack of understanding of system	Bob Bethell	Training
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