Overview of presentation

Basic principles

Two case studies of knowledge management from a socio-technical perspective

Conclusions

Key challenges to socio-technical systems thinking

Where we are coming from:

Basic Principles/assumptions*:

To improve performance of work systems requires research as well as effective change processes

Research to create new knowledge must be complimented by activity to enhance the workplace such that it provides a rewarding and satisfying experience (Quality of Working Life)

Good practice offers a means for developing better behavioural theory

Validity/robustness of behavioural theories can only be enhanced through application in complex, real-world situations

* Derived from the Tavistock approaches of the 1940s and 50s
Knowledge management as a socio-technical system
(After Emery and Trist, 1960)

Case study A

The context

Global R&D organisation

Large scale change - ‘Breakthrough Performance’

Technological sophistication

Need to commercially exploit all knowledge

Increasing move to distributed team working (DTW)

Information management improvement Project
What they told us

Summary of the vision

but .... reality:

1000 users registered
25 per day log on regularly
there are less than 100 active R&D users
a further 100 active customer services users

Key barriers to usage

Lack of user friendly interface
Shortfall in functionality
Unreliability of system
Response time slow
Inadequate support and training
Absence of added value
Cultural, policy & practice issues
Case study B

The Context

Service organisation in the UK
Facing competition for the first time
Staff in demand in labour market
Management fears about information/knowledge loss
Need to guard intellectual capital.
Concern to improve version control
Clear desk policy introduced to achieve secure central storage of information

What they told us

Aware of Clear Desk Policy (CDP)
Recognise potential benefits of CDP
Inadequate consultation / involvement in planning
Lack of preparation for new ways of working
Concerns about reduced individual work performance
Perceived negative impact on customer service

The gap

The Vision

integrated solutions
widely used
customer service
sharing know-how
foundation for DTW
key information store
secure
added value
The Reality

file management
pockets of use
useful service tool
profit centre needs
tool for DTW
some but little backdated
security adds complexity
needs more investment

Approaches to knowledge management

TECHNOLOGY PUSH

System implementation driven
Imposed
User may not be committed
Faster to get action, slower to get benefits
Centrally driven procedures and guidelines
Business as usual

TECHNOLOGY PULL

Driven by real user needs
Ownership (learning)
User commitment to making it work
Slower to get action, quicker to get benefits
Supported to develop tailored business solution
Illustrates culture change
Provides ‘wins’ to celebrate changing attitudes
How to cross the gap?
solution - an integrated approach

Technical Factors
System reliability
Functionality
Interface
Migration
Guidelines and procedures
Human/Social Factors
Usability
Training and Development
Change Management
Communication
Boundary Conditions

Commercial knowledge management dilemmas: socio-technical issues

Knowledge Access v Competency to use
Validity v Learning
Free access v Value adding
FAQ’s level v Integrated solutions
Not invented here v Improvement
Peer challenge v Invisible access
Unrestricted Access v Leakage
Information overload v Managed Knowledge
Free use v Commercial

Key building blocks

Share the corporate vision of benefits of knowledge sharing
Elicit a local and individual vision
Agree how to achieve a knowledge sharing culture
Implement a programme to achieve the necessary changes
Agree and implement a communications strategy re.change
Ensure high usability of systems interface
Encourage early identification of organisational barriers
Monitor the impact of systems and evolve as appropriate
Institutionalise values of knowledge sharing

Conclusion

80% of all technology will be replaced within the next decade (source: Directorate General of European Commission, 1998)
Continuity will therefore be provided not by technology, but by human beings and human capacity to learn and apply knowledge
Planned change at the macro-level, underpinned by state of the art knowledge of human learning and transition, must replace project centrism

Challenge for socio-technical systems practitioners and theorists

How to incorporate processes for transfer, human learning and transition with every socio-technical sub-system

Who did we speak to?

Data collected from:
Management Team
Specialist Users
Information System Support

Who did we speak to?

CEO
Departmental managers
Individual users
What did we do?

**Collected and analysed data to:**

Understand organisational context

Review information management needs

Identify extent to which current system meets needs

Learn from the experiences - gain feedback

Identify critical success factors

**Critical success factors for knowledge management in case studies A & B**

Driven from the top

Take 2 years not 10 years

Integrated with other initiatives

Institutionalised

Clear benefit to individuals and teams

Easy and quick to use

Appropriate training and communication

Critical mass of data

Built on culture of trust