Knowledge Management: The Practice & The Pitfalls

Dr David J. Skyrme

For Aslib Training
Knowledge Management

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Knowledge Management

Session Knowledge Map

The IM Contribution
Knowledge

The Essence
What it’s really about

Knowledge Management

KM Framework
Critical Success Factors
(and some pitfalls)

Knowledge Practice
Key Techniques

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Knowledge Management is the explicit and systematic management of vital knowledge - and its associated processes of creation, organization, diffusion, use and exploitation.
Knowledge Management is the explicit and systematic management of vital knowledge - and its associated processes of creation, organization, diffusion, use and exploitation - to help achieve organizational objectives.
Essentially Different

Data

Information

Knowledge

Intelligence

Codifiable, explicit
Easily transferable

Contextual, tacit
Transfer needs learning

Human, judgemental
Knowledge Management

Essentially Chaordic

Chaotic knowledge processes

Human knowledge and networking

Communities

Content

Information databases and technical networking

Systematic information and knowledge processes

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Knowledge Management

Shift of Focus

Internal Focus

Knowing and sharing what we know
Measurement

Creating and converting knowledge (innovation)

Existing Products & Services

External Focus

eCRM (customer k)
Personalized portals

Taxonomies / Ontologies

Knowledge Products & Services

Intranet

Extranet

Internet

CoPs

K-businesses (knowledge e-businesses)

Storytelling

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Knowledge Management

KM Maturity Curve

- Ad-hoc
  - Discover what’s happening
  - Share lessons / best practice
  - Identify peers / learning resources
  - Audit / assessment

- Formal
  - Change management
  - Develop ‘standards’
  - Customise methods

- Expanding
  - Codification
  - X-org communities
  - ‘Benchlearning’

- Integrated
  - Develop ‘standards’
  - Customise methods

- Embedded
  - Change management
  - Develop ‘standards’
  - Customise methods

Time (years)

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Drivers

- Dispersion - fragmented knowledge
- Change/restructuring - lost knowledge (and new)
- Customer relationships - personalized knowledge
- Interdependencies - ‘one-stop’ knowledge
- Better technology - easier to disseminate
- Performance – knowledge-enhanced outcomes
- Governance / compliance – FoI, public records

... Quest for value
Knowledge Management

Justifying KM

Assets

Benefits

Cost-Effectiveness

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Customer Capital

Intellectual Property

Human Capital

Structural Capital

- Market value
- Cost
- Replacement Cost
- Liability Cost
  and / or
- Relative Index
- Indicators

Knowledge Management

Benefits Focus

Access to best / latest thinking

Faster access to knowledge

Better sharing

Knowing who’s doing what

Knowledge Benefits

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Knowledge Management

Benefits Focus

Access to best / latest thinking

New approaches
Innovation

Faster access
to knowledge

Coherent
Responses

Better sharing

New Hires
Effective Quicker

Knowing who’s
doing what

Minimizes
Duplication/
Re-invention

Knowledge
Benefits

Organizational
Benefits

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Knowledge Management

Benefits Focus

Access to best / latest thinking

Faster access to knowledge

Better sharing

Knowing who’s doing what

Knowledge Benefits

New approaches

Innovation

Coherent Responses

New Hires Effective Quicker

Minimizes Duplication/Re-invention

Organizational Benefits

Better/faster Service

Authoritative Advice

Deeper Relationship

Productivity / Performance

Stakeholder Benefits

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Cost Effectiveness

- Better use of resources, especially people
- Knowledge worker productivity e.g. 1% = £50m
- Sharing Best Practice e.g. Chevron $100m energy
- E-opportunities e.g. Sun $100m customer self-help
- Better focus on key customers e.g. Chase
- Minimize rework, duplication, lost knowledge

...... Leverage on bottom line
Customer Knowledge - the most vital knowledge
Knowledge in Products - ‘smarts’ add value
Knowledge in People - but people ‘walk’
Knowledge in Processes - know-how when needed
Organizational Memory - do we know what we know?
Knowledge in Relationships - richness and depth
Knowledge Assets - intellectual capital
2 Key Thrusts

Sharing existing knowledge
"Knowing what you know"

Knowledge for Innovation
"Creating and Converting"
### Some Practices (1)

<table>
<thead>
<tr>
<th>Creating</th>
<th>Creativity techniques, simulation, skilful dialogue</th>
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<tbody>
<tr>
<td>Identifying</td>
<td>Knowledge audit, knowledge mapping, expertise directories, text mining, conceptual mapping</td>
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</table>
Knowledge Audit

Attributes

- Subject
- Content
- Media
- Format

- Owner
- Location
- Currency
- Exploitability

Source: CCTA

Practical Hints:
- Balance effort vs. benefit
- Focus on key tasks/decisions
- What is vital knowledge?
- Use database/mapping tools
- Identify duplication/gaps
- Identify critical people/nodes

Used on ...

\[ K_1, \ldots, K_n \]
Typical Knowledge Tree

Governments
- National
- Regional
- International Agencies

Environment
- Socio-demographic
- Technology Trends

Market/ Customers
- Trends /market structures
- Top customers / product uses/ applications

Supply Chain
- What products services / trends
- Suppliers / contract performance
- High value / High volume

Products / Services
- Features / benefits /applications
- Product wish list (prioritised)
- Problems / feedback

People
- Skills register / who’s working on what

Projects
- Project/contract summaries / histories / assumptions

Processes
- Procedures
- Best practices (internal /external)
Knowledge Management

Case: Teltech Resources

- “Experts for Hire” - 3000 plus; many fields
- Services - assisted database, vendors, technical alert
- KnowledgeScope™ - a taxonomy; 1000 new terms/mth
- Knowledge Analysts - client/user bridging
- Reorient client’s ‘information behaviour’
- Monthly service summaries

Bottom Line - successful KM consulting
## Some Practices (1)

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<tr>
<td>Gathering</td>
<td>Interviewing, observing, intelligent agents, search/retrieval</td>
</tr>
<tr>
<td>Organizing</td>
<td>Thesaurus, knowledge trees, metadata tools</td>
</tr>
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Some Practices (2)

Sharing

Best practices, office design, share fairs, k-bases, EDRMS, portals, intranets, cross-functional teams, CoPs
## Knowledge Sharing

<table>
<thead>
<tr>
<th>Same Time</th>
<th>Different Place</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Same Place</strong></td>
<td><strong>Different Place</strong></td>
</tr>
<tr>
<td><strong>Settings</strong></td>
<td><strong>Remote Access</strong></td>
</tr>
<tr>
<td>Workshops</td>
<td>Videoconferencing</td>
</tr>
<tr>
<td>Meeting Support</td>
<td>Audioconferencing</td>
</tr>
<tr>
<td>ShareFairs</td>
<td>Instant messaging</td>
</tr>
<tr>
<td>Conversations</td>
<td></td>
</tr>
<tr>
<td><strong>Info Objects</strong></td>
<td><strong>Asynchronous</strong></td>
</tr>
<tr>
<td>Document mgmt</td>
<td>Email lists</td>
</tr>
<tr>
<td>White boards</td>
<td>Intranets</td>
</tr>
<tr>
<td>Project rooms</td>
<td>Web conferencing</td>
</tr>
<tr>
<td>Log books</td>
<td></td>
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Best Practices

1. Identify Requirements
2. Discover Good Practices
3. Document Practices
4. Validate Best Practice
5. Disseminate And Apply
6. Develop Supporting Infrastructure

See for example Beep  http://www.beep-eu.org

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K-base (vs. Database)

- Add contextual information - why, where, how?
- Know-who - expertise directories/finders
- Multimedia - video, sound, desk-top conferencing
- Author(ity)/expert access - click for conversation
- Knowledge Communities – discussion, forums
- Add the human interface - people-to-people as well as people-to-computer

... brains as well as disks!
Communities of Practice

- Practical guidance (e.g. NAVSEA, Fed CIO/KM)
- Phase by phase:
  - Getting started
  - Creating knowledge
  - Building knowledge base
  - Sustaining communities
- Factors to consider:
  - Tasks, roles
  - Useful tools, examples, additional resources

Key part of successful KM initiatives
Case: CoPs at Siemens

- “The heart of knowledge management”
- Developing “a common body of knowledge”
- Bottom-up and top-down (“cultivation vs control”)
- Community Support:
  - Over 3 phases: start-up, run and improve, wind-down
  - Kick-off workshops
  - Communities@Siemens
  - KCS website
- New measures, eg on reuse
- A socio-tech approach

Bottom line: €150m per year value
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<td>Learning</td>
<td>AARs, project reviews, decision diaries, external forums, story telling</td>
</tr>
<tr>
<td>Applying</td>
<td>Packaging, decision support, process/workflow, case based reasoning</td>
</tr>
<tr>
<td>Evaluating</td>
<td>KM assessment, IC measurement and accounting, benchmarking</td>
</tr>
<tr>
<td>Exploiting</td>
<td>Productizing knowledge assets, external portals, k-business</td>
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**Intelligence - Insight - Innovation**

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Knowledge Measurement

- Skandia
  - IC models
  - online reporting
- Dow Chemical
  - IAM / patents
- 100 Danish orgs
  - annual reports
- Initiatives
  - OECD, Brookings, MERITUM etc.

Source: SKANDIA AFS

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Systematic knowledge processes

Levers

Processes  People  Measure - ment  Information  Space
KM Success Framework

- Well developed ICT infrastructure
- Knowledge creating/sharing behaviours
- Continuous learning / experimentation

Foundations

- ‘Hard’ infrastructure - Intranet, groupware etc.
- ‘Soft’ - Skills, learning, KM roles etc.

Tools and Techniques
KM Success Framework

Enablers

- Strong link to business value
- Compelling vision and architecture
- Knowledge leadership / champions

Leadership

Structures - Cultures - HR Policies - Vision

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KM Success Framework

Enablers
Leadership
Structures - Cultures - HR Policies - Vision

Levers
Processes
People
Measure - ment
Information
Space

Foundations
‘Hard’ infrastructure - Intranet, groupware etc.
‘Soft’ - Skills, learning, KM roles etc.

Tools and Techniques

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Critical Success Factors

- Strong link to business imperative
- Compelling vision and architecture
- Knowledge leadership
- Knowledge creating and sharing culture
- Continuous learning
- Well developed ICT infrastructure
- Systematic knowledge processes / practices
Knowledge Management

Top Ten Pitfalls

- IT “silver bullet”
- Narrow vs holistic
- Focus on what’s there
- Isolated initiative
- Mechanistic (tick-box)
- Cultural ‘obstacle’
- Management ‘nod’
- Inappropriate skills
- Impatient - ‘quick fix’
- Fail “what’s in it for me”
Knowledge Manager’s Role

- Knowledge inventory, validation of sources
- Key IM skills e.g. classification, thesauri
  – but need to convince users vs. search engines
- Custodian of key k-bases (portal management)
- Setting the IM standards (information architecture)
- Expert navigators, connectors, filters, QA
- Consultant and advisor to business

... using the knowledge of your network!!
Implications

- Don’t get hi-jacked - articulate value of good IM
- Develop partnerships with CKO and users
- Build links from info to knowledge - interactivity
- Automate info flows - help users help themselves
- Add the human element - know your business, personalise, develop relationships, build your networks!
- Use knowledge management yourself – benchmark, apply best practice, learn continuously, add value to your Intranet
“You never actually own knowledge. You merely take care of it for others”

(Adapted from an advert for a Patek Philippe watch).
Contact Details

Dr David J. Skyrme
David Skyrme Associates Limited
Highclere, England

email: david@skyrme.com
WWW - http://www.skyrme.com

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