Knowledge Management Adoption in the Hong Kong Public and Private Sectors

Prof. Eric Tsui
Associate Director, Knowledge Management Research Centre
The Hong Kong Polytechnic University
&
Vice President, Hong Kong Knowledge Management Society
KM Projects and Programs

KM roles and job opportunities

KM Education and Training
Key Adoption Metrics

1. Projects and Programs
   - Commercial, Government & Academic
   - No of projects & rate of increase
   - Nature of the projects
   - KM Maturity

2. KM roles and job opportunities
   - KM job roles & duties
   - Positions advertised & rate of increase
   - Salaries

3. Education and training
Core activities of the KMRC

• Teaching
  – Certified Knowledge Professional (CKP), Custom design in-house training
  – Undergraduate Final Year Projects
  – Postgraduate Diploma in KM, M.Sc. in KM

• Research
  – MPhil
  – PhD
  – Doctor of Engineering

• Consultancy
  – Project-based, Strategic Planning, Assessments, Advisory

• Events
  – Seminars, Workshops, Conferences, etc.
KM Education

HKCyberU Master of Science in Knowledge Management

• Blended online and classroom environments
• Unique in Asia Pacific
• 5th year in operation
• Nearly 100 graduates
• 120+ participants
• HK, Mainland, Australia, Canada, US, Italy & Thailand participants
PolyU has also completed a survey on how the adoption of KM Systems supports knowledge processes in several HK government departments in 2008.
Knowledge management is a **business solution** – even though technology is important

- Not just a technical solution, but mostly a **business solution**
- Impacts **all dimensions of the business**

**KM implementation is a program of business change requiring**

- Clarity of vision and objectives
- Management commitment
- Business ownership
- Rewards & Recognition
- Resource availability
- Appropriate infrastructure

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**Creating an environment for knowledge sharing**

The diagram illustrates the integration of **Process**, **People**, and **Technology** in knowledge management (KM). The diagram highlights the intersection of these elements under the umbrella of KM, emphasizing the importance of creating an environment that fosters knowledge sharing.

**Key Concepts**

- **Inter-organizational**
- **Social capital**
- **Personalization**

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**KMRC**

Knowledge Management Research Centre

Department of Industrial and Systems Engineering
Common “KM projects”

• Cultural Assessment
• Formulation of a KM Strategy, Framework & Strategic Planning
• Knowledge Retention / Capturing of Tacit Knowledge
• Knowledge Audit / Knowledge Management Audit
• Change Management
• KM Assessment, define metrics and reporting of Intellectual Capital (IC)
• Community of Practice / Centre of Excellence / Expert Networks
• Search Engine
• Taxonomy
• Collaboration System(s) Enterprise Portal
• Electronic Document Management System (EDMS)
• Knowledge / Information / Document Repository
• Content Management System (CMS) and Application (CMA)
• Business Intelligence, Data/Text Mining
• Process Mapping, Business Process Management (BPM)
• E-Learning
• Business Rule System, Artificial Intelligence, Expert System
• Intranet / Extranet
• Blogging / Weblogs / RSS Readers / Wikis
Common projects aligned with stage of KM journey

For organizations which are new to KM
• Awareness raising / Readiness Assessment
• Strategy Formulation / Strategic Planning
• Identification & ranking of KM initiatives
• KM Pilot(s)

For organizations that have already started KM
• Re-assessment of KM Strategy
• Sustainability of KM programs
• Culture Building
• Soft KM tools/skills
• Health checks
• Benchmarking
Assessment Current State

1. IT Assessment
2. Cultural Assessment
3. Knowledge Audit

Future Plan Development

1. Gap Analysis between current state and knowledge leveraged organization
2. Develop a customized KM framework for the organization
3. Develop a phased implementation plan
4. Develop a change management plan with detail performance metrics
5. Pilot KM tools to facilitate knowledge sharing
6. Design the KM training programs

Project Implementation

1. Review and assess the implementation of the new KM initiative(s)
2. Implement change programs
3. Conduct knowledge management training programs
4. Review the KM implementation roadmap and strategy for future enhancements

12 - 18 months
PolyU has also completed a survey on how the adoption of KM Systems supports knowledge processes in several HK government departments in 2008.
Survey on the use of Knowledge Management Systems for leveraging knowledge processes within the government departments in Hong Kong

Date of survey: From Dec-2007 to Mar-2008
Total no. of participating departments: 6 (7 different groups)
Total no. of survey respondents: 83

Objective:

To study the use of different knowledge management systems for leveraging knowledge processes and identify the potential improvements to facilitate knowledge processes that are applicable in government departments in Hong Kong.
Methodology: A mixed approach of quantitative and qualitative methods

For quantitative analysis, the method of questionnaire (both paper-based and electronic) was adopted in the survey while focus group discussions was chosen as the qualitative method to allow probing of information and development of insights among respondents which can help to explain the special findings generated from the quantitative analysis.

Design of Survey:

Covering letter for background of research and confidentiality information
Part A: Knowledge processes and their related activities
Part B: Motivational factors and knowledge transfer environment
Part C: Utilization of knowledge management systems (KMS)
Part D: Satisfaction of KMS in facilitating knowledge processes
Part E: Background information of respondents
Explanatory notes for definitions of KM terms and concepts
Knowledge Management Systems for leveraging knowledge processes

Knowledge creation:
Data Mining, Web 2.0 – Wiki, Knowledge community building tool, Taxonomy tool

Acquisition:
Search engine

Storage:
Document Management System, Shared drive

Dissemination:
E-learning system, Podcasts, Knowledge base, Lesson learned/ Best practice/ After action database

Exchange:
E-mail, Web 2.0 – Blogs, Video/web conferencing tool, Instant messaging /online chat, Social bookmarking system

Application:
Customer Relationship Management System (CRM). Intranet, extranet/ enterprise information portal
Q9. Please indicate how important are the contribution of the following knowledge processes to your daily work.

Importance of knowledge processes (average scores of all respondents)

Knowledge application (avg. score: 4.17)
Knowledge creation (avg. score: 3.63)
Knowledge acquisition (avg. score: 4.24)
Knowledge exchange (avg. score: 4.05)
Knowledge dissemination (avg. score: 4.01)
Knowledge storage (avg. score: 4.11)

where:
5-Extremely important, 4-Very important, 3-Somewhat important, 2-Not very important, 1-Not at all important
Q10. Please rate your satisfaction level towards the knowledge processes, based on your impressions of their performance in your work environment.

Satisfaction level towards knowledge processes (average scores of all respondents)

Knowledge application (avg. score: 3.48)
Knowledge creation (avg. score: 3.27)
Knowledge acquisition (avg. score: 3.59)
Knowledge storage (avg. score: 3.40)
Knowledge exchange (avg. score: 3.19)
Knowledge dissemination (avg. score: 3.25)

where:
5-Very satisfied, 4-Satisfied, 3-Neutral, 2-Dissatisfied and 1-Very dissatisfied
Q14. part (i), the level of KMS use is based on the following scale:

1. **No use** - system is not being used

2. **Utilization** - individuals utilize the system but not as the primary information source

3. **Infusion** – individuals are beginning to routinize the technology and use the system equally along with alternative information source

4. **Integration** – individuals have integrated the KMS into the work environment to the extent that if the system is unavailable, the productivity diminishes

5. **Expansion** – it has the same characteristics as “Integration” except that individuals have now expanded their use of KMS to include technology-based information sources outside their work environment
Q14. part (i), for each type of KMS deployed in your work environment, please indicate its “level of use (1-5)”.

Level of use of knowledge management systems

<table>
<thead>
<tr>
<th>Types of Knowledge Management System</th>
<th>Level of use (Average score for all respondents)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business Intelligence/Data mining</td>
<td>2.20</td>
</tr>
<tr>
<td>Intranet</td>
<td>3.55</td>
</tr>
<tr>
<td>Extranet/project extranet/enterprise information portal</td>
<td>2.73</td>
</tr>
<tr>
<td>Shared drive</td>
<td>3.03</td>
</tr>
<tr>
<td>E-mail system</td>
<td>4.03</td>
</tr>
<tr>
<td>Search engine</td>
<td>3.44</td>
</tr>
<tr>
<td>Knowledge base</td>
<td>3.08</td>
</tr>
<tr>
<td>E-learning system</td>
<td>2.20</td>
</tr>
<tr>
<td>Taxonomy tool</td>
<td></td>
</tr>
<tr>
<td>Lesson learned/ Best practice/After action database</td>
<td>2.79</td>
</tr>
<tr>
<td>Document Management System</td>
<td>2.63</td>
</tr>
<tr>
<td>Video/web conferencing tool</td>
<td>1.41</td>
</tr>
<tr>
<td>Instant messaging /online chat</td>
<td>1.48</td>
</tr>
<tr>
<td>Web 2.0 – wiki</td>
<td>1.94</td>
</tr>
<tr>
<td>Web 2.0 – blogs</td>
<td>1.89</td>
</tr>
<tr>
<td>Podcasts</td>
<td>1.45</td>
</tr>
<tr>
<td>Social bookmarking system</td>
<td>1.24</td>
</tr>
<tr>
<td>Customer Relationship Management System (CRM)</td>
<td>2.25</td>
</tr>
<tr>
<td>Knowledge community building tool</td>
<td>2.20</td>
</tr>
<tr>
<td>Others</td>
<td></td>
</tr>
</tbody>
</table>
## Knowledge Management Systems/Tools

<table>
<thead>
<tr>
<th>Knowledge Management System</th>
<th>Level of use of KMS</th>
<th>Percentage of respondents with KMS installed</th>
<th>Number of participating groups with KMS installed</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-mail system</td>
<td>4.03</td>
<td>90.4%</td>
<td>7</td>
</tr>
<tr>
<td>Intranet</td>
<td>3.55</td>
<td>86.7%</td>
<td>7</td>
</tr>
<tr>
<td>Search engine</td>
<td>3.44</td>
<td>84.3%</td>
<td>7</td>
</tr>
<tr>
<td>Knowledge base</td>
<td>3.08</td>
<td>72.3%</td>
<td>6</td>
</tr>
<tr>
<td>Shared drive</td>
<td>3.03</td>
<td>85.5%</td>
<td>7</td>
</tr>
<tr>
<td>Lesson learned/ Best practice/After action database</td>
<td>2.79</td>
<td>78.3%</td>
<td>6</td>
</tr>
<tr>
<td>Extranet/project extranet/enterprise information portal</td>
<td>2.73</td>
<td>67.5%</td>
<td>5</td>
</tr>
<tr>
<td>Document Management System</td>
<td>2.63</td>
<td>48.2%</td>
<td>5</td>
</tr>
<tr>
<td>Customer Relationship Management System (CRM)</td>
<td>2.25</td>
<td>38.6%</td>
<td>3</td>
</tr>
<tr>
<td>Business Intelligence/Data mining</td>
<td>2.20</td>
<td>53.0%</td>
<td>4</td>
</tr>
<tr>
<td>Knowledge community building tool</td>
<td>2.20</td>
<td>54.2%</td>
<td>4</td>
</tr>
<tr>
<td>E-learning system</td>
<td>2.20</td>
<td>75.9%</td>
<td>6</td>
</tr>
<tr>
<td>Web 2.0 – wiki</td>
<td>1.94</td>
<td>43.4%</td>
<td>3</td>
</tr>
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<td>Web 2.0 – blogs</td>
<td>1.89</td>
<td>42.2%</td>
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<td>4</td>
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<td>3</td>
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<td>49.4%</td>
<td>5</td>
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<td>Social bookmarking system</td>
<td>1.24</td>
<td>20.5%</td>
<td>1</td>
</tr>
<tr>
<td>Taxonomy tool</td>
<td>Not applicable</td>
<td>0.0%</td>
<td>0</td>
</tr>
<tr>
<td>Others</td>
<td>Not applicable</td>
<td>0.0%</td>
<td>0</td>
</tr>
</tbody>
</table>
Potential solutions to facilitate knowledge processes

- Knowledge Café for knowledge creation
- Communities of Practice for Knowledge creation and exchange
- Training on the use of KMS to facilitate all knowledge processes
- Training on brainstorming techniques for knowledge creation
- Job rotation for knowledge exchange
- Provide feedback channels for better dissemination of knowledge

[Images of various solutions depicted]
# Project and Job Trends

## KMRC Final Year Projects (FYPs)

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<th>Year</th>
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<td>2007</td>
<td>293</td>
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<td>2008 (till end of October)</td>
<td>148</td>
</tr>
</tbody>
</table>

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**KMRC** Knowledge Management Research Centre

Department of Industrial and Systems Engineering
Companies offering Final Year Projects (08/09)

Government Department / Education
(14 students, 6 companies, 6 projects)
- Census and Statistics Department, HKSAR (1 student)
- Child Assessment Service in Department of Health (1 student)
- HK Police (6 students)
- Hospital Authority (2 students)
- St Margaret's Hospital (2 students)
- Hoh Fuk Tong College (2 students)

Business Enterprise
(21 students, 10 companies, 17 projects)
- Adidas Service Limited (1 student)
- Automated Systems (HK) Ltd (1 student)
- Azzurra CPA Limited (2 students)
- China Aircraft Service Ltd (CASL) (1 student)
- Cathay Pacific Airways (2 students)
- Gold Peak Ltd (3 students)
- Hong Kong Air Cargo terminals Limited (HACTL) (4 students)
- HSBC (3 students)
- Humphrey and Partners Medical Services Limited (1 student)
- MTR Corporation (2 students)

NGO
(8 students, 5 companies, 8 projects)
- British Council (1 student)
- Caritas Hong Kong (2 students)
- HKCSS (2 students)
- HKYWCA (2 students)
- Samaritan Befrienders Hong Kong, (1 student)
- Suicide Crisis Intervention Center
<table>
<thead>
<tr>
<th>Type of Company</th>
<th>Project Scope</th>
<th>Study Areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transportation, Manufacturing</td>
<td>Capture Tacit Knowledge</td>
<td>Measuring Team Performance, Team Building Development</td>
</tr>
<tr>
<td>Financial Services, Logistics, Government Department, Non-Government Organisation</td>
<td>Various</td>
<td>Taxonomy &amp; Search, Document Management, Soft KM tools, Communities</td>
</tr>
<tr>
<td>Financial Services, Manufacturing</td>
<td>IC Assessment</td>
<td>IC Indicators and Measurements</td>
</tr>
<tr>
<td>Financial Services, Logistics, Government Department</td>
<td>KM Feasibility Studies, Capturing Tacit Knowledge</td>
<td></td>
</tr>
<tr>
<td>Financial Services, Logistics, Government Department, Non-Government Organisation, Secondary School</td>
<td>Knowledge Audit</td>
<td></td>
</tr>
<tr>
<td>Transportation</td>
<td>Sharing Platform</td>
<td>Intranet site analytics</td>
</tr>
<tr>
<td>Government Department, Non-Government Organisation</td>
<td>Sharing Platform</td>
<td>Data Mining, Portal Development</td>
</tr>
<tr>
<td>Sportswear</td>
<td>Sharing Platform</td>
<td>Raising the User Awareness, Rewads &amp; Recognition, E-Learning</td>
</tr>
<tr>
<td>Transportation</td>
<td>Sharing Platform</td>
<td>Collaboration Tools and Culture</td>
</tr>
<tr>
<td>IT Outsourcing</td>
<td>Technologies</td>
<td>Knowledge-enabled CRM System</td>
</tr>
<tr>
<td>Government Department</td>
<td>Technologies</td>
<td>Web 2.0 Technologies, RSS</td>
</tr>
<tr>
<td>FYP Company Name</td>
<td>Project Scope</td>
<td>Study Areas</td>
</tr>
<tr>
<td>------------------------</td>
<td>-------------------------------</td>
<td>--------------------------------------------</td>
</tr>
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<td>IT Outsourcing</td>
<td>Technologies</td>
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</tr>
<tr>
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<td>Collaboration</td>
<td>Collaboration Tools and Culture</td>
</tr>
<tr>
<td>Government Department</td>
<td>Knowledge Management System</td>
<td>Web 2.0 Technologies</td>
</tr>
<tr>
<td>Government Department</td>
<td>Sharing Platform</td>
<td>Various</td>
</tr>
<tr>
<td>Government Department</td>
<td>Knowledge Management System</td>
<td>Various</td>
</tr>
<tr>
<td>Government Department</td>
<td>Sharing Platform</td>
<td>Portal Development</td>
</tr>
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Common “KM projects”

• Cultural Assessment
• Formulation of a KM Strategy, Framework & Strategic Planning
• Knowledge Retention / Capturing of Tacit Knowledge
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• Intranet / Extranet
• Blogging / Weblogs / RSS Readers / Wikis
People

Culture, Knowledge Sharing
Capturing tacit knowledge

Process

Business Process Mapping

Technology

Collaboration Systems/Portals

Web 2.0

Content

Business Intelligence/Data Mining

Web 2.0

E-Learning

Knowledge Audit

Information/Content/Document Management

Case Management

Knowledge-enabled CRM

Knowledge Audit

Intellectual Capital

Taxonomy

KMRC Knowledge Management Research Centre

Knowledge Management Research Centre

Department of Industrial and Systems Engineering
<table>
<thead>
<tr>
<th>Date</th>
<th>Training</th>
<th>Participants</th>
</tr>
</thead>
<tbody>
<tr>
<td>21st May, 08</td>
<td>General Briefing to FYP Students By Prof. Eric Tsui</td>
<td>All Final Year Project Students 08/09 Selected Final Year Project Students 07/08</td>
</tr>
<tr>
<td>12th June, 08</td>
<td>Training on KM Frameworks By Prof. WB Lee</td>
<td>Selected Final Year Project Students 08/09</td>
</tr>
<tr>
<td>17th June, 08</td>
<td>Training on Knowledge Audit (STOCKS Methodology) By Ms. Vivien Shek</td>
<td>Selected Final Year Project Students 08/09</td>
</tr>
<tr>
<td>20th – 21st June, 08</td>
<td>2 Days of Introduction to KM By Prof. Patrick Lambe from Singapore</td>
<td>All Final Year Project Students 08/09 Company Representatives / Project Mentors from: Cathay Pacific, HACTL, Hospital Authority, Adidas, HSBC, Hoh Fuk Tong College, Child Assessment Service in Department of Health, Gold Peak Ltd, British Council</td>
</tr>
<tr>
<td>30th June, 08</td>
<td>Training on Collaboration Tools and Share Point By Prof. Eric Tsui and Mr. Ming Chow</td>
<td>Selected Final Year Project Students 08/09 Company Representatives / Project Mentors from: British Council, Cathay Pacific, Adidas</td>
</tr>
<tr>
<td>15th July, 08</td>
<td>Training on Taxonomy and RSS By Prof. Eric Tsui</td>
<td>Selected Final Year Project Students 08/09</td>
</tr>
<tr>
<td>22nd July, 08</td>
<td>Training on Knowledge Audit (Practical Training – PHASE I)</td>
<td>Selected Final Year Project Students 08/09</td>
</tr>
<tr>
<td>28th July, 08</td>
<td>Training on Knowledge Audit (Practical Training – PHASE II)</td>
<td>Selected Final Year Project Students 08/09</td>
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Send an email to polyukmrc@gmail.com if you want to contribute and edit this spreadsheet.
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Sample KM job titles in HK

Deloitt LANGHAM PLACE
MONGKOK, HONG KONG

Assistant Manager National Knowledge Manager

Knowledge Management

Environmental Protection Department
Knowledge Management Unit

Hung Hom
Fax: (852) Email

Asia Intellectual Capital Alliance

Hong Kong Science Park, Shatin, N.T., Hong Kong
香港新界沙田香港科學園科技大道西五號九座六樓

Tel: (852) Fax: (852) Direct Line: (852) Email:
Sample KM job titles in HK

LANGHAM PLACE
MONGKOK, HONG KONG

Director, Intellectual Capital and Quality

Office of the Government Chief Information Officer
The Government of the Hong Kong Special Administrative Region

Manager, Knowledge Management

Knowledge Management Manager
Global Information Strategy and Solutions
- Knowledge Management Division

Knowledge Management Research Centre
Department of Industrial and Systems Engineering
MIS Asia magazines
Projects in the KM Research Centre
Project Brochures are available...

Conducting KM projects in the Hong Kong Healthcare Services Sector

Conducting KM projects in the Transportation Sector in Hong Kong

Conducting KM projects in Departments of the Hong Kong SAR Government

KMRC
Knowledge Management Research Centre

Department of Industrial and Systems Engineering
The Hong Kong Polytechnic University


M-Commerce Demo. Unit  Logistics & Simulation Lab.
Digital Factory

Virtual Design

Digital Hall

Virtual Manufacturing Simulation

Sponsors:

PTC

SolidWorks

EDS
Hong Kong Knowledge Management Society

- Monthly Talks
  - June 2008, “Finding a new way of working” by Ron Baillie
  - March 2008 “Knowledge in the Absence of Wisdom: Management of High-value Abstract Knowledge in Business” by Dr. David Rooney
  - February 2008 Panel Discussion - “Wisdom from the Conference Circuit”
  - January 2008 ”Effective Knowledge and Innovation Management – The Keys to Building Business Success” by Kevin Moore
  - October 2007 ”Collaboration – the new killer application!” by Les Hales
  - September 2007 “KM Barometer Study” by Professor Uwe Wilkesmann
- KM Forum (1.5 days, March 2008)

Download membership forms at www.hkkms.org
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