Lessons learnt from nearly two hundred cases of KM journeys by Hong Kong and Asian Enterprises

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Knowledge Management and Innovation Research Centre (KMIRC)
The Hong Kong Polytechnic University

AGENDA

The KMIRC
A model for sustainable industry-academic collaboration
KM tools, outcomes & measurements
Challenges and Solutions
Theory & practice gap
Outcomes & Impact
Going Forward
Vision & Mission

1. To conduct research in the interdisciplinary area of KM, develop various methods and tools for the implementation of affordable KM program and systems in various industrial sectors, organizations and communities.
2. To promote and disseminate the practice of knowledge management through delivering of consultancy, training and benchmarking not only on Hong Kong but also mainland China.
3. To offer advice to practitioners by promoting KM in Hong Kong.
4. To liaise with local KM bodies and similar bodies in other countries and participate in the formulation of various KM practices and standards.
Still many obstacles to overcome …

1. Organisation may not have resources or expertise to adopt KM. Where to start?
2. KM projects are high risk projects
3. Scarcity of KM professionals in the market
4. How to measure success and quality?
5. Myth “KM needs a Big budget”
6. How to measure the Return on Investment?
7. How to sustain a KM journey?

Uniqueness of our approach

“The World as an Open Laboratory”
But the particular strategy and role of the HKPolyU also played a significant role, I believe. HKPolyU is unusual among universities with KM on their agendas. They do research, and they have a Master’s in KM course, to be sure, as do other universities. More than that, however, their KM group has been aggressively building a strong KM consulting practice in both private and public sectors – not as sidelines for their professors and teachers, but as a kind of action research learning experience for both the clients and the KM group itself.”

Patrick Lambe
KM Strategist & past president of iKMS, Singapore
The Projects

1. Final Year Projects (80%)
   • 11 months duration
2. Consultancy Projects (15%)
   • 4 months to 1.5 years
3. Research Projects (5%)
   • Ad hoc

Typical obstacles & excuses

1. There is no budget for doing KM
2. People are not willing to share
3. Everyone is already over-loaded; we do not have time
4. Our staff are not IT-savvy; they refuse to learn to use new tools
5. We do not have the skills nor the expertise
6. How can I ensure the codified/elicited knowledge is correct and complete?
7. I cannot measure and justify the benefits?
Some easy (or easier) “entry points” to KM

Managing Knowledge
- A Study of knowledge management for business process improvement in a logistics company
- Application of Knowledge Management in an Electronics Manufacturing Company
- Design and Implementation of Knowledge Management Strategies for a Logistics Enterprise
- Identification, evaluation and piloting of Knowledge Management (KM) in Marine Department (MD)
- Knowledge Management in the Financial reporting for a HK company
- Personal Knowledge Management for the Information Management department at Cathay Pacific
- Managing Knowledge of open innovation for innovative technology-intensive enterprises
- Managing system implementation knowledge of an ERP system in China
- Managing Knowledge in the implementation of a Finance System
- Implementation of knowledge sharing tools in the Caritas Early Education and Training Centre
- Product Lifecycle Management (PLM) knowledge mapping at PCCW
- Identification of KM initiatives and deployment of an Industry Research Knowledge Base at Cathay Pacific
- HCI research and implementation for consumer electronics with multimedia capabilities
- Knowledge Communities at the Operation Team of MTR
- Knowledge Communities at the project team of MTR
- A Study of the effectiveness of learning communities at PolyU
- Tracking and reporting of community activities in the Child Assessment Services
- Information Classification at Eastpoint Property Management Services
- Explorations on the use of MOOCs & Flipped Classrooms at PolyU

Organizational Learning
- Siemens Power Transmission & Distribution Group Organisational Learning Evaluation Process
Knowledge Management Systems

- Measuring the effectiveness of a project repository at Gammon Construction
- Measuring the effectiveness of the CSC Portal for ASL
- Assessment of the EDMS and enhancement initiatives at Housing Society
- Evaluation and deployment of a collaboration tool at Hutchison
- Business Intelligence for Food bank Social Services
- Data mining and business intelligence for a social service organization
- Data Visualization across distributed databases for ITIL reporting
- Evaluation and Deployment of Social Software to support collaborative work at Cathay Pacific
- Evaluation and implementation of a knowledge visualization system for DL Informatique
- A Knowledge-based Case Library for Positive Intervention in Social Welfare Organization
- Deployment of a KMSS at the Census and Statistics Department
- Design and deployment of Enterprise Content Management System at PolyU
- Design and Implementation of a Document Management and Workflow System for FujiXerox
- Design and Implementation of a Personal Learning Environment and Networking System
- Design and implementation of a portal for the J-Institute
- Establishment of a repository to capture and report continuous improvement in fault analysis
- InTaxon: An Intelligent Taxonomy for the Environmental Protection Department
- Intelligent Reasoning in the Immigration Department's e-Brain system

Intellectual Capital

- A comprehensive study of intellectual capital and annual reports in the financial services industry with special emphasis on data collection and presentation

Knowledge Capture

- Knowledge Capture for the manpower utilization in Aircraft Maintenance
- Knowledge Capture at CCC Heep Wooh College
- Knowledge Capture in Caritas Rehabilitation Services (Adult Services)
- Knowledge Capture in Caritas Rehabilitation Services (Pre-school)
- Knowledge Capture in Maintenance Operations
- Knowledge Capturing and Codification to build up narrative database through Knowledge Café or Open space perspective.
- Narrative-based knowledge capture
- Product Performance Knowledge Harvesting (PCCW)

Knowledge Elicitation and Transfer

- Use of storytelling technique to capture engineering project knowledge at ARUP
- Requirements elicitation, evaluation and content categorization in a Document Management System (DMS) at Cathay Pacific
- Knowledge Retention of Retiring staffs in a Container’s Service Company
- Identification of critical factors that stimulate the adoption and sustainment of subspecialties communities of practice in the CAS Portal
- Identify and evaluate the effectiveness of critical factors to attract repetitive internal and external visits to ASTRI Intellectual Property Department Portal
- Evaluation of User Experience of the Future Centre (Innovation Space) at the Hong Kong Science and Technology Park

KM Strategy
• A comprehensive study of intellectual capital and annual reports in the financial services industry with special emphasis on data collection and presentation
• A Knowledge-based Case Library for Positive Intervention in Social Welfare Organization
• A Study of intellectual capital reporting for a technology enterprises
• A Study of intellectual property management and trading system for Hong Kong Science and Technology Park
• A Study of knowledge management for business process improvement in a logistics company
• A Study of the effectiveness of learning communities at PolyU
• Academic Social Networking tools and their applications
• Application of Knowledge Management in an Electronics Manufacturing Company
• Applications of social media for academic institutions
• Assessing the organizational learning culture and environment in school
• Assessment of the EDMS and enhancement initiatives at Housing Society
• Auditing of organizational knowledge based on STOCKS methodology
• Business Intelligence for Food bank Social Services
• Business process re-engineering at information management department of Cathay Pacific Airways
• Conduct a Knowledge Audit for Product Development Processes
• Conducting Structured Knowledge Audit for Data Processes
• Data and Process Management at Cathay Pacific
• Data mining and business intelligence for a social service organization
• Data Visualization across distributed databases for ITIL reporting
• Development of the RightTracCX service call centre system
• Development, Testing and Documentation of a B2B Web Portal Infrastructure for the Leo Printing Group
• Document Management at Liberty Insurance
• Effectiveness of a Game-based approach to learning
• Effectiveness of Scenario-based Learning for Teaching and Learning
• ERP and Knowledge Management Audit
• Establishment of a repository to capture and report continuous improvement in fault analysis
• Evaluation and deployment of a collaboration tool at Hutchison
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• Identify and evaluate the effectiveness of critical factors to attract repetitive internal and external visits to ASTRI Intellectual Property Department Portal
• Implementation of knowledge sharing tools in the Caritas Early Education and Training Centre
• Knowledge Management Development at the Census and Statistics Department
• Knowledge Management Development at VF Corporation
• Knowledge Management Development at WWF Hong Kong
• Knowledge Management Development in an Electronics Manufacturing Company
• Knowledge Management Developments at Bank of China (HK)
• Knowledge Management Developments at child assessment service in department of health
• Knowledge Management Developments at the Hong Kong International Airport (HKIA)
• Knowledge Management Developments at the obsidian networks ltd.
• Knowledge Management Developments at the Pico Group
• Knowledge Management in the Financial reporting for a HK company
• Knowledge Retention of Retiring staffs in a Container’s Service Company.
• Managing Knowledge of open innovation for innovative technology-intensive enterprises
• Managing system implementation knowledge of an ERP system in China
• Managing Knowledge in the implementation of a Finance System
• Mapping of business processes in the Power Transmission and Distribution Group of Simens South China
• Measuring the effectiveness of a project repository at Gammon Construction
• Measuring the effectiveness of the CSC Portal for ASL
• Mobile-learning in schools
• Narrative-based knowledge capture
• New Way of Working at Cathay Pacific Airways
• Personal Knowledge Management for the Information Management department at Cathay Pacific
• Process design for the "Enquiry and Complaint System" of the Construction Industry Council of Hong Kong
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• Deployment of a KMSS at the Census and Statistics Department
Types of KM projects

People & process-oriented KM initiatives

- Cultural and Readiness Assessment
- Formulation of a KM Strategy, Framework & Strategic Planning
- Knowledge Audit & Knowledge Management Audit
- Change Management
- KM Assessment including the definition of metrics & reporting of Intellectual Capital (IC)
- Community of Practices / Special Interest Groups (SIG)

Types of KM projects

Technology-oriented KM deployments

- Search Engine configuration, testing & deployment
- Taxonomy development, maintenance & governance
- Collaboration System
- Enterprise Portal
- Electronic Document Management System (EDMS)
- Knowledge / Information Repositories
- Content Management System (CMS) & Applications (CMA)
- E-Learning
- Intelligent System
- Blogging / Weblogs / RSS Readers / Wikis
Real KM projects

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Success in KM leads to

**Increase** in

- Sales
- Customers
- Quality & consistency in decision making
- Consistency in process executions
- Organizational Memory
- Social & Professional Networks
- Readiness to respond
- Ability to innovate
- Knowledge about customers, partners, market, industry

**Reduction** in

- Time to search for information
- Time/Effort needed to locate/connect with knowledge experts
- Time to carry out “knowledge-intensive” tasks
- Time/Effort needed to resolve a problem
- Printing & mailing costs
- Travel cost & time
- Costs of providing training
Intellectual Capital (IC) training in HK

KMIRC has provided training on IC auditing and reporting to HSBC, Caritas, GoldPeak, HK Productivity Council, Towngas, Langham Place Hotel, HK Science and Technology Park, HKPC, and the Intellectual Property Department (IPD)

Intellectual Capital (IC) for business planning

Gaps between “Should Be” and “As is” in Human, Structural, Relation, and External Capital provide input into business planning
IC development at IPD, HKSARG


IC reports produced by SMEs in HK

• Since March 2009, over 600+ SMEs have benefited from the free ICM consultancy
• IC reports available for download from the IPD web site

http://www.ipd.gov.hk/eng/ICM/intellectual_capital_statements.htm
Building blocks for a knowledge-leveraged organisation

A Win-Win-Win design

1. Organisations are offered free resources and expertise to kick-start their KM journey and/or solve their KM problems
2. Students gain valuable learning and experience in applying KM in practice
3. Academics appreciate the constraints in operationising KM in practice as well as study problems, develop solutions and publish
### KM tool, outcomes & measurements

<table>
<thead>
<tr>
<th>Initiative/Technique /Tool/System</th>
<th>Outcomes</th>
<th>Method of measurement/evaluation</th>
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<td>Formulation of a KM Strategy</td>
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<td>Taxonomy creation and Search Engine customization</td>
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<td>Revamp of a Knowledge Portal</td>
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<td>Near-miss reporting database</td>
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<td>Stories database</td>
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### Challenges & Solutions

**The Eleven Deadliest Sins Of Knowledge Management**  

1. No working definition of knowledge
2. Emphasizing knowledge stock to the detriment of knowledge flow
3. Viewing knowledge as existing predominantly outside of the heads of individuals
4. Not understanding that a fundamental intermediate purpose of managing knowledge is to create shared context
Challenges & Solutions


5. Paying little heed to the role and importance of tacit knowledge
6. Disentangling knowledge from its uses
7. Downplaying thinking and reasoning
8. Focusing on the past & present but not the future
9. Failing to recognize the importance of experimentation
10. Substituting technological contact for human interface
11. Seeking to develop direct measures of knowledge

Challenges & Solutions (cont.)

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<td>The Business-IT divide – leads to insufficient end-users and Subject Matter Experts (SMEs) input</td>
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<tr>
<td>Technology is adopted before a strategy has been created e.g. a KM system is installed but it was later found out to be mis-aligned with user’s needs</td>
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<tr>
<td>Over-emphasis on KM systems (i.e. the containers), insufficient focus on the knowledge content</td>
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## Challenges & Solutions (cont.)

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<td>KM is treated/viewed as a project</td>
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<tr>
<td>Poor/Lack of configuration of the search engine and/or lack of user training – compromises the effectiveness of a high power enterprise search engine</td>
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## Challenges & Solutions

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<td>Skepticism about how to monitor and govern the use of Web 2.0 tools limits bottom-up knowledge sharing</td>
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<tr>
<td>Failure to capture &amp; share of tacit knowledge in processes</td>
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</table>
Some KM tools developed by KMIRC

1. STOCKS and AUTO-STOCKS
2. Fuzzy Association algorithm for IP & Patent search
3. TaxoFolk: A hybrid top down & bottom up navigation system
4. RAPIDS (Rapid Authoring Platform for Instructional Design of Scenarios)
5. Computational narrative analysis & generation
6. Personal Learning Environment & Network (PLE&N)
7. Intellectual Capital-extraction & reporting
8. Games for learning KM

Organisations are trained & free to use
Observation

For organizations which are *new* to KM, they focus on

- Awareness raising / Readiness Assessment
- Strategy Formulation / Strategic Planning
- Identify, rank and pilot of KM initiatives
- Knowledge Audit, Social Network Analysis
- EDMS, Search engine, portal deployment
- Taxonomy Creation and Maintenance

Observation

For organizations that have *already started* KM, their focus are principally on

- Sustainability of KM programs, culture building
- Strategy revisit, gap analysis
- Embodiment of knowledge in business processes
- Knowledge distillation and harnessing
- Soft KM tools/skills
- Health checks & Benchmarking
The theory-practice gap

Having carried out close to 200 KM projects, one can clearly identify several major areas where KM theories (covered in books) and practice differ, and those practical issues that are not only addressed but nevertheless important.

The theory-practice gap (cont.)

1. Knowledge Audit and Knowledge Strategy: Which one comes first?
2. Similarities of KM strategies among MNCs, local companies & SMEs
3. “Zero-budget” KM
4. KM journey rarely starts from a “clean sheet of paper”
5. Factors for sustaining the use of KMS are different from factors that affect adoption
6. People are lazy when tagging
7. Natural KM “entry points” in organizations
Causal Failure Factors
(Source: Alan Frost, 2015)

1. Lack of performance indicators and measurable benefits
2. Inadequate management support
3. Improper planning, design, coordination, and evaluation
4. Inadequate skill of knowledge managers and workers
5. Problems with organisational culture
6. Improper organisational structure

Resultant Failure Factors
(Source: Alan Frost, 2015)

- Lack of widespread contribution
- Lack of relevance, quality, & usability
- Overemphasis on formal learning, systematisation, & determinant needs
- Improper implementation of technology
- Improper budgeting & excessive costs
- Lack of responsibility & ownership
- Loss of knowledge from staff defection & retirement
Experience shared by APQC

“Firms that document their KM strategies are 3x more likely to leverage institutional knowledge for competitive advantage.”

“Firms with cross-functional KM steering committees are 3.5x more likely to have KM programs that are aligned with the broader business vision and strategy.”

“Firms that regularly benchmark their KM programs are 5x more likely to successfully address barriers to knowledge sharing and reuse.”

Outcomes and Impact

• Our students and graduates
• Partnering organisations and clients
• Recognition of KMIRC expertise & efforts
• Accolades
Partnering organizations and clients

- Absolute majority of them continue with their KM journey
- Some are showing evidence of higher KM maturity
- Many gained international acclaim
KM permeating into operational level staff

Workshop on Effective Knowledge Management for Supervisors of Clerical and Secretarial Grades of the Government of the Hong Kong Special Administrative Region

Invitation of Quotations

The General Grades Office of the Civil Service Bureau would like to commission a training Consultant to design and deliver up to four classes of the one-day Workshop on Effective Knowledge Management for Supervisors of Clerical and Secretarial Grades of the Government of the Hong Kong Special Administrative Region. You are invited to submit a quotation for the provision of such services on the terms and service requirements specified in the Programme Brief attached.

The MAKE (Most Admired Knowledge Enterprise) Award

1. Creating an enterprise knowledge-driven culture
2. Developing knowledge workers through senior management leadership
3. Delivering knowledge-based products/services/solutions
4. Maximizing the intellectual capital of the organisation
5. Creating and sustaining an environment of knowledge sharing
6. Creating and sustaining an enterprise culture of continuous learning
7. Delivering value based on customer knowledge
8. Managing knowledge to generate shareholder (or societal) value
Partnering organizations and clients winning MAKE awards

Since 2008, there have been

• 6 Global MAKE (IOU) winners
• 33 Asian MAKE winners
• 52 HK MAKE winners
• 36 Mainland China MAKE winners
Recognition of KMIRC expertise & efforts

Paul McDowall • Excellent presentation, Eric, thanks for making this available to us. It's great to see what is happening in KM at HKC. Clearly the KMIRC has been a catalyst force in the awareness and development of KM.

Ankur Makhija • Ankur.Makhija@eclerc.com

I am writing this email to thank you for organizing the Asian Knowledge Forum. I have attended KM forums/conferences in many cities and I can tell you by my experience that the 2016 Asian Knowledge Forum organized by KMIRC is perhaps the best KM forum that I have attended till date. Please share this thank you note with everyone at KMIRC who was involved in organizing the event. There were many practical takeaways from the conference today.
This course is suitable for participants from various background. No prior technical background is assumed.

More than 40,000 global students have joined. Don’t miss the boat!!! Starts on 6th Sept 2016

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Enquiry:
Miss Eva Su
34003158, eva.su@polyu.edu.hk
Connecting the dots through KMIRC family

Lessons learnt from nearly two hundred cases of KM journeys by Hong Kong and Asian Enterprises

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