

REAL **KM**

**Evidence based.
Practical results.**

OPEN KM SYLLABUS

2018 EDITION

Introduction

Knowledge Management (KM) is a management discipline that aims to sustainably improve the effectiveness of organisations and social systems through deliberate and planned systems interventions.

It is a multidisciplinary management science, drawing from diverse fields including information theory, data sciences, librarianship, communications, marketing, psychology, biology, sociology, and management research.

Many KM curriculums for both tertiary qualifications and private certifications only cover a small subset of the areas relevant to effective practice of knowledge management in organisations.

The **RealKM Open KM Syllabus** is an initiative which attempts to systematically describe the themes and topics required for a fully-rounded education in knowledge management theory and practice.

The goal is to provide a reference standard which can be used to:

- compare the content of educational KM programs
- create a common language for KM specialisations
- assist KM practitioners to identify opportunities for personal improvement

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- theme numbering is preserved
- any new themes use a numbering scheme which clearly indicates it is an extension, eg
 - EX.A.1 – new theme
 - A.EX.1 – new subtheme
- any insertions, modifications, or deletions to listed topics are clearly marked or footnoted
- origin of document remains clearly credited

If you have any questions or suggestions for improvement of the syllabus, please contact Stephen Bounds on stephen@bounds.net.au.

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A. Core concepts

A.1. Systems and complexity

Key topics

What is a system?
Defining the boundary of a system
'Open' and 'closed' systems
Complex systems
Types of complex systems
Are all systems complex?
Understanding complex system agents
Navigating complexity

A.2. Knowledge systems

Key topics

What is a knowledge system?
Defining information, knowledge and action
Williams AKI model

A.3. Problem solving patterns

Key topics

Knowledge as precursor to action
Problem solving models
eg scientific method, OODA, Deming cycle, Six Sigma DMAIC, knowledge lifecycle,
Bounds unified problem solving pattern

A.4. Knowledge Management objectives

Key topics

KM objectives chain
Knowledge codification

Narrative
Collaboration
Knowledge distribution
Individual learning
Knowledge integration
Distributed problem solving

A.5. Knowledge Management interventions

Key topics

Firestone & McElroy 3-tier KM
Business process interventions
Knowledge process interventions
Information process interventions
Problem solving pattern interventions

B. Knowledge management strategy

B.1. Knowledge application outcomes

Key topics

What is the knowledge application scale?
Knowledge deployment – delivery of products and services
Intangible assets – creating knowledge products covered by law
Intellectual capital – curating knowledge systems and information assets
Knowledge entrepreneurship – sponsoring creativity and innovation

B.2. Knowledge construal assessment

Key topics

Intrinsic and extrinsic motivation
Congruence of knowledge value among actors
Accessibility of knowledge
Knowledge delegation
Low involvement vs high involvement
Risk avoidance
Behavioural defaults

Psychological distance

B.3. Trust assessment

Key topics

Criticality of trust to organisational systems
Vanhala trust model – acceptance of vulnerability
Interpersonal trust – Competence, benevolence, and reliability trust
Impersonal trust – Leadership trust and structural trust
Individual / team / systems knowledge
Irrevocable trade-offs in organisational knowledge systems
Resilience / robustness / productivity triangle

B.4. Systems awareness and design

Key topics

Ecology and competition
Alliances and partnerships
Recognising and aligning behavioural incentives

B.5. Strategy development

Key topics

Selecting a systems scope and timeframe
Ideation-realisation axis – Premises, aims, and systems
Specification-indication axis – Design, action, and measurement
Premises establish consensus on values (principles) versus effort (initiatives)
Linking why (objectives) to what (goals)
Systems define how things are done (norms) and who does them (roles/responsibilities)
Design attributes (principles, objectives, and norms) describe future aspirations
Action components (initiatives, goals, and roles/responsibilities) describe present-day status
Measuring benefits to close the organisational feedback loop

C. Knowledge assessment

C.1. Knowledge audits and mapping

Key topics

Undertaking knowledge discovery
Documenting knowledge needs
Discovering knowledge gaps
Identifying key knowledge processes

C.2. Decision making structures

Key topics

Governance – policies, standards and accountability
Management – control and execution
Monitoring – reality versus assumptions
Assessment – identifying next steps
Soft influence – indirect behavioural change
Social networks – informal knowledge transmission
Rewards & punishment – providing explicit systems feedback

C.3. Capability design, implementation, and maintenance

Key topics

Group structures – teams, task forces, and squads
Mentoring and apprenticeships
Equipment and technology
Physical and virtual spaces

C.4. Training and development

Key topics

Competency and skills frameworks
Communities of practice
E-learning

D. Systems interventions

D.1. Systems management

Key topics

Identifying complexity
Predictability and propensity
Attractors, blockers, and constraints
Loci of stability and systems disruption

D.2. Knowledge processes

Key topics

Knowledge discovery
Knowledge evaluation
Solution comparison and selection
Decision support systems

D.3. Information processes

Key topics

Information theory (Shannon, Vigo)
Architecture and taxonomy
Ontology and semantics
Capture, sharing and retrieval

D.4. Business processes

Key topics

Process / practice divide
Coherence, consistency, and compliance
Documentation
Quality assurance
Collaboration

E. Applied KM

E.1. Knowledge economy

Key topics

Increased work focus on knowledge-based outcomes
Leveraging increased employee education and capability
Transformative effects of near-zero information transmission and processing costs
Organizational coordination with expectations of near-instantaneous response
Employee mobility and contracting
Deployment of artificial intelligence

E.2. Knowledge brokering

Key topics

Knowledge linchpins
Social network analysis
Library as knowledge broker

E.3. Development and extension

Key topics

Critical problem – achieving group knowledge uptake
International cooperation
International development programs
Committees and forums
Conventions and agreements
Agricultural extension – applicability generally

E.4. Management decision making

Key topics

Agile versus lean – Continuous delivery vs continuous improvement
Multitasking – overhead, pre-emption, context switching, deadlock
Smarter management design – Minimising pre-emption conflict

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