Information and Knowledge Management

A Risk Manager’s Perspective

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WHAT IS KNOWLEDGE MANAGEMENT?
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The nonsense of 'knowledge management'

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“THE NONSENSE OF KNOWLEDGE MANAGEMENT”

!!! = consternation
!!!!!! = Alarm

Where !!!= consternation
!!!!!! = Alarm
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Professor Wilson’s review of literature showed that when ‘Knowledge Management’ was used ‘Information Management’ was described
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WHAT IS KNOWLEDGE?
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The state or fact of knowing
Logical but not enlightening

Familiarity, awareness or understanding gained through experience
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The sum or range of what has been perceived, discovered and/or learned
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Knowledge must involve human information processing and resides in brain
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Can knowledge be managed?
Disaster/Risk Managers must ensure that the public is aware, alerted. Usually means Giving Data and Information
Using Storm systems as example, warning usually starts as data gathered by “technology”,
Gets translated to information (scientists ?)
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Needs further translation to useful information
Transformation from data to useful information involves ‘Knowledge’ as previously defined
This transformation is critical for most appropriate and effective warning message to be given.
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Data (Storm System)
(weather stations, satellites, radar)

17N LAT, 76 W LONG
Pressure 1004 millibars
Forward speed 15 kmh
Wind speed 60 kmh
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That data useless to persons who have not been exposed to lat, long etc.

Has to be changed into information
Storm is 100 miles (southwest of) below Kingston.
Moving at a speed of x mph etc towards Rocky Point.
(Some persons do not understand Metric system)
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Knowledge must now be added
to give useful information
Winds will start at 2:00pm
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Strong enough to blow small cars off road, motorists using Smith Road should be careful as area known to have strong winds.
The Shore Road is like likely to be impassable by 5:00pm based on Projections etc. Leave now!
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Data, Information Processed By Human Brain which applies knowledge -> USEFUL INFORMATION
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Knowledge allows same data to be adapted to various audiences applying appropriate communications technology.
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SAME DATA

POLICY LEVEL  President to address Nation
(Mass media)

OPERATIONS  Pre-stage, open shelters
(radio, cell phone, pagers, email)

COMMUNITY  Evacuate
Mass media, radios, cell phones inc
messages to multiple users

POST-IMPACT  Assessment - Satellite phones, GPS
handsets,
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OR SAME DATA – DO NOT GIVE ALERT AT SAME TIME

Because the sum of what has been perceived, discovered or learnt i.e. knowledge, (mainly that public doesn’t like “false alarms”) means that future credibility must be factored into equation
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Effective communication acknowledges validity of others’ knowledge

Community too has ‘perceived, discovered and learnt’, therefore they too have knowledge which is to be applied. Disaster management officials must somehow integrate this knowledge into “official” systems
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HOW CAN THE D/E/R MANAGEMENT COMMUNITY BENEFIT FROM KNOWLEDGE

Since it cannot be “managed”? 
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LEADERSHIP MUST ENSURE

EXPOSURE to new technology, data, information, experiences for RM staff, volunteers, community workers – leads to new knowledge

RM - Risk Management
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COMMUNICATION
SHARE knowledge – must involve human interaction – workshops, e-discussion groups, scholarly and non-scholarly writing, use of cultural/popular media-internet (regularly updated websites), cable television, music videos
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COMMUNICATION

Note: Use of web-based applications allows real-time management of any event from any location with multiple user inputs – Virtual EOC including video-conferencing.
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RESEARCH

Gather data from a variety of sources – Physical/natural/social /behavioral sciences
To help create new knowledge (or modified knowledge?)
ANALYSIS AND FEEDBACK

Analyse events, interventions, programmes, exercises etc. and feedback to improve procedures, plans, ensure more efficient use of technology
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Information and Communications Technology facilitates knowledge sharing – allows wider – global – reach of DRR message, allows manipulation of data to permit modelling of complex systems – and spatial displays of data (GIS) etc.

DRR – Disaster Risk Reduction
SUMMARY

- Knowledge is built from data and information

- Requires integration of information and communications technology and brain technology to ensure successful disaster risk reduction
SUMMARY

- “Management” must involve sharing of:
  - Information and Communications Technology
  - Knowledge of technology and applications including most appropriate technology for circumstances
SUMMARY

- It is the responsibility of DRR leadership to ensure that:
  i) Structures permitting sharing and exchange are developed and maintained necessarily includes application of available ICT
  ii) New knowledge is created and applied
THANK YOU