



Knowledge Exchange Seminar Series (KESS)

...is a forum that encourages debate on a wide range of research findings, with the overall aim of promoting evidence-based policy and law-making within Northern Ireland



Knowledge Management strategy and implementation

Dr Sandra Moffett

School of Computing and Intelligent Systems
Ulster Business School Research Institute

University of Ulster

A Learning Organisation is:

‘a company that facilitates the learning of its members and continuously transforms itself ... five main features to include systems thinking, personal mastery, mental models, shared vision and team learning’ (Senge 1990)

Knowledge Management is:

‘The process of capturing, developing, sharing and effectively using organisational knowledge’
(Davenport 1994)

The essence is to:

‘Get the right information to the right people at the right time’



Key factors identified in the literature:

Title	Theme	Content
Macro-environment	Economic, technical and social agents of change	Includes globalisation and the recession, emergence of new technology such as the Internet, market orientations
Internal organisational development	Culture and organisation climate	Includes organisational structure, strategy, goals, culture, employee emancipation, change management and business improvement initiatives
Overall management approach	Link between strategy and operations	Includes business improvement initiatives (TQM, the Learning Organisation, Business Process Re-engineering), continuous improvement, leadership and facilitation, knowledge-orientated direction
Customer focus	Interface between internal operations and customer /client	Includes satisfaction, loyalty, customer relationship management
Quality focus	TQM, Business Process Re-engineering, production improvement	Includes production and manufacturing processes, service delivery, outsourcing, partnerships and alliances, new product design, research and development
Knowledge focus	KM concepts, tools and applications, implementation, knowledge drivers of change	Includes tacit and explicit knowledge, knowledge roles, knowledge-based systems, information management, employee emancipation
Technical focus	Internal technical climate, technical contributors to change	Includes technological infrastructure, response to technical change, system standardisation and compatibility, technical usability, technological tools and software applications
Informational Contributors	Creating, storing, disseminating and using information	Includes information fatigue, infamine, infoglut, knowledge silos and power-bases and information auditing
Personal Contributors	Human Resource Management, people and working practices	Includes knowledge roles and skills, motivation and self-reflection, empowerment, learning networks and communities of practice, dialogue, collaboration and innovation

Components of Model

Macro-Environment - economic, technical, social agents of change. These include globalisation, technological development, Partnerships and Alliances, Customer-focused markets, rise of e-economy

Organisational Climate - structure, strategy, goals, culture, employee emancipation, reward systems, change management & business improvement initiatives

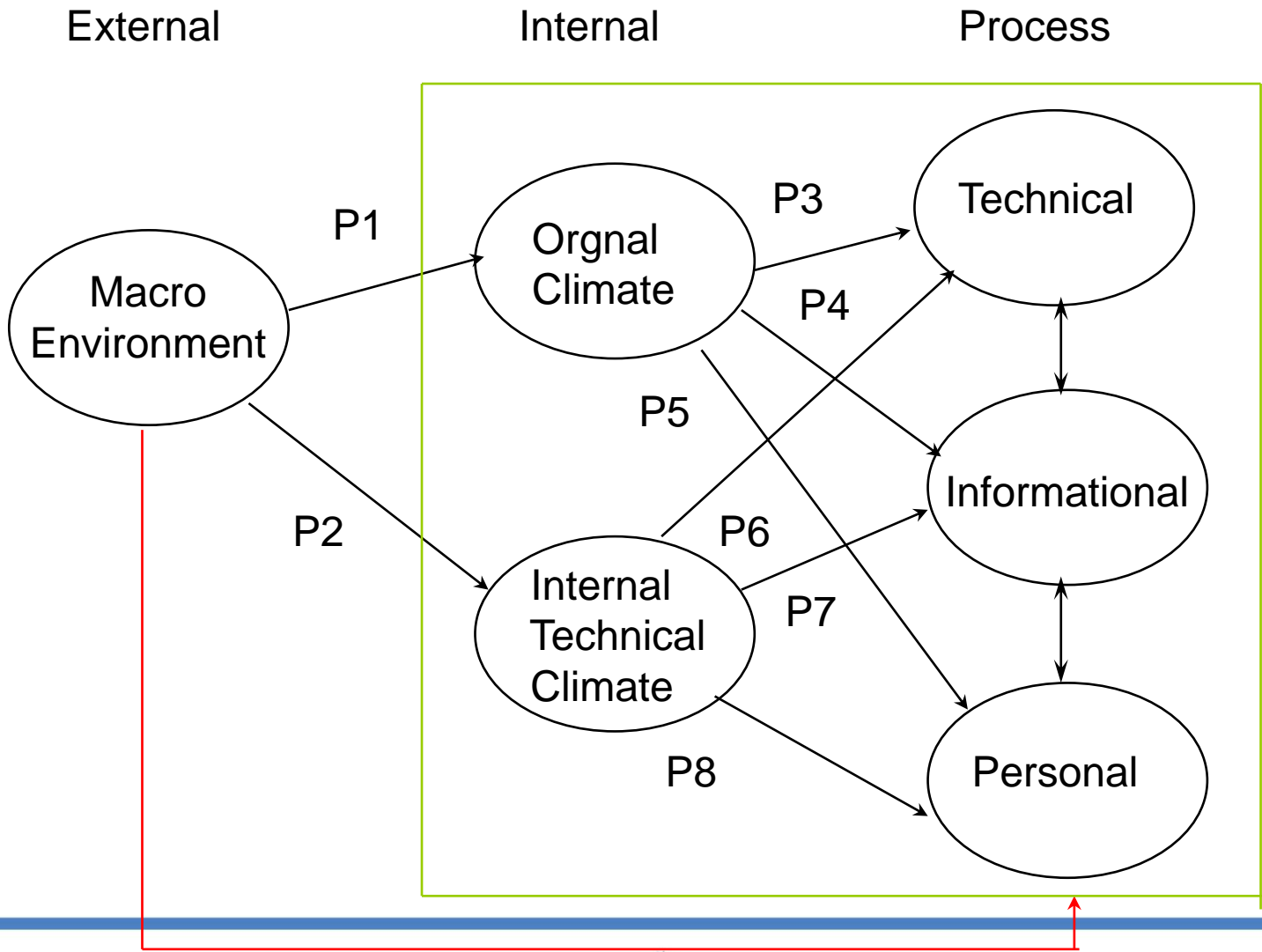
Internal Technical Climate - technological infrastructure, response to technical change

Technical - system standardisation, capability, technical usability, technological tools for KM

Informational - information fatigue, infofamine, infoglut, knowledge silos, power-bases, information auditing

Personal - knowledge roles, skills, trust, motivation, empowerment, self-reflection, learning networks, communities of practice, dialogue, collaboration, innovation





P9

Methodology – survey sample

<http://www.business.ulster.ac.uk/questionnaires/moffett/questionnaire.htm>

Database - 4709 records with complete company contact details, including email addresses

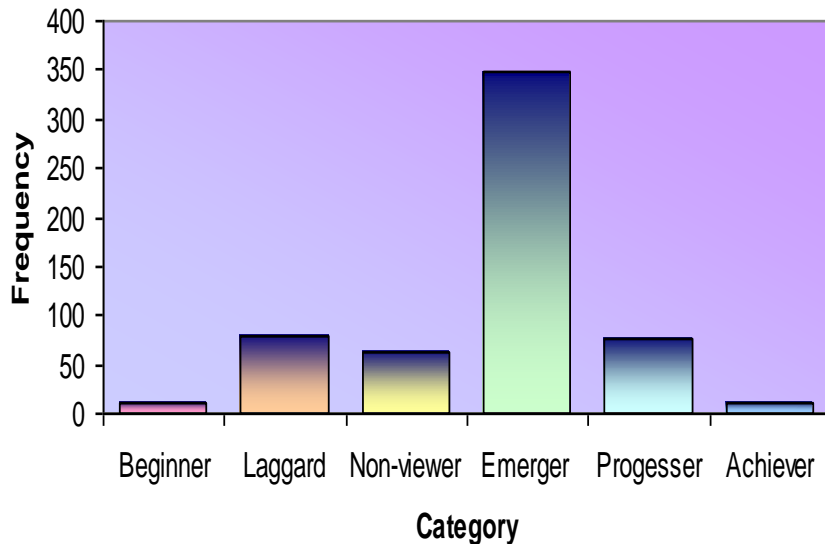
Sample 2000 organisations, n=588, acceptable return rate of 29.4%

Almost one third of the sample elected to complete the survey possibly due to their enthusiasm to develop KM practices within their own organisations

No rewards - no social desirability bias



KM Categories



2% of respondents are '**beginners**' with little KM implementation

14% are deemed to be '**laggards**', they have low focus on at least two of the three elements necessary (technology, information and people) for KM implementation.

11% have a key driver for KM implementation, receiving a high score in one element, but are not seeing the bigger picture - '**non-viewers**'

59% scored medium on either two or three of the elements showing that some form of KM implementation was in motion - '**emergers**', this activity needs to be nurtured to move towards progresser/achiever status

13% are organisations with high KM activity in two of the elements - '**progressors**'. While these organisations will see benefit to KM implementation the third element in which they are lacking needs attention.

2% are deemed '**achievers**' received a high factor score in all three elements. These organisations should be exemplars of KM implementation and practice.

Macro-Environment (Me)

Recession

'The trouble comes in a recession, when you have £150 million of fleet, depreciating at £15million per year, sitting in a yard not being used'

'I don't see the point in going all out for Sales, we don't have the capacity to deliver, in the current market we should just focus on the work we have got'

Sustainability

'When there's less capacity in the market, you need to be able to change more, and start going back up the cycle. So I guess our plan right now is hold tight, pull back on the stuff that is 'dangerous', the highly risky stuff, and be ready to expand into the market when it (improvement) happens again'

Value for Money

'increasingly we are looking at our spend, we must at all times demonstrate that what we do spend is value for money. We are trying to work smarter and cheaper'



Macro-Environment (Me)

Conservatism

'that steady hand has now paid off'

Innovation

'What did we need to do to become more innovative? Knowledge Management was identified as an enabler, now it is one of our core themes'.

'We started looking at what other people do, what might be out there, what we really need, and we add detail to those. We have a plan now for future innovation'



Organisation Climate (OC)

Strategy

'everyone is aware of the mission statement and organisation values. We (board members) come up with a three year plan once a year'

'We know what our strategy is – to survive, to grow, build up the business, make money ... the question is whether we need to put that down on paper'

Flexibility

'When speed is of the essence, sometimes not all procedures are followed'

Communication

'With it being a small business you assume everyone knows what is going on. That is an assumption that was not right. There was not enough communication and we were not conscious that that was the case'

Visibility

'We consciously made an effort to be visible in doing these things, and it has really helped'



Technical Climate (TC)

Knowledge capture

'Most of our communication takes place by phone or face-to-face. The downside to this is that we don't have a record of what is happening, decisions can be made between two people but that is not communicated to the rest of the team, if they (the person with the tacit knowledge) don't pass it on no-one else knows'

Embedding

'There seems to be initial excitement and then organisations become complacent'

'What I like here is that we don't talk about IT. It really annoys my colleagues but I feel it shouldn't be mentioned, it should just work'

Scalability

Scalability tends to depend on organisation size, while smaller organisations focus on information storage and communication, larger organisations are seeking robust, integrated systems that can be utilised globally for information storage, share and application.



Technology

Tools

Intelligent tools, support tools and web-based tools

Knowledge acquisition

'Building information into an industry-level discipline is a challenge. The information is out there. .. a lot of the market is based on tacit knowledge. There is a lot of knowledge which cannot be codified, which is actually quite valuable. IT professionals need to use technologies that will capture tacit knowledge, no matter how limited that may be, providing information that makes sense, processed in a way that is currently possible'

Communication

'Email is accessed from the internet, which provides the opportunity for connection from any location'

'email is the main driver of communication'



Technology

Security

'We don't want a walled garden or a silo, but a controlled membrane surrounding the whole organisation, so that you know with confidence that information can be quite safely circulated to the audience to engage the maximum degree of expertise, but not go out to your competitors'

Business Intelligence

'knowledge nuggets'



Information

Capture and dissemination

'the right knowledge in the right format at the right time'

Content Management

'how do you bring all this information together, ideally in one central place, so that users can get access to all of that information that is in there? How do you secure it so that only the right people can see the right information? How do you version control it so that obsolete information is superseded and that key, relevant, up-to-date information is always available at the front-end?'

Information Strategy

'We wrote our information strategy about three or four years ago – we took a year writing it, going backwards and forwards, working out what we wanted to do – and it's a real, living document and strategy. And we are doing what it says we are going to do. And for me, that is really important'



Information

Information overload

'We have identified who the lead owner is for pieces of information. What that means is the person who own it knows they shouldn't throw it away, and everybody else knows they can. One of the issues I have, especially in a small institution, you feel you have to remember everything all the time. And you can't. What is important to me is I know what I need to keep, and what someone else knows and so I don't have to worry about any more, we can integrate things better, so we don't operate in silos but in a genuinely joined-up way, but no one individual needs to know all the joined up bits'

'people are used to this in their personal life, there is data smog everywhere'



People

Employee welfare

'All benefits are better than the norm. The organisation offer staff childcare vouchers, private medical insurance for members and their families, very good life insurance policy. There are also little things in the building, for example the company provides free fruit daily and a masseuse comes in once a month. People are well looked after though they may take it all for granted. The company is considering benefit statements, as way of reminding people of all they get in addition to salary and bonuses. Family friendly policies and flexible working hours are also the norm'

'People see us as a good employer, absolutely. I think our pay rates are quite competitive. People say 'if I get into Company H I'm going to stay there forever'. We have plenty of guys who have been here 20+ years. That's the way it's always been. I'm certainly going to work here as long as I possibly can'

Flexible working

'I do work from home quite a bit. Rather than stay at work longer, I go home early, sort out the family, then do a bit more. A lot of managers subsidise their hours in-house'



People

Teamwork

'in a given programme there will be a team selected based on their function, role, knowledge and expertise'

Mentoring

'during induction we encourage new staff to sit with the other teams in the business for an hour or so, just to get an overview of what they do, how the whole thing hangs together'

'I have an open door policy, I am glad to take the time to sort out issues with new staff, a fresh pair of eyes can be very useful'

Succession planning

'No, we have nothing in place to do that. We simply wish them all the best, for whatever reason they are leaving, and then recruit someone in their place and start to train them up all over again'

'When staff are retiring, you are aware that they are taking their knowledge. We currently have a few people approaching retirement age, and potentially they could all leave at the same time, causing a large gap'



Evidence

KM is becoming growing concern in management research and practice because of its role in determining firm innovation capability and in enhancing working life quality of knowledge workers (Corso et al., 2001)

With the emergence of the knowledge intensive industry, where organisations rely on the knowledge of their staff for competitive advantage (Lustri et al., 2007), KM has become key for business success (Mu-jung et al., 2007).

Successful KM programs can produce up to tenfold returns, thus indicating that KM might also have a positive effect on firm performance (Numri, 1998)

KM is beginning to grow for SMEs (Sparrow 2001,Wong & Radcliffe 2000, van Rijnsouw 2005)

KM, once seen as a fad (Ramsey, 1996) is now an integral business function (Zhou and Fink, 2003) in both traditional and internet-based businesses (Borges Tiago et al., 2007) to the extent that KM is now viewed essential for profit (Yang, 2008)

KM in Government has broad scope from building administrative repositories, sustaining decisions, assisting planning processes and improving citizen participation to enhancement of procedures ((Traunmiller, 2012)



Challenges

Most organisations do not manage their knowledge well

They lose knowledge through downsizing and staff turnover, lack of succession planning

They buy in expertise they already possess, re-invent the wheel internally, knowledge capture and share

Unsure how to apply KM for cost reduction, efficiency and value for money

Technical and social barriers, limited uptake of emerging concepts and tools, feel restricted by organisational barriers

They do not know what they know, pay the cost, fear of the unknown

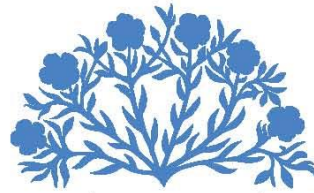


KM strategies



Thank you for listening





Northern Ireland
Assembly



The Open University



Knowledge Exchange Seminar Series (KESS)

...is a forum that encourages debate on a wide range of research findings, with the overall aim of promoting evidence-based policy and law-making within Northern Ireland