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Facilitating and Enabling Global Change: Towards a Model of Knowledge-Based Paradigm Shift

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Overview

- Motivation, & Problem
- Theoretical underpinnings:
 - “KM episode”
 - “Paradigm shift”
- Emergent theoretical model
- Conclusions and future work



The drivers for fundamental change



Practical Motivation & Problem

- Out-moded, environmentally destructive industrial processes are killing our environment and we will ultimately pay the price in human suffering.
- The problem lies with *fundamental human beliefs and behaviours* rather than the absence of technological solutions
- Radical reform needs to occur at a global scale
URGENTLY

Therefore:

How can we orchestrate radical societal change at a global scale to avoid the consequences of unsustainable 20th Century beliefs and industrial processes?

Theoretical motivation & research question

- While significant research has been undertaken in KM at the firm level, little consideration has been made of KM's potential explanatory power in regional and global change.

Does the application of a KM-theoretical lens hold promise in describing and explaining resources, influences, and processes required for orchestrated communal change?

KM as a lens for reform

- The knowledge-based view (KBV) of the firm suggests that knowledge is the only true source of sustainable advantage (Grant, 1996).
- KBV is operationalised through strategic knowledge management practice in the firm (Nevo & Chan 2007; Nonaka & Takeuchi 1995; Snowden 2002).
- The firm is a sub-system of a global socio-technical system and shares similar characteristics.

Therefore:

Sustainable advantages for global society are based in strategic knowledge management practice.

The KM Episode

- Holsapple & Joshi (2004) describe a KM Episode, which is triggered by circumstances and leads ultimately to learning and/or action.

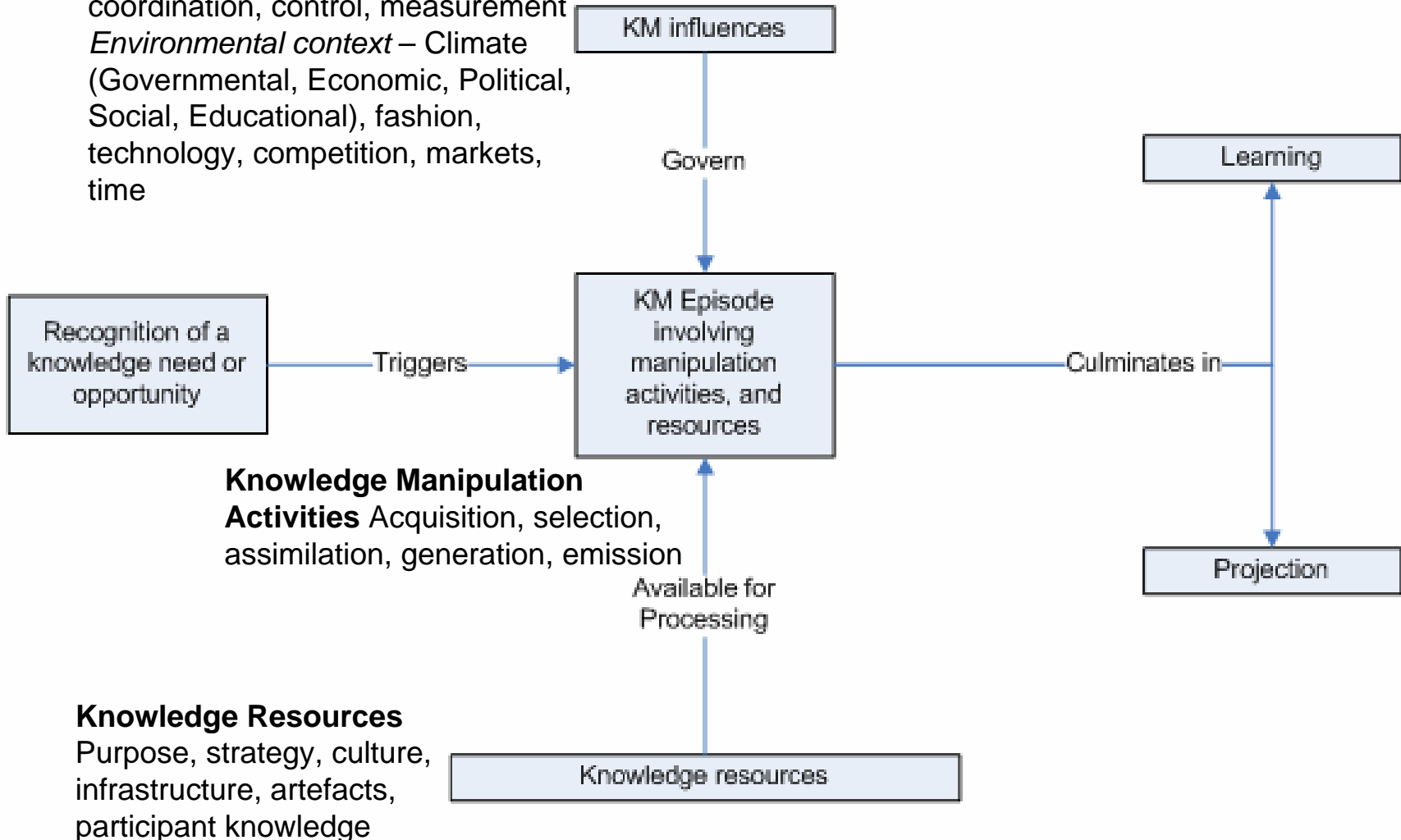
A KM Episode

Knowledge Management Influences

Resource context – Human, material, financial, and knowledge

Managerial context – Leadership, coordination, control, measurement

Environmental context – Climate (Governmental, Economic, Political, Social, Educational), fashion, technology, competition, markets, time



Paradigm-shift

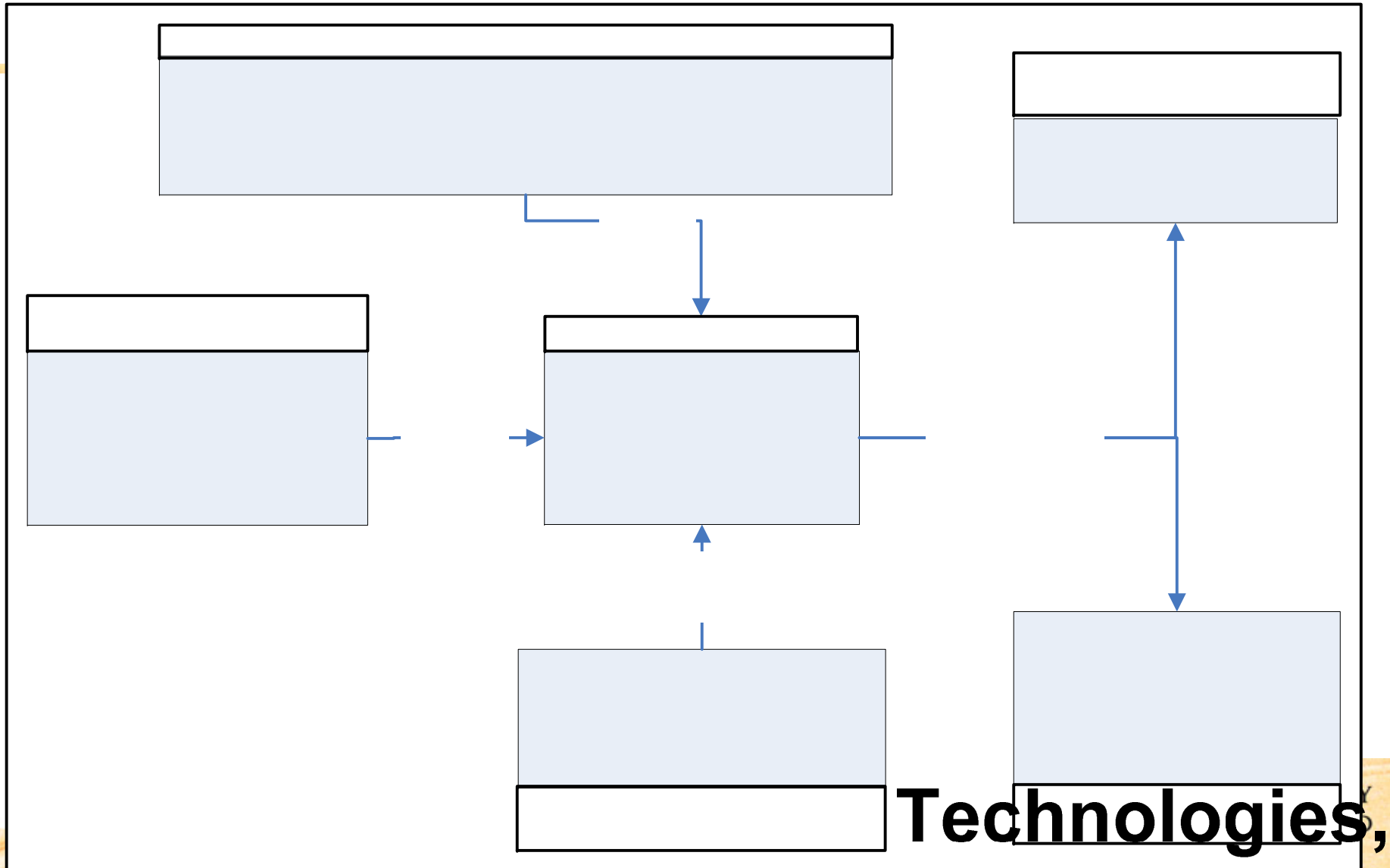
Paradigm shift expresses the way that scientific communities embrace significant changes in their collective understanding of key assumptions that inform theory development and practice within their discipline over time (Kuhn 1996).

Inhibitors & Drivers

Paradigm-shift inhibitors	Paradigm-shift drivers
Socio-cultural dynamics lead to conservatism and dogma is enshrined. Individuals are more likely to be discredited than the old paradigm they refute.	The development of empirical evidence in support of the new paradigm becomes overwhelming.
The old paradigm is entrenched in professional preparation and education. Texts only profess one view of the discipline and are openly biased to alternative, emergent paths of thought.	Innovation of technologies and instrumentation to empirically assess alternative theories support new theory development.
Individual & communally-supported buffering of large discrepancies and deviations away from expected outcomes leading to interpretive “blind-spots.”	Personal comparative advantage in solving problems is obtained by those who embrace the new paradigm because it exhibits “elegant simplicity”

There is an apparent link between paradigm shift and the current global situation.

KM Episode & Paradigm Shift



Combining KM and Paradigm Shift

The combination of the KM episode and paradigm shift provides an abstract representation of resources, influences, and processes required for community-based radical change:

- Paradigm shift and KM episodes are learning-based process theories.
- KM provides reusable knowledge for single loop learning (DOGMA).
- KM also provides knowledge-enabling processes to drive disruptive innovation and double-loop learning (PARADIGM SHIFT).
- Paradigm shift reflects the processes apparent in a community during radical change.

Future research

- An empirical study, which aims to investigate the green-engineering paradigm of industrial design and process.