Chapter 6

A Survey of Epistemology and its Implications for an Organisational Information and Knowledge Management Model

Ah-Lian Kor
Leeds Metropolitan University, UK

Graham Orange
Leeds Metropolitan University, UK

ABSTRACT

This is a theoretical chapter which aims to integrate various epistemologies from the philosophical, knowledge management, cognitive science, and educational perspectives. From a survey of knowledge-related literature, this chapter collates diverse views of knowledge. This is followed by categorising as well as ascribing attributes (effability, codifiability, perceptual/conceptual, social/personal) to the different types of knowledge. The authors develop a novel Organisational Information and Knowledge Management Model which seeks to clarify the distinctions between information and knowledge by introducing novel information and knowledge conversions (information-nothing, information-information, information-knowledge, knowledge-information, knowledge-knowledge) and providing mechanisms for individual knowledge creation and information sharing (between individual-individual, individual-group, group-group) as well as Communities of Practice within an organisation.

INTRODUCTION

Epistemology is the study of knowledge which includes what it is and how it is acquired. Nonaka and Takeuchi (1995) emphasise the need to understand what knowledge is, know how to manage it, and exploit it to increase an organisation’s competitive advantage. They view every member in an organisation as knowledge workers where new knowledge always begins with an individual which can then be transformed into organisational ‘knowledge’. In this chapter, we would like to address a few issues. Firstly, there is a need to revisit seminal epistemology and unify them with contemporary epistemology so as to uncover the
elusive meaning of knowledge. Secondly, there is
general lack of consensus over tacit and explicit
knowledge as well as information and knowledge,
which will affect knowledge management in or-
ganisations. To address these two issues, we have
developed an Organisational Information and
Knowledge Management Model to tease out the
differences between information and knowledge
for an organisation’s benefits, and have provided
mechanisms for individual knowledge creation
and information sharing among individuals within
the organisation. The Organisational Information
and Knowledge Management Model is grounded
on philosophy, knowledge management, cognitive
science, educational theories, and is consistent
Knowledge Management (NGKM) which ad-
dresses people-centric knowledge developments
(e.g. how people learn, possess knowledge, apply
knowledge, etc.).

The discussion in this chapter is divided into
two sections where the first section will present
the outcome of a survey on epistemology related
chapters in philosophy, knowledge management,
cognitive science, and education while the second
section, a conceptual design of an Organisational
Information and Knowledge Management Model.

In this chapter, we have categorised epistemol-
yogy into the following: seminal epistemology
(rationalist approach, empirical approach, prag-
matic approach, social approach); contemporary
epistemology (cognitive approach, knowledge
management approach: pluralist epistemology).
Pluralist epistemology is further divided into the
following categories: dichotomy model of knowl-
edge; multiple model of knowledge; continuum
model of knowledge; duality model of knowledge;
and knowing model of knowledge. The conceptual
design of the Organisational Information and
Knowledge Management Model aims to tease
out the differences between information and
knowledge, followed by depicting mechanisms
for individual knowledge creation and informa-
tion sharing, and finally Communities of Practice
within the organisation.

LITERATURE SURVEY
ON EPISTEMOLOGY

Seminal Epistemology

Rationalist Approach

According to the rationalist approach to epistemol-
yogy, knowledge is justified true belief (Plato in
Newman, 2005) or unshakeable conviction (Des-
cartes in Newman, 2005) which is attained through
reason alone. Such type of a priori knowledge
which is independent of sense experience, could
be innate knowledge or acquired through intuition
and deduction. Popper (Thornton, 2006) claimed
that scientists begin with problems rather than ob-
servations and he attributed the growth of human
knowledge to the search of solutions (involving
the formulation of theories) which correspond
to these problems. However, creative imagina-
tion which transcends the existing knowledge is
required when current theories are inadequate to
account for anomalies.

Empiricist Approach

Empiricists argue that humans have no innate
knowledge, the human mind is a blank slate (tabula
rasa) and claim that experience is a source of a
posteriori knowledge (e.g. Aristotle (Hett, 1936)
and John Locke, 1689). Empiricists like Locke
(1689) argue that human experience comes in the
form of sensation and reflection where the former
subsumes external senses (e.g. vision, smell,
hearing, taste, and touch) and inner sensations
(e.g. pain, joy, anxiety, etc.) which informs one
about the things and processes in one’s external
world. On the other hand, reflection informs one
about the operations of one’s mind. Locke also
argued that the outcome of our mental processes
is ideas which are considered as the materials of
knowledge. According to him, simple ideas cannot
be created but can only be obtained from experi-
ence. However, when the mind has a repository of
simple ideas which when reflected on (or applied