

# Ontologyx

---

An introduction



# Ontologyx Background

---

- Ubiquity of networking
  - we take “connectedness” for granted
- Increasing use of the network for machine-to-machine communication
  - “Web Services” have the potential to revolutionise machine to machine communication
- But...there is a real problem
  - to work together, systems need to share the same “world view” – common data models, data dictionaries, a common understanding of meaning



# Just another integration problem?

---

- This is as significant a problem within organisations...
  - “silo” culture in systems development
  - compounded by mergers and acquisition
- ...as it is between organisations
  - beyond the boundaries of the enterprise



# Isn't XML the solution?

---

- XML is about message syntax (structure)
  - a vital element of any communication
- XML has nothing to say about message semantics (the meaning of the terms used in the message)
  - at least as important as the syntax
- The significance now beginning to be appreciated
  - growing recognition of the central role of “ontologies” to the effective integration of systems



# What is an “ontology”?

---

- A combined data model and dictionary
  - designed to facilitate “interoperability” – the processes by which different systems working together
- Structured and prescriptive
  - defines precise meaning of terms
  - defines the relationships between terms (not simple hierarchies)
- EDI- a “lowest common denominator” approach to ontology development
  - inadequate for communication above the most basic level



# What is different about Ontologyx?

---

- Many organisations are designing domain-specific ontologies
  - designed to facilitate communication within and between businesses
  - already some are being widely adopted in certain sectors
- What makes Ontologyx different?
  - "Ontology X"



# Ontology X

---

- Built on principles that have been being developed over several years
  - a rich, “event-based” data model
- Contains many thousand terms – growing all the time
- Provides a framework for “mapping” terms between different ontologies
  - mapping = incorporating other ontologies
  - terms retain original precision of meaning



# Ontology X

---

- Designed both as a generic “master” ontology and to facilitate interoperability between other ontologies
- Provides a powerful architectural framework for the management of complex, event-based instance metadata