

ESRC Scottish Doctoral Training Centre Information Science Pathway Training day 13th February 2012



Analytical tools and frameworks for organisational analysis

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Session content

- Focus on tools and techniques for organisational and case study analyses through a consideration of:
 - Purpose and output of frameworks
 - Systems thinking as a framework (Hazel)
 - Actor-network theory as a framework – with example (Hazel)
 - Activity theory as a framework – with example (Tom)
- NB there is a wide range of tools and techniques for research *in general*. Some (or elements of some) are more applicable to organisational and case study research than others. We are considering *examples* here.

Purpose of frameworks

- Frameworks
 - help make sense of data collected, and thus of phenomena (e.g. organisational dynamics) observed
 - act as a tool for diagnosis
 - and thus aid the processes of:
 - acquiring knowledge
 - reflection
 - action for change (if appropriate, for example in an action research setting)

Output of frameworks

- Frameworks provide you with a means of formatting your findings
 - e.g., as a graphical representation of the organisation under investigation
- In using a framework you are encouraged to
 - (re)organise your data
 - understand what it is that your data represent
 - present your findings in a format that is understandable to others – the representation can be used as a short-cut to shared understanding (akin to boundary objects)

Systems thinking as a framework

- Systems thinking encourage you to review an organisation as a whole, made up of inter-related and inter-dependent parts
- Like a body
 - Bones, muscles, tissues, organs can be examined separately
 - But to examine how a body functions you need to take a holistic view of how all the parts work together

Systems thinking as a framework

- Premise of systems thinking
 - An organisation is a whole, and the whole comprises inter-related and independent parts, such as:
 - planning
 - control
 - structural
 - technological
 - behavioural
 - Phenomena are the emergent property of the inter-related whole.
 - “The whole is greater than the sum of its parts.”
 - Synergy

systems

“Cause and effect” V “dynamic complexity”

- Systems thinking encourages you to examine elements of the organisation
 - meshes of causes and effects
 - patterns of interaction
- to discover “dynamic complexity” (Senge, 1990).

Value of systems thinking approach

- Anticipated output
 - indications of issues that help account for what is happening within the environment under investigation
 - basis on which to build interpretations
 - starting point for exploring possible interventions (for action research)
- Format of output
 - graphics, e.g. pictures, diagrams of what has been observed
 - form of creative problem solving as patterns emerge
 - discussion of graphic may lead to explanation
 - (often regarded as alien to “spectator” research)

3. Actor-network theory as a framework - example

- Background
 - Optimism associated with the development of systems to promote knowledge sharing is misguided.
 - Examples in the literature go back to 1980s.
 - “Culture” often takes the blame.
 - Case study organisation wanted explanations as to why the efforts of its knowledge management staff to promote information systems for knowledge sharing were sub-optimal.

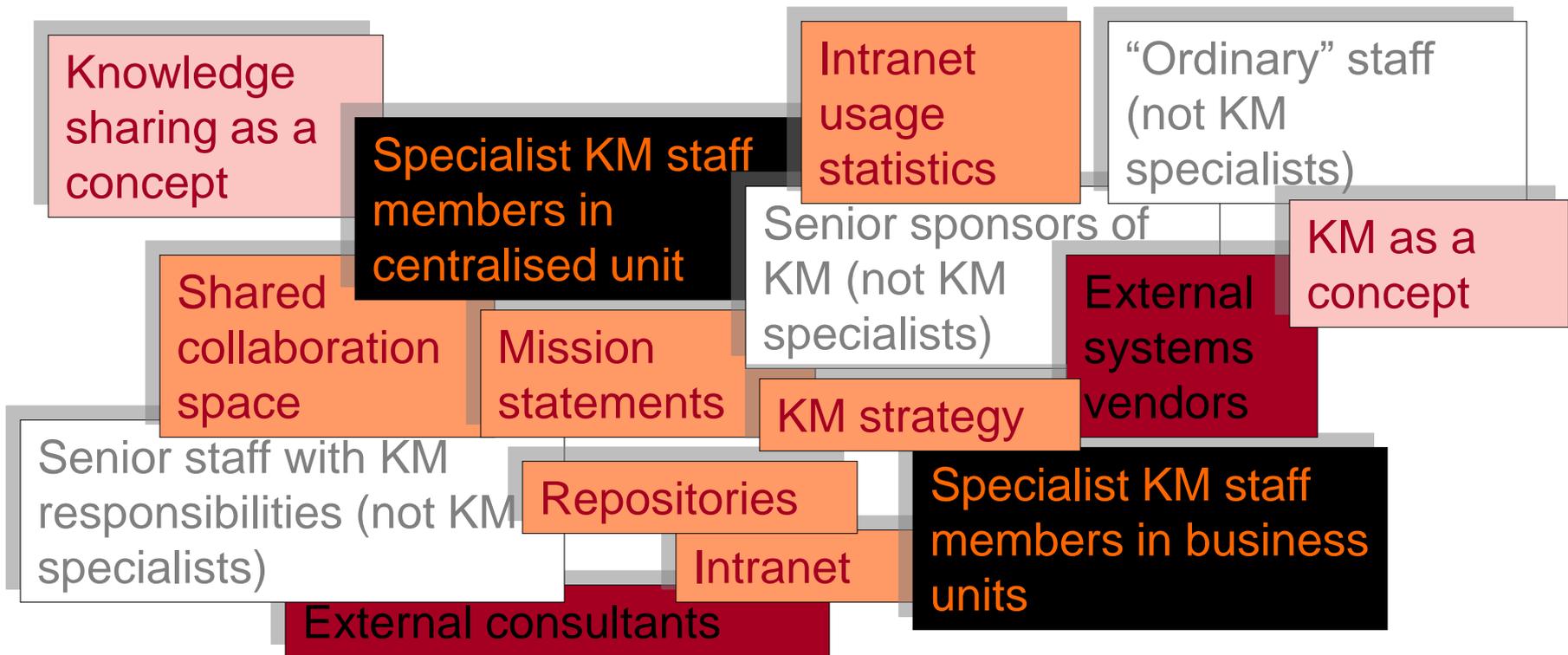
Actor-network theory as a tool of analysis

- History
 - Developed in 1980s
 - Michel Callon and Bruno Latour
- Key concepts
 - Non-humans, as well as humans, are actors
 - Relationships between actors shift as they compete for organisational resources, from tangible, e.g. office space, to intangible, e.g. corporate attention
 - Actor-networks grow through successful “translation”
 - Actor-networks diminish/disintegrate when ties in the network loosen

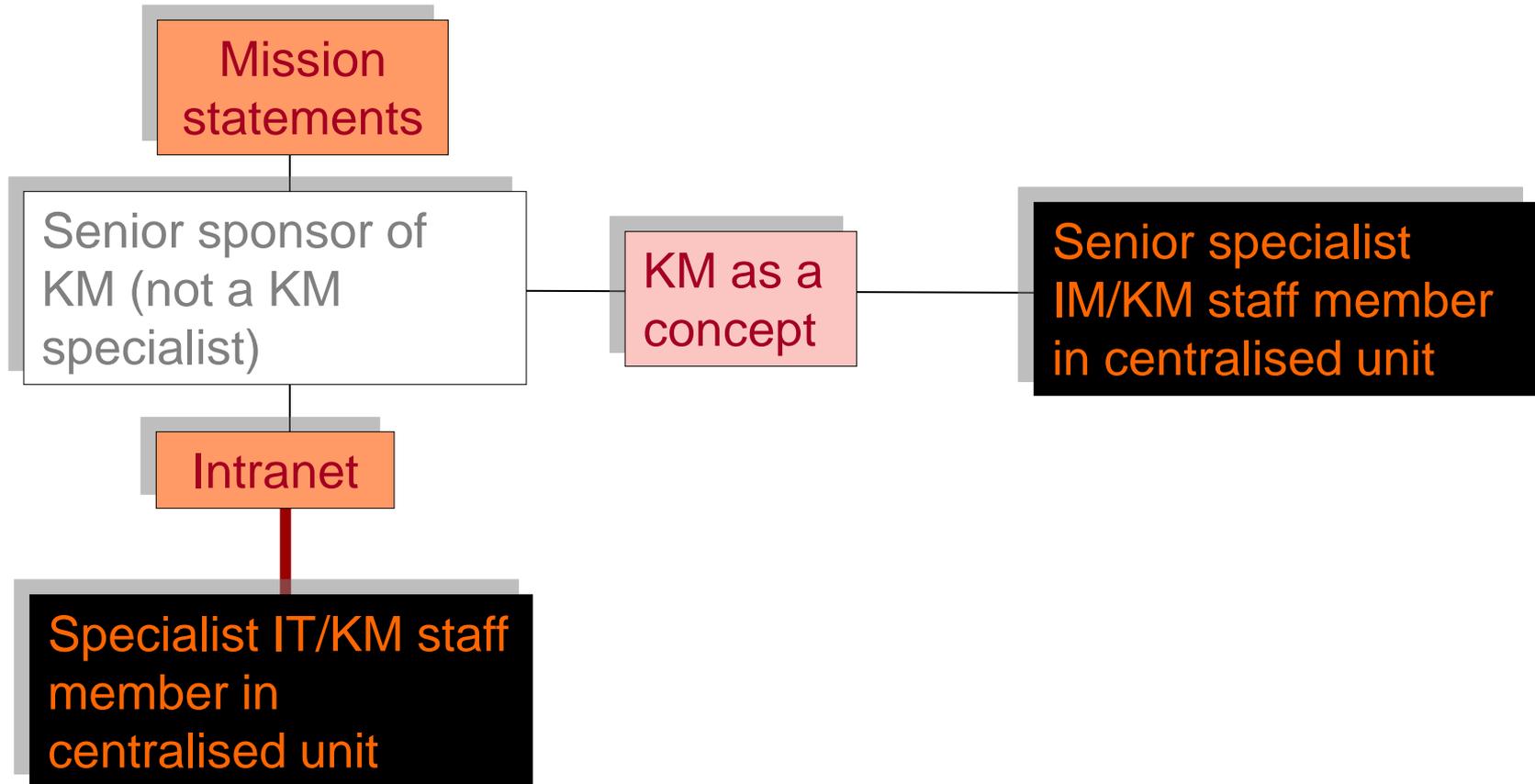
Relevance of actor-network theory to this case

- The organisation was understood as a mesh of competing actor-networks.
- The success/failure of corporate initiatives was suspected to be related to the degree to which particular groups enhanced or diminished their organisational power-base.
- Service delivery could be examined with reference to historical and social context of the organisation.
- The approach provided opportunities to reflect, learn, act.

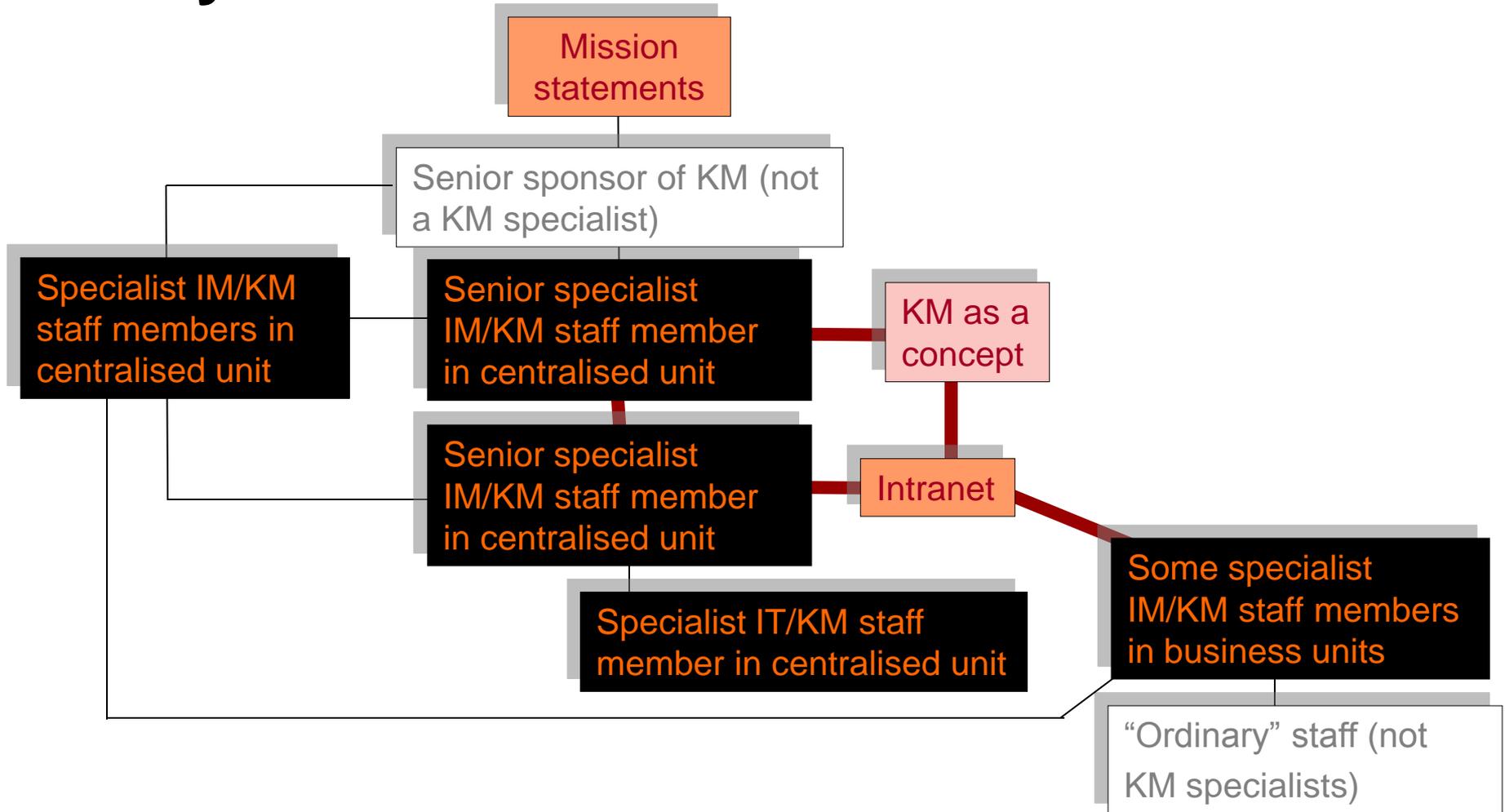
Actors in the organisation



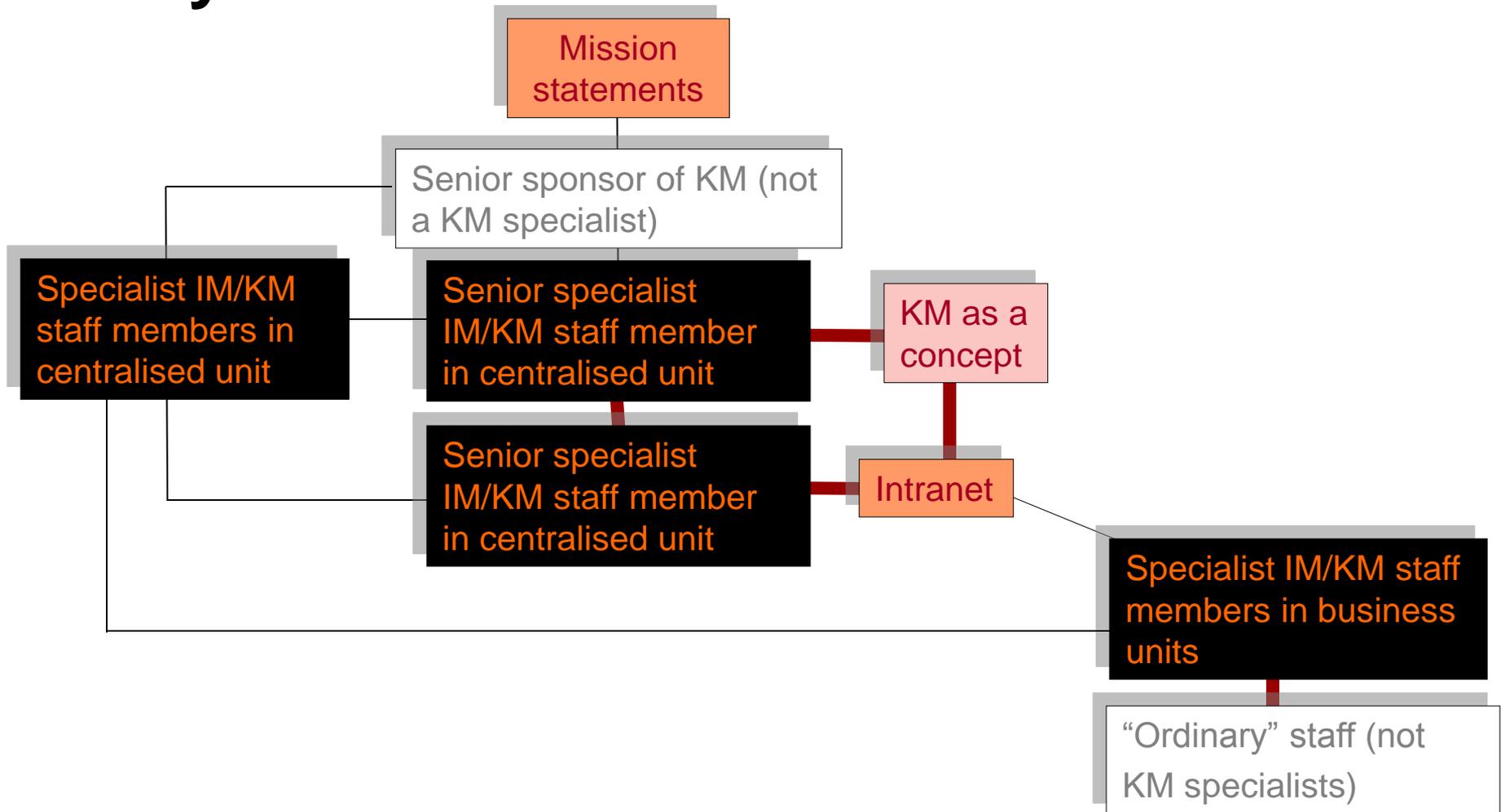
Analysis 1995



Analysis 1998



Analysis 2001



Some findings

- Central position of intranet, and its proximity to KM as a concept, account for confusion over what KM represented in the organisation.
- Distance between policy documentation and “ordinary” staff explained lack of engagement with KM, and what it implied in terms of behaviours.
- Ties between KM staff in business units and “ordinary” staff strengthened over time at the expense of their relationship with the central KM team and the main tool of the KM implementation. As a result their commitment to KM weakened, as did that of their “ordinary” colleagues.

2. ACTIVITY THEORY EXAMPLE

Selection of a framework – Weisbord (1988)

- Weisbord (1988) advises that you select a framework that:
 - is simple
 - fits with the organisation's values and will focus on what is important to the organisation
 - will generate output that can be recognised by the organisation and validate individuals' experience, whilst shedding new light on issues under discussion
 - can point to practical steps that the organisation can take to act upon the findings of the research

Selection of a framework – Burke (1994)

- Burke (1994) advises that you select a framework that:
 - you understand
 - fits the organisation, in particular
 - is comprehensive enough to cover relevant aspects of the organisation
 - will make sense to organisational members
 - supports data collection and interpretation in a comprehensive manner, i.e. will not miss out important information
- Burke also cautions against becoming “trapped” by your framework – know its strengths and weaknesses

References

Burke, W.W. (1994). Diagnostic models for organizational development. In A. Howard and associates (Eds.), *Diagnosis for organizational change* (pp. 53-84). New York: Guildford.

Senge, P. (1990). *The fifth discipline*. New York: Doubleday.

Weisbord, M.R. (1988). Towards a new practice theory of OD: notes on snap-shooting and movie making. In W.A. Pasmore & R.W. Woodman (Eds.), *Research in organizational change and development volume 2* (pp. 59-96). Greenwich, CT: JAL.

For application of Actor Network Theory in Hazel's PhD thesis, please see:
http://www.soc.napier.ac.uk/~hazelh/esis/hazel_publications.html#phd

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