



Implementation Issues for Building Product Models in Australia: A Framework for Investigation

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Presentation Overview

- Research Rational
- Developing the Framework
- Establishing the Frameworks Validity
- Summary

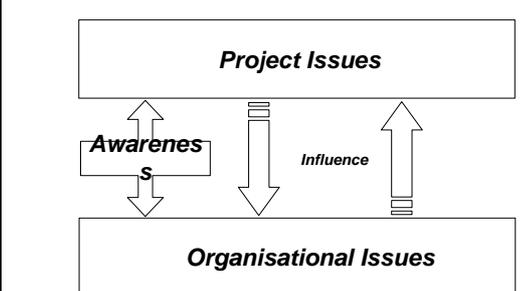


Research Rational

- Failure to gain full potential of IT within CI (Markus and Robey, 1988; Simoff and Maher, 1996; Sauer, 1993; Whyte et al., 2002)
- Industry focus on automation of existing procedures (Aouad, 1999)
- Electronic Modeling of buildings has a long history yet implementation still remains minimal (Coons 1967; Amor and Ihsan, 2001)
- Technological development, far in advance of implementation with other major industries already using product models (Brandon et al., 1998; Eastman, 1999)



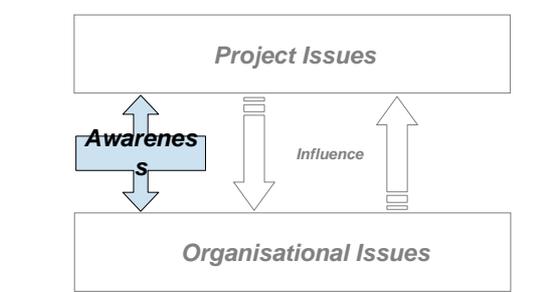
The Holistic Framework



The diagram illustrates the relationship between Project Issues and Organisational Issues. Project Issues is at the top and Organisational Issues is at the bottom. A double-headed vertical arrow on the left is labeled 'Awareness', indicating a bidirectional relationship. A double-headed vertical arrow on the right is labeled 'Influence', also indicating a bidirectional relationship.



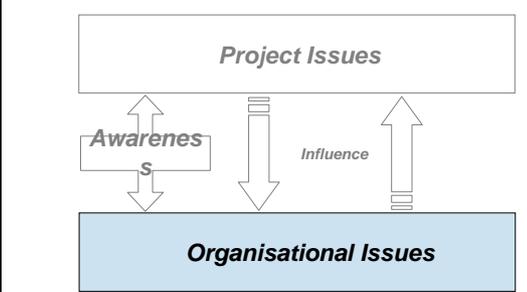
The Holistic Framework



This diagram is identical to the one in the previous slide, showing the bidirectional relationship between Project Issues and Organisational Issues through Awareness and Influence.



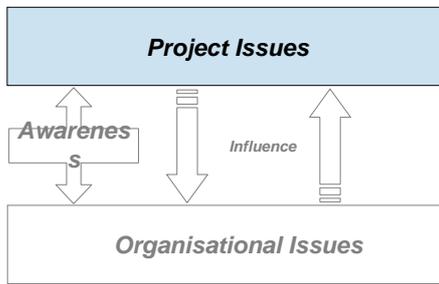
The Holistic Framework



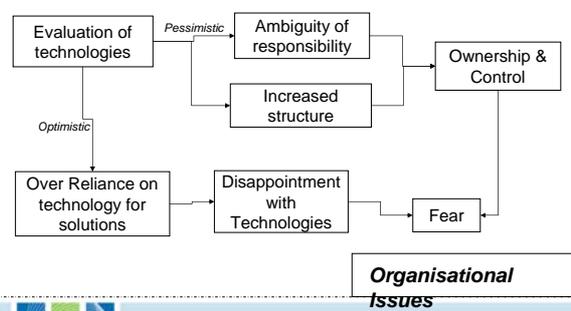
This diagram is identical to the previous ones, but the 'Organisational Issues' box is shaded in light blue, highlighting its role in the framework.



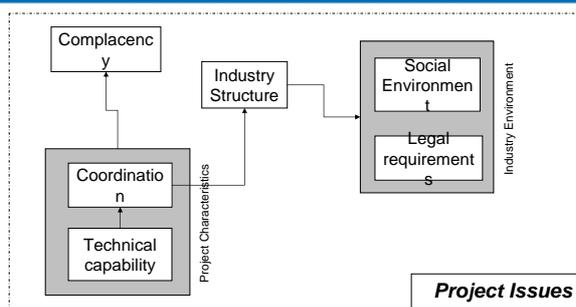
The Holistic Framework



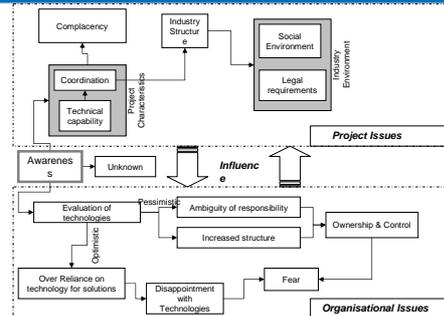
The Organisational Framework



The Project Framework



The Holistic Framework



Assessing the Framework

- Access to appropriate data
- People who have used or had potential to use BPM.
- Survey or Case Study – Case Study offering the depth of research required.
- A single project will uncover a depth of issues affecting each of the key stakeholder groups.



Establishing the Framework Validity

- Live Project – Ensure currency of information.
- Full scope of industry stakeholders
- Access to key participants for semi-structured interviews to establish external validity



The Selected Case

- Large multi storey project
- Located in an Australian Capital City
- Multi-national Builder
- Architects first project using Building Product Model
- Model usage includes - Construction Documentation, Construction Sequencing, Interior Design, Penetration Locations, with limited use by other professions



Summary

- The literature based framework is to be validated through the use of a single case study, within which key project participants will be interviewed.
- Through this research we will have a better understanding of the issues affecting the implementation of BPM's within the Australian CI.

