Knowledge management competence for ERP implementation success

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Road Map

- Introduction
- Knowledge management competence for ERP implementation success
- Conceptual framework on KM competence-ERP success
- Case study outline
- Key contributions
- Conclusion
Introduction

- Many companies are turning to Enterprise Resource Planning (ERP) systems in order to accomplish corporate goals.
- Literature had extensively discussed the key issues, challenges and current status of ERP selection, implementation and use in industries.
- Knowledge Management (KM) has been identified as one of the key success factors for ERP implementation.
KM competence for ERP implementation success

- **Two major areas of ERP knowledge:** managing tacit knowledge and issues concerning the process-based nature of organizational knowledge (Vandaie, 2008).

- A large, significant and positive relationship between knowledge management competence (KM life cycle) and enterprise success (Sedera and Gable, 2010).

- **Variables to measure ERP success:** information quality, system quality, satisfaction, individual impact and organizational impact (Sedera et al., 2003).
KM competence for ERP implementation success (Cont’d…)

- **K-types**: organisation culture, business framework, ERP package and project were the knowledge types identified by Alavi and Leidner (2001).

- **K-layers** based on empirical knowledge characterization: know-what, know-why, know-how and know-with (Chen, 2010).

- **Determinants** for KM life cycle phases were identified by various literature sources (Jones et al., 2006; Xu et al., 2006; Vandaie, 2008; Donate and Guadamillas, 2011; Tsai et al., 2011; Hung et al., 2012; Maditinos et al., 2012).
Conceptual framework on KM competence-ERP success

- **ERP package knowledge**
- **Organisational cultural knowledge**
- **Business process knowledge**
- **Project management knowledge**

K-types

**K-types**
- **Know-what**
- **Know-how**
- **Know-why**
- **Know-with**

K-layers

**K-layers**
- **Information quality**
- **System quality**
- **Satisfaction**
- **Individual impact**
- **Organizational impact**

KM Competence

**KM Competence**
- **TM Creation**
- **K-retention**
- **K-transfer**
- **K-application**

ERP Success

**ERP Success**
- **Project team power and culture**
- **Top management support**
- **User support**
- **Consultant support**

KM life cycle

**KM life cycle**
- **Tacit nature of ERP knowledge**
- **K-centred culture**
- **K-oriented leadership**
- **Nature of individual interactions**
- **ERP features for KM**
- **KM automation**
- **Practice of document management**
- **Competitive advantage resides in knowledge re-use**

Competitive advantage resides in knowledge re-use
Case study outline

- Case study approach ➔ Deductive
- Few hypotheses:
  - ERP features for KM has a positive effect on KM competence in k-retention.
  - Knowledge representation and reasoning with “know-why” layer has a strong influence on KM competence.
  - There is a relationship between KM life cycle and K-layers which would improve KM competence.
- Case study companies:
  - Carson Cumberbatch (Sri Lanka)
  - Emerson Control Technology (UK): In-depth interviews are in-progress
Case study outline (Cont’d…)

Initial findings:
- Issues in committing resources for KM inside the company.
- Proper utilisation of ERP features for KM.
- Project team members resign without proper knowledge transfer causes organisational memory losses.
- No KM system in place to capture employee knowledge.
- Proper management of ERP projects related documents.
Key contributions

- **ERP package knowledge**
- **Organisational cultural knowledge**
- **Business process knowledge**
- **Project management knowledge**

**Know-what**
- **Know-how**
- **Know-why**
- **know-with**

**Information quality**
- **System quality**
- **Satisfaction**
- **Individual impact**
- **Organizational impact**

**Novel relationships to ERP context**

**K-types**

**K-layers**

**KM Competence**

**ERP Success**

**KM life cycle**

**K-creation**
- Tacit nature of ERP knowledge
- K-centred culture
- K-oriented leadership
- Nature of individual interactions

**K-retention**
- ERP features for KM
- KM automation
- Practice of document management

**K-transfer**
- Project team power and culture
- Top management support
- User support
- Consultant support

**K-application**
- Competitive advantage resides in knowledge re-use

- Only tested for SAP implemented public sector orgs in Queensland, Australia
- No integrative framework for KM-ERP before
- Only tested for Taiwan companies
- No empirical work has been done
- Potential of validating outcomes through quantitative approach
- Extend this framework to discover determinants
Conclusion

- Background of KM and ERP.
- Literature and importance of fulfilling research gaps in KM competence-ERP success domain.
- Case study outline.
- Significant contribution in terms of the proposed conceptual framework.
- This conceptual framework should be a useful guide for ERP projects toward success, by helping to eliminate failure points with regard to the knowledge management aspect.
Thank You!!!