

Graduate Student Research Abstract – Construction Education (Pedagogical Content)

Understanding Knowledge Boundaries in the Construction Industry: A Critical Reflection

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This paper seeks to evaluate the level of the understanding in knowledge boundaries in the construction industry by; Identifying the different types of knowledge boundaries that exist in the implementation of a project and establishing key challenges that confront key stakeholders in the construction sector with respect to knowledge boundaries. Understanding knowledge boundary and knowledge integration are key success factors for an organisation to be competitive and innovative. Many innovations occur at boundaries. In order to be, and remain, competitive organisations need to be innovative and create value by improving communication and interaction between experts who are involved in knowledge communities. One of the aims of organisational boundaries is to obtain a balance between external instability, autonomy and internal order. In other words, the more effective knowledge is managed across boundaries, arguably the more competitive an organisation would be. However, the effect of knowledge on organisational boundaries has not been explicitly explored. To achieve this, knowledge should be accurately integrated with the aim of addressing future needs of organisation. Through archive data, analysis thematic and content analysis of knowledge boundaries, this paper seeks to identify different types of knowledge boundaries that exist and key challenges that confront stakeholders in implementation of a construction project. From critical review of the literature, the three different types of knowledge boundaries that affect the implementation of a project are; semantic, syntactic and pragmatic boundaries. Managing knowledge across these boundaries should lead to novelty and accurately implementing a project. Furthermore, bridging these boundaries facilitate the process of sharing knowledge which, in turn, will enable stakeholders to have a better understanding of key challenges in the implementation of construction projects. Literature identifies cost and time as the key challenges that confront stakeholders in the effective implementation of construction projects. Each stakeholder has their own perspective to these challenges. A consultant or an engineer only focuses on cost, whilst the contractor who is responsible for implementing project and dealing with both suppliers and consultants focuses on reducing time and cost of project. This paper seeks to identify associated mechanisms for bridging these boundaries with respect to these challenges. The identified mechanism is suggested to be implemented in a real project in order to be evaluated. The result of this evaluation will reveal the impacts of integrating knowledge and coordination in project on a company. In fact, the achieved results will evaluate how practical the identified mechanism that achieved from critically reviewing the literatures in specific area will be in real life. The paper offers appropriate recommendations for the benefit of academia, policy and practice.

Key Words: Construction industry, Knowledge boundary