Refining and validating modeling requirements for improved value creation in KIBS engagements

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Introduction

Whether it be a trade of goods or services, exchanges have been the driving forces behind both the industrial revolution, and modern day operational efficiency. Focusing particularly on service exchanges, it has hitherto been deemed that value is primarily derivative of the output that results from these exchanges. Recently, this particular conceptualization of value has been revisited. It is now proposed that in service exchanges, value emerges from a collaborative process among providers, clients, and other partners, rather than being “added by the provider” (Lusch, Vargo, & Wessells, 2008). This service exchange process, more formally known as value co-creation, is based on the notion that economic value emanates from the ability to use goods and services as resources, rather than from the exchange of goods or services as assets (Gadrey & Gallouj, 2002).

This research seeks to refine and evaluate requirements for a modeling technique providing the ability to systematically analyse and design value creation processes in knowledge intensive business service (KIBS) engagements. A KIBS engagement is defined as a time-bounded service relationship among a provider, client, and other parties that is crystallized in a specific project or contract.

Methodology

In order to achieve the design-oriented objectives of this research, a Design Science Research (DSR) methodology is used. DSR is a design-oriented research approach that is becoming widely recognized in the information systems field as a complement to behavioural science (March & Storey, 2008; van Aken, 2009); it is an approach that aims at developing IT artefacts - constructs, models, methods, or instantiations - in a way that both provides practical knowledge to professionals and contributes to theoretical knowledge.

1. Literature Review & Framework Development: A design-oriented, systematic literature review integrating empirical results from relevant literature is being conducted (e.g., Lessard, 2014; Ordanini & Passini, 2008; Sarker et al., 2012; Stucky & al., 2011). It will lead to the development of an integrated framework of value co-creation in KIBS engagements, and to the specification of modeling requirements from the framework.

2. Phase 1 Validation: Modeling requirements will first be evaluated through simulated applications of modeling requirements with KIBS professionals in order to evaluate their internal validity. Professionals belonging to different types of KIBS (Muller & Doloreux, 2009) will be interviewed, and asked to recall past experiences in establishing and monitoring relationships with clients and partners in order to evaluate if the proposed modeling requirements cover all elements that need to be considered and analyzed when striving for successful value co-creation.

3. Phase 2 Validation: Revised modeling requirements will be evaluated in terms of pragmatic validity, thus for their ability to produce intended outcomes (Denyer et al, 2008). Specifically, following recommended design evaluation methods, a field study will be conducted in order to monitor the use of modeling requirements to guide analysis and design of value co-creation processes.

Preliminary results & Conclusion

Research synthesis resulting from the systematic literature review serve to expand upon results obtained through previous work (Lessard, 2014). These results identified modeling requirements for value co-creation in KIBS relationships, from a limited number of case studies of value co-creation in KIBS engagements. The integrated framework (illustrated at right through a partial causal map of value co-creation) serves to identify the elements to be expressed and the types of analyses to be conducted by a modeling technique supporting successful outcomes in KIBS engagements.

These modeling requirements will then be validated in two successive phases.

Contributions

The results of this research will provide empirically validated requirements for a modeling technique supporting the analysis and design of value creation processes in KIBS contexts. These requirements could be used to develop new service modeling approaches addressing the specific characteristics of KIBS engagements. By making these approaches available as decision-making support tools to KIBS professionals, we can then foster successful, value-creating engagements among KIBS providers, clients, and partners.

References

Breton, Pearl, Barbara A. Kitchenham, David Budgen, Mark Turner, & Mohamed Khalil (2009) Lessons from applying the systematic literature review process within the software engineering domain. Journal of Systems and Software, 82(4).


Partial causal map of value co-creation

Contact: Highly collaborative KIBS engagements

Cocreating value in knowledge-intensive business services: An empirically-grounded design framework and a modeling technique (Ph.D.), University of Toronto, Toronto.

Phase 1 Validation:

Identification of added value

Phase 2 Validation:

Process of analyzing added value

Methodology

1. Literature Review & Framework Development

2. Phase 1 Validation

3. Phase 2 Validation

Framework for a design-oriented, systematic literature review

- Techniques for describing data, e.g., descriptive meta-matrix
- Techniques for explaining data, e.g., causal chains or networks
- Identifying “C”, “M”, and “O” elements
- Identification of additional variables refining the causal model
- Specification of modeling requirements
- DSR logic

Guidelines for conducting systematic literature reviews

- Breton, Kitchenham, Budgen, Turner, & Khalil, 2007; Okoli & Schabram, 2010.

- Techniques for synthesizing empirical results
  (Miles & Huberman, 1994)

References