#### APPENDIX

## **Principles for Assessing the Eligibility of Submissions for the INFORMS ISS Design Science Award**

### **1.** The Award Committee has a preference for work that has gone "End-to-End" from the beginning to the end of the design realization cycle for an IT artefact.

That design realization cycle typically includes the following steps, end-to-end:

- Identification and Statement of Need
- Iterative Design-Build-Validate-Evaluate Activities
- Evidence pertaining to the feasibility and value of the designed IT System or Artefact
- Articulation of design principles, insights, and lessons learned that provide guidance for subsequent efforts to design and create innovative IT Artefacts.

The more the work has gone end-to-end across this whole cycle, the stronger the case for the award.

We note that steps going beyond design realization, such as field deployment or commercialization are not listed above. See Principle #3 below.

#### 2. The design and systems work must be in the realm of Information Systems. While there might not be a single precise and uniformly agreed upon definition of the term Information Systems, we will use the following phrases and their associated concepts as working definitions:

- Adapted from the Mission of ISR: "Information Systems Research (ISR) is dedicated to furthering knowledge that aids in the productive application of information technology to human organizations and their management...."
- Adapted from the AIS Web site: "The mission of the Association for Information Systems is to advance knowledge in the use of information technology to improve organizational performance and individual quality of work life.
- From the Information Systems overview article in Wikipedia: "The term information system (BCIS, IS) sometimes refers to a system of persons, data records and activities that process the data and information in an organization, and it includes the organization's manual and automated processes."

To the fullest extent possible, we will allow for a broad interpretation of the concept of an information system that actually supports work in an organizational context, or that has the potential to do so.

This award is specifically focused on Design Science research within the Information Systems discipline.

A great deal of design science research takes place outside of the context of what is generally regarded as the purview of Information Systems. For example, there are many types of ingenious power engineering related efforts that extend the battery life of mobile devices. Design Science and systems development achievements in this realm may impact organizations and people working in organizations in major ways through indirect channels or effects. Nonetheless, we would not consider this type or work, or any type of work principally focused on the design and realization of physical devices or components to be within the scope of what should be considered for this award.

# 3. While the submitted research should include effort to validate and evaluate the IT artefact, the work does not need to have been deployed outside of the university R&D setting.

The information artefact or system need not have been deployed in an organizational setting outside the university. Similarly, the information system need not have been commercially implemented.

If the submission is based on an information system that has been deployed in organizational settings outside of the university, or commercially implemented, and these implementation steps that take it beyond university R&D provide evidence of design science principals, practice and insight, then this evidence will be considered in the evaluation of the submission.

### 4. The award recognizes innovation and depth of new thinking and insight in design principles for Information Systems.

Immediate or near term business impact of the application, per say, is not the determining factor in the selection of the award winner, though it might be a relevant factor.

Similarly, only the documentation of a business case for a design (without the actual design and its implementation) is not eligible for submission. This type of content is more suitable for submission to a business case competition.

# 5. This is an award to promote information systems related design science research and activity within the university-based academic communities throughout the world.

This award is to promote and recognize information systems related design science research and related experimental development by university researchers and educators, and the associated communities of students and research staff that work under the supervision of university faculty.

Commercial companies, government organizations, consulting firms, commercially oriented contract-based Research & Development Labs (even if they are university affiliated), and R&D labs of commercial companies, often develop new types of information technologies and information systems as part of their organizational mission. While such efforts often play a very important role in furthering information systems related design science principles and practice,

efforts principally driven by such non-university based entities are not eligible for this award. The rationale for this limitation is that the award is intended to promote more of this type of work inside the university community.

University work done in collaboration with the types of external organizations noted above will be eligible for this award, assuming that the university team played the lead role in the design, in the realization of the design, and in the distillation and articulation of design related principles and insights.