# Artifacts and Knowledge in Design Science Research

# Alan R. Hevner

Professor and Eminent Scholar Citigroup/Hidden River Chair of Dist. Technology Information Systems and Decision Sciences College of Business University of South Florida Tampa, FL 33620-7800 (813) 974-6753 <u>ahevner@usf.edu</u>

#### Workshop Abstract

Design science research (DSR) has been an important component of Information Systems (IS) research for a considerable period of time and its general acceptance as a legitimate approach to research in IS is increasing. To further a better understanding of DSR in information and communication technology (ICT) disciplines, my presentation explores two important issues: (i) the nature of ICT artifacts and (ii) the role of knowledge for the grounding of DSR projects and the types of contributions that are made via DSR research. The goal is to provide assistance to researchers so that they are better able to identify appropriate ways of consuming and producing knowledge when they are preparing journal articles or other scholarly works and to show how a DSR article can be structured so that a significant contribution to the knowledge base is highlighted. The evolving contents of the presentation are drawn from on-going discussions between Shirley Gregor and me on how to harmonize current perceived conflicts in DSR thinking.

### **References**

S. Gregor and D. Jones, "The Anatomy of a Design Theory," Journal of the AIS, Vol. 8, No. 5, May 2007, pp. 312-335.

A. Hevner and S. Chatterjee, *Design Research in Information Systems: Theory and Practice*, Integrated Series in Information Systems, Vol. 22, Springer, 2010.

A. Hevner, S. March, J. Park, and S. Ram, "Design Science Research in Information Systems," *Management Information Systems Quarterly*, Vol. 28, No. 1, March 2004, pp. 75-105.

## **Speaker Biography**

Alan R. Hevner is an Eminent Scholar and Professor in the Information Systems and Decision Sciences Department in the College of Business at the University of South Florida. He holds the Citigroup/Hidden River Chair of Distributed Technology. Dr. Hevner's areas of research interest include information systems development, software engineering, distributed database systems, healthcare information systems, and service-oriented computing. He has published over 150 research papers on these topics and has consulted for a number of Fortune 500 companies. Dr. Hevner received a Ph.D. in Computer Science from Purdue University. He has held faculty positions at the University of Maryland and the University of Minnesota. Dr. Hevner is a member of ACM, IEEE, AIS, and INFORMS. Recently, he served as a program manager at the U.S. National Science Foundation in the Computer and Information Science and Engineering (CISE) Directorate.