Where are we on the “fend off the alligators - drain the swamp” continuum?

Don Gause
Savile Row, LLC and SUNY/Binghamton
USA
dgause@stny.rr.com

Abstract

Over the past ten years, we have seen many useful developments in software specification tools, languages, processes, and practices as well as the creation of a number of excellent requirements management tools. Numerous books and articles have been produced on requirements elicitation and development. We have learned to explicitly specify complex synchronous and asynchronous processes using Petri nets, state diagrams, and structured decision tables. We are exploring the use of fuzzy logic and imprecise probabilities to improve our management of uncertainty in the design process. But, WAIT JUST A MINUTE! Where is the industry with respect to all of this? In spite of this dramatic progress, are there remaining holes and/or opportunities in our practice of Requirements Engineering? We find the industry to be all over the map as the answer to the former and an emphatic YES as an answer to the latter.

We take a friendly look at the industry in terms of 1) requirements practices already in place - from none to some to plenty, 2) what the industry means by “requirements”, and 3) what companies say to their stockholders versus what their end products reflect. We will suggest a few simple ideas for enhancing the value of requirements over the full life cycle of the product. We will propose a more moderate strategy for realizing, in a practical way, greater opportunity through requirements engineering. We feel that, with modest but consistent effort, we can experience relatively large benefits. We suggest charming the alligators.

About the Speaker

Prof. Donald C. Gause is a Principal of Savile Row, LLC as well as a Bartle Professor in Systems Science in the Thomas J. Watson School of Engineering, SUNY/Binghamton. He has worked as an engineer and computer programmer and has managed engineering, programming and education groups with General Motors and IBM. He has been active as a consultant and professor for the past 33 years and served for many of these years as an adjunct member of IBM’s Systems Research Institute (SRI). He has been a visiting scholar and has lectured at many universities and institutes around the world, has been an associate editor of the International Journal of Cybernetics and Systems, and has served as a national lecturer for a number of professional societies.

Mr. Gause’s consulting and research interests include the development and analysis of requirements engineering and systems design processes, the design of user-oriented systems, and the management of innovation within large organizations. He has advised in the elicitation and documentation of business plans and requirements for Internet start-ups and Fortune 100 companies. He has also consulted on the development of strategic business systems, new products and processes for many leading firms.

Mr. Gause is the author (with G.M. Weinberg) of Are Your Lights On?: How to Figure Out What the Problem REALLY Is, Dorset House, N.Y., 1990 and Exploring Requirements: Quality BEFORE Design, Dorset House, N.Y., 1989.