Pursuing a Universal Foundation of System Design Quality

Projecting the choice properties of Thriving Systems Theory onto widening domains of information systems models

Les Waguespack, Bentley University

A system thrives when it promotes the unfolding of the choices that support and align with the stakeholders’ current intentions; and it promotes the unfolding of those intentions through the conceptual clarity and efficiency with which it represents them.

The fifteen choice properties of system quality can be perceived in information system artifacts, but can also be instilled and strengthened through the enlightened application of the ontology and/or vocabulary that defines the nature of the system domain.

In 2011, Les Waguespack in partnership with Bill Schiano and David Yates continues exploring the question of a fundamental, universal, underlying theory of systems quality. The work thus far has mapped the choice properties of Thriving Systems Theory to object-oriented modeling, relational data modeling, and explained the extraordinary success and resilience of the Apache web server.

This year we’ve explored the architectural qualities of agile project management methodologies (i.e., SCRUM) and the design implications of the choice properties on the perceived quality of management information systems.

The extension of Thriving Systems Theory’s aesthetic characteristics of quality to these broader domains of information systems leads us to try more systems paradigms as a way to investigate quality in those domains and to further substantiate and refine the underlying Thriving Systems Theory.

Thriving Systems Theory


