

Modeling Agile Portfolios as Viable Systems

Identifying design goals

Joseph Puthenpurackal, Antwerp Management School, Antwerp 2000 Belgium
(josephpc@yahoo.com)

While enterprise IT functions are increasingly adopting agile practices to accelerate their software delivery, these practices appear to introduce additional complexities for traditional portfolio management activities [1] through a manifold increase in portfolio level interactions [2]. Additionally, the focus on change, self-organization and continuous improvisation within agile projects necessitates portfolios to be more adaptive than previous top-down efforts [3]. Enterprise scaling models that attempt to aggregate agile projects from a team level to a program or portfolio level are finding increasing acceptance within enterprises, but have been routinely criticized for their extensive process-reliance.

Project portfolios have to continuously adjust and adapt to their environment in order to stay efficient and viable over an extended period and continue to deliver value to the enterprise. This quest for 'requisite variety' is foundational to the viable systems model [4] and its recursive structure allows the portfolio and its components to be modeled at different levels like projects, programs, portfolios, enterprise goals and even a network of related enterprises. Initial literature reviews identified very few studies modeling portfolio management, particularly in the context of agile portfolios, using systems theory approaches.

This study is considered a part of a broader design science research effort to create a model to operationalize agile portfolio management using a viable systems approach with varying levels of recursion as required by the portfolio context. In the current stage, the study aims to explore theory and practice to identify a set of design goals through a qualitative Delphi approach across a purposively selected panel of experts from academic and practitioner fields. The outcomes will contribute to a better formulation of systems theories as applied to agile portfolio management.

References

- [1] Stettina, C. J., & Hörz, J. (2015). Agile portfolio management: An empirical perspective on the practice in use. *International Journal of Project Management*, 33(1), 140–152.
- [2] Sweetman, R., & Conboy, K. (2018). Portfolios of Agile Projects: A Complex Adaptive Systems' Agent Perspective. *Project Management Journal*. Vol. 49(6)m 18-38.
- [3] Hobbs, B., & Petit, Y. (2017). Agile approaches on large projects in large organizations. Newtown Square, PA: Project Management Institute.
- [4] Beer, S. (1985). Diagnosing the system for organizations. John Wiley & Sons Inc.