

Viable Structures for IT Service Operations Management

Rai Veerendra Kumar

Purpose: This paper explores the use of Viable System Model (VSM) of Stafford Beer to understand IT Service Operations Management as a system and subsystems thereof and investigates viability of these subsystems and IT service operations management system as a whole.

Design: Viable System Model (VSM) has been used in this study as a test bed for validating viability of systems. IT Service Operations management is a system whose constituent subsystems are disparate and have different objectives and purposes. Yet, these subsystems must work in tandem to produce requisite IT services within defined Service Level Agreement and requisite service quality parameters.

System 5, acts as global constraint for strategy definition and design. Policies regarding levels of support depending on the context of a service engagement, service engagement models, escalation policies, resource management policies etc. are decided at system 5 level.

The intelligence system explores the external environment to look for scenarios that might influence SLA compliance and/or service quality, for instance. Corresponding to each scenario, intelligence system also develops a set of strategies to handle scenarios. To study the impact of a particular strategy we run time series behavior of the strategy for the duration of a service engagement.

The control system seeks data from monitoring layer in terms of dashboards, health-check reports, etc. and performs root cause analysis to identify the underlying cause for any abnormality that may be present in the current state of IT service operations management system.

Coordination system manages the interfaces between value producing functions within IT service operations management system. The value adding functions are a set of services provided by production support teams that are spread across levels of support and locations.

Operations level consists of support window, configuration item, ticket taxonomy, employees, skills of employees, roles and responsibilities. It must be noted that a ticket is an abstract unit of work and could relate to any of the services mentioned above i.e. from event management to problem management.

Originality and Value: The findings of this study will help senior executives with responsibility for managing enterprise IT. The value of this study lies in reducing the cost of production support, automation of commoditized ticket resolution, more resources for “change the business” rather than “run the business” component of the enterprise.