

Organizational Agility Demands Tools

Process Enactment is Essential for Large Scale Adoptions of Methods

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1. Introduction

Organizational process improvement is fraught with challenges. Even if consensus is reached among key stakeholders during the definition of a process framework, enabling the organization without an enactment platform is naïve. Deploying a staff of seasoned mentors to coach and measure process adoption does not scale to the large enterprise. Process enactment is essential for large scale adoption of methods to succeed.

2. Process and Tools Empower Individuals and Interactions

Individuals are ultimately responsible for producing working systems and the small co-located team doesn't necessarily need sophisticated tools to get the job done. Personal interaction maybe the most efficient means to communicate; however, the larger the organization the more the interactions, and the more formal they may need to be. Just as email is essential to organizational communication, process enactment is essential to organizational agility.

Physical task boards do not scale with distributed development. Large teams with numerous stakeholders need a visible way to communicate work, manage risk, and maximize throughput. There are a variety of emerging technologies under the ALM paradigm that can meet these needs, improve team collaboration, and provide a virtual medium to improve personal interaction, spanning the geographical divide.

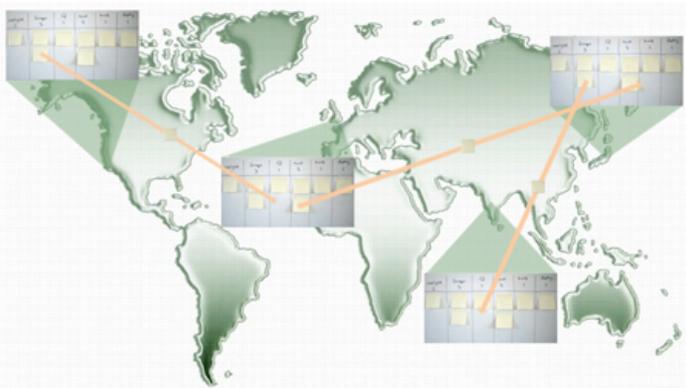


Figure 1. Physical Task Boards Do Not Scale

3. Integration of Enterprise Disciplines

The IT enterprise is comprised of multiple organizations each with their own role in the solution delivery value stream. In large organizations with numerous projects under way, ensuring that the proper stakeholders are sufficiently involved with the correct projects requires governance. Managing and facilitating this involvement while enabling this governance is best accomplished through process enactment.

Process enactment will keep stakeholders informed of work items that need their attention and allow them to collaborate with project teams. For example, this integration will allow an enterprise architecture stakeholder to be kept in the loop on architectural decisions, an operations change manager to plan for a release based on project progress, and a portfolio manager to roll-up project data to better make key investment decisions. Amazingly enough with process enactment, this can happen in real time without having to schedule and attend meetings.

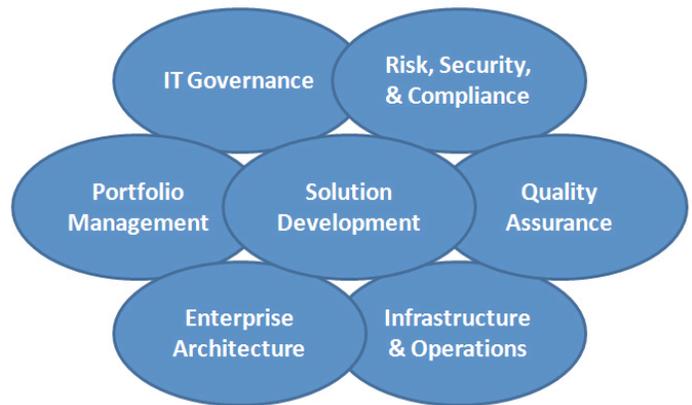


Figure 2. Sample Set of IT Domains

4. Overcoming Entrenched Process Silos

Many departments in a large IT enterprise will have affinities with existing process and/or tools. For instance, operations personnel may be firm believers in ITIL and use BMC tools, the PMO may follow PMBOK and love MS Project, and the enterprise architects may follow TOGAF and use a UML CASE tool. Additionally, different lines of businesses may have distinct development organizations whose process spans a spectrum from Waterfall to Lean. Whatever the case, unifying these process and tools may be comparable to a crusader fighting a holy war.

Transforming a heterogeneous mixture of process and tools cannot succeed overnight. A common ground needs to be identified and the interfaces between organizations need to be clearly defined. Using encapsulation and a design-by-contract approach, process silos can be incrementally changed and integrated. To increase adoption, prevent reversion to old practices, and further the longevity of this unification, an integrated enactment platform needs to support the process improvement effort.

5. Clear Definition Drives Enactment

The process definition needs to drive the enactment architecture; the tools will influence the process but should not define the process. For example, the IBM Tivoli Unified Process (ITUP) has clearly defined how various ITIL service areas interface together to provide a more integrated service management process.

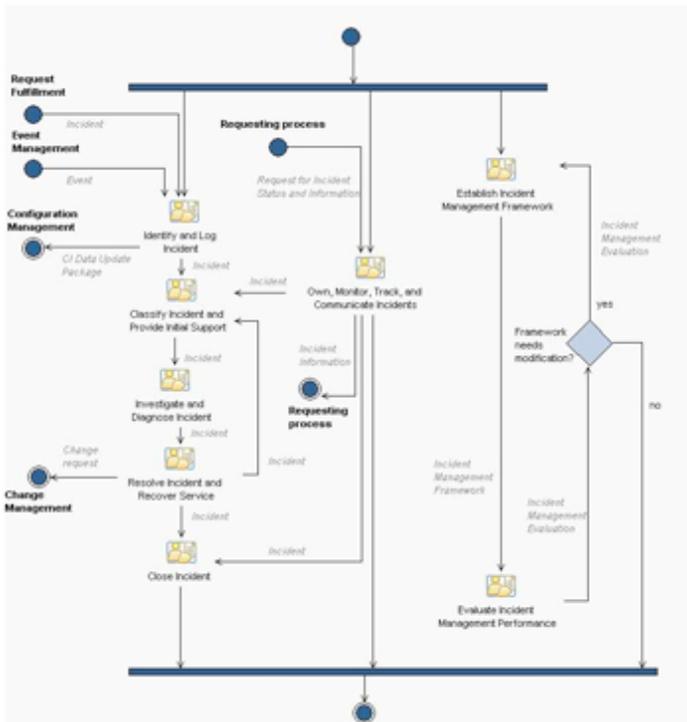


Figure 3. ITUP Incident Management Activity

In today's marketplace we have yet to see one enactment tool that encompasses all the domains of the IT enterprise. Generally a hybrid solution from the best of breed tools that cover the IT domains is a sound approach. Given today's technologies this will involve custom integration work between systems. For example, BMC's Remedy, a service management platform, could be integrated with IBM's Jazz, a solution development platform, to cover a portion of the IT domain spectrum, see sample delineation in Figure 2.

6. Process Must Be Actionable

UMA and SPDM gave us some common structure to make process more actionable. However, a work product in a given process goes through various stages in its life span. Depending on these stages or states there is a workflow that is followed either tacitly or through governance comprised of drafts, reviews, refinements, approvals, etc.. SPDM 2.0 can try to describe this

workflow in terms of tasks and activities; but another useful supporting view is a state transition diagram.

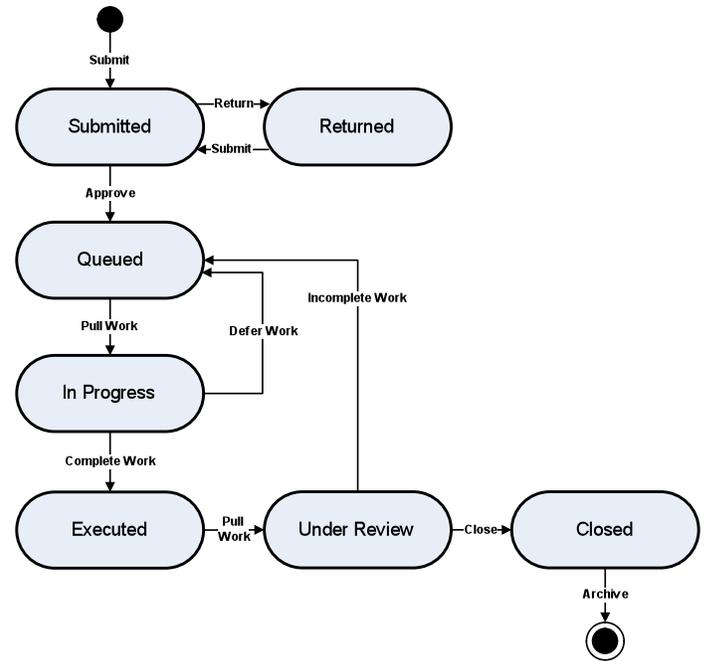


Figure 4. Sample Work Item STD

State transition diagrams can show us how work products progress through the value stream; this is needed when defining the workflow blueprints for process enactment. Once a process engineer has architected process in this way and reached consensus among the stakeholders, the automation should be easier to achieve (hopefully, after all we are IT). Once process is enacted as a workflow in a system, then it is truly and unarguably actionable.

Today's process enactment platforms and tools are becoming more and more flexible, such that they can be used to build a consistent framework across IT and at the same time be adapted in context to fit the needs of a project or program. This is not easy to balance and there will be trade-offs, but this duality provides an opportunity to enable better organizational agility through improved IT business intelligence while not hindering team agility at the project level.

By making process actionable and by default auditable, even the tools themselves are starting to provide insights into process improvement, especially ways to streamline and reduce waste.

7. Bureaucrats and Compliance

Most large organizations in today's business climate need to adhere to compliance regulations that affect the ways in which we develop, deliver, and maintain our IT solutions. Depending on the organization and the bureaucrats involved, these regulations can be interpreted in different ways, and often the resulting IT policy and rules reflect the methodology affiliation of the interpreter.

However, if the original legalese of the regulations is referenced, there is usually room to support the use of most process trends for systems development, be it UP, Agile, or Lean. Actually, one could argue that the essence of the language could

imply that late integration risk and the reduced ability to adapt to change of the Waterfall process is not compliant.

One common thread through most compliance standards is that evidence needs to be collected and preserved, in terms of who did what when, and that a set of various tolls guard the standard of care and fiduciary responsibility to protect the business production environment. Process enactment technologies for the most part are geared to meet these general compliance requirements.

8. Enabling the Process

Enabling process takes more than enactment. Generally, a huge campaign and training effort is needed to grow awareness and ability. Enablement often incorporates elements of organizational change management and psychology. The human factor turns an IT Organization into a stochastic and complex system that is not easily transformed.

A team of mentors are needed to help IT personnel climb the learning curve. Teams must become proficient in the process and must learn how to apply the associated techniques and practices to execute the process effectively. Learning the enactment system is not enough to understand methodology. Teams need to be guided by seasoned veterans.

Mentors though are not enough by themselves. Rolling out process to the enterprise is a huge undertaking, and finding enough season veterans to coach the wide array of projects underway is a resource challenge. Even with a curriculum of instructor and computer based training, a user-friendly website depicting a clear process definition, and reams of guidance materials, I've witnessed process improvements initiatives fail without enactment.

Process enactment is the realization of process definition. IT organizations don't ask their customers to execute their architecture and design; they provide real services in working code. Process definition needs to be realized in working code and evolved as the organization improves.

9. Achieving Organizational Agility

The speed at which an organization can innovate and respond to marketplace dynamics is a key measure of their agility. One primary concern to enhance this agility is to streamline workflow and reduce waste. Another primary concern is to make decisions based on the most accurate and up-to-date information. Process enactment is fundamental in achieving these concerns.

Imagine a hierarchical dashboard that an IT executive leader could use to understand the health, costs, and benefits of all projects in their portfolio. A dashboard that would allow them to drill into project details to understand the time to market of the functionality being developed based on current velocity or cycle times. Given this real-time intelligence the IT executive could better strategize on the competitive priorities based on internal development status and marketplace dynamics. The portions of a portfolio devoted to the development of new innovative services could be better balanced with projects geared to maintain the revenue generated by existing services.

Through the measurements and statistics generated from a process enactment platform, insights into overall organizational efficiency could be gleaned. Bottlenecks and choke points could be more readily identified allowing for workflow to be streamlined and waste to be reduced. Additionally, resource management could be greatly improved based on the real-time intelligence of projects and their projected obstacles, enabling greater organizational agility.

10. Summary

In 2001, when the Agile Manifesto was crafted, CASE tools and process were more rigid than they are today. Always avoiding the use of tools simply because the word appears on the right-side of the Manifesto is unwise. Process and tools have continued to evolve to be more adaptable based on context, and this flexibility empowers individuals and teams towards greater agility. Process enactment as a whole provides a means to achieve a collaborative, integrated, holistic, compliant, and actionable platform from which to increase organizational agility.

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