Executive Overview of the Agile Scrum Methodology

Why?

Agile Scrum provides a mechanism for significantly reducing risk associated with software development, and significantly improving the quality of the delivered product:

- The iterative nature of Agile, with interim deliverables of functionality, provides natural check points for assessing progress, and reducing the risk so obvious in traditional waterfall methods
- The intense collaborative nature of Agile, along with the focus on the quality of what is built, versus a focus on timelines and resources, results in much improved software that is better aligned to the business needs.

Too often, large enterprises trust the delivery of major software asset investments to system integrators, only to find out, after most of the money is spent, they will not get what was agreed to, and will be faced with a savvy contractor making a case for them to spend a lot more money. This acquisition approach has inherent conflict of interest built into it. Adopting an acquisition strategy that enables Agile, and implementing Agile, significantly reduces the chances of the above scenario occurring.

Why Not?

Moving to Agile is a significant cross-organizational effort:

- A true implementation of Agile requires a significant change in budgeting, contracting, and, most importantly, organizational software development process and culture.

- Agile changes governance, processes, roles, power structures, and skill requirements simultaneous across organizational and functional areas. It is hard to do, and requires a prescriptive organizational change effort.

- An organization may have in place long-term existing contractual relationships that preclude implementing Agile.

Is there a hybrid approach that can better map to a more traditional development environment?

In the long-term, Agile is clearly displacing traditional waterfall as the primary approach to software development. Modern software development environments provide incredible productivity increases, and improvements in the quality of what can be made possible with software. These environments can only be leveraged by implementing some form of Agile.

In the short term, organizations have implemented four strategies for moving to Agile:

Strategy	Difficulty	Benefit	Return
Wrap Agile language around a waterfall approach	Low	Provides political cover and a starting point for making change	Minimal
Maintain waterfall based management of vendor Agile	Low	Allows the leveraging of some Agile techniques	Medium
Incremental: Start small, and evolve	Medium to High	Makes use of proven organizational change techniques that reduce the chance of failure	Very High
Implement an immersion strategy	Very High	Potential quicker payback	Very High

How can an organization implement Agile while controlling risk?

Treat the implementation of Agile as a major organizational change effort, requiring a prescribed set of steps to be successful:

1. Allow and encourage vendors to implement Agile on their own, and incorporate the changes in how you manage and interact with their projects
2. Educate senior management across the organization on Agile
3. Have the CIO appoint a senior manager in the role of what is referred to as a Scrum Master (appoint a senior manager with responsibility to implement the program)
4. Carefully select a set of projects to pilot a first implementation of the complete Agile Scrum process
5. Just as carefully, select the participants for those projects
6. Stand-up a center of excellence to support the effort
7. Put in place the appropriate governance and software change processes required
8. Provide just in time training for the team
9. Implement the pilots and measure results
10. Put in place continuous process improvement