

ALMAS at Work

An Agile Adoption at a Large Energy Corporation

The Company is a service provider in the fast-paced and competitive North American Energy Services industry. As one of the premier Trucking Transportation businesses in this industry, They face continuous challenges from competitors, regulatory bodies and most importantly their customers. The Trucking Transportation business unit decided to tackle these challenges head on by leveraging information technology to provide a competitive advantage in the delivery of their services.

Where to Start

When the decision to create this capability was made, the company sought a proven partner to help them create a leading-edge, quality focused product development team. Imaginet's Application Lifecycle Management Adoption Services (ALMAS) are a set of services specifically designed to help organizations adopt an Agile or Lean culture and mindset, or take their current implementation to the next level. Culture change is not easy, and the process and technical debt we owe to our current teams and products is significant.

Building a Team Designed to Succeed

People. The enablers of any knowledge work endeavor.

A key part of the Imaginet ALMAS™ approach to adoption is a focus on the people who were going to be involved with the initiative. Ensuring that the team had all of the required skills in place for a fully cross-functional agile development group was determined to be an key success-factor that was addressed while assembling the team. In order to understand the context that the team would be working, a short but important assessment was done to understand the current culture, environment and capabilities.

Industry

Oil Field Services
Market Cap: \$3.0 Billion

Development Environment

Three teams located in Dallas and Calgary

Challenges

- Minimal software development experience in the business unit
- Needed to be able to address evolving business needs /w new and evolving technology
- Distributed teams and customers located all across North America

Solutions

- Imaginet ALMAS engagement
 - Agile Process Coaching
 - Technical Mentoring
 - Development Infrastructure setup on TFS 2010

Results

- Fully functional Agile team /w full-time business involvement
- Capability to delivery business features bi-weekly
- High quality product
- Demonstrated improvement in business financial results due to delivery of aligned business features

Once the current situation was understood, a comprehensive plan was created to level the team's foundational knowledge about agile and the development techniques that would need to be used, because an agile minded business without an agile delivery team is a source of frustration for both partners in the equation.

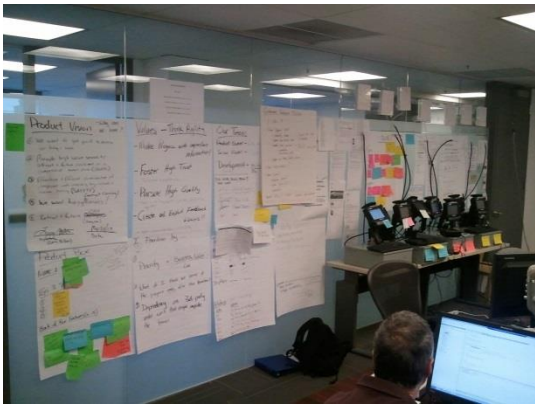
Focusing on a Mindset

Once the team had come together, it was time to build a common understanding of how our team and organization were going to execute. With that goal in mind, a tailored training program was delivered by Imaginet's Certified Scrum and Kanban

trainers. This program taught and reinforced the key agile and lean mindsets that allow a team to function in an agile fashion. Key agile tactics such as user stories, iteration planning, retrospectives and estimation were introduced and practiced. And as a part of the training program, an agile developer skills course was delivered that focused on helping developers understand unit testing and test driven development, user story decomposition into tasks, and delivering software within the context of an iteration. And throughout all of the training, the agile and lean *mindset* was discussed and reinforced. In order for an adoption to be successful, these mindsets need to be institutionalized into the organizational culture.

We were looking for a different way of approaching technology project work that would create business value quicker than the traditional methodologies. The adoption of the Agile methodology allows this. Our multi-year Technology Road Map provides the areas of focus and high level milestones, while allowing the daily focus of the project team to meet the business's ever changing needs with addressing "the next priority" on that Road Map

General Manager – Technology and Finance



Full Transparency

When an organization embarks into unfamiliar territory from a process, business or technology point of view, there is a tremendous amount of uncertainty and this makes people nervous. In this adoption initiative, all three challenges were present. The Imaginet ALMAS approach helps organizations deal with this fear of the unknown by promoting and supporting the creation of an transparent environment. In this kind of environment, successes are immediately visible, problems are immediately surfaced and the operations of the entire team are shared with everyone. This encourages the

uncertainty about the new processes fade away and fosters a level of comfort and excitement about the new level of organizational capability amongst stakeholders, business and delivery teams.

Continuous Improvement

The world is changing every day. New problems emerge, old challenges resurface, or the direction that we need to go changes. In order for organizations to be resilient and adaptable, the processes and technology that are used needs to provide learning and feedback opportunities. With the capabilities to gather feedback and learn, an organization gains the ability to continuously improve itself. At this company, we implemented many of the learning and feedback based agile tactics such as daily stand-ups, retrospectives, iteration reviews, unit testing, and continuous integration to provide these opportunities.

Rich and meaningful relationships were created with the business and end-user communities to foster an environment where business opportunities were aligned with technical development activities to deliver the optimal features early and often. In order to become competitive and stay competitive, an organization must be able to continuously improve in all the disciplines required to execute on modern knowledge work initiatives.

Focus on Quality

There was a keen understanding of the burden of poor quality on the organization. Work on fixing defects takes away time and effort that can be spent on innovative new features. Poorly architected and designed software can lead to an ever increasing amount of effort required to

“The changes we've made have allowed our developers to break the "keep the lights on" mentality of only fixing code and allowed them more time and focus to create features and capabilities the business needs.”

Enterprise Architect & Product Owner

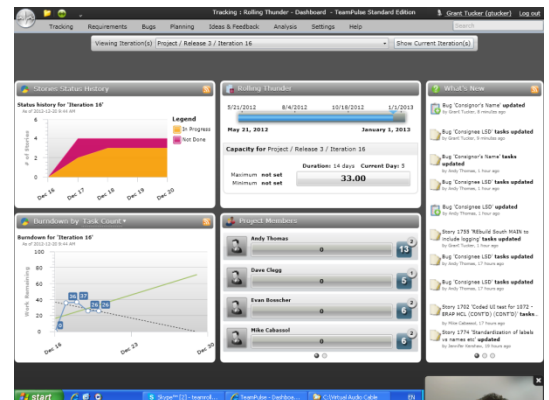
implement new features or fix defects. Insufficient documentation, incorrect feature implementations, poor usability are all problems that slow us down and all of these problems can be directly attributed to poor quality somewhere along the line. Either in the process, technology or business.

The ALMAS approach ensures that organizations create a culture of quality that is pervasive of all aspects of the software development process. In the team room, a significant investment was made to collaborate and execute on our quality principles. Quality Assurance professionals were required to work together with developers to help guide the overall quality of the product. The Quality Assurance professionals also

worked directly with the Business Analysts and Product Owner to ensure that features were working the way that the business needed them to work. The mindset of continuous improvement was applied to the quality efforts of the team and everyone was guided to take the time and space required to make sure their work met the team's standards.

Leverage the Tools

The complexity of knowledge work projects and the demands of business for high-quality, innovative products has never been higher and in order for organizations to effectively deliver our solutions, tooling becomes a critical part of our approach to ALM. The company made a significant investment in the tools that the delivery team would be able to leverage. In order to deliver high-quality software frequently, a state of the art development tool ecosystem was required and the company turned to Imaginet and our award winning ALM team to implement Team Foundation Server (TFS) 2010 as the core foundational component. Team Foundation Server provided key features and functional for all of the team members on the delivery team; Visual Studio 2010 Ultimate for the developers on the team, Microsoft Test Manager 2010 for the



"Being able to queue a build on-demand to my own, isolated, virtual test environment was a huge advantage in terms of efficiency and confidence in test results."

Quality Assurance Professional

QA professionals and Team Foundation Servers capabilities of Source Control, Automated Builds, Work Item Management and Lab Management. It is worth mentioning that the Lab Management implementation has proven to be a key enabler in the execution of end-to-end functional testing by all team members simultaneously and a catalyst for implementing automated Coded UI Tests and other developer-drive quality activities.

In addition to TFS, TeamPulse by Telerik was selected as the day-to-day agile project management tool to ensure that the team had the ease-of-use required to ensure all work item management processes took as little time and effort as possible. TeamPulse also

provided rich visualizations and dashboards to allow the team to quickly and effectively make daily planning decisions such as which tasks needed to be worked on, which stories where next to get started, and blocked stories or tasks that needed immediate attention.

Expanding the Adoption

A specific objective of the ALMAS model is to grow both the maturity of the original team involved but to also expand the agile adoption to more teams. Once the core team had established itself and developed a robust and proven capability, the agile initiative expanded in two ways. The first expansion was to a second and third team within the Trucking Transportation unit. The first team was located in Dallas. Using some of the capabilities developed by the original team as examples, these team started to adopt several of the agile tactics proven out as valuable by the Calgary team. The second expansion was to another business unit. This group had different requirements of the process and so only adopted the parts that they saw value in, in this case a high-quality mindset and the Microsoft Test Manager and TFS Lab Manager toolset.



Increasing Maturity And Self-Sufficiency

Every ALMAS engagement promotes organizational self-sufficiency. In order to achieve this, specific coaching activities are planned and an objective to transition the mentors off the project is put in place. At this organization, this self-sufficiency was achieved about 7 months after the initiation of the project. The stakeholders and business were completely comfortable with the level of maturity achieved and the team was comfortable with their abilities to maintain and grow without the constant support of the mentors, both from a process and technical perspective. In the time since the mentors transition off the project, the team has continued to enhance their processes and capabilities. Improvement include nightly builds that execute unit tests and Coded UI Tests automatically, work-in-progress limits on work items within the sprint and improved collaboration.

Adoption Timeline

May 2012

Project kick-off

Assessment

JIT Training

- Agile Workshop
- Agile Fundamentals
- Scrum For Developers

Sprint 1

- First iteration planning
- First retrospective

June 2012

Enhanced team room to support remote team members

Introduced Unit Testing

Introduced Continuous Integration

Introduced Gated builds

Initial coaching for Dallas team

July 2012

Introduced MTM

Introduced TFS Lab Manager

Introduced Deployment builds

September 2012

First release to South from TFS

Dallas team starts using Kanban

Augmented team

October 2012

First release to North from TFS

Process mentor transitions off project

November 2012

Technical mentor transitions off project

Automated CUIT Tests created and executed in Lab Manager VM

Second Business Unit starts adopting MTM and TFS Lab Manager

April 2013

Deployments have stabilized such that

Calgary team can deploy per sprint
Second Calgary team created

Business Success

Throughout the entire agile adoption, the mindset of the team and stakeholders was to drive all of our activities towards delivering tangible business value through innovative new features, enhanced capabilities and operational efficiencies. And to this end, the project is being viewed as a huge success. Several key business objectives were declared at the start of the project and they are now coming to fruition.

“The team’s focus on collaborating daily with the business to deliver high-value features has allowed us to achieve our business results sooner than we thought possible.”

Business Analyst

One of these goals for the project was to create a capability to bill tomorrow for the work that was done today. In recent months, one area manager has reported that booked month-to-date revenue had **increased 30 times** versus a previous time period due to operational efficiencies. This goal was achieved as early as possible in the project because the partnership between business and the delivery team focused on delivery the most valuable features early in the project.

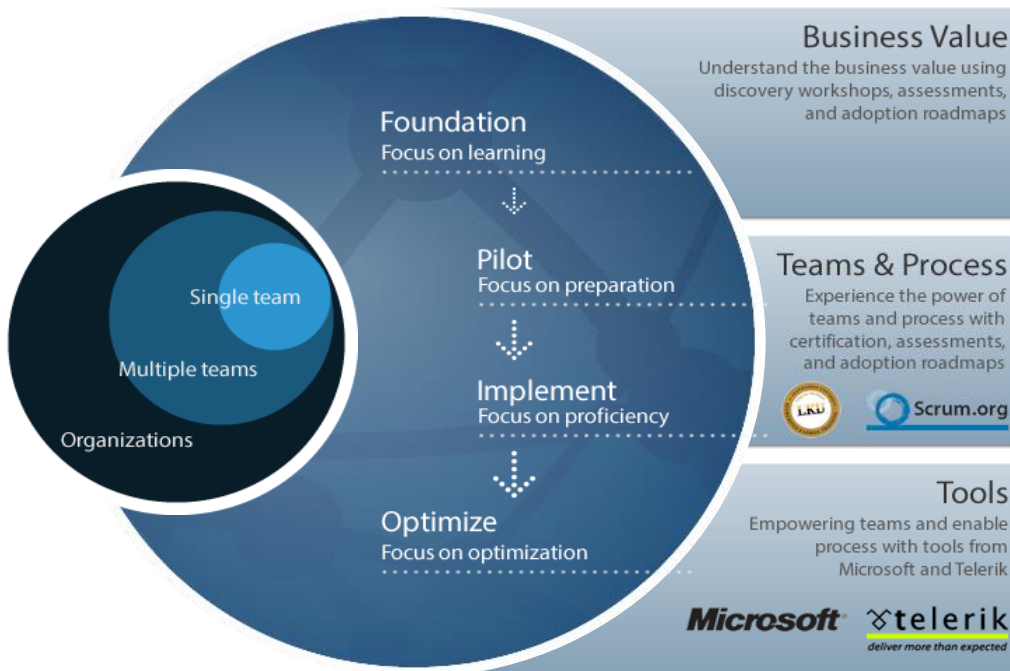
Summary

For this organization, agile adoption and continued success are a testament to the perseverance and focus of the entire team, from sponsors to customers to delivery and support professionals. It also demonstrates the value of the holistic Imaginet ALMAS™ approach for organizational agile adoption and improvement initiatives.

If you are interested in more information regarding our ALMAS services, please contact us at info@imaginet.com.

About Imaginet's Application Lifecycle Management Adoption Services (ALMAS)

There is an industry-wide demand for improved software delivery processes / frameworks to be used across the Enterprise. Imaginet has developed our ALM Adoption Services as a proven approach to achieve this with concrete phases and objectives. ALMAS was created as a result of the experiences of several of our top consultants with over 50 years of combined experience helping organizations establish and optimize their development process. ALMAS embodies the patterns that have proven most successful in increasing team and organization maturity.



About Imaginet

Founded in the spirit of innovation and leadership, Imaginet has been committed to helping organizations deliver outstanding business value through the use of technology since 1997. We have a proven track record with over 500 successful ALM engagements and reputation for delivering results.

Imaginet is Microsoft's 2011 ALM Partner of the Year, a Microsoft Gold Certified Partner with ALM Competency, and a Visual Studio Inner Circle Partner. We have the highest level of expertise with Microsoft technologies and a close working relationship with Microsoft. We also have multiple Microsoft Regional Directors, TFS Rangers, Virtual Technical Specialists, and many Microsoft MVPs on staff. This unique relationship allows us to continually deliver solutions that not only meet today's requirements but are also positioned for the future.