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PDSA Special Report

Agile Application Lifecycle
Management

What's Agile ALM?

Everyone knows that having a good Application Lifecycle Management (ALM) process in place is the key to developing software on-time and on-budget. If you wish to use an Agile approach to software development, having an ALM in place is absolutely essential!

The ALM process is all about having a well-defined process in place for developing software. Many developers think an ALM conflicts with the Agile approach to software development. This is not true. If the two processes are well integrated, and everyone understands the process from start to finish, these two processes work very well together.

Agile ALM Principles

A good ALM allows a company to develop and maintain software applications from inception to demise. ALM embraces requirements management, system design, software development methodology (the Agile approach is one such methodology), configuration management and other disciplines of the software development process.

The Agile process is based on an iterative approach to development where the requirements for an application and the software being developed are often done at the same time. This is not to say there is no planning as this is happening, and that thought is not put into the process. In fact, nothing could be further from the truth. An Agile approach makes planning and architecture paramount to the success of the project!

Agile ALM Documented

A process is not worth anything unless it is documented. For a process to be successful everyone must know it, understand it, and be able to follow the process for each project undertaken. Your documentation check list should be similar to the following list.

- Promote a disciplined, well documented and measurable ALM process within your team. Remember, if it is not written down, it will not be followed.
- Incorporate frequent inspection and adaptation of the ALM process and documentation. Solicit feedback from everyone involved with the process to help refine and make the process better.

- Develop a set of engineering best practices that allow for rapid delivery of high-quality software.
- Best practices are to be documented and consist of programming, database, software configuration, unit testing, and architectural standards, to name just a few.

The People Equation in Agile ALM

People are an integral part of the Agile ALM process. This includes everyone from management, to programmers to the customers. Encourage a philosophy promoting teamwork, self-organization and accountability. Make everyone feel a part of the team, and that their feedback on the whole process is important. Take everyone's feedback, incorporate it in some way back into the process. If the feedback is not appropriate, discuss it with the person and let them know that not everything can make it in, but the feedback was valuable.

Running the Agile ALM Project

Starting and keeping the project running requires a lot of communication between your project manager, customers and programmers. It is important that everyone stays focused and tuned into the process to ensure an on-time delivery. Manage the project with a purpose. Perform only those tasks that add value to the project and to the business processes supported by the ALM system. Below are guidelines to help you run the Agile ALM project.

- Build customer satisfaction by delivering frequent software milestones to your users. Customers appreciate knowing work is progressing on their project. This frequent release schedule also allows feedback and testing to begin much earlier.
- Foster close, frequent communication between business people and the appropriate IT team members. Everyone needs to be kept in the loop on where they are in the process. Communication allows everyone to identify potential problems sooner rather than later. After all, this is what Agile is all about.
- Strive for rapid feedback to ensure the project meets the needs of all the participants and stakeholders. Feedback should take several forms: status reports,

web casts, presentations, phone calls, meetings, and informal stand ups. Use the method that fits the group and your goal of what you are trying to communicate.

- Align development with customer needs and company goals. If a customer gives you a specific task or direction, ensure that those activities are aligned with the needs and goals of the company. Remember you are teamed with your customer, and hence you need to be sure that your joint efforts are aligned and can be substantiated against the company's business plan.
- Make incremental changes to the requirements document, the project plan, and all other project artifacts as the project develops. It can be a challenge to keep all of the project documents up to date, but you must do it! If requirements change, update the specifications documents. If the test plans change, update the test plans. When you go live to production, ALL documents should be up to date. This helps tremendously during customer buyoff. How can the customer buy off on a system that doesn't match the necessary documents?

As your project and your processes develop, be diligent on discarding those procedures and artifacts that don't add value to the software or your process. Continuously review your processes, your documents, and your project artifacts for value. Remove or update your processes as needed. Someone in your organization should be the process owner and be responsible not only for your documents, but for the ALM process too.

How Does Your Organization Stack Up?

Consider each of the points illustrated above and think about how you rate yourself and your organization. From the list above you should develop an action plan on improving your organization's ALM process. Take an incremental approach so you can take advantage of your changes immediately.

The PDSA Agile ALM

PDSA has developed a highly effective Agile ALM methodology that we use to run each successful project for our clients. We call this approach the PDSA Agile ALM. This re-useable process embraces the Agile approach for software development as well as all of the processes and procedures mentioned above. Our complete system is available for purchase to allow you to build your own Agile ALM.

Contact Information

If you would like to know more about the information in this special report, please contact either Paul D. Sheriff or Michael Krasowski at PDSA.

Paul Sheriff

(615) 675-4632

PSheriff@pdsa.com

Michael Krasowski

(714) 734-9792 x223

Michaelk@pdsa.com

Company Information

PDSA, Inc.
17852 17th Street
Suite 205
Tustin, CA 92780

Tel (714) 734-9792
Fax (714) 734-9793
www.pdsa.com

