

THE WHY OF AGILE:

Understanding the Top Five Reasons it Works

This white paper sponsored by



Mike Thompson, Mark Masuelli and Chris Murphy



INTRODUCTION

When The Manifesto for Agile Software Development first was published in 2001, it laid out twelve basic – and some would say radical for the time – principles for accelerating application development, testing and maintenance. Above all, Agile development advocated for significantly greater flexibility in meeting customer needs, even if those needs were constantly changing. Since then, Agile methodology has gone mainstream in a big way. It has reshaped the development practices and processes of IT service providers around the world and is responsible for accelerating the pace of fielding software applications that users have come to expect today.



Despite its
adoption as a
best practice
within many
companies, the
Agile methodology
is beginning to
show signs of
calcification and
rigidity.

Despite its adoption as a best practice within many companies, the Agile methodology is beginning to show signs of calcification and rigidity. For some companies, introducing Agile into the IT organization has become a means to "check the box" to appease senior business or IT leadership. When this happens, companies often lose sight of the rationale for moving to Agile in the first place. Instead of truly understanding the "why" for doing things differently, they tend to focus on the "how" of Agile, or the mechanics of the methodology. Implementing Agile practices simply for its processes is like sleepwalking through Agile and puts an organization at risk of missing out on many of its benefits.

Agile is a journey of continuous improvement that looks to increase application development efficiency through the acceleration of critical planning, design and build processes while transforming the way work gets done in an organization. Focusing on the methodology as if it should only be practiced in a certain, pre-defined way – that it requires certain-sized teams, team structures or specific workflows and schedules – has become, for some companies, a significant barrier to increasing its agility.

To make Agile practices work in a company – that is, for the company to see measurable improvements in the way it develops and maintains its applications – it must first understand its own software development processes and practices. Agile practices are not a one-size-fits-all solution. Different companies work in different ways, often defined by company culture, existing processes and leadership direction. To be as successful as it can be, the Agile framework should align with and leverage these organizational differences. This ISG white paper, commissioned by Mindtree, explores the "why" of five foundational components of the Agile methodology – the standup, sprints, backlog, retrospectives and on-site teams – so companies better understand the reasons that make Agile successful and how to make it work for their specific environment and business needs.

The Why of Agile





Above all else, the "standup" allows people to make personal commitments to their peers regarding assigned responsibilities, deliverables and due dates.



By helping teams focus their activities, they can accelerate results and deliver on the Agile methodology's greatest promise.

Building Accountability

A daily "standup" meeting is standard in most Agile teams today. The "standup" is a 10-to-15 minute all-hands meeting for scrum team members. The time and place of the standup meeting is set to occur on a regular basis at routine times and locations, so the team has clear expectations as to how and where it should happen.

Why are standup meetings important? A daily meeting gives team members the opportunity to brief the rest of the team on actions, progress and barriers to completing work, allowing individuals to communicate potential challenges and coordinate efforts to resolve problems or secure needed assistance in completing time-boxed activities. Above all else, the "standup" allows people to make personal commitments to their peers regarding assigned responsibilities, deliverables and due dates. The "why" of a standup, therefore, is to create the regular opportunity for individual team members to make public commitments to create accountability and the likelihood of on-time delivery against that commitment.

Setting Priorities

The principles of Agile methodology were built around the idea of the scrum, a development team that works directly with a business unit on a daily basis, sharing ideas and collaboratively accomplishing results in short bursts. Scrum teams are self-directed and work without strict oversight or rigid hierarchies, which they believe to be a hindrance to their ability to focus on the right thing. To know where to focus, scrums use a prioritized backlog – not as a perfunctory task, but because selective focus delivers the greatest value.

An Italian economist in 1896 noticed that 20 percent of the farm lands he studied produced 80 percent of the crops. In mathematics, we know this as the "Pareto Principle" or the 80/20 rule. It is a widely occurring principle with implications in IT services. For example, research shows that as much as 80 percent of identified software errors are found in 20 percent of the code. Similarly, as little as 20 percent of the features in commercial off-the-shelf software packages are responsible for delivering 80 percent of the functionality or value of that software.

In Agile software development, scrum teams use a prioritized backlog to focus on creating and realizing the greatest amount of value in the least amount of time. A prioritized backlog allows a team to identify the 20 percent of the work that should yield 80 percent of the value. By helping teams focus their activities, they can accelerate results and deliver on the Agile methodology's greatest promise.



Counteracting Human Nature

Unfortunately, even well-intentioned people sometimes procrastinate. While it is difficult to plan for and manage, procrastination is simply a part of human nature. We know that the longer we have to work on a task, the greater our tendency to put it off. And the reverse is true as well; the tighter the timeframe, the more focused we become on getting things done. There is nothing like a deadline to drive us to complete the work we have to do. It is this focus on completing tasks and activities in the least amount of time possible – and maximizing the use of the time available – that underscores the importance of sprints in Agile development teams.

Time-boxing activities and deliverables into short sprints helps overcome the tendency to procrastinate. In fact, the nature, structure and management of scrum teams are, in large part, designed to optimize human nature. With a short period of time to complete work, team members must begin working immediately after the sprint planning session to assign responsibilities, identify barriers to completing the work and begin collaborating. Working on smaller, more manageable assignments allows individuals and the overall team to be more productive and transparent during the delivery sprint.

Continuously Improving

Learning theorists have found that the time between intervals of learning and the frequency of repetition have a significant impact on how much a person learns, retains and integrates into what they know and act on in their daily lives. When a person experiences a "cycle" of learning, they absorb, process and integrate a particular set of materials or events into their knowledge, perceptions and behavior. Cycles of learning not only facilitate the delivery and retention of facts and/or experiential-based knowledge, they also are fundamental to continuous improvement.

The "why" of retrospectives in Agile development is to facilitate and ingrain the process of continuous improvement into the work of scrums and, ultimately, into the overall project lifecycle. Simply put, the more times we face and overcome obstacles that impede our progress, the more likely we are to mitigate them in the future. Sharing experiences across team members is essential to continuous improvement. Furthermore, by doing retrospectives as a team, scrums significantly expand access to the experience of other team members that may be critical to dealing with changes, addressing issues, overcoming barriers and ultimately completing a sprint on time.



The "why" of retrospectives in Agile development is to facilitate and ingrain the process of continuous improvement into the work of scrums and, ultimately, into the overall project lifecycle.



Sharing constructive criticism across the scrum team(s) is an inherent part of the Agile framework and critical to the learning process. The way teams share feedback and criticism is important to the effectiveness of Agile teams. A study by Angela Legg and Kate Sweeny published in the March 2014 issue of *Personality and Social Psychology Bulletin* found that 78 percent of respondents who were given the choice preferred to hear bad news before good news. Unfortunately, hearing bad news first can sour a team's mood to the point that members are no longer interested in the good news or feel a sense of accomplishment in the work that has been successfully accomplished to date.

Scrum leaders must take every opportunity to celebrate what the team has accomplished and capitalize on the positives to create additional momentum and direction for the team. The "why" of retrospectives, then, is twofold: first, to help increase the value of each cycle of learning that presents itself; and, second, to ensure that positive and negative feedback is shared with individuals to facilitate and institutionalize continuous improvement across the team.

Maximizing Collaboration

Communication and collaboration are critical to the Agile methodology and its successful adoption in enterprises today. Real-time interaction between individual team members and between teams is essential to this collaboration. To facilitate communication, open dialog and engagement across team members and other sub-teams, many Agile teams are located in very close proximity to one another. To encourage face-to-face conversation and interaction, teams are often arranged according to a seating chart with a scrum master at the end of the table and 6-8 team members seated around the sides of the workspace.

Given the evolution of collaboration software and other communication technologies, maximizing collaboration between geographically dispersed work teams is much easier today than it was when the framework was first introduced in 2001. Videoconferencing and other tools significantly increase the ability of Agile teams to work across time zones and continents. Over time the "why" of on-site teams has changed. Today it is less about the location of team members than it is about the team's ability to interact, communicate and engage to successfully complete their tasks and activities in short, time-boxed sprints regardless of where they are located.





Understanding the "why" behind the Agile methodology is much more than simply moving the IT or application development organization to Agile.

CONCLUSION

Despite becoming a best practice for application development across many firms today, an increasing number of would-be practitioners do not fully comprehend the "why" behind the Agile framework and therefore run the risk of missing its key benefits.

We have explored a number of reasons Agile works, including the importance of daily stand-up meetings to build accountability at the individual team member level, setting priorities to ensure the team is focused on activities that yield the greatest value, time-boxing activities that mitigate the impact of procrastination, conducting regular retrospectives that encourage continuous improvement, and breaking down barriers to communication by ensuring maximum collaboration through use of physical and technology platforms that support both local and distributed work groups. Understanding the "why" behind the Agile methodology is much more than simply moving the IT or application development organization to Agile. It is about helping the enterprise become more agile as a whole.

ISG works with organizations to help them understand the value of moving to an Agile framework, assess the magnitude and challenge of the transformation and develop a realistic roadmap to get there.

ABOUT THE AUTHORS

THE WHY OF AGILE:
Understanding the Top Five Reasons It Works



MIKE THOMPSON
Principal Consultant, ISG

Mike Thompson has more than 35 years' experience managing large-scale, complex multitower IT outsourcing projects for global enterprises and U.S. federal and state and local government entities. Mike leads joint teams to achieve business case approval, conduct sourcing suitability assessments, develop market-ready solicitation documents, facilitate partner down-selection, negotiate service agreements and assist organizations transition to future-state service delivery environments.



MARK MASUELLI Principal Consultant, ISG

Mark Masuelli is an ISG Principal Consultant with more than 16 years in outsourcing and shared services consulting and service delivery. This includes background in ITO, ADM, HRO, procurement, and F&A. He has substantial client relationship with clients in the Manufacturing, Energy, Pharmaceutical and Financial Services Industries. He has strong relationships across IT and BPO providers, Analysis and industry associations.



CHRIS MURPHYGeneral Manager, Mindtree

Chris Murphy leads Mindtree's Global Agile Center of Excellence. He has more than 26 years of experience in management consulting and more than 12 years in Agile coaching, training and delivery. He has managed many large-scale IT programs, delivering Agile client experience that emphasize performance, innovation, collaboration and enterprise monitoring.

ABOUT ISG

ISG (Information Services Group) (NASDAQ: III) is a leading global technology research and advisory firm. A trusted business partner to more than 700 clients, including 75 of the top 100 enterprises in the world, ISG is committed to helping corporations, public sector organizations, and service and technology providers achieve operational excellence and faster growth. The firm specializes in digital transformation services, including automation, cloud and data analytics; sourcing advisory; managed governance and risk services; network carrier services; technology strategy and operations design; change management; market intelligence and technology research and analysis. Founded in 2006, and based in Stamford, Conn., ISG employs more than 1,300 professionals operating in more than 20 countries—a global team known for its innovative thinking, market influence, deep industry and technology expertise, and world-class research and analytical capabilities based on the industry's most comprehensive marketplace data. For more information, visit www.isg-one.com.

Let's connect NOW...

