

# AMS Insights

## Thought Leader Article

---



## Applying Agile Methods across Global Projects

**Written By:**  
Thomas Flynn, P.E., PMP

---



Developing People, Enhancing Process, Enabling Technology

### AMS Insights

AMS Insights is a collection of research, thought leader articles, white papers and other unique intellectual assets focused on helping our clients to benefit from our subject matter experts' global experiences and cross-industry interactions.

Developed as a collective outlet for our practitioners to ponder and propose thoughts, and observe industry trends, our clients become the beneficiaries of a library of cutting edge knowledge, available in a multitude of media formats.

If you would like more information on this, or other topics, please visit [www.amsconsulting.com](http://www.amsconsulting.com), or email us directly at [info@amsconsulting.com](mailto:info@amsconsulting.com).

Copyright © 2011 Advanced Management Services, Inc. (AMS). All rights reserved.

# Introduction

How can Agile methods be successfully applied on Global Projects?



Rapidly changing market conditions and business demands are requiring companies to shorten project delivery cycles and become more responsive to customer expectations. Agile development methodologies are leading the way, helping software development teams adjust to projects with global requirements and implications. Agile practices also challenge our notion of software engineering best practices, project management methodologies, and how we lead our teams.

Although Agile is more instantly associated with software development, Agile methodologies can be, and actually have been, applied to “non-software” project scope items for many years. Most commonly, Agile methodologies have been used on large and complex programs and projects where there are many functional project contributors, and Traditional and Agile methods must be utilized in tandem.

A mainstay for choosing Agile methodologies is the realization that the customer cannot describe their objectives and needs as detailed requirements at the outset of the project; and as a result change will be the norm, rather than the exception. This obviously contradicts traditional project management views where, theoretically, objectives are clear and can be defined and refined to a detailed level. We use the term theoretically as benchmark data often paints a different picture for many traditional project efforts.

For projects of substantial size, complexity, and certainly for global objectives with geographically dispersed teams, the combination of Traditional and Agile methods can and must be exercised across the various functional scope areas.

Consider the following when reviewing projects to determine if Agile methods are the best course of action:

Within your specific environment, what initial Agile implementation issues would need to be considered and/or overcome?

# No Longer Exclusive

Where do you recognize areas of scope development with different characteristics?

When we examine complex projects of both Traditional and Agile scopes we arrive at the following realizations:

1. There are portions of complex projects that we have done before that can be defined and decomposed to levels of task clarity early in the project (Traditional).
2. There are just as many (if not more) portions of projects that we have not done before that cannot be defined and decomposed to levels of task clarity early in the project (Agile).
3. There are just as many (if not more) portions of projects that we have done before that could not be defined and decomposed to levels of task clarity early in the project; yet, and most times due to blind process adherence, we have forced them into traditional models only to find out later that we do not have the clarity we once thought or the results we expected.
4. Given the realities of large and complex projects we reach the conclusion that Traditional and Agile methods must be leveraged simultaneously on larger and more complex project efforts; and across software and non-software scope areas.
5. Combining Traditional and Agile methods is not intuitive, and will require a great deal of experience and creativity to implement successfully.



# Applying Agile Methods to Non-Software Scope Areas

From experience, we note that risk and integration difficulties increase as the number of functional contributors increase.

What areas become difficult as a result of the increase in functional contributors?

Software development certainly is not the only functional area where customers and/or functional contributors cannot describe their objectives in detailed requirements. Projects of high complexity and large size generally contain many functional contributors, with varying levels of scope cognizance that must be successfully integrated. These non-software areas could include:

- Compliance
- Regulatory
- Marketing
- Public Relations
- Engineering and Manufacturing

All of these areas can benefit from modified Agile approaches to defining project scope and requirements development early in the project's life cycle.

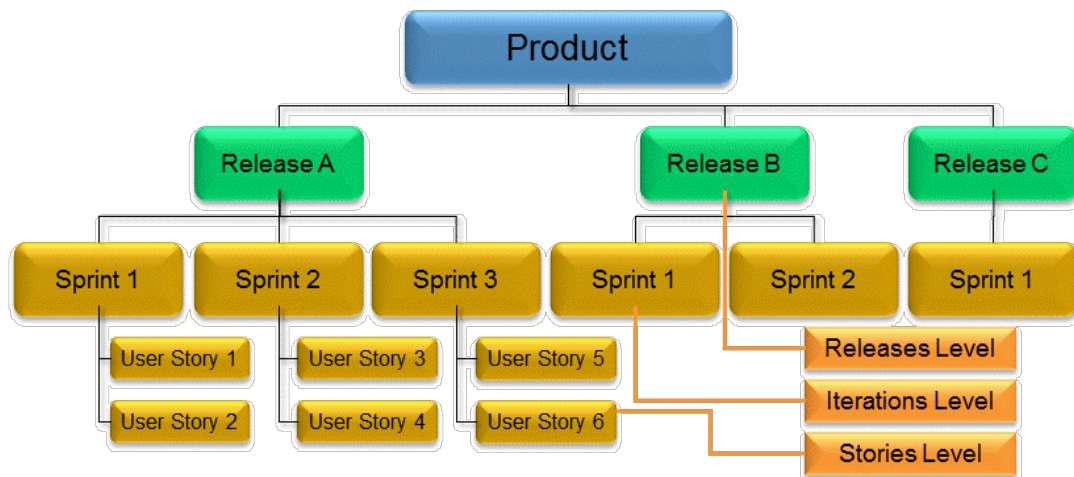
The key to successfully implementing Agile methods across diverse functional areas is the ability and willingness to acknowledge that the functional scope is not clear and will require a more iterative approach.

A generic and iterative approach like Scrum, as is pictured below, reflects a process where the product backlog (user stories) is worked down during each iteration or sprint (sprint backlog) so that functional software or a component of functional software is the tangible deliverable.

Strangely enough, for non-software functional areas, the iterative principle is the same yet, the format of execution and tracking is a bit different. This Agile method is known as "Rolling Wave Planning" (RWP) and is a sound process for developing and tracking non-software requirements development as the project progresses.

Where are the projects where we aren't acknowledging nebulous scope issues?

This is more than a question and requires constant inquiry and introspection.



# Rolling Wave Planning (RWP)

Rolling Wave Planning (and execution) is not new by any means; government and commercial organizations have been using Rolling Wave Planning as a best practice since the early 1960's. Also, the underlying philosophy of Rolling Wave Planning aligns perfectly with Agile methods; "You cannot plan in detail what you do not know." When using Rolling Wave Planning, the total scope of work is reduced to two different forms of "packages":

- **Work Packages:** work we are familiar with and can define, estimate, schedule, assign resources to, execute and track.
- **Planning Packages:** work we have identified that we are not familiar with and further planning is required to define detailed execution tasks and estimate/schedule accurately

How do I begin to think about Rolling Wave Planning as a practice?

Direct comparison can be drawn from Planning Packages and Work Packages to Agile's Scrum Product Backlog and Sprint Backlog. Both of these methods are an admission that there is work to be undertaken; that we are not fully aware of the details early in the project, and Agile design/development will be needed to deliver smaller pieces of a workable system (as in Scrum), or further planning will be required to define executable Work Package (as in Rolling Wave Planning).



Where might we actually be using Planning and Work Packages, yet a lack of formal distinction may cause future performance issues?

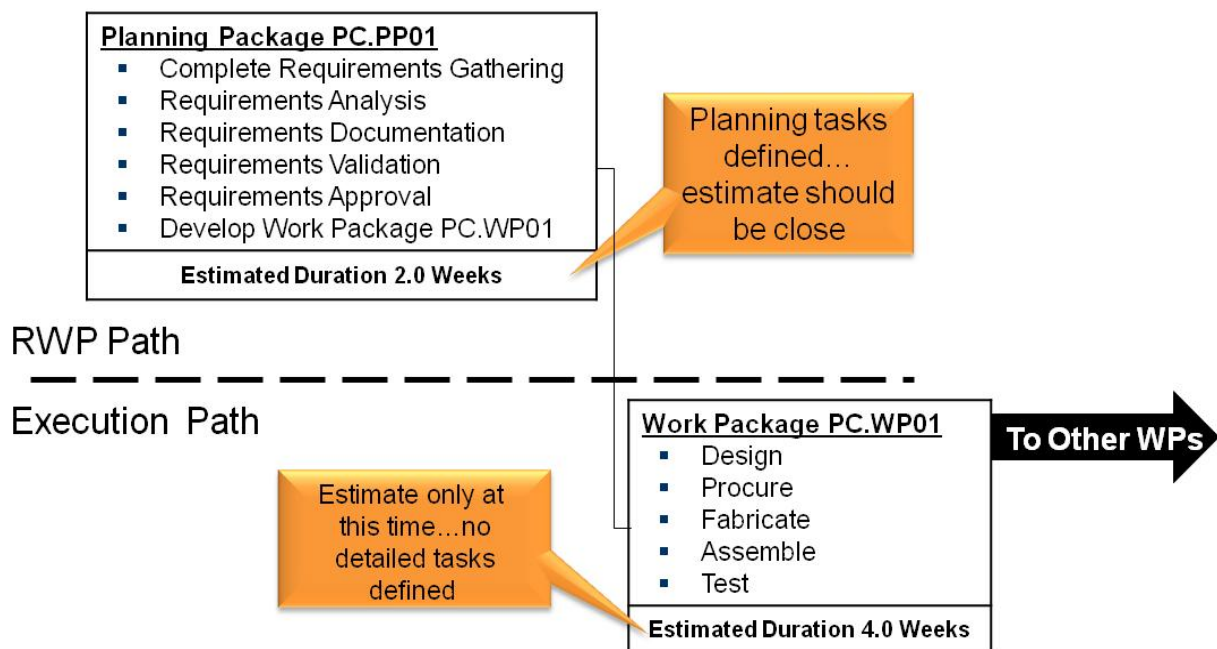
# The RWP Process

Where do we currently have difficulties keeping senior resources working consistently on projects?

The process for moving from planning packages to work packages is actually not a difficult one. What is difficult is that both planning and work packages will be worked on during the planning and early execution phases of the project; and are often undertaken by the same resources.

## Process Steps

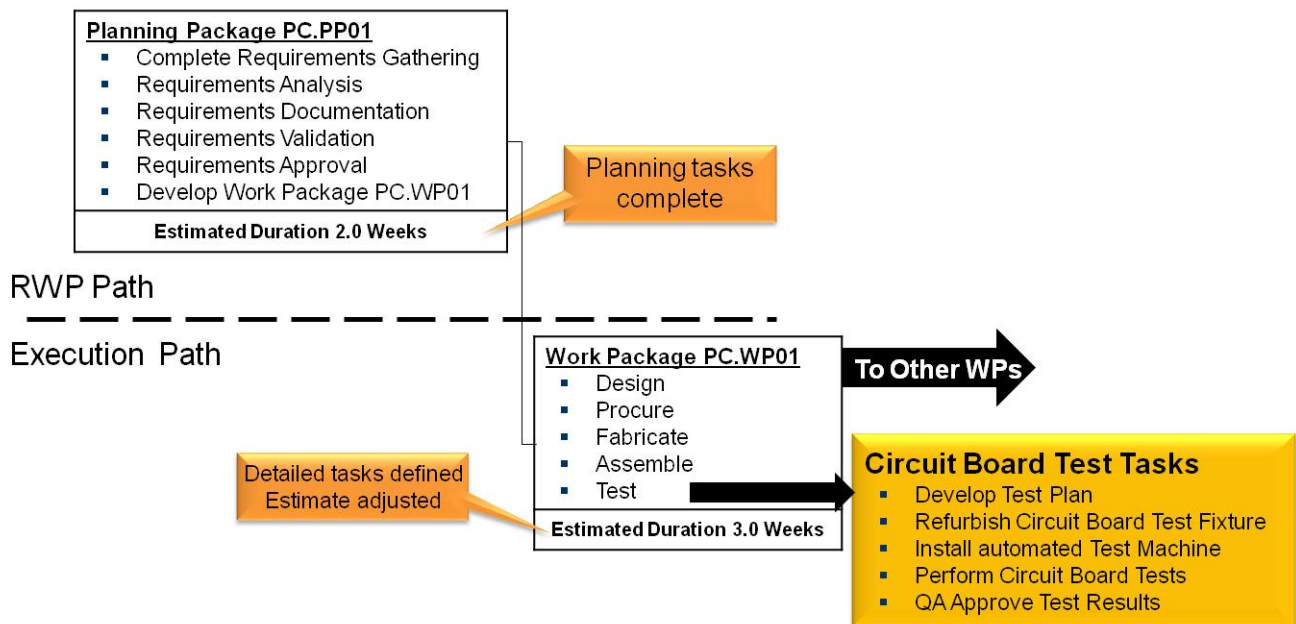
1. Identify the planning steps that will be required within the planning package.
2. Estimate the duration of the planning package execution.
3. For overall scheduling purposes, we will need a “best guess” estimate, or place holder estimate for the work package that will be revised at the completion of the planning package. Generally, this will be based upon major tasks we are aware of, yet do not have detailed task definition for at this time.
4. Execute the planning package tasks.



# The RWP Process

5. With the clarity and scope cognizance developed in the planning package execution, define the detailed work package tasks and revise the work package estimate.
6. Assign and integrate the work package into the overall execution scope of work.

As previously mentioned, the same resources may be used for both planning and execution; therefore, we must have the discipline to ensure that planning packages are complete prior to moving to an executable work package. Experience shows us that the line of planning package completion can be blurred when resources are working on both planning and execution, and execution timelines become compressed.



What type of process steps or decision gates are needed to ensure planning package completion prior to work package execution?

# Conclusion

What are a few key critical success factors we should consider prior to implementation of Agile best practices?

Agile practices can be applied across larger and global projects where creative thinking and scope cognizance are the precursors.

Experience shows us that a major commonality exists between Agile and Rolling Wave Planning practices: senior level resources for both customer and project teams are required for both approaches and those resources should remain in close proximity to the project to achieve consistent and successful execution results.

Agility describes the behavior of the project participants, their ability to move or adjust in new and possibly unforeseen situations, and to apply tools in different and creative ways.



Also, as traditional roles change, education of Agile methods for software development and non-software development will be necessary both across the enterprise and up and down the organization's hierarchy. This is a key critical success factor for successfully applying Agile methodologies across all aspects of complex and global projects.

Glen Alleman [1], a noted Agile subject matter expert, quite nicely sums up the issue of achieving agility for any type of project when he says that achieving agility is no more than simply using processes and practices intentionally, appropriately, and with intelligence... with that, we certainly would agree.



# About the Author/Research

## Thomas Flynn, P.E., PMP

A founding partner and Vice President of Consulting Services at Advanced Management Services, Inc., Tom has initiated and spearheaded the development of the Project and Program Management Division which helped transform AMS into its current position as a leader in the Project Management Consulting and Training industry.

A recognized subject matter expert in the field of human development, Tom currently works with a wide range of clients from CEOs to project team resources in formal coaching and mentoring programs. 35+ years in the martial and cultural arts, coupled with his experience with, understanding of, and formal training in the behavioral psychology field, he has developed a keen intuitive sense and a direct and effective approach.

## Research

1. [1] Alleman, G. "Agile Blog" email to Yahoo Groups, Agile Project Management group, March 1, 2005
2. The Blending of Traditional and Agile Project Management – Hass, K., PMI World Today – May 2007 (Vol. IX, IssueV)
3. Scaling Lean & Agile Development: Thinking and Organizational Tools for Large-Scale Scrum – Larman and Vodde, Addison-Wesley Professional, 2008
4. Agile Project Management - Agilism Versus Traditional Approaches - Daniel J Fernandez; John D Fernandez - *The Journal of Computer Information Systems*; Winter 2008/2009; 49, 2; ABI/INFORM Global

Management Consultants



Advanced Management Services

*Insights*

**Consulting • Learning • Research**

Developing People, Enhancing Process, Enabling Technology

**Advanced Management Services, Inc. (AMS)**

United States • Canada • Italy • Singapore

Hong Kong • United Kingdom • India

Email: [info@amsconsulting.com](mailto:info@amsconsulting.com) • Web: [www.amsconsulting.com](http://www.amsconsulting.com)

#### About AMS:

Advanced Management Services, Inc. (AMS) is a global management consulting firm focused on improving our clients' business performance by developing people, enhancing process and enabling technology. Our industry leading subject matter experts design and deliver customized consulting, learning and research solutions in a range of mission critical business areas resulting in continuity and sustainable results for clients across all industries. For two decades, AMS has assisted Fortune 500 organizations, Global 2000 companies and various government agencies in identifying their needs and implementing scalable solutions with a focus on value, quality, and positive impact.

#### AMS Advantage:

- Servicing a Global Client Base for two decades.
- Fully owned copyright allows for flexibility in customization of training programs.
- Executive level consultants with an average of 20 years specific industry and subject matter expertise.
- Licensing of specific training materials to corporate training departments and Universities.
- Learning Management System (LMS) to support curriculum based training solutions.
- Best in Class Implementation Methodology to ensure the highest levels of service.
- Unmet level of client satisfaction
- Account management structure to support client needs.
- Cross industry experience to promote creative client solutions.
- Priced competitively with a focus on value added solutions.
- Team and client portal to ensure collaboration and communication.
- Client facing Lessons Learned Analysis (LLA) at the close of every project.
- Project communications structure to ensure multiple consultants are briefed on client projects.
- Global resources to provide the right consultant, at the right time, in the right place.
- Best Practice tools and processes to support our solutions.
- Industry specific accreditations and academic credit for specific programs.
- Research: Articles, published works, podcasts, video vignettes, and benchmark research available for our client family.
- Monthly news update via RSS Feeds highlighting current trends, new products and industry news.
- Blended Learning and delivery solutions to support a distributed workforce and travel budget controls.

#### Disclaimer

This publication contains general information only, with the intention of delivering thought provoking ideas, and neither Advanced Management Services, Inc. (AMS), nor its affiliates are, by means of this publication, rendering accounting, business, financial, investment, legal, tax, or other professional advice or services. This publication is not a substitute for such professional advice or services, nor should it be used as a basis for any decision or action that may affect your finances or your business. Before making any decision or taking any action that may affect your finances or your business, you should consult a qualified professional adviser.

None of Advanced Management Services, Inc., or its respective affiliates shall be responsible for any loss whatsoever sustained by any person who relies on this publication.