University of Maryland

Project Management Symposium

NEXT SESSION

Hybrid Project Management: Navigating the New World of Project Management – with Agility!

Mark Tolbert

Owner and Instructor, Best Practices Team

PROJECT MANAGEMENT
CENTER FOR EXCELLENCE
A.J. CLARK SCHOOL OF ENGINEERING
Civil & Environmental Engineering Department

This session will be recorded.

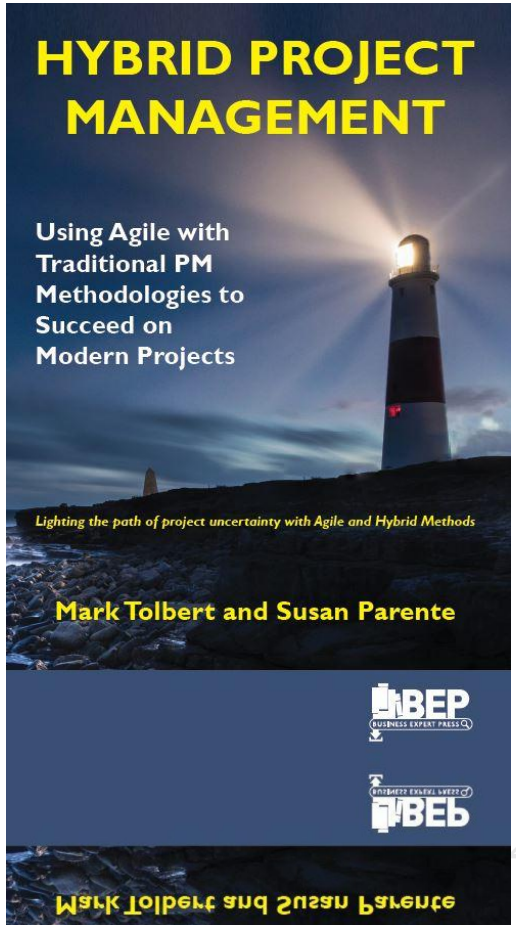
Project Management Symposium

Hybrid Project Management:
Navigating the New World of Project Management – with Agility

Mark Tolbert and Susan Parente

PROJECT MANAGEMENT
CENTER FOR EXCELLENCE
A.J. CLARK SCHOOL OF ENGINEERING
Civil & Environmental Engineering Department

This presentation is largely based off our book:



Agenda:

1) What is Hybrid Project Management?
2) Is Hybrid project management necessary today?
3) Where should Agile be used? Where should a traditional or predictive approach be used?
4) How can we mix predictive subprojects with Agile subprojects? What should we avoid?
5) Additional thoughts and conclusions.

What is meant by "Hybrid Project Management?"

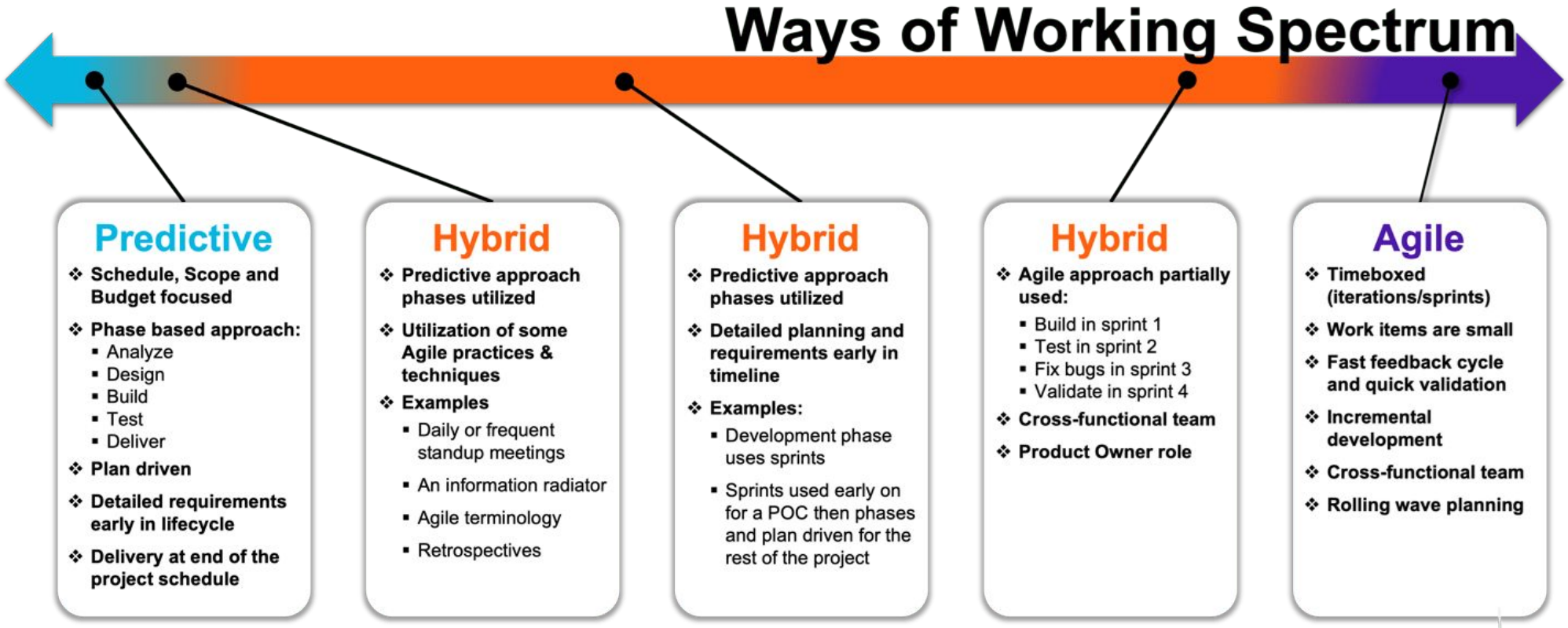
- There seems to be a lot of variance in what is meant by hybrid project management, and a lot of variance on whether it is advisable to use hybrid at all.
- What does PMI think of hybrid, especially when it involves mixing a Traditional approach with Agile? Do they endorse doing this?
- What does the Agile community think of hybrid – (mixing traditional and Agile), and do they endorse this?

What Does PMI think of hybrid? – (Where it involves mixing predictive with Agile?)

- PMI supports hybrid. In their Disciplined Agile materials, they go over several ways of mixing predictive with Agile.

PMI – "Ways of Working" – Uses of Hybrid –

https://www.pmi.org/disciplined-agile/serial/hybridlifecycles



What Does the Agile Community think of hybrid?

- Many key writers and figures in the Agile community – notably Jeff Sutherland and Ken Schwaber, the creators of Scrum - do not approve of hybrid.
- Why?
- They think this will inevitably lead to corrupting the Agile components of the project, and then ultimately, a failed project!

Agile Life Cycle

Initiation	Release Planning	Iteration 1	Iteration 2	Iteration 3
Create Charter Create Backlog High-level estimates Create Roadmap Story Maps	Story Estimating Planning Poker Build Release Plan	Sprint Planning Development Unit Testing Integrated Testing Sprint Review/Demo. Retrospective	Sprint Planning Development Unit Testing Integrated Testing Sprint Review/Demo Retrospective	Sprint Planning Development Unit Testing Integrated Testing Sprint Review/Demo. Retrospective

Common mistakes and ways to corrupt Agile!

- Have the classic “large and in charge” or “directing” project manager run the Agile project.
- Use a scheduling tool such as MSProject to define the critical path for the next 6 to 9 months, and try to stick to that critical path.
- Make your “standup meetings” full one-hour status meetings.
- Not provide the “Agile Ethos” or Agile culture to the team members.
- Not get management involved appropriately. (Management thinks Agile is just a nice tool for the developers to be more efficient, and do things faster.)

Is Hybrid Necessary?

- Numerous key authors of Agile materials would say Agile can be used on all projects!
- Is this correct?
- No! Why not?

Reasons Agile (or Scrum) Would be Impractical in Many Cases!

- A team of 5 to 10 senior, dedicated resources will be too expensive in many cases. Management will never agree to this.
- In the “cookie-cutter” world this is not needed!
- In the “cookie-cutter” world we will have:

  ✔ Historical records from similar previous projects that provide very good estimates of time and cost.

  ✔ Very good templates of key project documents.

- Therefore, using a classic predictive approach will be practical, less expensive and more efficient.

Yes, Hybrid Project Management is Necessary!

Why?

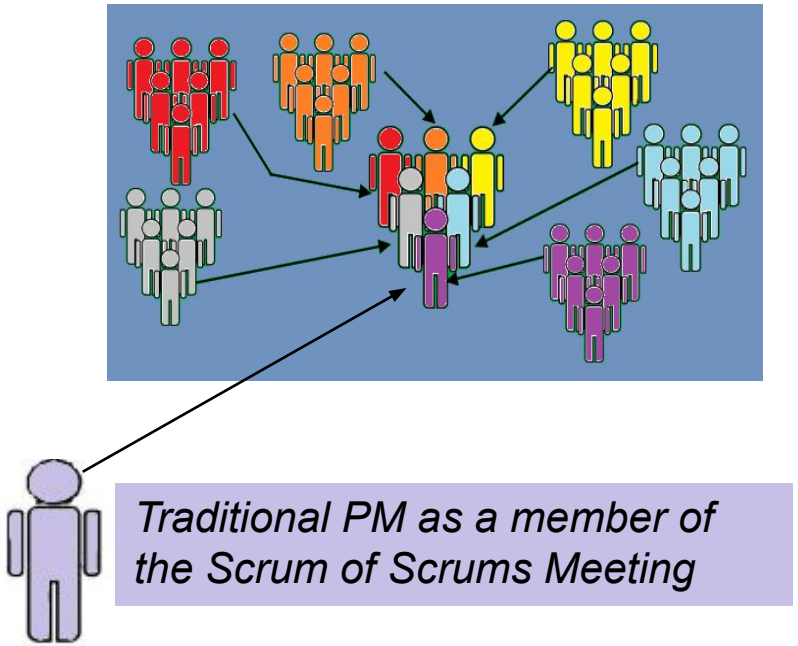
- Traditional (or Predictive) is still very valuable, and still has its place!
- Agile is also very necessary in our modern world.
- Now, our problem is how to best mix them together in a large complex project.
- Unfortunately, PMI, and the PM community in general, isn't addressing this well!
- The *PMBOK® Guide* has always embraced hybrid! (Even from day one in 1996!) How so?
- The current *PMBOK® Guide* should include material on how to correctly do hybrid!

So, you do have a large complex project, and some pieces need Agile, but others are “cookie-cutter.” How do you make this work?

How can you do effectively do a Hybrid Project?

Hybrid Project Management – Option #1

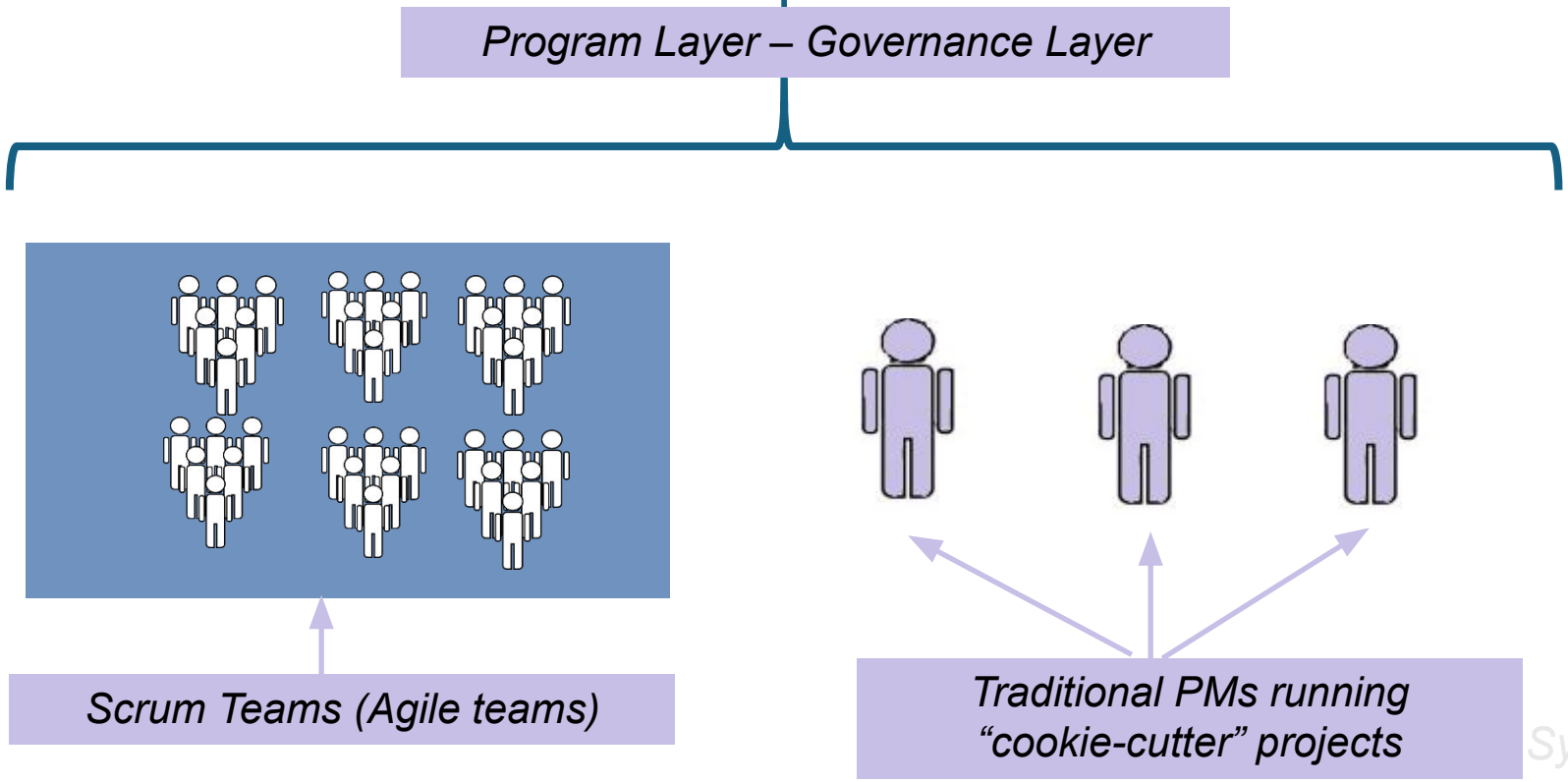
- Using the "Scrum of Scrums" approach, in which some components (or subprojects) may have a traditional project manager, we could try a Hybrid approach.
- In this case, the Traditional Project Manager would attend the "Scrum of Scrums" meeting.



Traditional PM as a member of the Scrum of Scrums Meeting

Hybrid Project Management – Option #2

- Have a "governance layer," or "program layer" overseeing all the components and subprojects



Things the "Project Governance" Can Do:

- Coordinate dependencies and interfaces between the various components or subprojects of the larger program/project.
- Translate Agile Information Radiator reports into classic traditional reports and forecasts.
- Provide the Product Owner role

Things the "Project Governance" Should Not Do!

- Direct the execution of the Agile components, and monitor & control the progress against the plan. (Use a "Command & Control" management style with the Agile components.)
- Mix Predictive/Waterfall planning approaches with Agile planning methods within the same subproject.
- Require the Agile teams and subprojects follow the traditional formal change control procedures.

Use Traditional/Predictive When:

- The customer knows what they want (in detail) at the start of the project.
- We're in a "cookie-cutter" situation. We've done this type of project many times before, and we have excellent historical records that will provide:
  - Solid estimates of time and cost.
  - Very good templates of key project documents: Scope statement, WBS, Risk Register, Risk Breaddown Structure, RACI chart, …
- It will be more efficient and less expensive to use this Predictive type of approach, and have an accountable "Command and Control" PM.

Use Agile When:

1. The customer doesn't know what they want at the start of the project, and we need to discover and explore requirements.
2. Technology changes could impact the project, and better solutions could be available in the next year or sooner.
3. We need to quickly find the "MVP" that meets most of the customer's needs.
    - We need to get a validity check on possible product/service designs ASAP.
    - We need to do a "spike" to check on possible architectural designs
    - We need to do a "spike" to check on Risks

Additional Thoughts - Conclusions

Can some Agile tools and approaches be used on a broad basis across all projects, even Predictive/Waterfall projects?

- Yes!
  - ✔ Agile has numerous types of reports, tools and approaches that improve communications and teamwork.
  - ✔ Burndown & Burnup charts
  - ✔ Kanban board
  - ✔ Increasing the frequency of interactions and the “feedback loops.”
  - ✔ Speeding up the PDCA loop.
- Using these will help any project!

Additional Thoughts - Conclusions

Can Agile be used with Virtual Teams?

Absolutely!
In today's world, this is also necessary.
There are numerous great online tools to help with this.

Questions?

Contact Kathleen Frankle
kfrankle@umd.edu
301.405.8271

Hybrid Project Management:
Using Agile with Traditional PM Methodologies to Succeed on Modern Projects

This book is available on Amazon.com and on the Business Expert Press website: https://www.businessexpertpress.com/

Find me on LinkedIn - https://www.linkedin.com/in/mark-tolbert-pmp-pmi-acp-90b9b38/

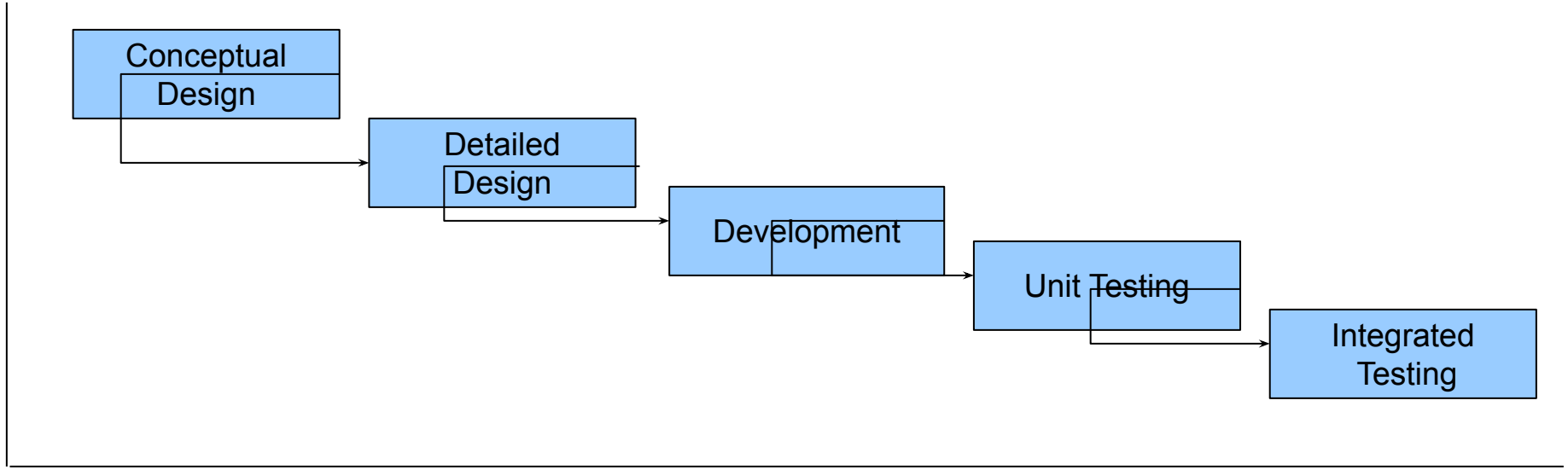
Evaluate Session

Backup Slides

(In case there are questions where these slides would be helpful.)

Traditional Project Life Cycle Structure

- Organize the project into phases. Phases are often organized in a predictive, sequential manner ("Waterfall" structure.)
- Large, complex engineering or construction projects often use this approach.



Agile Story = Template for a User Story

"As a <Role>, I want <Functionality>, so that <Business benefit>."

- Answers: "Who is asking for this?", "Why are we doing this?
- This same template applies to epics, features or stories (anything that makes up the product backlog)

** Note: Stories Do NOT Map Back Exactly to Work Packages or Activities**

Why Agile?

- When we try do predictive planning or waterfall for software projects, what typically gets included in the requirements list?
  - Everything imagined!
- Is the customer ever going to use all these features?
  - No! – Another Standish survey says that “65% of requirements the customer thought were necessary, will never be used!”
- A version of Pareto’s law comes into play here for requirements:
  - 80% of the customer’s need comes from 20% of the requirements

Why Agile?

- Deliver business value early
- Use an “iterative” or “adaptive” approach versus a “waterfall” or “sequential approach”
- Use Lean!
- Discover and Explore requirements
- “Identify fast-failures”
- The “Cone of Uncertainty”
- Empower the team to enhance creativity and accountability
- Much higher level of customer involvement is needed

The “Cone of Uncertainty”

PROJECT MANAGEMENT CENTER FOR EXCELLENCE
A.J. CLARK SCHOOL OF ENGINEERING
Civil & Environmental Engineering Department

Iterations in a Software/Knowledge Work Project