

GR8PM

Traditional • Agile • Hybrid

Training • Coaching • Consulting



Why Agile is *Mainstream*

and

How You Already Qualify For The PMI-ACP®!

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Agile Workshop Overview



Presentation Plan

- The Agile Landscape
- Agile Fundamentals
- Cover How Agile:
 - Handles Long-range Planning
 - Optimizes Estimating Accuracy
 - Manages Budgets, Forecasts, and Reporting
- Review Your PMI-ACP® qualifications

Introduction:

John Stenbeck, PMP, CSM, CSP, PMI-ACP



- Sr. PM Consultant for client-side ERP implementations
- Experience in Accounting, IT, Aerospace, Construction, and Manufacturing
- Train technical professionals in Aerospace, Defense, High Technology, Financial Services, Bio-medical and Life-science fields
- Adjunct instructor at the University of California San Diego (UCSD)

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Introduction:

John Stenbeck, PMP, CSM, CSP, PMI-ACP



- Featured speaker at HP's National Conference (2002), Oracle's Annual Conference (2003), and PeopleSoft's International Conference (2004).
- One project reached the Federal Supreme Court.
- Front page feature in the San Diego Union and LA Times; Guest on Oprah and the Today Show.
- Past President and VP of Prof. Dev. for PMI-SD

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GR8PM Introduction:



- PMP® and PMI-ACP® Exam Prep classes
- Scrum Master Certification classes
- Corporate On-site seminars:
 - Command Course in Agile Project Management
 - Project Management Boot Camp
 - Crash Course in Leadership
 - Masters Course in Estimating and Risk Management
- Organizational Support Services:
 - Agile Enterprise Roll-out Consulting
 - Contract Project Managers

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GR8PM Introduction:



Partial List of Past Clients

- Booz Allen Hamilton, Inc., McLean, VA
- Guinness Bass Import Company, Greenwich, CT
- Lucent Technologies – Bell Labs, Allentown, PA
- Nike Corp., Beaverton, OR
- Oracle Corp., Redwood Shores, CA
- Orange County Public Works, Orange, CA
- Qualcomm Inc., San Diego, CA
- U.S. Army – Space & Terrestrial Comms., Fort Monmouth, NJ
- U.S.D.A. – National Finance Center, New Orleans, LA
- Visa – Smart Cards, Foster City, CA

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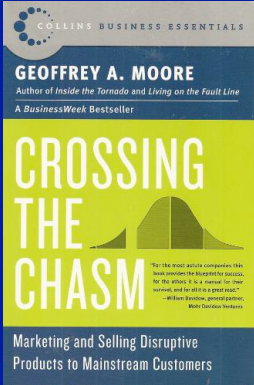
Why Agile is Mainstream: The Agile PM Landscape

PM Project Management Institute
an R.E.P. Institute

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Why is Agile Mainstream The Landscape

- How Do We Know Agile Is Mainstream?
 - *Crossing the Chasm: Marketing and Selling Disruptive Products to Mainstream Customers*, by Geoffrey A. Moore, HarperBusiness, 1991



- First adopters = 16%
 - Innovators and Early Adopters
- Second Adopters = 34%
 - Early Majority
- Third Adopters = 34%
 - Late majority
- Fourth Adopters = 16%
 - Laggards

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Why is Agile Mainstream The Landscape

- How Do We Know Agile Has Crossed Over?
 - The *math* says so! SA membership = 16%.

SCRUM ALLIANCE Membership = 100K PMI Membership = 500K

• Enthusiasts • Pragmatists • Conservatives • Skeptics

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Why is Agile Mainstream The Landscape

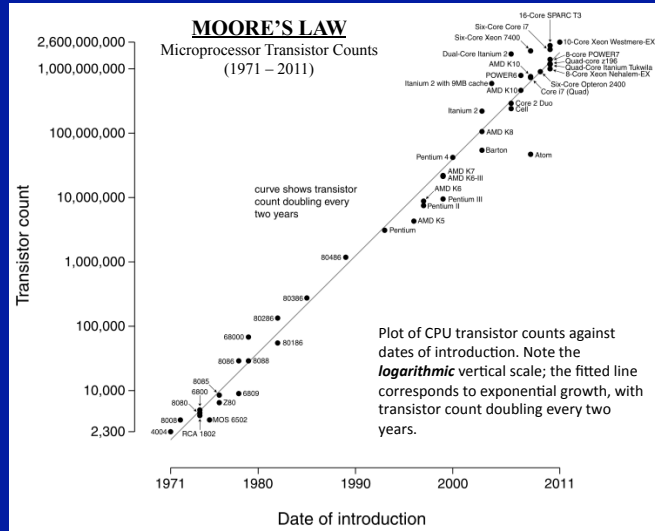
- Another View: Ancient Chinese Fable:
 - Inventor delights Emperor with new game – Chess – and is offered a reward.
 - Inventor requests 1 grain of rice on first square and doubling on each square.
 - At square 32 the reward was 4 billion grains; the yield from about 1 large field.
 - At square 32 the Emperor saw the final outcome would cost him his kingdom... and the Inventor was beheaded!
 - The chess board reward would equal $2^{64} - 1$ grains and be bigger than Mount Everest.

1	2
2	4
3	8
4	16
5	32
6	64
7	128
8	256
9	512
10	1,024
11	2,048
12	4,096
13	8,192
14	16,384
15	32,768
16	65,536
17	131,072
18	262,144
19	524,288
20	1,048,576
21	2,097,152
22	4,194,304
23	8,388,608
24	16,777,216
25	33,554,432
26	67,108,864
27	134,217,728
28	268,435,456
29	536,870,912
30	1,073,741,824
31	2,147,483,648
32	4,294,967,296

Why is Agile Mainstream The Landscape



- Digital improvement doubles every 18 months, reliably



Why is Agile Mainstream The Landscape



- Applying the Chessboard Fable:
 - In 1958, U.S. Government defined IT business segment.
 - Using Moore's 18 months, in 2006, we reached *square 32!*
 - In October 2010 Google delivered *fully-autonomous* cars.
 - In February 2011 IBM's Watson won *Jeopardy!* championship.



Why is Agile Mainstream The Landscape

- Analysis of Computers 1988 - 2003¹:
 - Computer problem solving increased 43-million fold.
 - Processor speeds contributed a 1000-fold factor.
 - Human created algorithms contributed a 43,000-fold factor.
- The Continuously, Self-Leveling, Playing Field:
 - Nokia – 1st King
 - HTC – 2nd King
 - Apple – 3rd King

¹President's Council of Advisors on Science and Technology, "Designing a Digital Future: Federally Funded Research and Development in Networking and Information Technology," December 2010.

Why is Agile Mainstream The Landscape

- The Economic and Competitive Landscape:
 - Why is agility so important?

ORGANIZATIONAL CONTINUUM

← FAILING	SURVIVING	THRIVING →
NOT INNOVATIVE...		... INNOVATIVE
		... AGILE

- **Strong Correlation:**
 - Pharmaceuticals
 - Consumer Electronics
 - Telecommunications
- **Mild Correlation:**
 - Wholesale/Retail
 - Healthcare
 - Insurance

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Why is Agile Mainstream The Landscape



- All companies *need* growth-driven *innovation*
- Small companies use *disruptive* innovation
- Big companies use *incremental* innovation
 - Economic growth is linked to “ecosystems”
 - Apple’s iPhones
 - Google’s Android
 - Amazon’s “marketplace”
 - Globalization requires size
 - State-backed competition (i.e., China)
 - Conglomerates
 - Biggest opportunities are in
 - Vast systems (i.e., healthcare, education)
 - Giant problems (i.e., pollution, climate change, renewable energy)

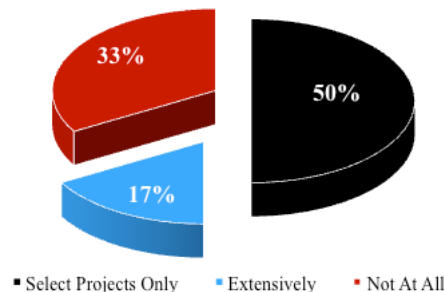
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Why is Agile Mainstream The Landscape



67% of Organizations Use Agile

Source: PMI.org (2011)



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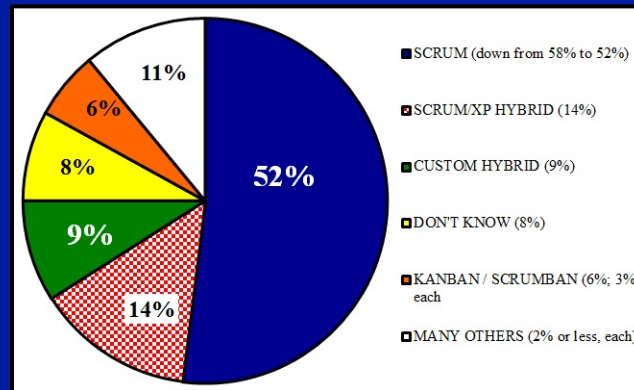
Why is Agile Mainstream The Landscape



• Sixth Annual "State of Agile Development"

• *Key Changes* (since last year):

- Companies using Scrum: *down 10%*
- Companies using Hybrids: *up 25%*



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Why is Agile Mainstream The Landscape



• Sixth Annual "State of Agile Development"

• Top 5 Techniques

- Daily Standup
- Iteration Planning
- Unit Testing
- Release Planning
- Burn-down

• Top 5 Concerns

- Lack of up-front planning
- Loss of management control
- Management opposition
- Lack of documentation
- Lack of predictability

• Top Reasons for Adopting Agile include:

- Accelerate Time to Market
- Increase Productivity
- Manage Changing Priorities
- Better Align IT / Business

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Why is Agile Mainstream
The Landscape

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Implications of Key Changes:

- Organizations want to:
 - Embrace Scrum’s team-level successes
 - “Cross the Chasm”¹ to enterprise-scale success

WHY?? Companies are hearing:

- John Deere Intelligent Systems Group²
 - Time to Market: 20% improvement
 - Time to Production: 20% improvement
 - Field Issue Resolution Time: 42% improvement
 - Warranty Expense: 50% reduction

¹Crossing the Chasm: Marketing and Selling Disruptive Products to Mainstream Customers, by Geoffrey A. Moore 19
²Source: Chad Holdorf, John Deere, Rally Agile Portfolio Mgt. Roadshow, Dallas, TX, 12-13-2011

Why is Agile Mainstream
The Landscape

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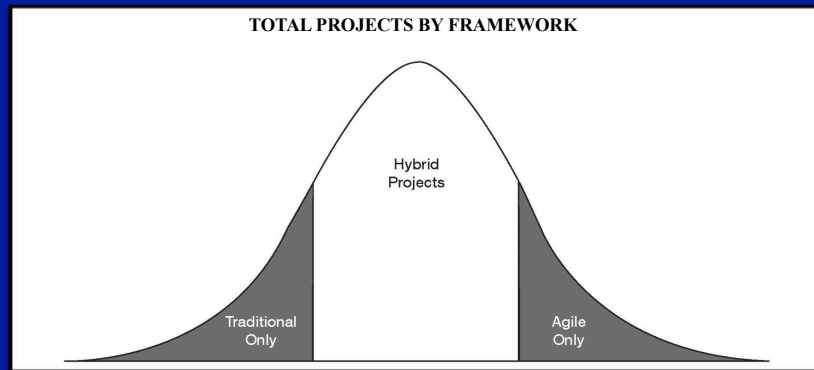
The diagram illustrates the evolution of project management constraints. On the left, a triangle represents the 'Iron Triangle' from the PMBOK Guide, Third Edition, with vertices labeled 'TIME', 'COST', and 'QUALITY'. On the right, a hexagon represents the 'Hell-of-a-Hexagon' from the PMBOK Guide, Fourth Edition, with vertices labeled 'Time', 'Cost', 'Scope', 'Quality', 'Risk', and 'Customer Satisfaction'. The text below states: *Iron Triangle transformed into Hell-of-a-Hexagon From Three to Fifteen Interrelationships.*

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Why is Agile Mainstream The Landscape



- Implications for future Project Leaders:
 - Understand multiple Agile frameworks and tools
 - Tailor Agile to the organizational context



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Why Agile is Mainstream: Agile Fundamentals



Why is Agile Mainstream Agile Fundamentals




- Where Does Agility Come From? (*Hint: 2 words*)

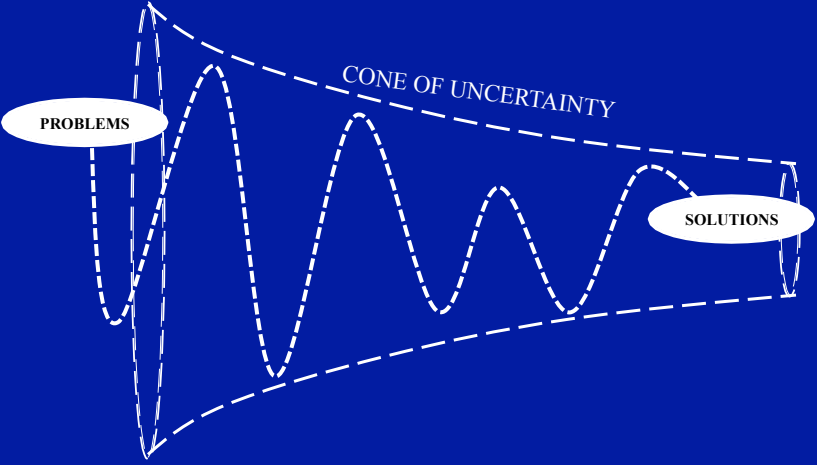


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Why is Agile Mainstream Agile Fundamentals



- What is the Agility “Challenge”?



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Why is Agile Mainstream
Agile Fundamentals

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- How is Agility Increased?

The diagram illustrates a 'CONE OF UNCERTAINTY' on a blue background. The cone is wider at the left end, labeled 'PROBLEMS', and narrows towards the right end, labeled 'SOLUTIONS'. Inside the cone, there are several dashed lines representing different paths or solutions. A solid white line with a dashed outline shows a series of peaks and valleys, representing the uncertainty of the project. The cone is bounded by a solid white line on the left and a solid white line on the right.

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Why is Agile Mainstream
Agile Fundamentals

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- How is the Cone of Uncertainty narrowed?

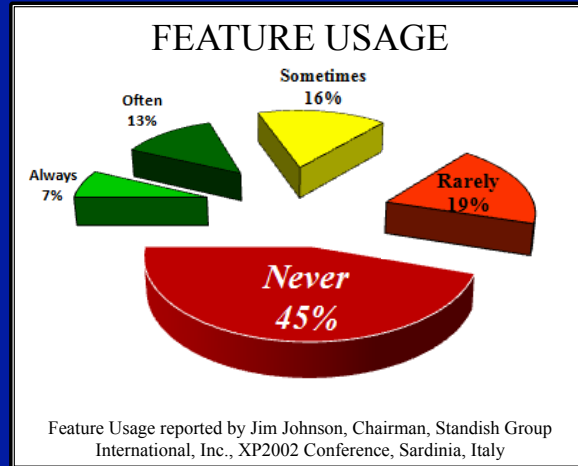
The diagram illustrates a 'CONE OF UNCERTAINTY' on a blue background. The cone is wider at the left end and narrows towards the right end. Inside the cone, there are several dashed lines representing different paths or solutions. A solid white line with a dashed outline shows a series of peaks and valleys, representing the uncertainty of the project. The cone is bounded by a solid white line on the left and a solid white line on the right. The text '2 WEEK CYCLE-TIME', '3 WEEK CYCLE-TIME', and '4 WEEK CYCLE-TIME' is written in yellow, red, and blue respectively, indicating the impact of shorter cycle times on narrowing the cone. The text 'TRADITIONAL PROJECT MANAGEMENT' is written in white at the bottom of the cone.

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Why is Agile Mainstream Agile Fundamentals



- How is the Cone of Uncertainty narrowed?

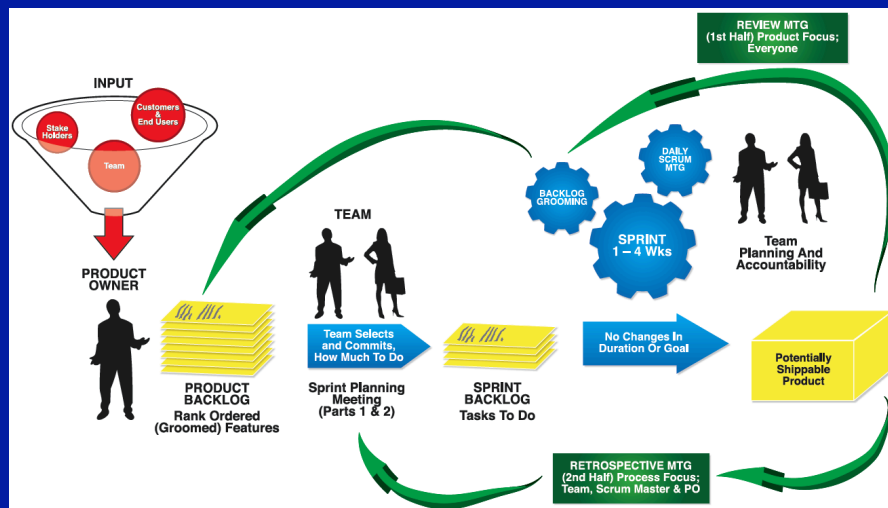


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Why is Agile Mainstream Agile Fundamentals



- Agile's Best Known Framework



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Why is Agile Mainstream Agile Fundamentals



We Value...

Individuals and Interactions	over	Processes and Tools
Working Software	over	Comprehensive Documentation
Customer Collaboration	over	Contract Negotiation
Responding to Change	over	Following a Plan

We would add... not a ...



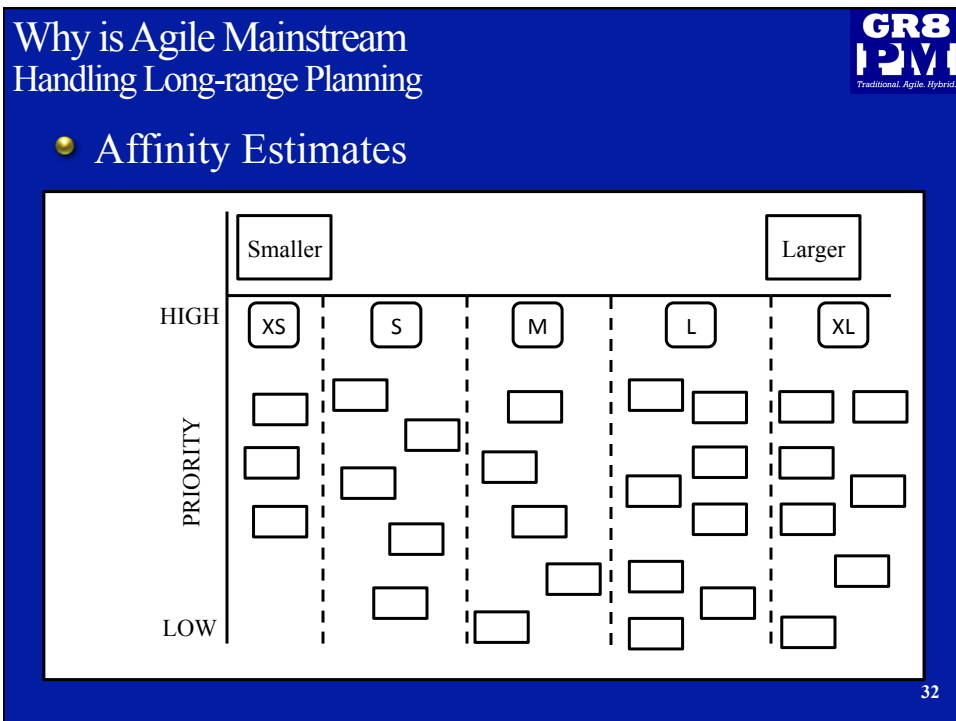
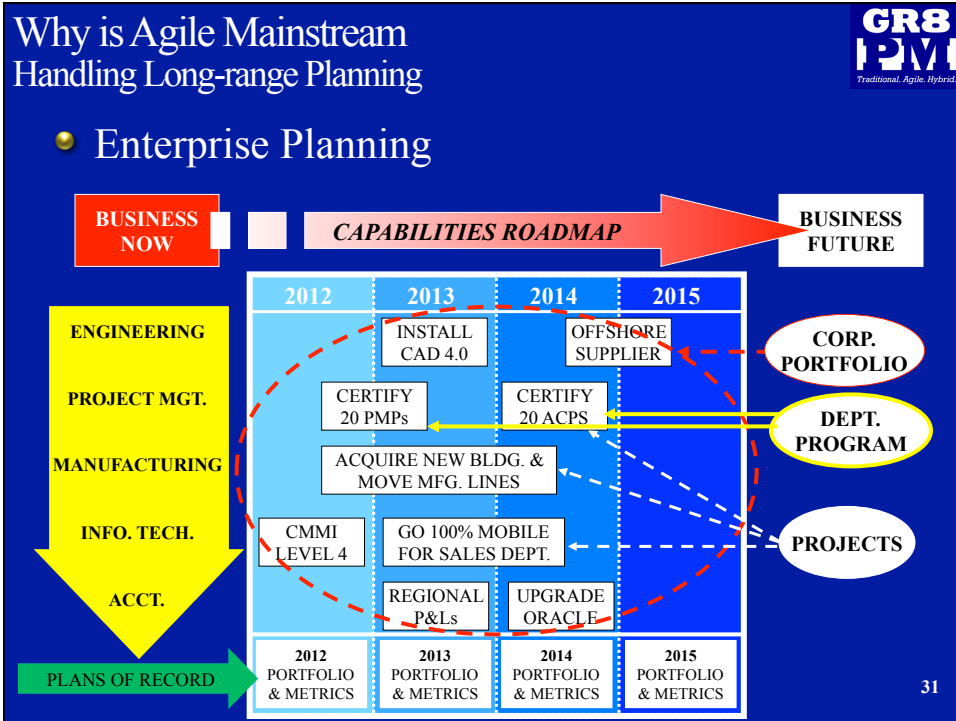
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Why Agile is Mainstream: How Agile Handles Long-range Planning





Why is Agile Mainstream Handling Long-range Planning



Forecast Velocity Assumptions

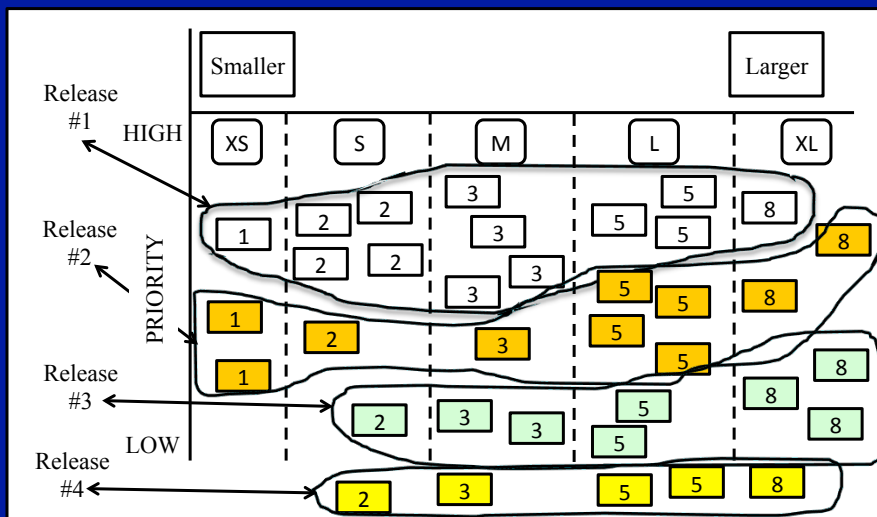
- 6 Developers x 3 wks. x 4 Iterations = 72 weeks
- 72 wks. x 60% efficiency = 43 weeks
- 43 weeks = Planning Limit
- Stories are:
 - Extra Small (XS) = 1 week to complete
 - Small (S) = 2 weeks
 - Medium (M) = 3 weeks
 - Large (L) = 5 weeks
 - Extra Large (XL) = 8 weeks

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Why is Agile Mainstream Handling Long-range Planning



● Affinity Estimates

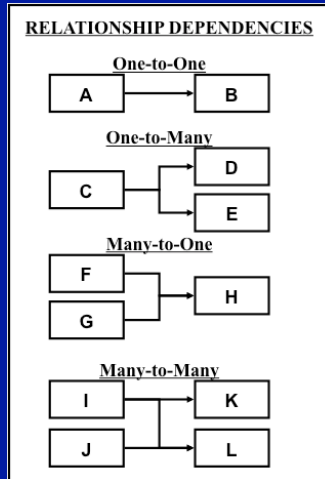


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Why is Agile Mainstream Handling Long-range Planning



- Logic Networks and Critical Paths



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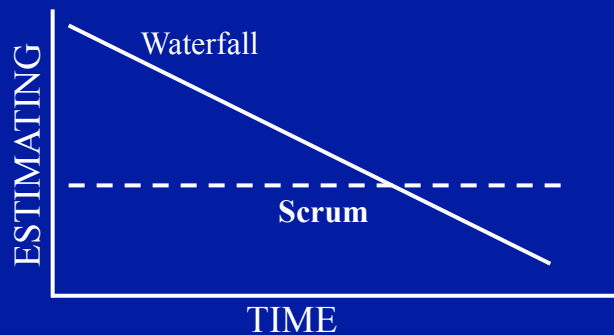
Why Agile is Mainstream: How Agile Optimizes Estimating Accuracy



Why is Agile Mainstream Optimizing Estimating Accuracy



When is it best to do detailed estimating, (a) when you know very little or (b) when you know a lot?



The amount of estimating done in Traditional versus Agile is similar. It just happens at different times, with different assumptions.

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Why is Agile Mainstream Optimizing Estimating Accuracy



● Fundamental Premise of Planning

<u>Estimate Types</u>	<u>% Design Complete</u>	<u>Estimate Accuracy</u>
ROM	0 – 10 %	+100% to – 50%
Budget	15 – 25 %	+30% to – 15%
Definitive	45 – 100 %	+15% to – 5%

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Why is Agile Mainstream Optimizing Estimating Accuracy

- Cost-effective Planning Despite Uncertainty

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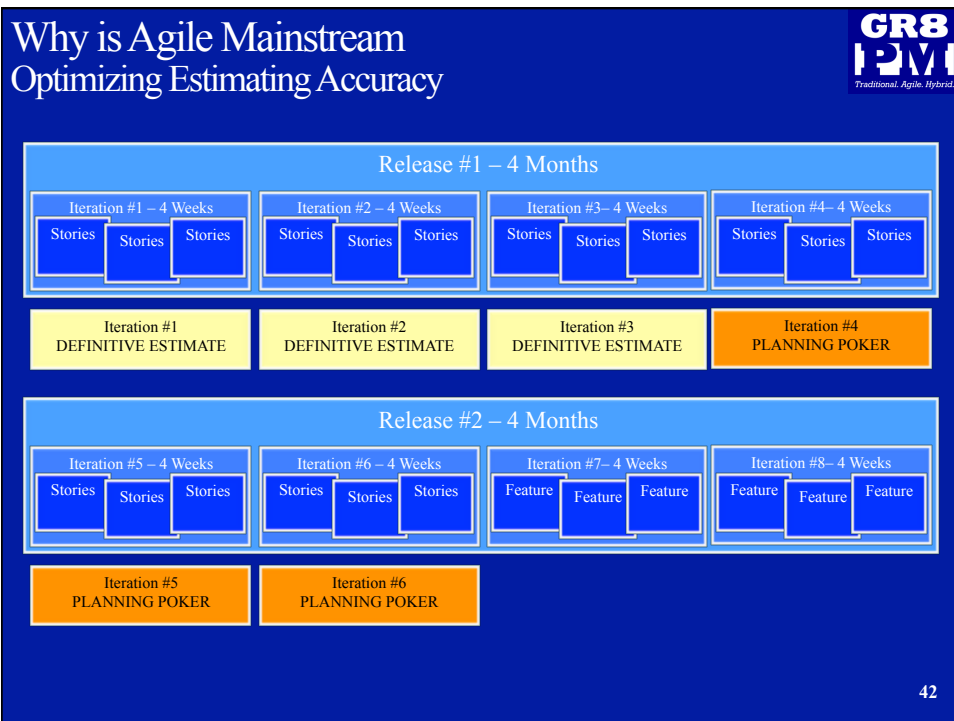
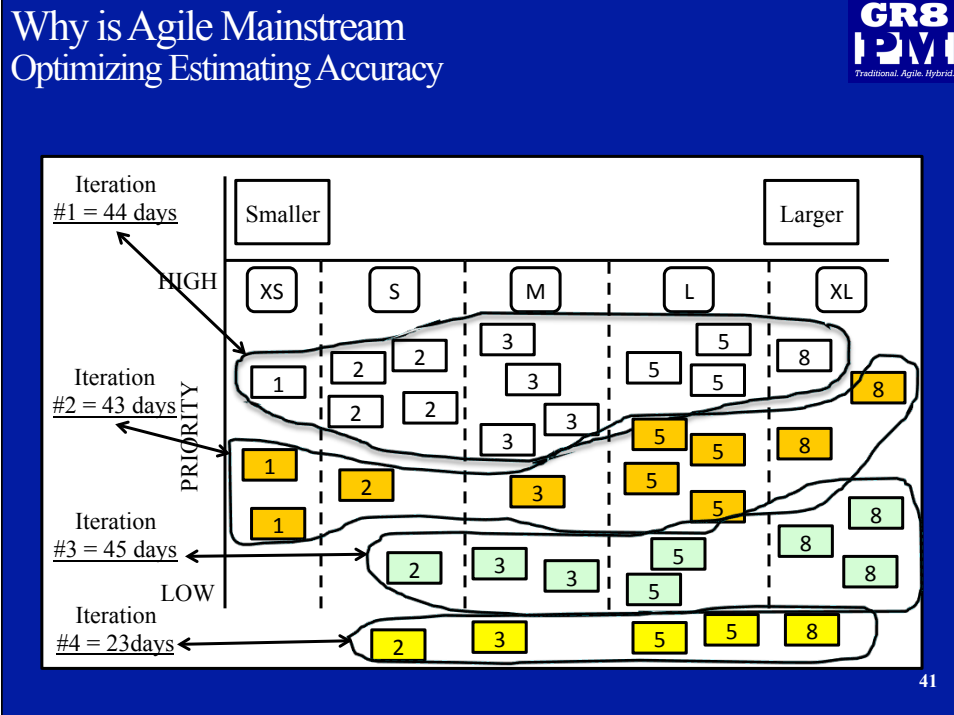
Why is Agile Mainstream Optimizing Estimating Accuracy

Roadmap – 1 Year (Sr. Mgt.)

Release #1 – 4 Months	Release #2 – 4 Months	Release #3 – 4 Months
Feature #1 Feature #2 Feature #3 Feature #4	Feature #5 Feature #6 Feature #7 Feature #8	Feature #9 Feature #10 Feature #11 Feature #12

Rolling Wave – 6 Months

Larger				Smaller
XL	L	M	S	XS
[] [] []	[] [] [] []	[] [] [] [] []	[] [] [] [] [] [] [] []	[] [] [] [] [] [] [] []



Why is Agile Mainstream Optimizing Estimating Accuracy



CALENDAR – 4 WEEK ITERATION				
MON.	TUES.	WEDS.	THURS.	FRI.
		SPRINT PLAN & BEGIN	STAND-UP & WORK	STAND-UP & WORK
STAND-UP & WORK	STAND-UP & WORK	STAND-UP & WORK	STAND-UP & WORK	STAND-UP & WORK
STAND-UP & WORK	STAND-UP & WORK	STAND-UP & WORK	STAND-UP & WORK	STAND-UP & WORK
STAND-UP & WORK	CODE FREEZE	PLANNING POKER	STAND-UP & WORK	STAND-UP & WORK
STAND-UP & WORK	REVIEW & RETRO	SPRINT PLAN & BEGIN		

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Why is Agile Mainstream Optimizing Estimating Accuracy



Key concepts:

- User stories describe a product feature from the perspective of the end user.
- The customer/proxy is primarily responsible for writing and prioritizing user stories.
- The team is responsible for estimating the work involved and deciding how to accomplish the work.

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Why is Agile Mainstream Optimizing Estimating Accuracy



Level 1 - Product: iPad, v1.0, Web Access & Communication

Level 2 - Theme:

- Video Watching
- Game Playing
- Music Listening
- Traveling
- E-Mailing

MANY
EPICS

1 THEME

Level 3 – Epics (for E-Mailing):

- Manage Contacts
- Create Messages
- Store & Retrieve Messages
- Attach & Link Content
- Filter Viruses & Spam

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Why is Agile Mainstream Optimizing Estimating Accuracy



Level 3 – Epics (for E-Mailing):

- Create Messages
- Manage Contacts
- Store & Retrieve Messages
- Attach & Link Content
- Filter Viruses & Spam

1 EPIC


MANY
STORIES

Level 4 – Stories:

- Create Contact
- Update Contact
- Delete Contact
- Sort Contacts

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Why is Agile Mainstream
Optimizing Estimating Accuracy




Level 4 – Stories:

- (Prior Slide) **ONE STORY** → **MANY TASKS** → Level 5 – Tasks:

- Define Fields
- Define DB
- Define GUI
- Check Duplicates
- Validate Format
- Import Function

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Why is Agile Mainstream
Optimizing Estimating Accuracy




Example #1 – Aircraft System Replacement

Priority	<u>Epic: Hardware Installation</u>	Size
<u>As a:</u>	Aircraft Quality/Test Engineer	
<u>I want:</u>	All procedures to follow FAA protocols	
<u>So that:</u>	I can certify the system and plane for commercial use	
<u>Acceptance Criteria</u>		
<u>Given:</u>	Components are replaced by certified techs	
<u>When:</u>	Components unit tested and no errors detected	
<u>Then:</u>	Aircraft ground safety run through is completed per FAA test protocol and plane certified to fly	

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Why is Agile Mainstream
Optimizing Estimating Accuracy




Example #2 – Teenager Chore

Priority	<u>Epic</u> : User Experience	Size
<u>As a</u> :	Parent	
<u>I want</u> :	Kitchen trash emptied	
<u>So that</u> :	No offensive odors interrupt dinner	
<u>Acceptance Criteria</u>		
<u>Given</u> :	The trash has been moved to outside can	
<u>When</u> :	The route to the outside trash can is viewed	
<u>Then</u> :	No pieces have been dropped and left behind	

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Why is Agile Mainstream
Optimizing Estimating Accuracy



Example #3 – Ship Control System

Priority	<u>Epic</u> : System Install	Size
<u>As a</u> :	Skipper	
<u>I want</u> :	A propeller/rudder control system installed	
<u>So that</u> :	Safe and accurate docking occurs	
<u>Acceptance Criteria</u>		
<u>Given</u> :	Components are stress-tested before install	
<u>When</u> :	Nautical tests completed/approved by Skipper	
<u>Then</u> :	Final vendor invoice is paid.	

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Why is Agile Mainstream
Optimizing Estimating Accuracy

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Priority	Epic: User Interface	Size
<u>As a:</u>	Stakeholder or Role	
<u>I want:</u>	Requirement or Feature description.	
<u>So that:</u>	Reason or Justification.	
<u>Acceptance Criteria</u>		
<u>Given:</u>	Specific situation <Input or Data>	
<u>When:</u>	Specific action <Trigger>	
<u>Then:</u>	Desired result <Response or Goal>	

Imprecise User-language by design!

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Why Agile is Mainstream:
Manages Budgets, Forecasts, and Reporting

Project Management Institute
R.E.P. Institute

Why is Agile Mainstream Managing Budgets, Forecasts, and Reporting



Earned Value Management (EVM)

- Few things are more abhorred by most project managers than accounting control.
 - Accounting control means creating a cost baseline and measuring performance against it.
 - Financial performance is fundamental to project success.
- Does completed work have actual cost or planned cost?

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Why is Agile Mainstream Managing Budgets, Forecasts, and Reporting



- EVM Memorization Trick:

Schedule	Variance	=	EV	-	PV
Schedule	Index	=	EV	/	PV
Cost	Variance	=	EV	-	AC
Cost	Index	=	EV	/	AC

- Practice chanting (out loud to yourself) and commit to memory:
 - Schedule, Schedule, Cost, Cost
 - Variance, Index, Variance, Index
 - EV is always first
 - Minus, Divide, Minus, Divide
 - PV, PV, AC, AC

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Why is Agile Mainstream Managing Budgets, Forecasts, and Reporting



- EVM Memorization Trick:
- Once PV is established, calculations are routine.
 - For completed work, $PV = EV$.
 - For completed work, AC comes from cost accounting.
- Interpreting results is very straightforward.
 - For SV and CV, negative variance is undesirable.
 - For SPI and CPI, variances less than 1 are undesirable.

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Why is Agile Mainstream Managing Budgets, Forecasts, and Reporting



Earned Value Management (EVM)

- There are two variations of EVM.
 - Level of effort (LOE) for projects where no discrete deliverables are defined.
 - Discrete effort for projects that deliver results in discrete batches or units.
- Kanban is LOE-ish and other Agile frameworks are discrete.

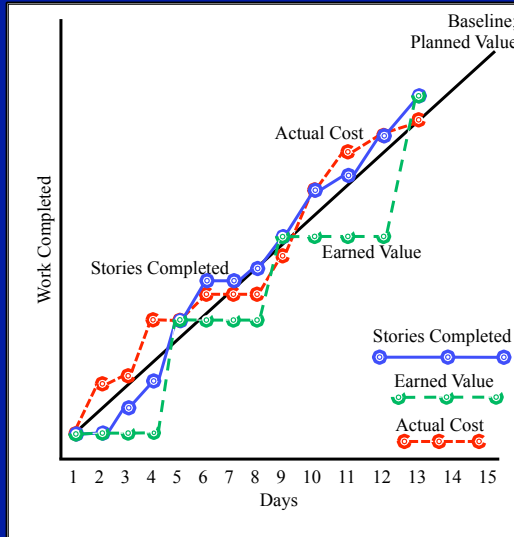
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Why is Agile Mainstream
Managing Budgets, Forecasts, and Reporting



Earned Value Management (EVM)

EVM & Burn-up
Chart



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Why Agile is Mainstream:
Review Your PMI-ACP® Qualifications !

Learning is not compulsory... *neither is survival.*

W. Edwards Deming



Why is Agile Mainstream
The Landscape

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- The Project Management Landscape:

TRADITIONAL PROJECT MANAGEMENT

PROJECT MANAGEMENT INSTITUTE

PRINCE2®, APM, IPMA, and Various Universities

AGILE PROJECT MANAGEMENT

SCRUM ALLIANCE

Agile Alliance, Scrum.org, PMI, and Various Universities

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Why is Agile Mainstream
The Landscape

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- The Project Management Landscape:

PMI

```


graph TD
    CAPM --> PMP
    CAPM --> ACP
    PMP --> PgMP
    PMI-SP --- PMP
    PMI-RMP --- PMP
    ACP --- PMP
    ACP --- PgMP
            
```

SCRUM ALLIANCE

```

graph TD
    CSPO --> CSP
    CSM --> CSP
    CSD --> CSP
    CSP --> CSC
    CSP --> CST
            
```

Why is Agile Mainstream
Your PMI-ACP® Qualifications




PROBLEM → *AVOIDING WASTE* → **SOLUTION**

(100% PRODUCTIVE)

Accept PMI's
Appropriate, Flexible Definitions

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Why is Agile Mainstream
Your PMI-ACP® Qualifications



Similar Taxonomy for Each Methodology

Traditional:
Graphical WBS

```

graph TD
    Objective[Objective] --> Phase1[Phase 1]
    Objective --> Phase2[Phase 2]
    Phase1 --> WP1[Work Package 1]
    Phase1 --> WP2[Work Package 2]
    Phase2 --> WP3[Work Package 1]
    Phase2 --> WP4[Work Package 2]
    WP1 --> Act1[Activity 1]
    WP1 --> Act2[Activity 2]
    WP2 --> Act3[Activity 3]
    Act3 --> T1[Task 1]
    Act3 --> T2[Task 2]
    Act3 --> T3[Task 3]
        
```

Agile / Scrum:
Feature Structure

```

graph TD
    Product[Product] --> Theme1[Theme 1]
    Product --> Theme2[Theme 2]
    Theme1 --> Epic1[Epic 1]
    Theme1 --> Epic2[Epic 2]
    Theme2 --> Epic3[Epic 3]
    Theme2 --> Epic4[Epic 4]
    Epic1 --> Story1[Story 1]
    Epic2 --> Story2[Story 2]
    Epic3 --> Story3[Story 3]
    Story1 --> T1[Task 1]
    Story2 --> T2[Task 2]
    Story3 --> T3[Task 3]
        
```

DETAILS


Few & Broad

↓

Many & Specific

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Why is Agile Mainstream
Your PMI-ACP® Qualifications



Similar Taxonomy for Each Methodology
 Definitions are completely arbitrary logical devices.

<u>PMBOK:</u>	<u>AGILE:</u>	<u>DEFINITION:</u>
1. Objective	1. Product	1. Business-level Full Function Vision
2. Phase	2. Theme	2. What a User <u>Class</u> wants to see or experience (Sub-function; End-to-end workflow)
3. Work Pkg.	3. Epic	3. What a User will do and the result(s) they will see
4. Activity	4. Story	4. Workflow component in User words
5. Task	5. Task	5. Technical job plus acceptance criteria

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Why is Agile Mainstream
Your PMI-ACP® Qualifications




Similar Roles

Traditional vs. Agile/Scrum

<u>Traditional:</u>	<u>Agile / Scrum:</u>
• Stakeholders & Sponsor	• Stakeholders & Sponsor
• Program or Sr. Project Manager	• Product Owner
• Jr. PM or Team Lead	• Scrum Master
• Team and SME's	• Team and SME's
• Everybody else	• Everybody else

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Why is Agile Mainstream Your PMI-ACP® Qualifications



Traditional, Agile, Hybrid.

Knowledge Areas	Project Management Process Groups				
	Initiating	Planning	Executing	M & C	Closing
Project Management Integration	• Develop Project Charter	• Develop Project Management Plan	• Direct and Manage Project Execution	• Monitor and Control Project Work • Perform Integrated Change Control	• Close Project or Phase
Project Scope Management		• Collect Requirements • Define • Create		• Verify Scope	
Project Time Management		• Define • Sequence • Estimate • Resource • Estimate • Duration • Develop			
Project Cost Management		• Estimate • Determine			
Project Quality Management		• Plan			

Inputs

- Project Statement of Work (Light version)
- Contract (Agile version)

Outputs


- Project Vision Statement
- Feature Descriptions

All projects – Traditional and Agile – use a kick-off ceremony to describe the engagement and manage expectations. It usually includes reviewing the Project Charter that describes Why, What, When, Where, and for Whom the project is being done.

The key difference lies in the approach to the question, “How will it be done?” Agile uses iterative development to increased business involvement, team commitment, and process improvement.

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Why is Agile Mainstream Your PMI-ACP® Qualifications



Traditional, Agile, Hybrid.

Knowledge Areas	Project Management Process Groups				
	Initiating	Planning	Executing	M & C	Closing
Project Management Integration	• Develop Project Charter	• Develop Project Management Plan	• Direct and Manage Project Execution	• Monitor and Control Project Work • Perform Integrated Change Control	• Close Project or Phase
Project Scope Management		• Collect Requirements • Define • Create			
Project Time Management		• Define • Sequence • Estimate • Resource • Estimate • Duration • Develop			
Project Cost Management		• Estimate • Determine			
Project Quality Management		• Plan Quality	• Perform Quality Assurance	• Perform Quality Control	

Inputs

- Project Vision Statement
- Feature Descriptions


Outputs

- Roadmap and Release Plans
- Epic-level Stories

The PMBOK recommends Progressive Elaboration as the process to update and refine project plans which matches Agile’s use of Stories to develop a Roadmap that is composed of Release Plans. Release Plans are equivalent to a project management plan (document).

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Why is Agile Mainstream Your PMI-ACP® Qualifications



Knowledge Areas	Project Management Process Groups				
	Initiating	Planning	Executing	M & C	Closing
Project Management Integration	• Develop Project Charter	• Develop Project Management Plan	• Direct and Manage Project Execution	• Monitor and Control Project Work • Perform Integrated	• Close Project or Phase
Project Scope Management		• Collect Requirements • Define Scope • Create WBS			
Project Time Management		• Define Activities • Sequence Activities • Estimate Activity Resources • Estimate Activity Duration • Develop Schedule			
Project Cost Management		• Estimate Cost • Determine Budget			
Project Quality Management		• Plan Quality			

Inputs

- Release Plan
- Epic and User Stories

Outputs


- Product Backlog
- (Initial) Prioritization

The PMBOK identifies Define Scope and many PMs interpret that as a one-time activity even though it conflicts with Progressive Elaboration. Agile embraces Progressive Elaboration by establishing a framework – the Product Backlog – for scope management. The Backlog is prioritized and frequently reviewed and revised to manage project scope.

Given the high uncertainty about requirements and/or high technological risks facing most projects it is a wise approach.

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Why is Agile Mainstream Your PMI-ACP® Qualifications



Knowledge Areas	Project Management Process Groups				
	Initiating	Planning	Executing	M & C	Closing
Project Management Integration	• Develop Project Charter	• Develop Project Management Plan	• Direct and Manage	• Monitor and	• Close Project or
Project Scope Management		• Collect Requirements • Define Scope • Create WBS			
Project Time Management		• Define Activities • Sequence Activities • Estimate Activity Resources • Estimate Activity Duration • Develop Schedule			
Project Cost Management		• Estimate Cost • Determine Budget			
Project Quality Management		• Plan Quality			

Inputs

- Prioritized Product Backlog

Tools

- Prioritization techniques
- Sizing and Estimating techniques
- Iteration Planning techniques

Outputs


- Prioritized Iteration Backlog
- User Stories

Traditional project management uses a hierarchy of Program, Project and sub-Project plans to sequence work and measure progress. Agile uses a hierarchy of Roadmap, Release, and Iteration plans to do the same thing.

Agile project sequencing is more dynamic because of its Lean-driven focus to eliminate the waste of non-value-added work.

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Why is Agile Mainstream Your PMI-ACP® Qualifications



Knowledge Areas	Project Management Process Groups	
	Initiating	Planning
Project Management Integration	<ul style="list-style-type: none"> Develop Project Charter 	<ul style="list-style-type: none"> Develop Project Management Plan
Project Scope Management		<ul style="list-style-type: none"> Collect Requirements Define Scope Create WBS
Project Time Management		<ul style="list-style-type: none"> Define Activities Sequence Activities Estimate Activity Resources Estimate Activity Duration Develop Schedule
Project Cost Management		<ul style="list-style-type: none"> Estimate Cost Determine Budget
Project Quality Management		<ul style="list-style-type: none"> Plan Quality

Inputs

- Roadmap and Release Plans
- Product Backlog
- Iteration Backlog

Tools

- Sizing and Estimating techniques
- Velocity Analysis

Outputs


- Cost Baseline
- EVM Baseline

Key concept – *Estimates are **wrong by design!*** Knowing this truth, Agile avoids **false precision** in order to eliminate waste and focuses on producing useful, reasonable cost estimates and schedules to support needed and required planning.

Over time project metrics – such as velocity, quality, and change rates – stabilize and Agile cost estimates become more reliable than traditional ones.

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Why is Agile Mainstream Your PMI-ACP® Qualifications



Knowledge Areas	Project Management Process Groups				
	Initiating	Planning	Executing	M & C	Closing
Project Management Integration	<ul style="list-style-type: none"> Develop Project Charter 	<ul style="list-style-type: none"> Develop Project Management Plan 	<ul style="list-style-type: none"> Direct and Manage 	<ul style="list-style-type: none"> Monitor and 	<ul style="list-style-type: none"> Close Project or
Project Scope Management		<ul style="list-style-type: none"> Collect Requirements Define Scope Create WBS 			
Project Time Management		<ul style="list-style-type: none"> Define Activities Sequence Activities Estimate Activity Resources Estimate Activity Duration Develop Schedule 			
Project Cost Management		<ul style="list-style-type: none"> Estimate Cost Determine Budget 			
Project Quality Management		<ul style="list-style-type: none"> Plan Quality 			

Inputs

- Product Backlog
- User Stories

Tools

- Modeling techniques

Outputs

- Models (Multiple, small, interlocking models)


Agile's approach to Quality is Organic, and Overt if needed.

Projects include more frequent quality review steps because the Team includes QA. Smaller, more frequent reviews reduce waste by reducing how far off-track any work can actually go.

Organic means that the Customer/Proxy must be involved with defining story specifics, among other things. Overt means specific data capture and reporting can be called out if needed or required – by regulators, for example.

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Why is Agile Mainstream Your PMI-ACP® Qualifications




Traditional. Agile. Hybrid.

Knowledge Areas	Project Management Process Groups				
	Initiating	Planning	Executing	M & C	Closing
<p>Inputs</p> <ul style="list-style-type: none"> • Prioritized Iteration Backlog • Retrospective Meeting Outputs <p>Tools</p> <ul style="list-style-type: none"> • Prioritization techniques • Daily Synchronization Meeting <p>Outputs</p> <ul style="list-style-type: none"> • Velocity Data • Backlog Updates <p>Work is done within the Iteration time box. Work is re-prioritized and re-sequenced outside of the Iteration. By planning outside the Iteration time box priorities and flexibility are maintained. By executing work within the time box team focus and commitment are maintained.</p> <p>The team uses Daily Synchronization to improve the work dynamic and periodic Retrospectives to institutionalize the team's learning into its practices.</p>			<ul style="list-style-type: none"> • Direct and Manage Project Execution 	<ul style="list-style-type: none"> • Monitor and Control Project Work • Perform Integrated Change Control • Verify Scope • Control Scope • Control Schedule • Control Costs • Perform Quality Assurance 	<ul style="list-style-type: none"> • Close Project or Phase

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Why is Agile Mainstream Your PMI-ACP® Qualifications



Traditional. Agile. Hybrid.

Knowledge Areas	Project Management Process Groups				
	Initiating	Planning	Executing	M & C	Closing
<p>Inputs</p> <ul style="list-style-type: none"> • Product Backlog • Models <p>Tools</p> <ul style="list-style-type: none"> • Organic techniques • Overt techniques <p>Outputs</p> <ul style="list-style-type: none"> • Tests and Acceptance Criteria for Stories • Multiple small, interlocking Models <p>Agile's approach to Quality is to reduce waste by reducing how far off-track any work can actually go.</p> <p>Organic QA uses TDD practices (and automated testing tools in software) to enable frequent work reviews and Customer/Proxy evaluation of the emerging increment of the solution.</p> <p>Overt data capture and reporting is done if needed due to the context of the project, or if required by regulators or others.</p>			<ul style="list-style-type: none"> • Direct and Manage Project Execution 	<ul style="list-style-type: none"> • Monitor and Control Project Work • Perform Integrated Change Control • Verify Scope • Control Scope • Control Schedule • Control Costs • Perform Quality Assurance 	<ul style="list-style-type: none"> • Close Project or Phase

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Why is Agile Mainstream Your PMI-ACP® Qualifications



What the Exam Tests

- The ACP exam is based on 11 books from agile authors.
- That body of work covers 3,888 pages.
- The 11 authors sometimes have differing and/or opposing opinions regarding agile practices.

<u>Title:</u>	<u>Price</u>	<u>Pages</u>
Agile Estimating and Planning	\$ 54.99	368
Agile Retrospectives: Making Good Teams Great	\$ 29.95	200
Agile Project Management: Creating Innovative Products	\$ 49.99	432
Agile Project Management with Scrum	\$ 39.99	192
Lean-Agile Software Development: Achieving Enterprise Agility	\$ 39.99	304
The Software Project Manager's Bridge to Agility	\$ 49.99	384
Agile Software Development: The Cooperative Game	\$ 59.99	504
Coaching Agile Teams	\$ 42.99	352
Becoming Agile: In an Imperfect World	\$ 44.99	408
The Art of Agile Development	\$ 39.99	440
User Stories Applied: For Agile Software Development	<u>\$ 54.99</u>	<u>304</u>
	\$507.85	3,888

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Why is Agile Mainstream Your PMI-ACP® Qualifications



What the Exam Tests: A Passing Grade

- Based on the PMP credential, and exam standards, about 61% of test takers will pass.
- The exam has 120 multiple-choice questions.
 - 100 scored questions.
 - 20 un-scored, development questions
- A passing score require enough correct answers within the 3 hour time period.

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Why is Agile Mainstream Your PMI-ACP® Qualifications



What the Exam Tests: Question Allocation

- Knowledge and Skills
 - 50 percent of questions and from 43 areas
- Tools and Techniques
 - 50 percent of questions and from 50 components

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Why is Agile Mainstream Your PMI-ACP® Qualifications



PMI-ACP Certification Fees:

	Member	Non-member
Computer-based Test	\$ 435	\$ 495
Paper-based Test	\$ 385	\$ 445
Re-exam CBT	\$ 335	\$ 395
Re-exam PBT	\$ 285	\$ 345
CCR Renewal Fee	\$ 90	\$ 130

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Why is Agile Mainstream Your PMI-ACP® Qualifications



What about PDUs?

- Continuing Certification Requirements (CCR):
 - PMI-ACP® holders are required to earn 30 professional development units (PDUs) in agile topics every 3 years.
- Counting PMI-ACP® PDUs for other PMI credentials:
 - The 30 PDUs in agile topics also count towards the PMP® or PgMP® certification(s).
 - For general project management classes, only the hours that pertain to agile topics count towards the PMI-ACP®.

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Why is Agile Mainstream Your PMI-ACP® Qualifications



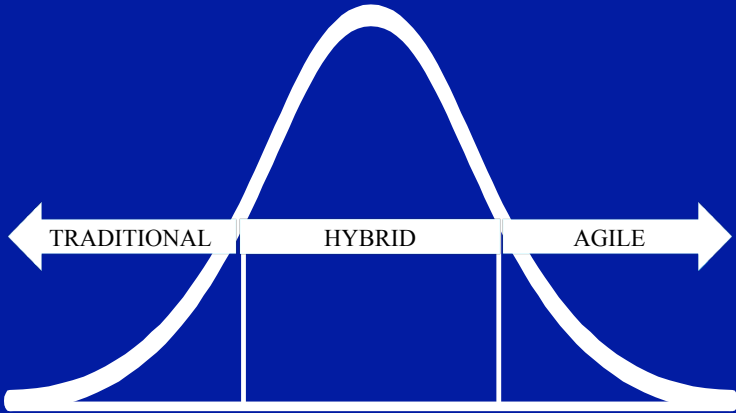
- Map YOUR Process for Success!
- Volunteer in Chapter's ACP Exam Prep class
 - Train-the-Trainer (T3) Program
 - Instructor Guides
 - PPT Slide Decks
- Coach, Mentor, and/or Manage ACP classes

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Why is Agile Mainstream Your PMI-ACP® Qualifications

**GR8
PMI**
Traditional, Agile, Hybrid.

- Key Question: Why is Agile important to you?



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GR8PM

Traditional • Agile • Hybrid
Training • Coaching • Consulting

Why Agile is Mainstream



Please feel free to contact me or get LinkedIn.
jstenbeck@gr8pm.com

**GR8
PMI**
Traditional, Agile, Hybrid.

PMI Project Management Institute
an R.E.P. Institute