Lean & Agile Project Management

For Leading Large & Complex Technology Programs & Projects

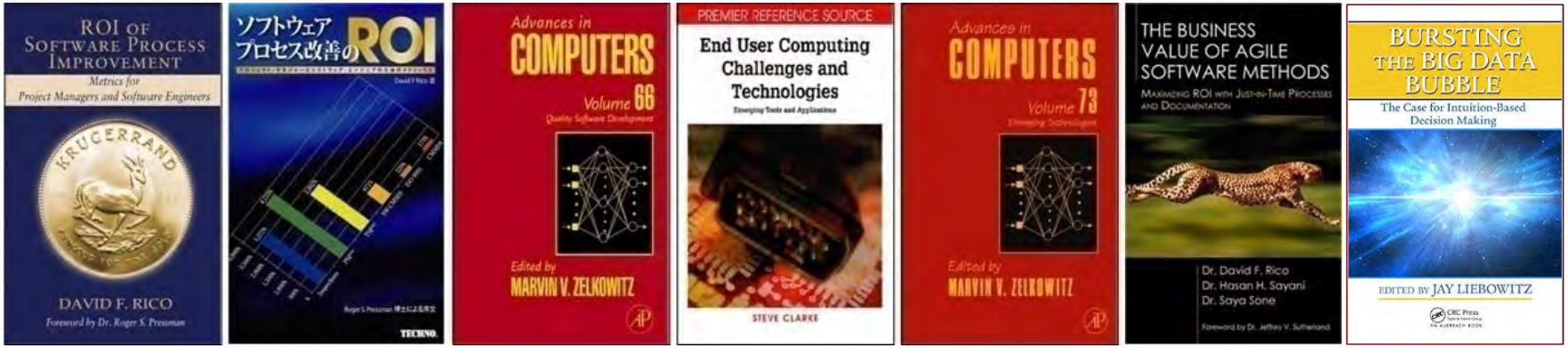
Dr. David F. Rico, PMP, CSEP, FCP, FCT, ACP, CSM, SAFE, DEVOPS

Twitter: @dr_david_f_rico
Website: http://www.davidfrico.com
LinkedIn: http://www.linkedin.com/in/davidfrico

Agile Capabilities: http://davidfrico.com/rico-capability-agile.pdf
Agile Cost of Quality: http://www.davidfrico.com/agile-vs-trad-coq.pdf
DevOps Return on Investment (ROI): http://davidfrico.com/rico-devops-roi.pdf
Dave's NEW Leadership Video: http://www.youtube.com/watch?v=70LRzOk9VGY
Dave's NEW Business Agility Video: http://www.youtube.com/watch?v=hTvtsAkL8xU
Dave's NEWER Scaled Agile Framework SAFe 4.5 Video: http://youtu.be/1TAuCRq5a34
Dave's NEWEST Development Operations Security Video: http://youtu.be/X22kJAvx44A
DoD Fighter Jets versus Amazon Web Services: http://davidfrico.com/dod-agile-principles.pdf

Author Background

- Gov't contractor with 35+ years of IT experience
- B.S. Comp. Sci., M.S. Soft. Eng., & D.M. Info. Sys.
- ☞ Large gov't projects in U.S., Far/Mid-East, & Europe



→ ***Career systems & software engineering methodologist***
→ *Lean-Agile, Six Sigma, CMMI, ISO 9001, DoD 5000*
→ *NASA, USAF, Navy, Army, DISA, & DARPA projects*
→ *Published seven books & numerous journal articles*
→ *Intn'l keynote speaker, 200+ talks to 14,500 people*
→ *Specializes in metrics, models, & cost engineering*
→ *Cloud Computing, SOA, Web Services, FOSS, etc.*
→ *Professor at 7 Washington, DC-area universities*

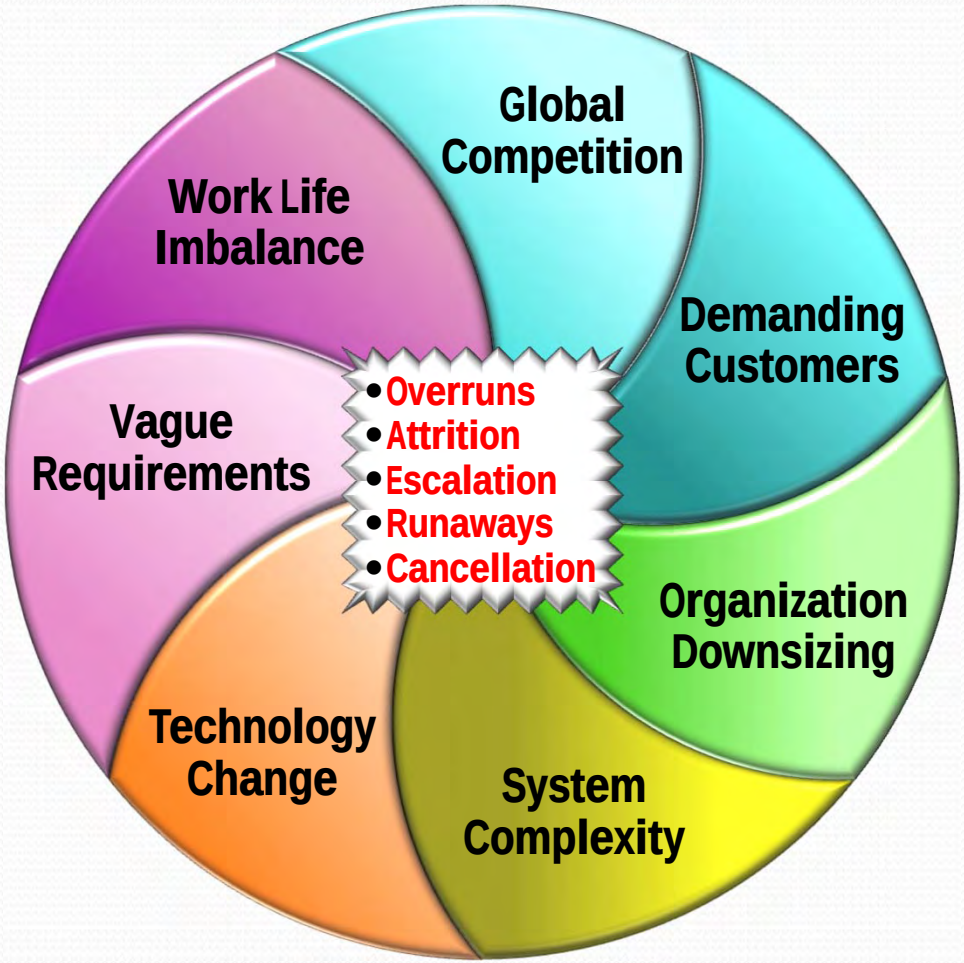
Project Management — von Moltke

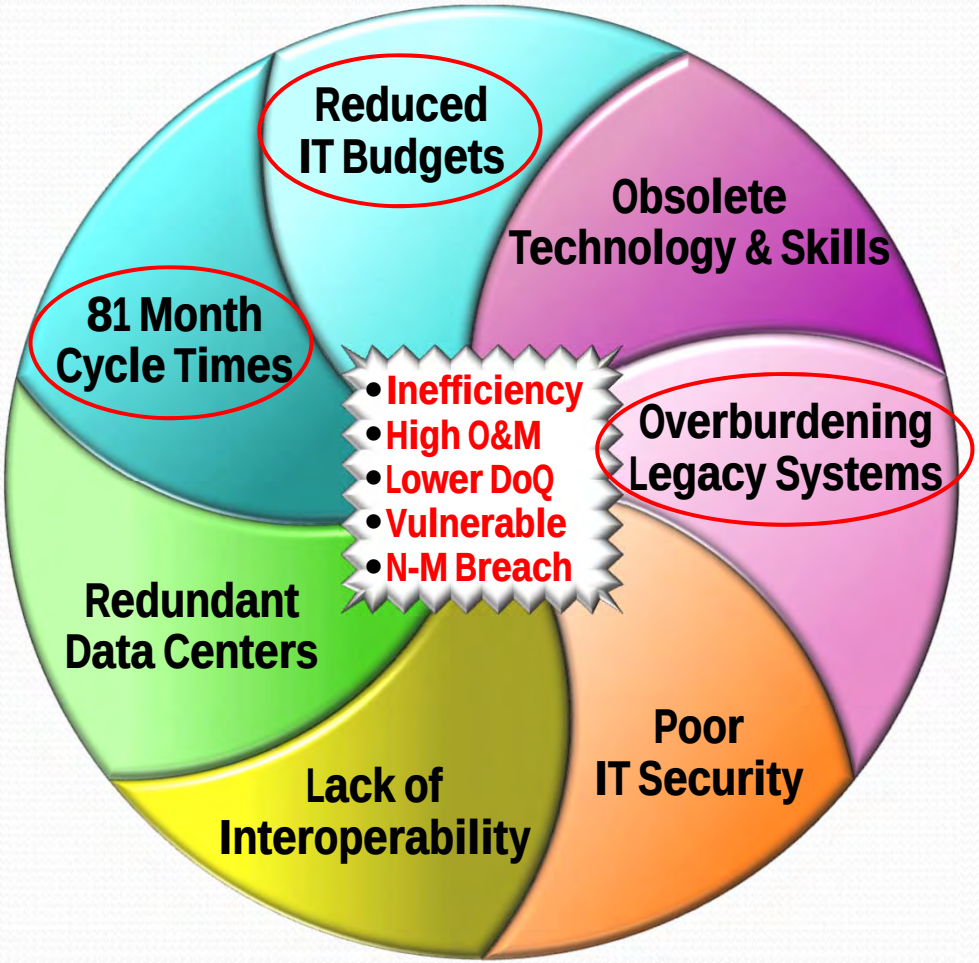
No battle plan ever survives first contact with the enemy

(*Because Humans Cannot See Beyond the First Battle*)

— Helmuth von Moltke the Elder (~1871)

Today's Whirlwind Environment

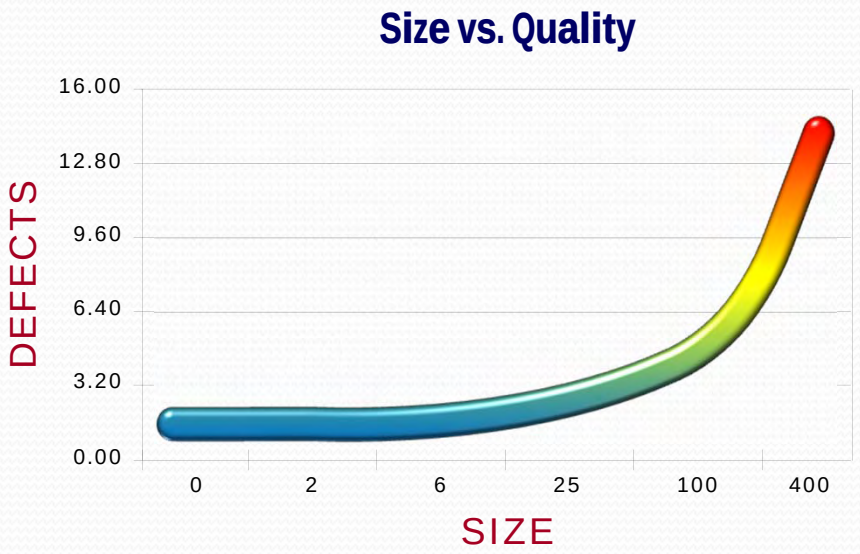


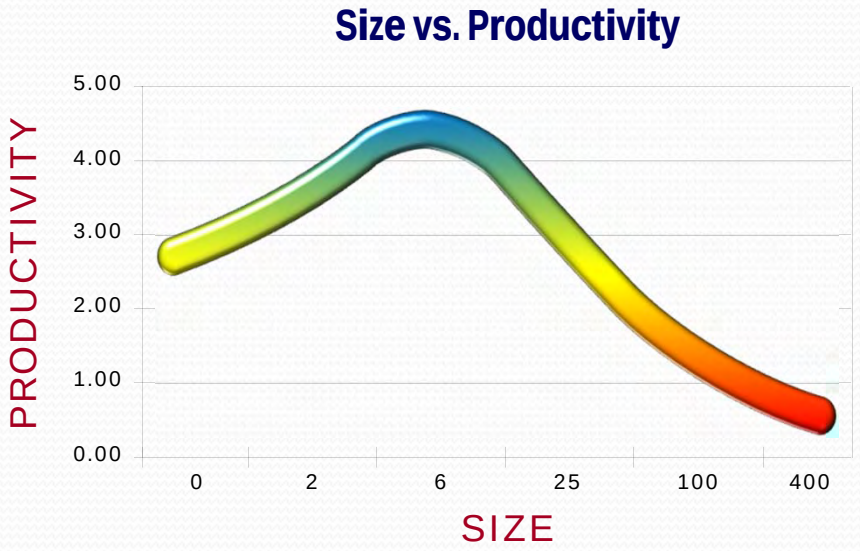


Pine, B. J. (1993). *Mass customization*: *The new frontier in business competition*. Boston, MA: Harvard Business School Press.

Pontius, R. W. (2012). Acquisition of IT: Improving efficiency and effectiveness in IT acquisition in the DoD. *Second Annual AFEI/NDIA Conference on Agile in DoD, Springfield, VA, USA.*

Large TRADITIONAL Projects

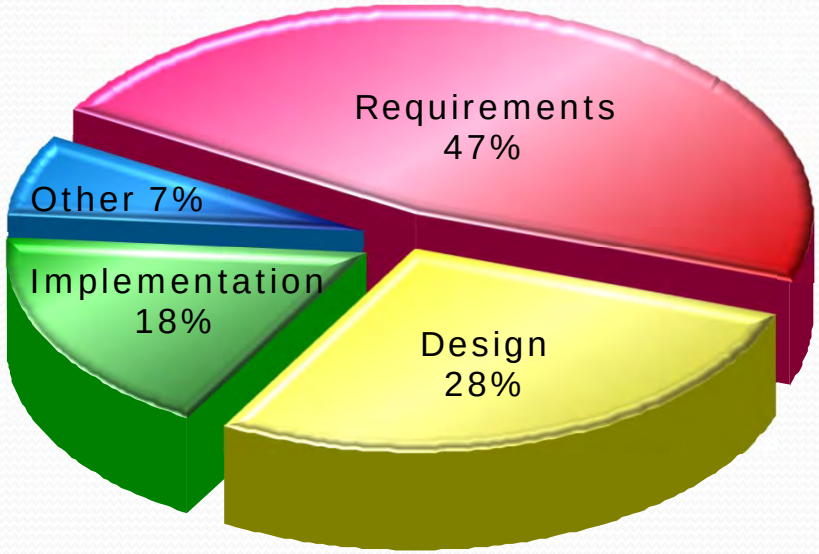




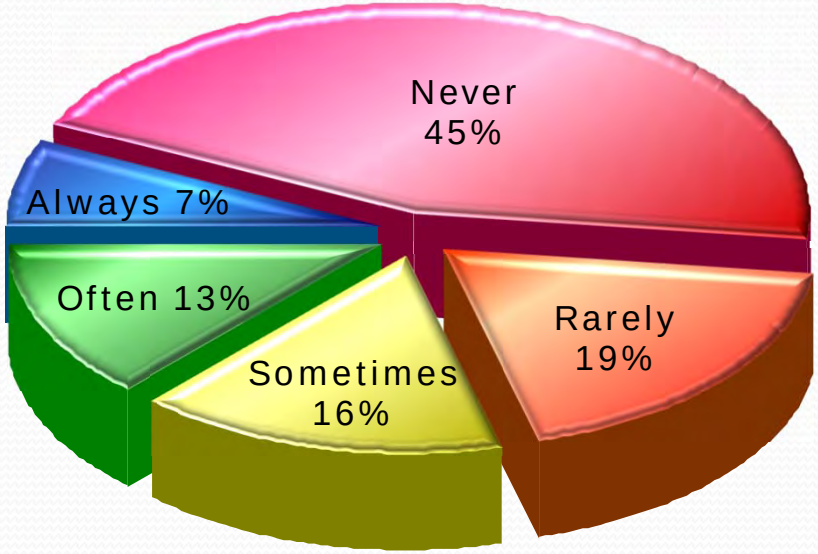
Jones, C. (1991). *Applied software measurement*: *Assuring productivity and quality*. New York, NY: McGraw-Hill.

Large TRADITIONAL Projects—Cont'd

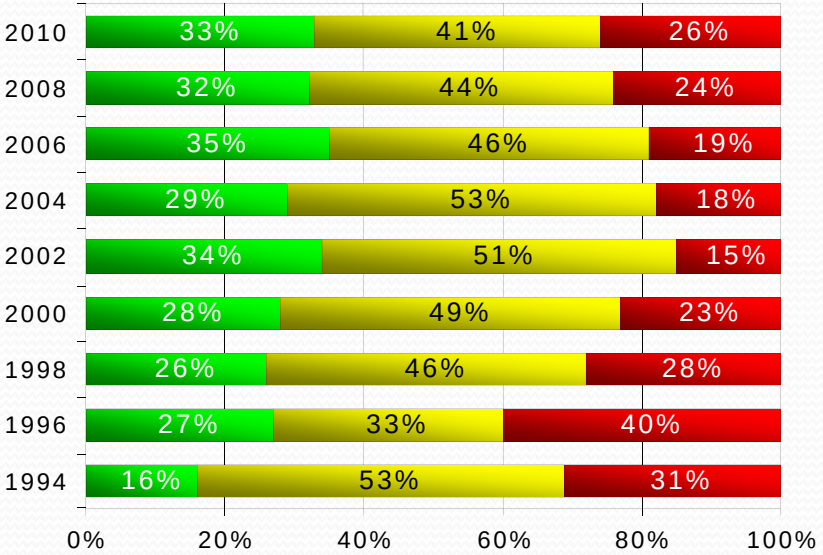
DEFECTS



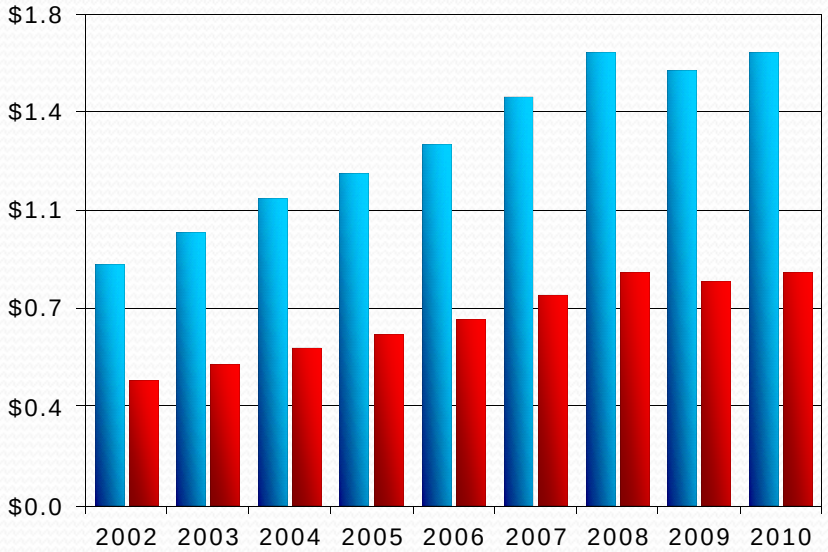
WASTE



IT PROJECT FAILURES



GLOBAL IT PROJECT FAILURES



What is AGILE PROJECT MGT.?

- A-P-M (ā-pē-ĕm): Light, flexible, collaborative, and adaptive; Market-centric project management model:
  - *Sound, yet* flexible process *to manage projects using* lean thinking, product development flow, & agile methods
  - *Adaptable framework for* customer collaboration, team-work, iterative development & responding to change
  - *Use of* evolutionary, incremental, *and* iterative *delivery methods to converge on an optimal customer solution*
  - Lightweight, *yet* disciplined *project management model for building high-quality* technology-intensive *systems*
  - *Maximizing* **BUSINESS VALUE** *with right sized, just-enough, and just-in-time products and service projects*

Augustine, S. (2005). *Managing agile projects*. Upper Saddle River, NJ: Pearson Education.
Chin, G. (2004). *Agile project management: How to succeed in the face of changing project requirements*. Broadway, NY: Amacom.
DeCarlo, D. (2004). *Extreme project management: Using leadership, principles, and tools to deliver value in the face of volatility*. San Francisco, CA: Jossey-Bass.
Highsmith, J. A. (2010). *Agile project management: Creating innovative products*. Boston, MA: Pearson Education.

Values of Agile Project Mgt.

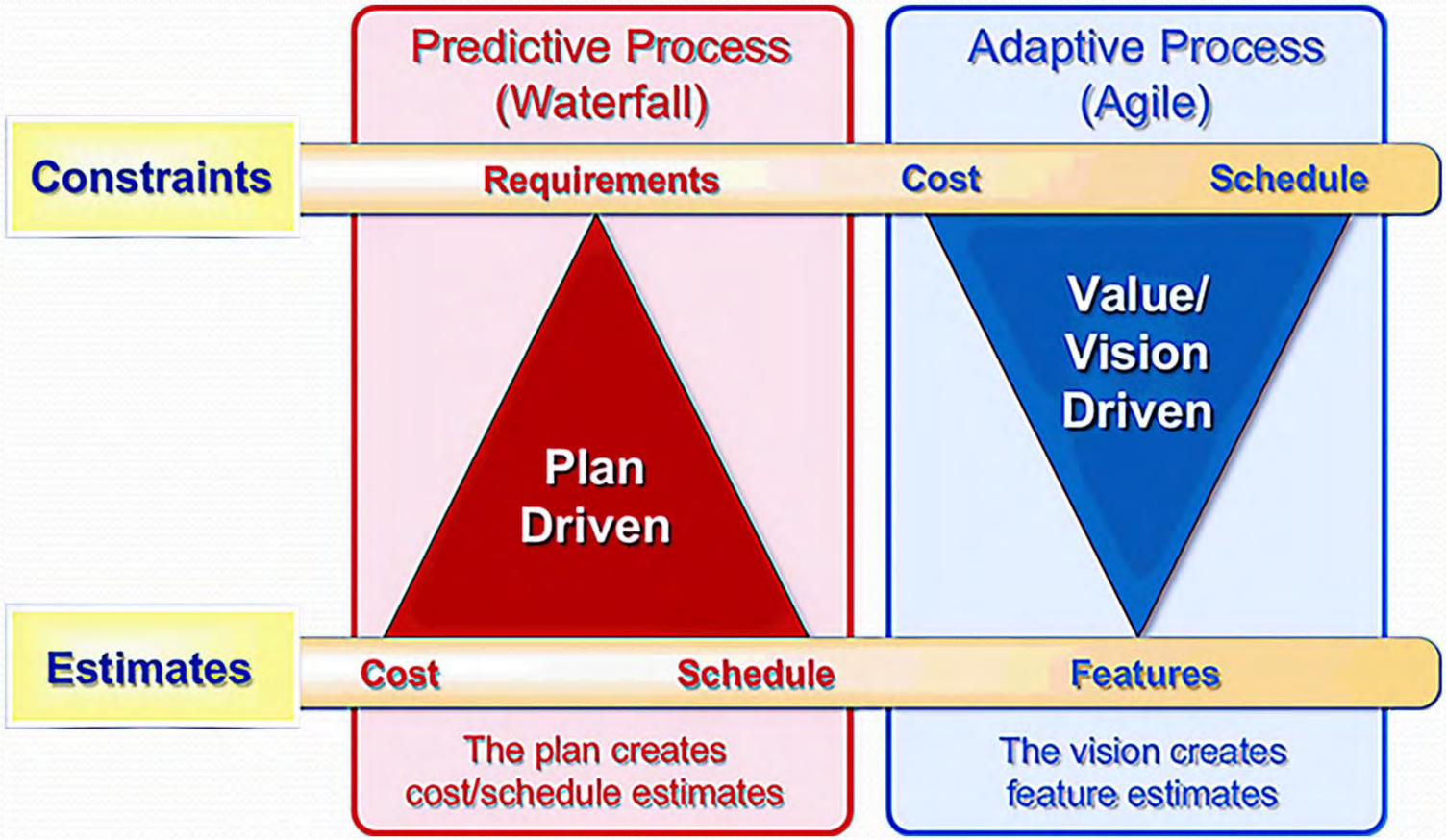
- Declaration of Interdependence formed in 2005
- Carved out a niche for agile project managers
- Focus on Agile Methods, ROI, and culture

- ***We increase ROI by making continuous flow of value our focus.***
- ***We deliver reliable results by engaging customers in frequent interactions and shared ownership.***
- ***We expect uncertainty and manage for it through iterations, anticipation, and adaptation.***
- ***We unleash creativity and innovation by recognizing that individuals are the ultimate source of value.***
- ***We create an environment where people can make a difference.***
- ***We boost performance through group accountability for results and shared responsibility for team effectiveness.***
- ***We improve effectiveness and reliability through situationally specific strategies, processes and practices.***

DOI. (2005). *Declaration of interdependence*. Retrieved April 8, 2014, from http://www.pmdoi.org

Goals of Agile Project Mgt.

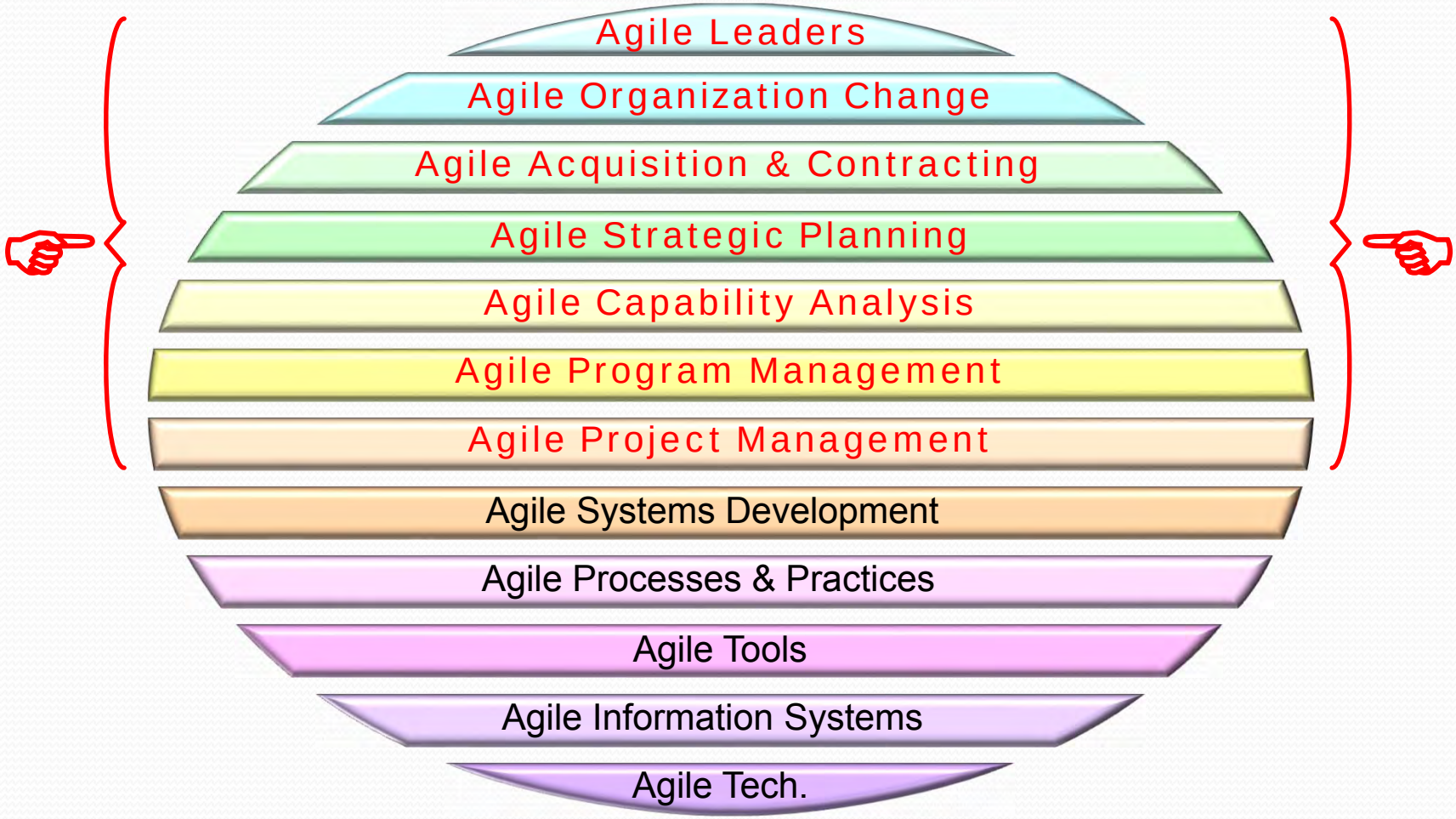
- Traditional project management is scope-based
- Agile project management is primarily time-based
- ☞ Early, iterative, & release of valuable features is #1



Sylvester, T. (2013). *Waterfall, agile, and the triple constraint*. Retrieved December 16, 2017, from http://tom-sylvester.com/lean-agile/waterfall-agile-the-triple-constraint

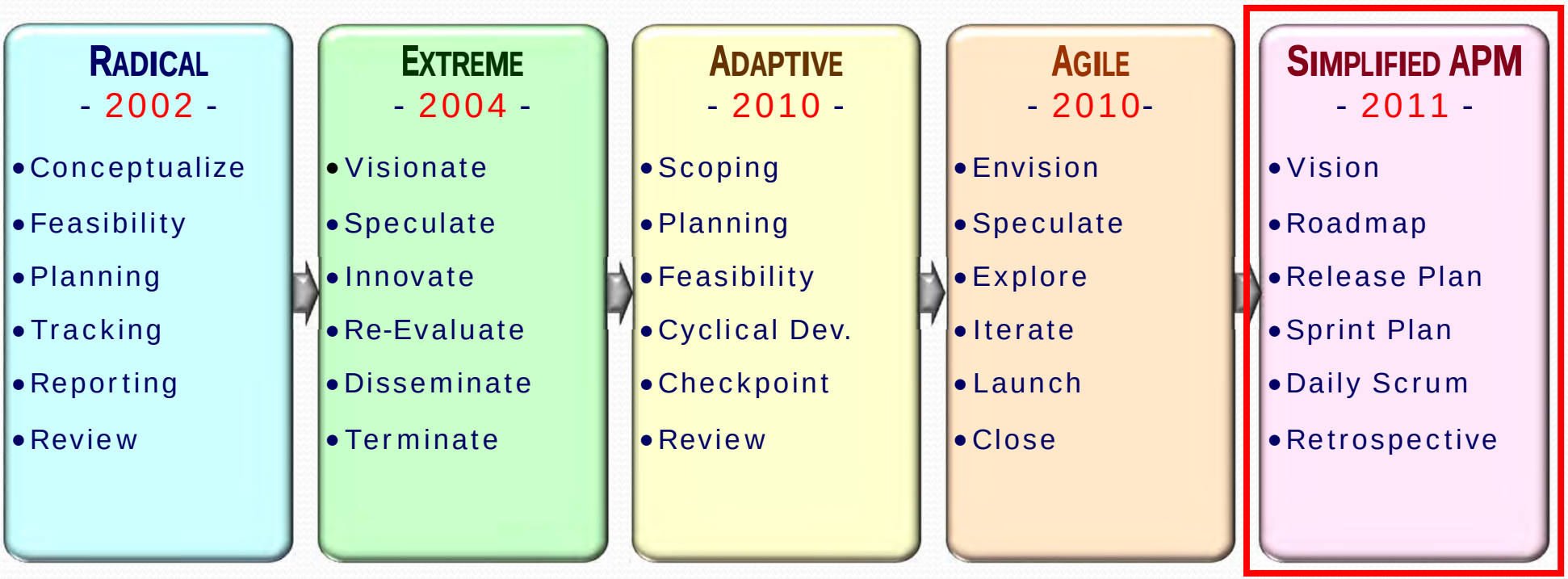
Place of Agile Project Mgt.

- "Agility" has many dimensions other than IT
- It ranges from leadership to technological agility
- The focus of this brief is program management agility



Models of Agile Project Mgt.

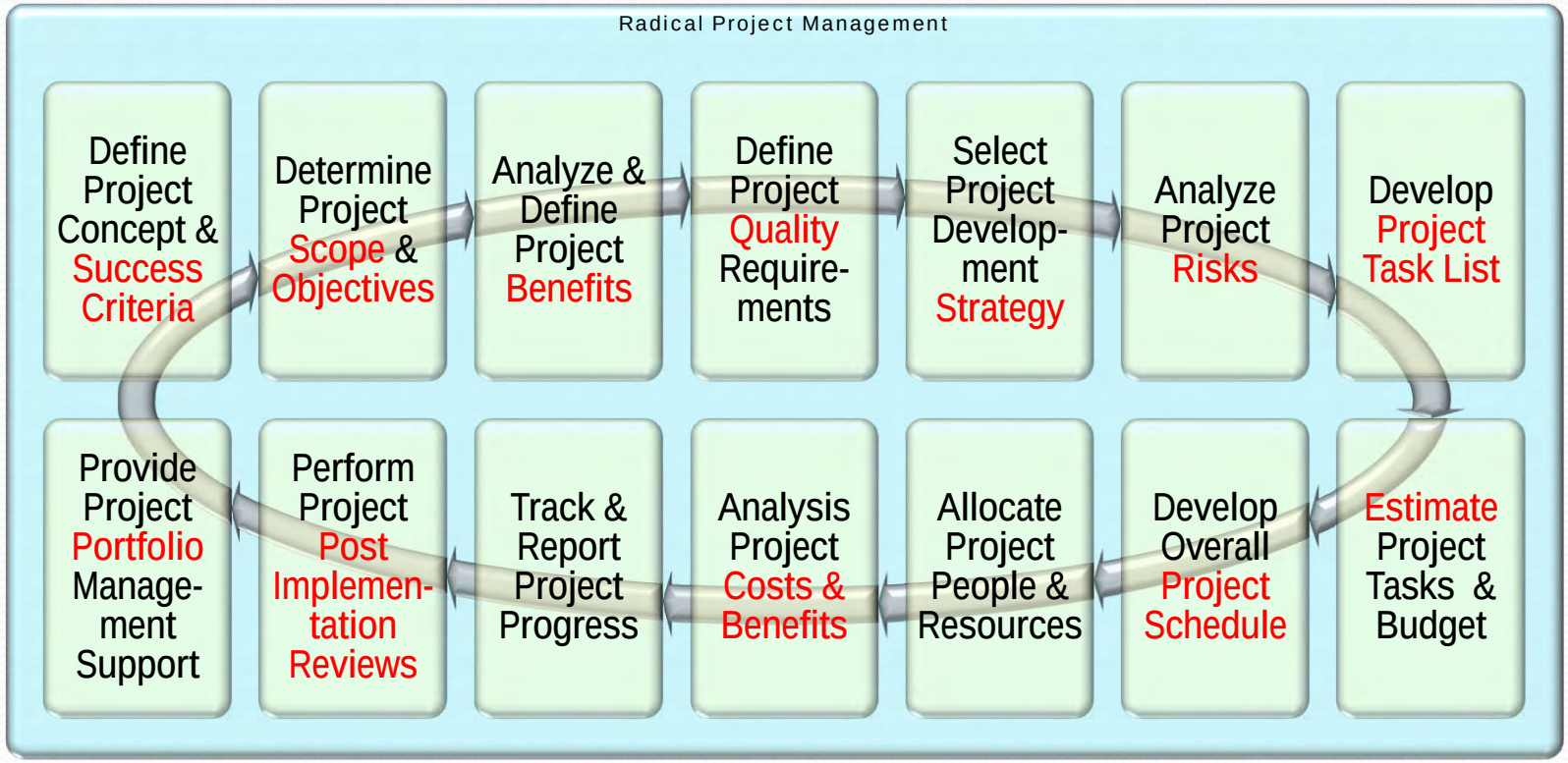
- Dozens of Agile project management models emerged
- Many stem from principles of Extreme Programming
- Vision, releases, & iterative development common



Thomsett, R. (2002). *Radical project management*. Upper Saddle River, NJ: Prentice-Hall.
DeCarlo, D. (2004). *Extreme project management*: *Using leadership, principles, and tools to deliver value in the face of volatility*. San Francisco, CA: Jossey-Bass.
Wysocki, R.F. (2010). *Adaptive project framework*: *Managing complexity in the face of uncertainty*. Boston, MA: Pearson Education.
Highsmith, J. A. (2010). *Agile project management*: *Creating innovative products*. Boston, MA: Pearson Education.
Layton, M. C., & Maurer, R. (2011). *Agile project management for dummies*. Hoboken, NJ: Wiley Publishing.

APM Model—RADICAL

- Created by Rob Thomsett at Cutter in 2002
- Focus is on scoping, economics, and planning
- Cost/benefit-driven project management approach



Thomsett, R. (2002). *Radical project management*. Upper Saddle River, NJ: Prentice-Hall.

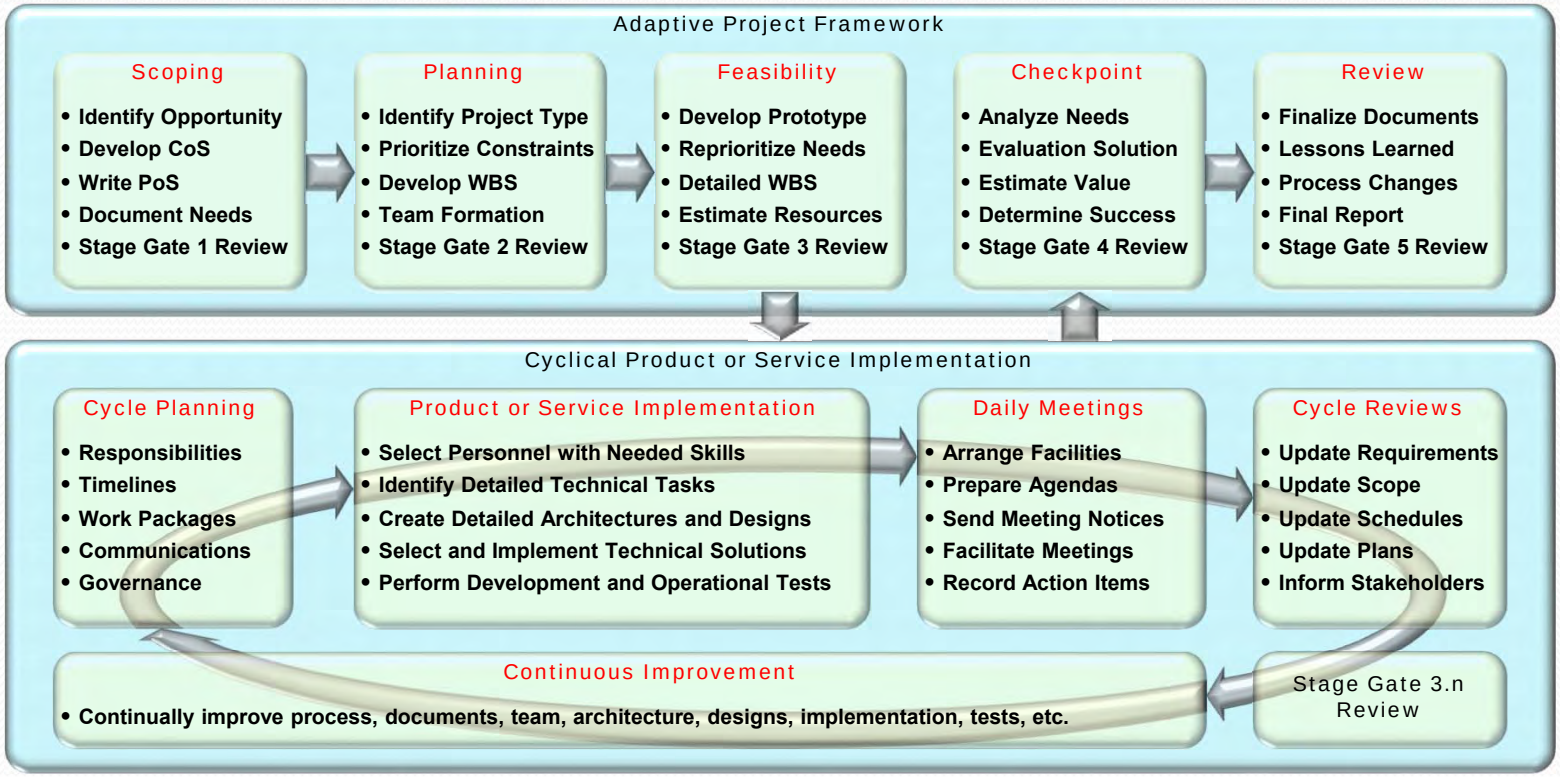
APM Model—Extreme

- Created by Doug DeCarlo at Cutter in 2004
- Focus is on collaboration, scoping, and speed
- Thinner traditional project management approach

DeCarlo, D. (2004). *Extreme project management*: *Using leadership, principles, and tools to deliver value in the face of volatility*. San Francisco, CA: Jossey-Bass.

APM Model—Adaptive

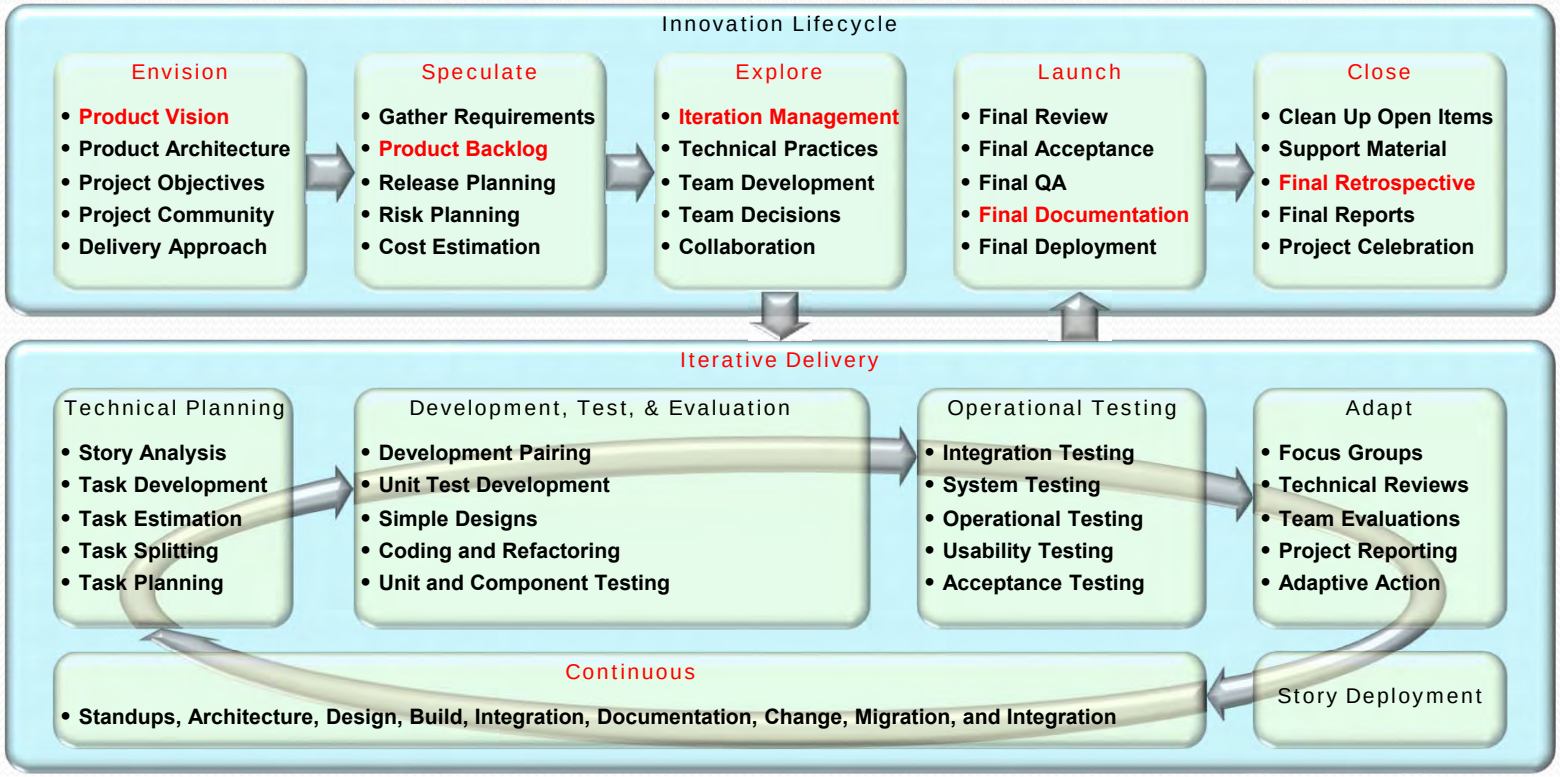
- Created by Bob Wysocki for consulting in 2010
- Designed to be a generic model for non-IT projects
- Lightweight traditional project management approach



Wysocki, R.F. (2010). *Adaptive project framework*: *Managing complexity in the face of uncertainty*. Boston, MA: Pearson Education.

APM Model—Agile

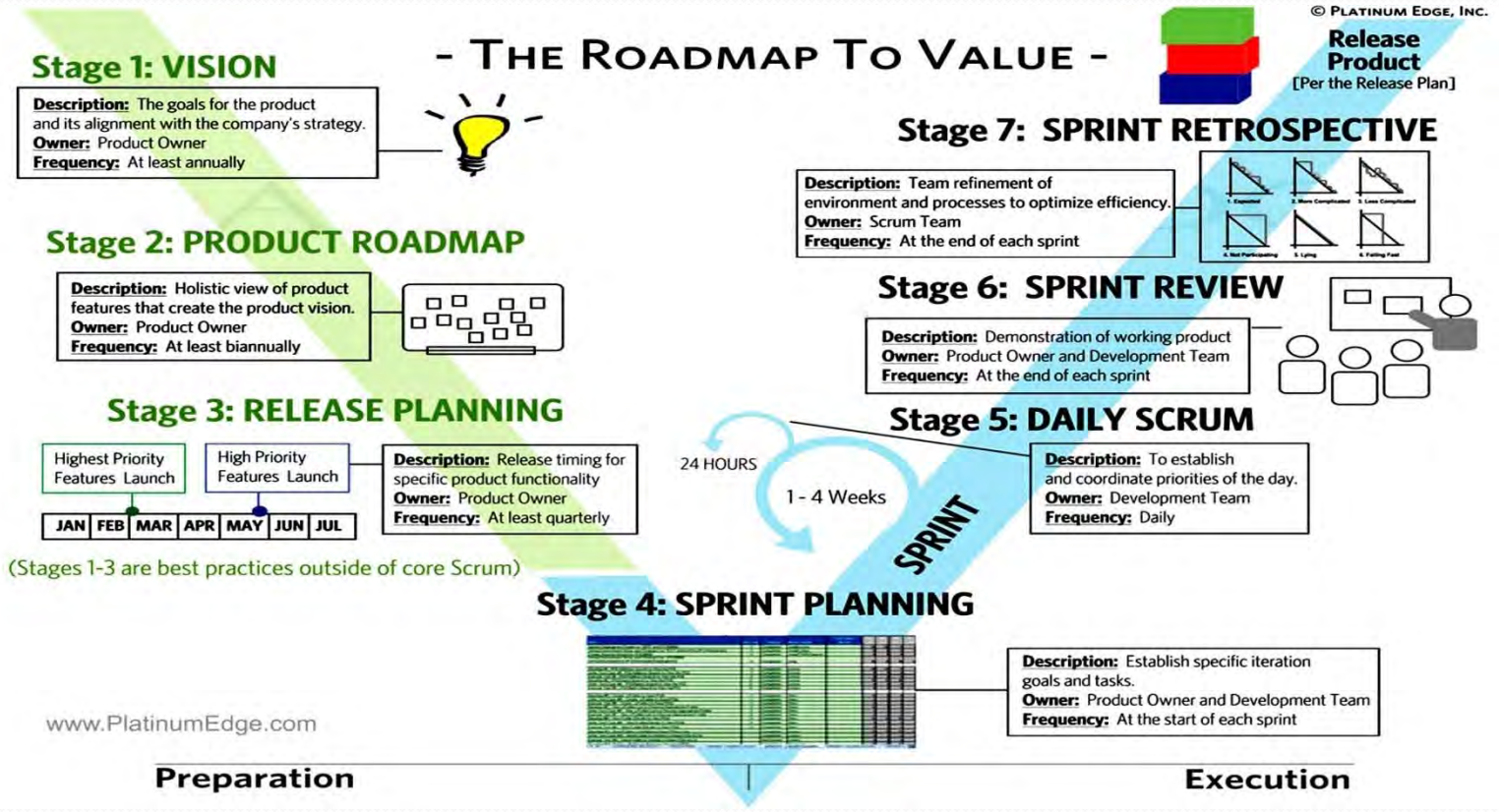
- Created by Jim Highsmith of Cutter in 2010
- Front-end visions and architectures and final QA
- Light project model wrapped around agile practices



Highsmith, J. A. (2010). *Agile project management*: *Creating innovative products*. Boston, MA: Pearson Education.

APM Model—Simplified

- Created by Mark Layton at PlatinumEdge in 2011
- Mix of new product development, XP, and Scrum
- Simple codification of common XP-Scrum hybrid



Layton, M. C., & Maurer, R. (2011). *Agile project management for dummies*. Hoboken, NJ: Wiley Publishing.

Simplified APM—Vision

- Description. Product goals aligned with strategy
- Owner. Product Owner
- Frequency. At least annually [1-2 hours]

Process Steps

1. Develop product objective.
2. Create draft vision statement.
3. Validate and revise vision statement.
4. Finalize vision statement.

Vision

- **For**. <*target customer*>
- **Who**. <*needs it*>
- **The**. <*product name*>
- **Is a**. <*product category*>
- **That**. <*product benefit, reason to buy*>
- **Unlike**. <*competitors*>
- **Our product**. <*differentiator, value added*>

Example

- **For**. *Bank customers*
- **Who**. *Want mobile banking*
- **The**. *Mobile banking application*
- **Is a**. *Mobile device enable banking app*
- **That**. *Provides secure, 24x7 mobile banking*
- **Unlike**. *Brick-and-mortar access points*
- **Our product**. *Enable 24-hour a day services*

Product owner identifies product vision. ***Vision is project's destination. It defines what product is, how it supports organization strategy, who will use it, and why people will use it.***

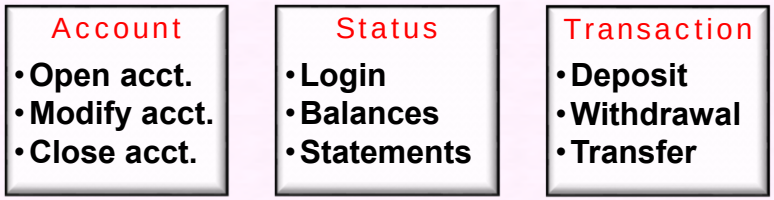
Simplified APM—Roadmap

- Description. Holistic view of product features
- Owner. Product Owner
- Frequency. At least biannually [2-4 hours]

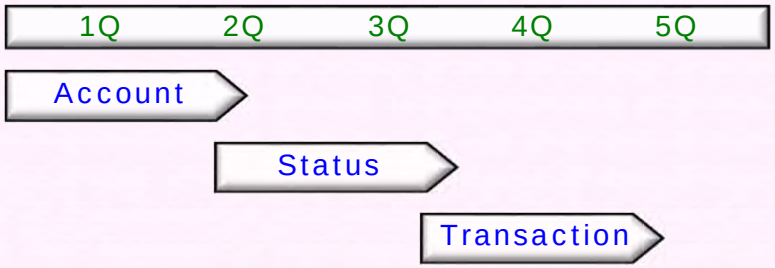
Process Steps

1. Identify product features.
2. Arrange product features.
3. Estimate and order product features.
4. Determine high-level time frames.

Features



Roadmap



Product owner creates product roadmap. ***Roadmap is high-level view of product requirements with loose timeframe for development. Identify, estimate, valuate, prioritize, and schedule themes.***

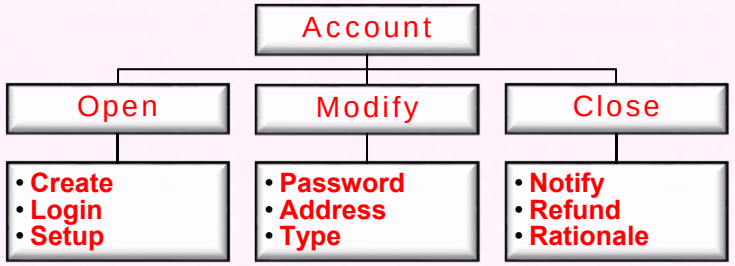
Simplified APM—Release Plan

- Description. Release timing for product functions
- Owner. Product Owner
- Frequency. At least quarterly [4-8 hours]

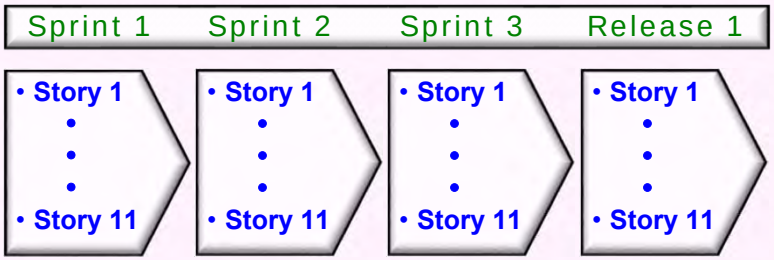
Process Steps

1. Decompose product features.
2. Create release plan.
   - **Establish release goal.**
   - **Prioritize or order user stories.**
   - **Set release date.**
   - **Refine user stories.**
   - **Verify release plan.**

Decomposition



Release Plan



Product owner creates release plan. ***Release plan identifies high-level timetable for releasing functions. Mid-term goals that team mobilizes around. There are many releases in priority order.***

Simplified APM—Sprint Plan

- Description. Specific iteration goals and tasks
- Owner. Product Owner and Development Team
- Frequency. At the start of each sprint [2-4 hours]

Process Steps

1. Establish goals and choose user stories.
2. Decompose stories into tasks and create sprint backlog.

Goals & User Stories

As a mobile banking customer, I want to create an account so I can write personal checks

- **Create account.**
- **Login to account.**
- **Setup checking account.**

Sprint Backlog

Task	Pri	Status	Who	App.	M	T	W	T	F
• Create account:									
– Setup	1	Done	Sue	Joe	4	4	0	0	0
– Install	2	Done	Sue	Joe	4	4	0	0	0
– Schema	3	Done	John	Joe	0	0	8	0	0
– Queries	4	In-work	Bob	-	0	0	0	8	0
– Forms	5	N/S	Patty	-	0	0	0	0	0
– Test	6	N/S	Sam	-	0	0	0	0	0

Product owner, Scrum Master, and Developers create sprint plan. ***Sprint planning done at start of sprint***. ***Product backlog must be ready***. ***Developers select sprint goal and what can be done***.

Simplified APM—Standup

- Description. Establish & coordinate daily priorities
- Owner. Development Team
- Frequency. Daily [15-minutes]

Process Steps

1. Hold daily standup meeting.
2. Update sprint burndown chart.
3. Perform design, development, test, and evaluation.

Daily Standup

All Developers on Team Answer Three Questions in Round-Robin Style

- What has been done since the last meeting?
- What will be done before the next meeting?
- What obstacles are in my way?

Sprint Burndown

Developers hold daily standup meetings. ***Purpose is to coordinate daily priorities***. ***Identify what was done, what will be done, and impediments***. ***Task boards and Sprint burndown are updated***.

Simplified APM—Demo

- Description. Demonstration of working product
- Owner. Product Owner and Development Team
- Frequency. At the end of each sprint [2-4 hours]

Process Steps

1. Prepare sprint review meeting.
2. Hold sprint review meeting.
3. Collect feedback from stakeholders.

Product Demonstration

Developers Perform a Live Demo on Target Hardware and Answer Stakeholder Questions

- What was the goal of the sprint?
- What user stories were attempted?
- What user stories were implemented?

Stakeholder Feedback

Poll Stakeholders One-by-One in Round-Robin Style to Solicit their Feedback

- Is the product acceptable as implemented?
- Is the product acceptable with modifications?
- Is the product unacceptable as implemented?

Developers hold a sprint review. ***Sprint review performed at end of sprint***. ***Developers demo validated code to stakeholders***. ***Stakeholders vote on demo outcome. Product backlog reprioritized***.

Simplified APM—Retrospective

- Description. Refine environment and processes
- Owner. Development Team
- Frequency. At the end of each sprint [1-2 hours]

Process Steps

1. Plan sprint retrospective meeting.
2. Hold sprint retrospective meeting.
3. Inspect and adapt.

Sprint Retrospective

Poll Developers on Team to Answer Three Questions to Reach Group Consensus

- **What went well in the last sprint?**
- **What could be improved in the next sprint?**
- **What people, process, and tools should change?**

Process Improvements

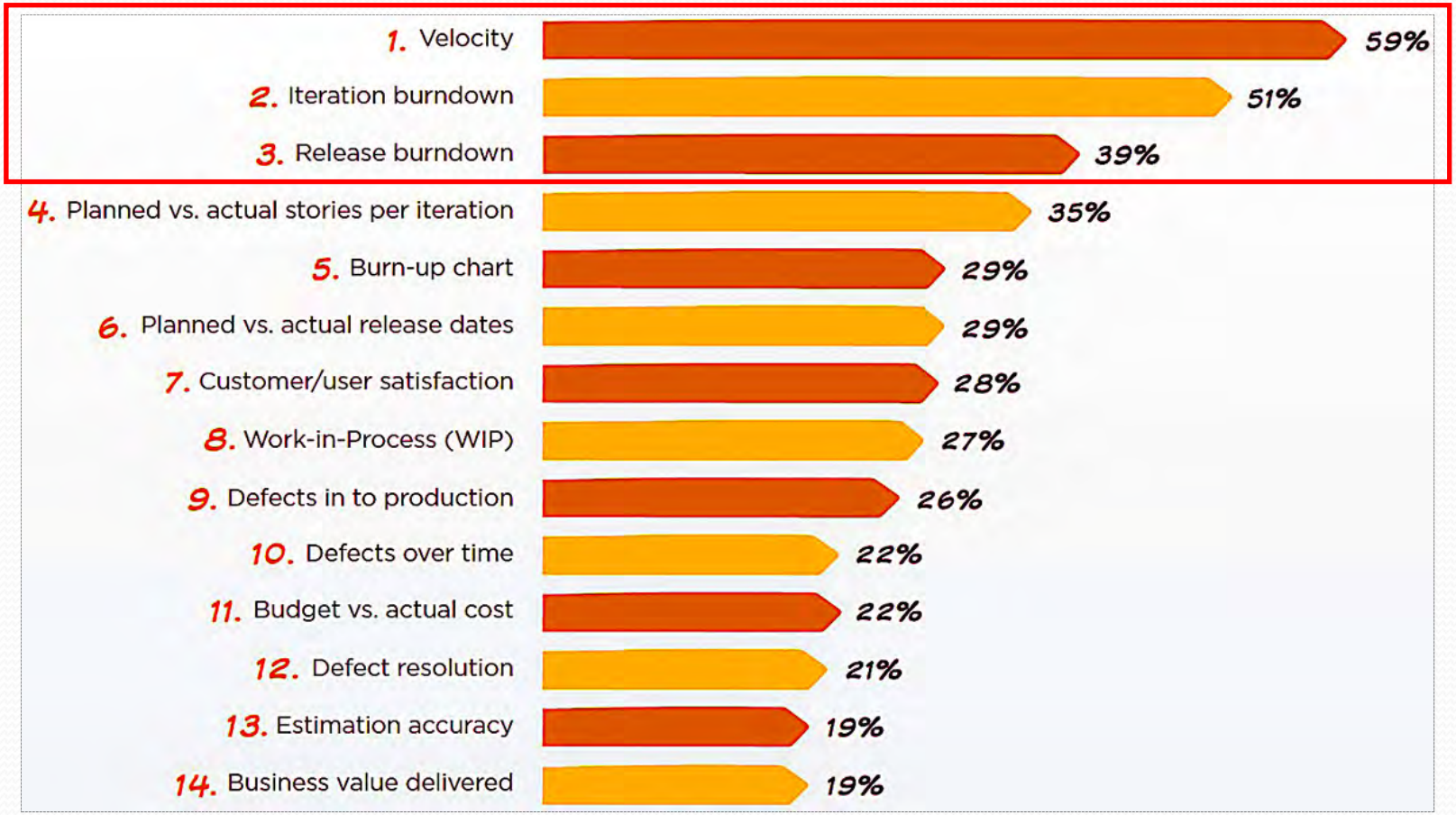
Scrum Master Records Action Items and Prepares Process Improvement Plan

- **Scrum master records suggested improvements.**
- **Developers prioritize suggested improvements.**
- **Add high-priority non-functional items to backlog.**

Developers hold sprint retrospective. ***Retrospective held at end of sprint***. ***Developers identify the good and bad***. ***Scrum master records results***. ***Processes, tools, and backlog may be adjusted***.

Metrics for Agile Project Mgt. I

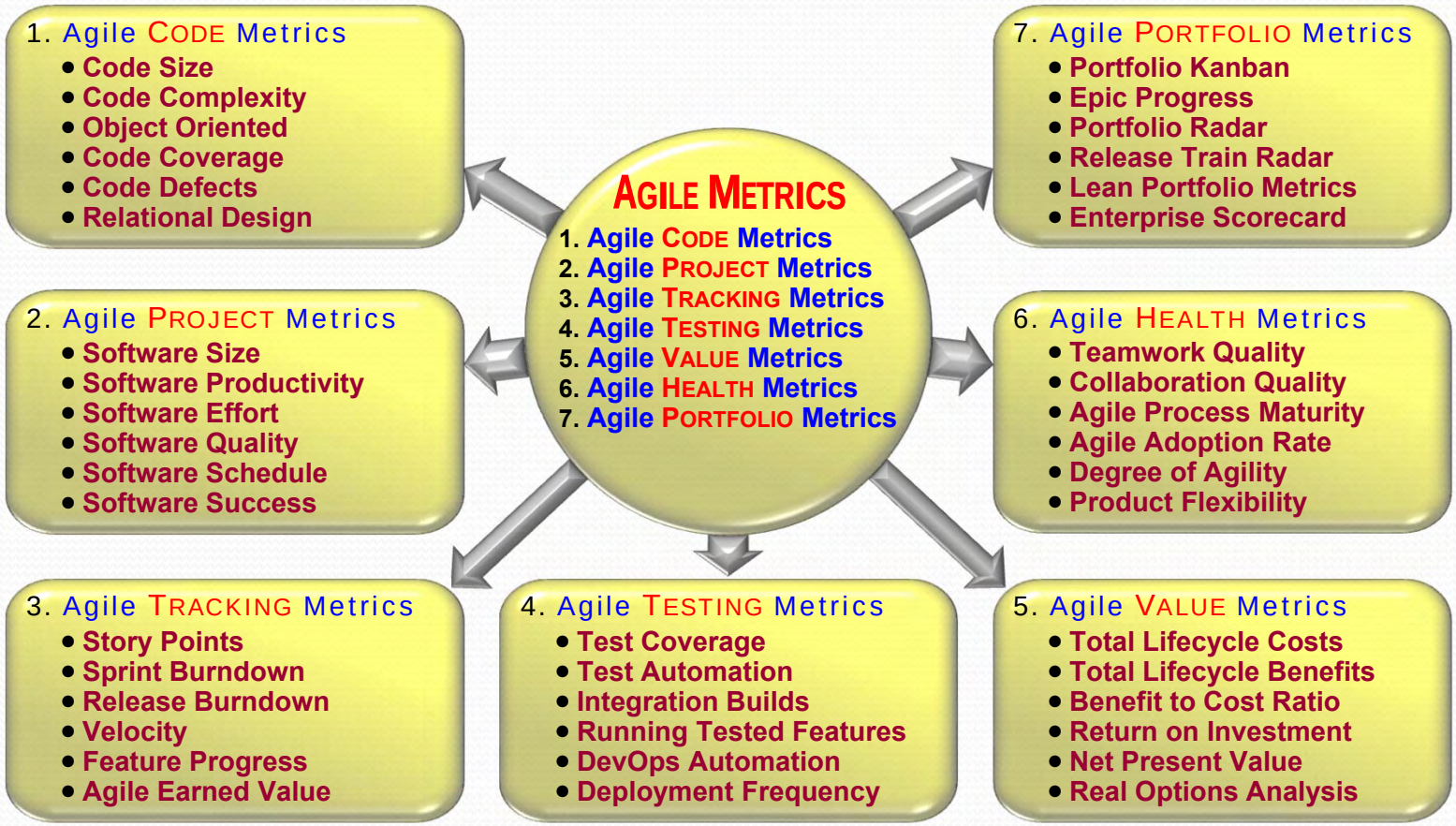
- Lean & agile metrics for agile project mgt. emerging
- Metrics often meet with fierce resistance to change
- Velocity, burndown, defects, & agile EVM popular



Holler, R. (2015). *Ninth annual state of agile survey*: *State of agile development*. Atlanta, GA: VersionOne.

Metrics for Agile Project Mgt. II

- Agile methods are based on traditional measures
- Story points, velocity, and burndown basic metrics
- Experts use Agile EVM, test, ROI & portfolio metrics



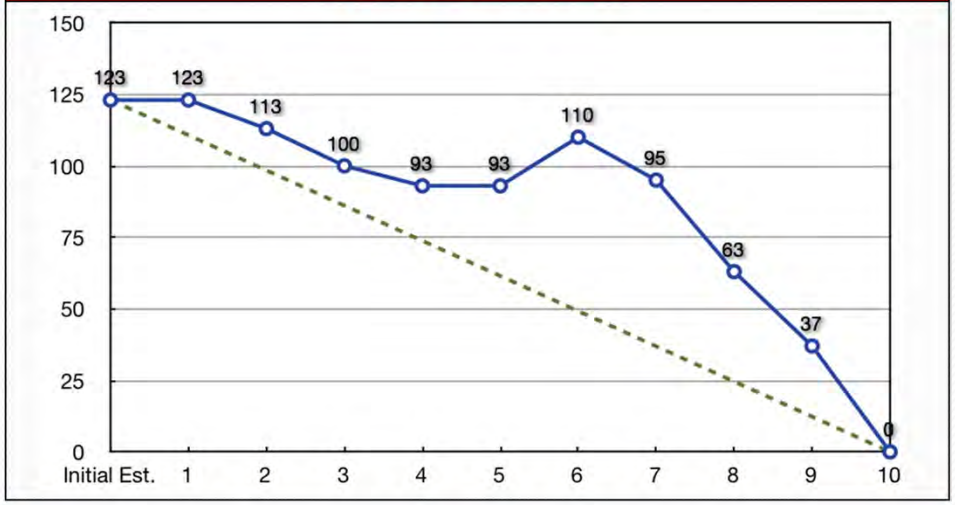
Rico, D. F., Sayani, H. H., & Sone, S. (2009). *The business value of agile software methods*. Ft. Lauderdale, FL: J. Ross Publishing.

Metrics for Agile Project Mgt. III

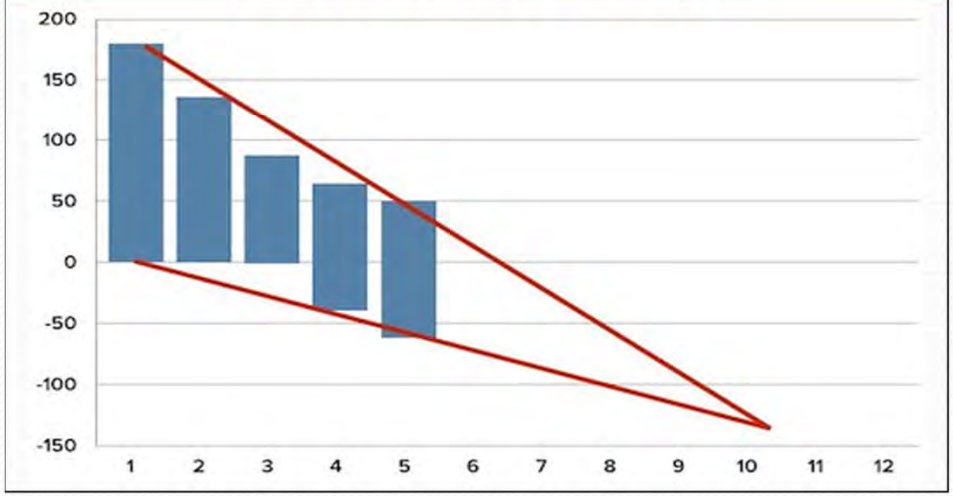
Story Points

Relative Size	Story Points	Staff Hours	Staff Days	Staff Month	Staff Years	2-Week Sprints	3-Sprint Releases
User Story	1	22	3	0.1	0.0	0.1	0.0
	2	44	6	0.3	0.0	0.1	0.0
	3	67	8	0.4	0.0	0.2	0.1
	5	111	14	0.6	0.1	0.3	0.1
Feature	8	178	22	1.0	0.1	0.4	0.1
	13	289	36	1.7	0.1	0.7	0.2
	21	467	58	2.7	0.2	1.2	0.4
	34	755	94	4.4	0.4	1.9	0.6
Epic	55	1,222	153	7.0	0.6	3.1	1.0
	89	1,977	247	11.4	1.0	4.9	1.6
	144	3,199	400	18.5	1.5	8.0	2.7
	233	5,177	647	29.9	2.5	12.9	4.3

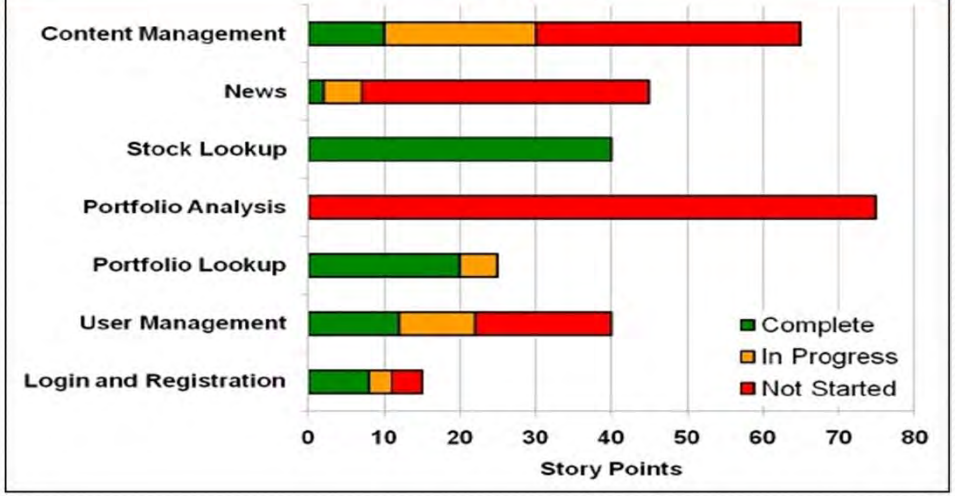
Sprint Burndown



Release Burndown (+Velocity)



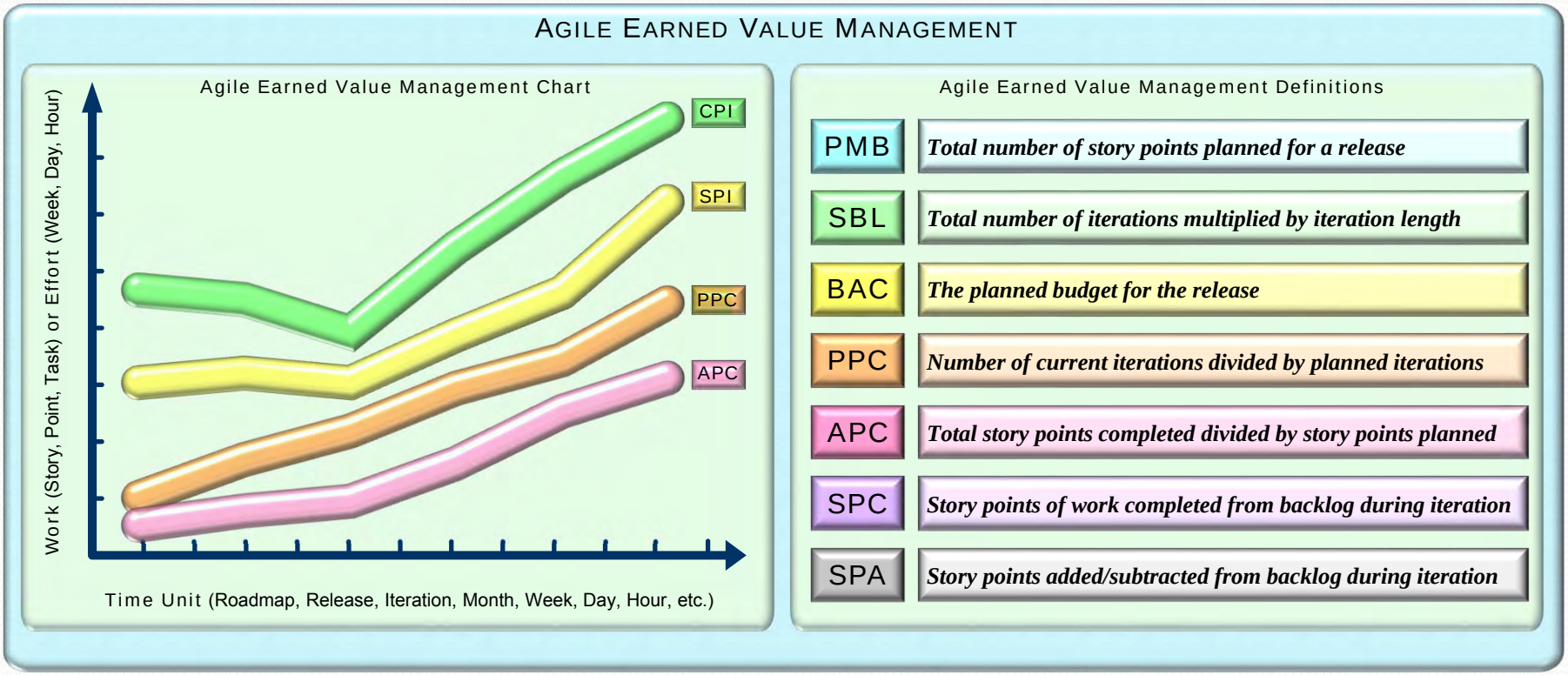
Feature Progress



Cohn, M. (2006). *Agile estimating and planning*. Upper Saddle River, NJ: Pearson Education.

Metrics for Agile Project Mgt. IV

- Adaptation of earned value mgt. for agile projects
- Value accrues with completed sprints and releases
- ☞ Better measure of value due to agile DoD, RTF, & CI

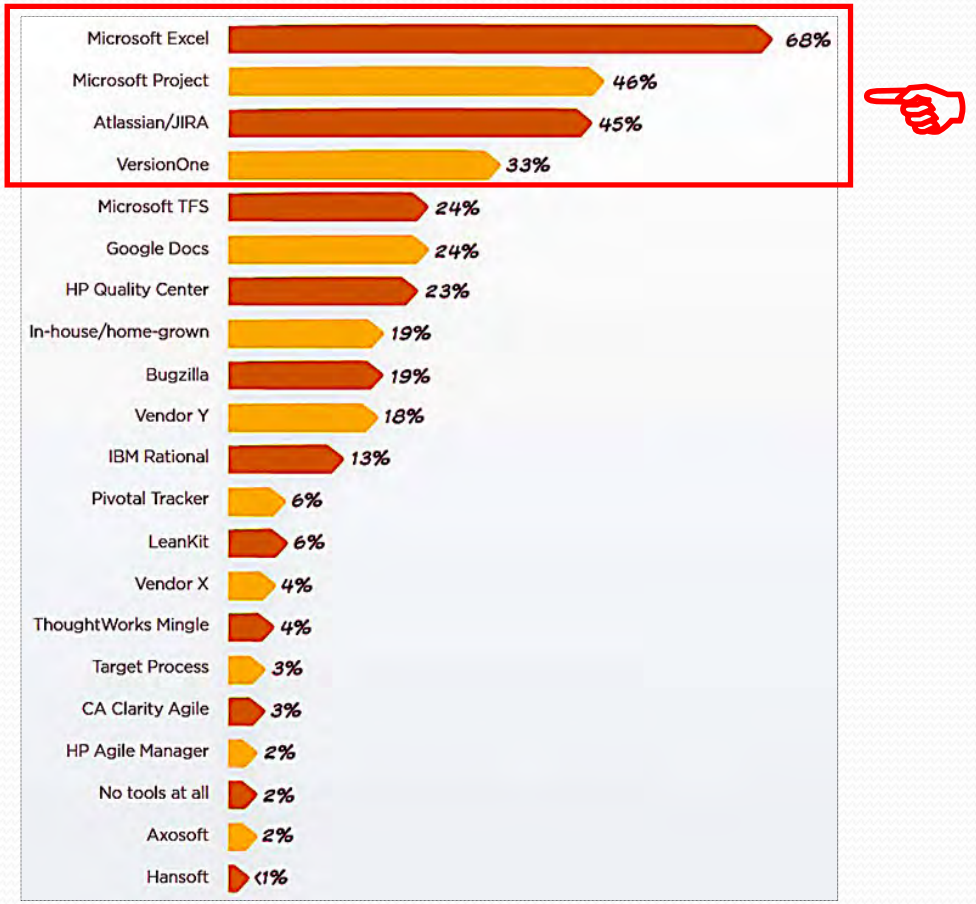


Sulaiman, T. (2010). *AgileEVM*: *Information for good decision making*. San Francisco, CA: CollabNet, Inc.
Sulaiman, T., & Smits, H. (2007). Measuring integrated progress on agile software development projects. *Methods & Tools, 5*(3), 2-9.
Sulaiman, T., Barton, B., & Blackburn, T. (2006). Agile EVM: Earned value management in scrum projects. *Agile 2006 Conference, Minneapolis, Minnesota, USA*, 7-16.
Rico, D. F. (2015). *Lean & agile earned value management*: *How to use EVM to manage projects, programs*, & portfolios, Retrieved from, http://davidfrico.com/rico15v.pdf

Tools for Agile Project Mgt.

- There are literally dozens, if not 100s of APM tools
- There are dozens of free open source software tools
- Excel, JIRA, MS Proj., & VersionOne most often used

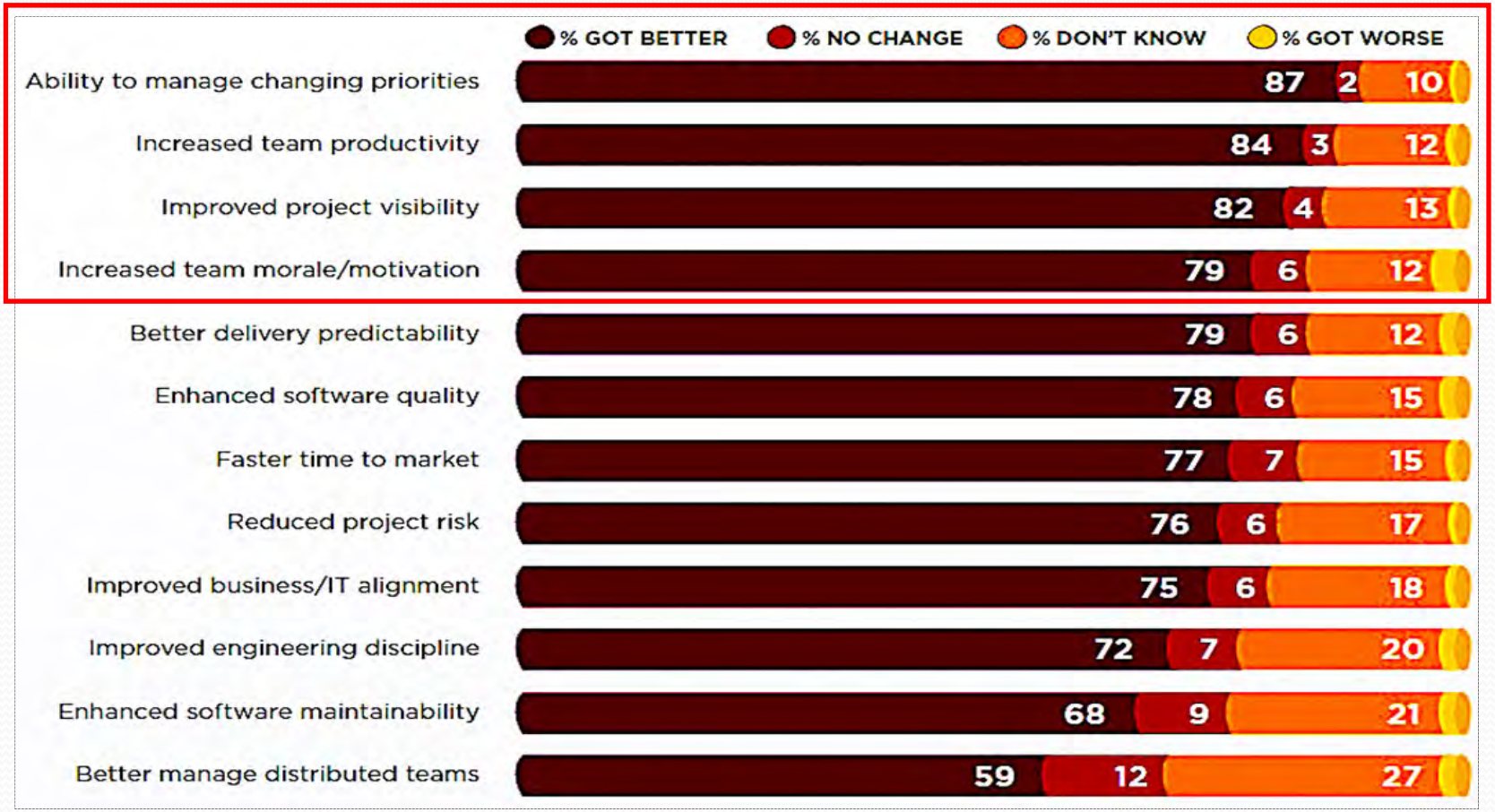
	CURRENT TOOL USAGE		FUTURE PLANS TO USE	
	2014	2013	2014	2013
Bug tracker	80%	83%	10%	5%
Taskboard	79%	81%	11%	6%
Spreadsheet	72%	68%	5%	3%
Wiki	68%	71%	12%	6%
Agile project management tool	65%	66%	20%	10%
Unit test tool	65%	65%	21%	12%
Automated build tool	65%	69%	20%	12%
Continuous integration tool	55%	57%	26%	14%
Kanban board	52%	43%	15%	9%
Traditional project management tool	51%	49%	7%	4%
Requirements management tool	50%	47%	22%	10%
Release/deployment automation tool	48%	47%	32%	14%
Index cards	41%	44%	10%	6%
Project & portfolio management (PPM) tool	37%	22%	24%	11%
Automated acceptance tool	35%	33%	39%	19%
Story mapping tool	34%	47%	29%	14%
Refactoring tool	29%	33%	26%	11%
Customer idea management tool	22%	21%	28%	11%



Holler, R. (2015). *Ninth annual state of agile survey*: *State of agile development*. Atlanta, GA: VersionOne.

Benefits of Agile Project Mgt. I

- Benefits of agile methods known for decades
- Improves productivity, speed, efficiency, & quality
- Biggest are team morale, customer satisfaction & ROI



Holler, R. (2015). *Ninth annual state of agile survey*: *State of agile development*. Atlanta, GA: VersionOne.

Benefits of Agile Project Mgt. II

- Costs based on avg. productivity and quality
- Productivity ranged from 4.7 to 5.9 LOC an hour
- Costs were $588,202 and benefits were $3,930,631

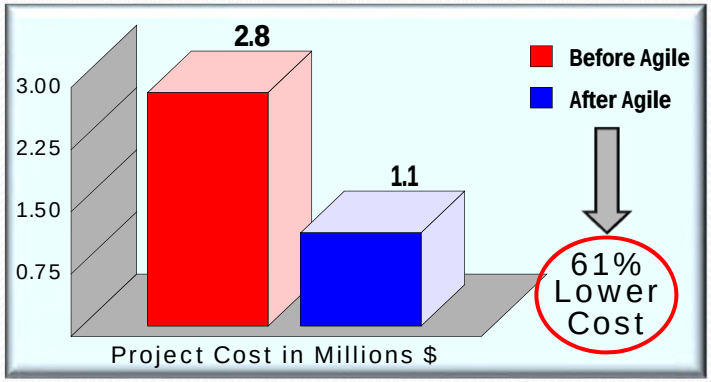
Metric	Formula	Trad. Testing	Agile Testing
Costs	$(10{,}000 \div \mathbf{5.4436} + \mathbf{3.945} \times 10 \times 100) \times 100$	$588,202	$233,152
Benefits	$(10{,}000 \times 10.51 - 6{,}666.67 \times 9) \times 100 -$ $588,202	$3,930,631	$4,275,681
B/CR	$3,930,631 ÷ $588,202	7:1	18:1
ROI	($3,930,631 − $588,202) ÷ $588,202 × 100%	567%	1,734%
NPV	$(\sum_{i=1}^{5} (\$3{,}930{,}631 \div 5) \div 1.05^5) - \$588{,}202$	$2,806,654	$3,469,140
BEP	$588,202 ÷ ($4,509,997 ÷ $588,202 − 1)	$88,220	$12,710
ROA	NORMSDIST(2.24) × $3,930,631 − NORMSDIST(0.85) × $588,202 × EXP(−5% × 5)	$3,504,292	$4,098,159

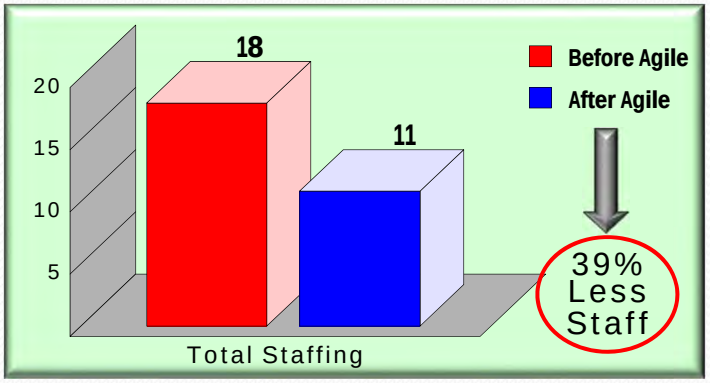
$d1 = [\ln(Benefits \div Costs) + (Rate + 0.5 \times Risk^2) \times Years] \div Risk \times \sqrt{Years}$, $d2 = d1 - Risk \times \sqrt{Years}$

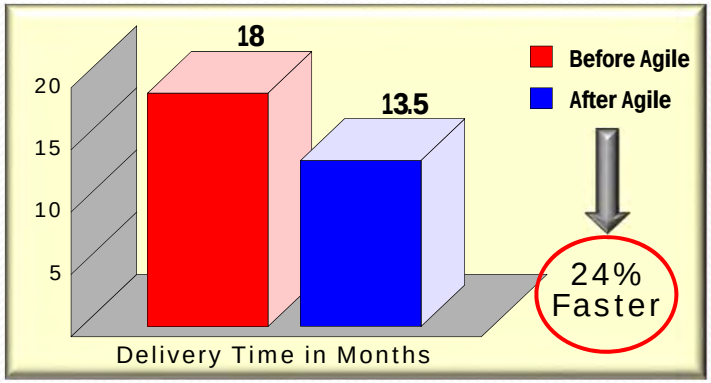
Rico, D. F., Sayani, H. H., & Sone, S. (2009). *The business value of agile software methods: Maximizing ROI with just-in-time processes and documentation*. Ft. Lauderdale, FL: J. Ross Publishing.

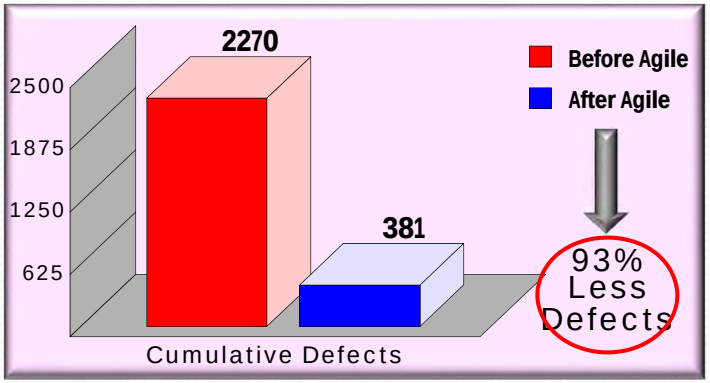
Benefits of Agile Project Mgt. III

- Analysis of 23 agile vs. 7,500 traditional projects
- Agile projects are 54% better than traditional ones
- Agile has lower costs (61%) and fewer defects (93%)





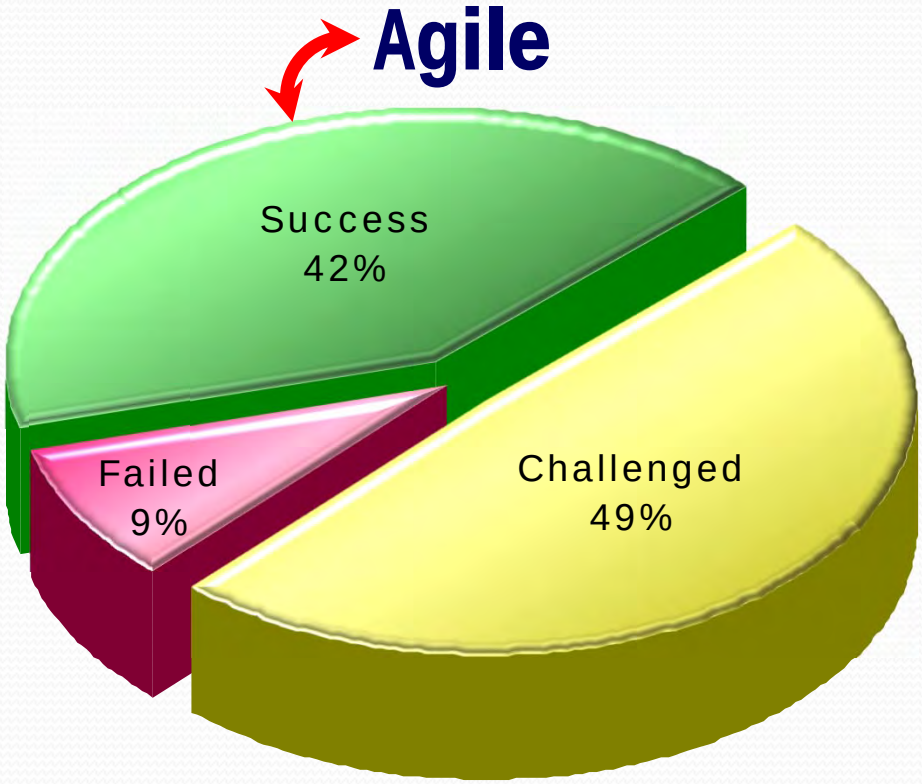


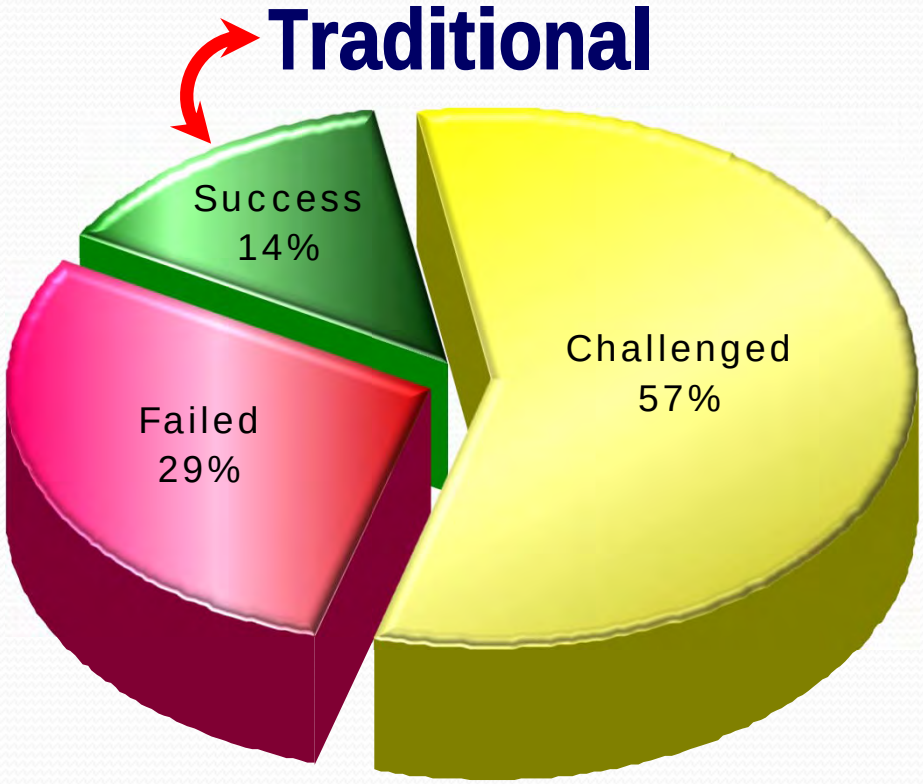


Mah, M. (2008). Measuring agile in the enterprise: *Proceedings of the Agile 2008 Conference, Toronto, Canada.*

Success of Agile Project Mgt.

- Traditional projects succeed at 50% industry avg.
- Traditional projects are challenged 20% more often
- Agile projects succeed 3x more and fail 3x less often





Standish Group. (2012). *Chaos manifesto*. Boston, MA: Author.

Cases of Agile Project Mgt.

- 94% of worldwide IT projects use agile methods
- Includes regulated industries, i.e., DoD, FDA, etc.
- Agile now used for safety critical systems, FBI, etc.

Industry	Org	Project	Purpose	Size	Metrics
Electronic Commerce	**Google**	**Adwords**	**Advertising**	• 20 teams • 140 people • 5 countries	• 1,838 User Stories • 6,250 Function Points • 500,000 Lines of Code
Shrink Wrapped	Primavera	**Primavera**	**Project Management**	• 15 teams • 90 people • Collocated	• 26,809 User Stories • 91,146 Function Points • 7,291,666 Lines of Code
Health Care	FDA	**m2000**	**Blood Analysis**	• 4 teams • 20 people • Collocated	• 1,659 User Stories • 5,640 Function Points • 451,235 Lines of Code
Law Enforcement	FBI	**Sentinel**	**Case File Workflow**	• 10 teams • 50 people • Collocated	• 3,947 User Stories • 13,419 Function Points • 1,073,529 Lines of Code
U.S. DoD	**Stratcom**	**SKIweb**	**Knowledge Management**	• 3 teams • 12 people • Collocated	• 390 User Stories • 1,324 Function Points • 105,958 Lines of Code

Rico, D. F. (2010). Lean and agile project management: For large programs and projects. *Proceedings of the First International Conference on Lean Enterprise Software and Systems, Helsinki, Finland*, 37-43.

Sweetspot of Agile Project Mgt.

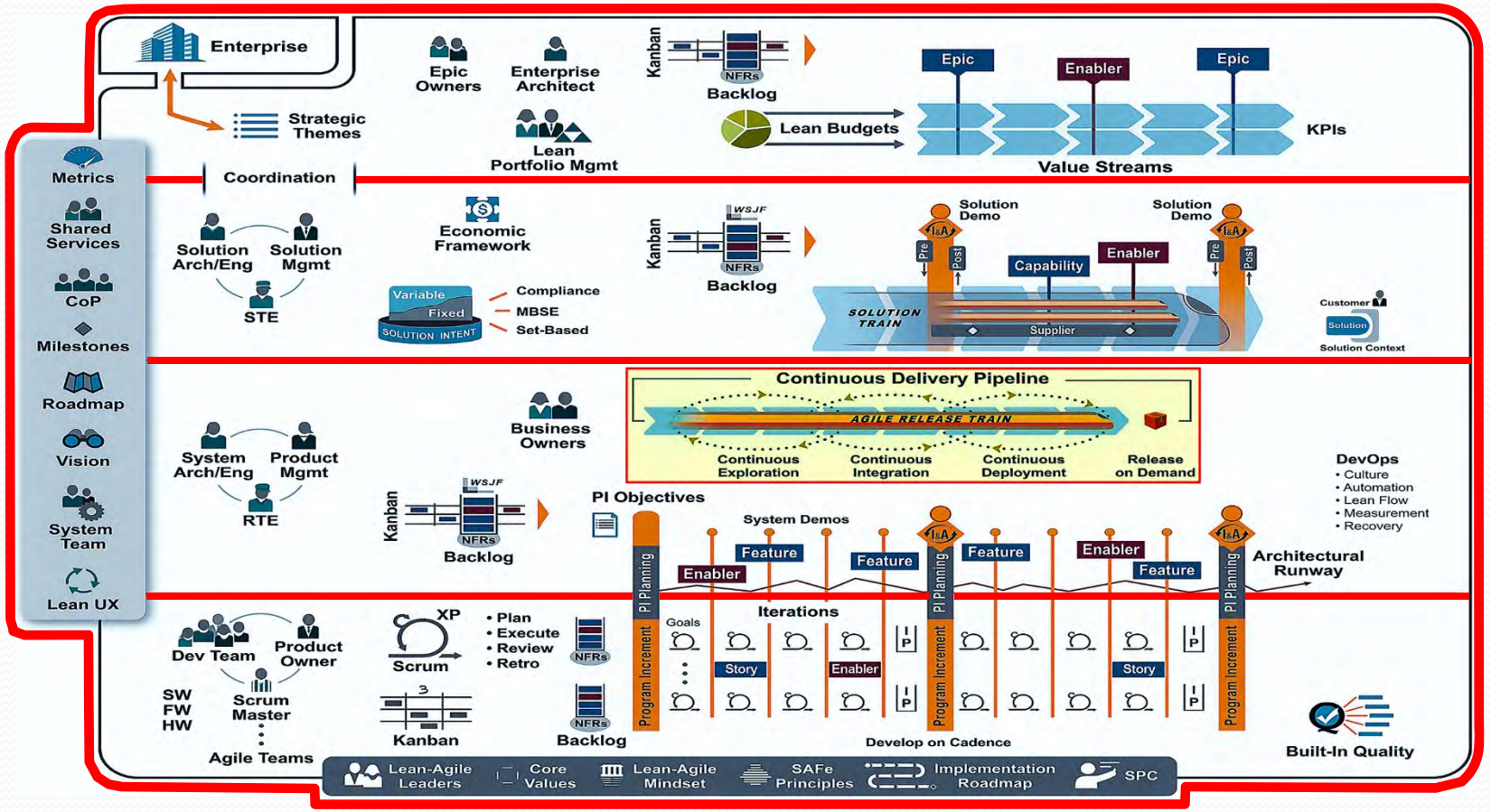
- Exploratory or research/development projects
- When fast customer responsiveness is paramount
- In organizations that are highly innovative/creative

Traditional Project Management	Agile Project Management
• Predictable situations	• High levels of uncertainty and unpredictability
• Low technology projects	• High technology projects
• Stable, slow moving industries	• Fast paced, highly competitive industries
• Low levels of technological change	• Rapid pace of technological change
• Repeatable operations	• Research oriented, discovery projects
• Low rates of changing project performance	• Large fluctuations in project performance
• Long term, fixed price production contracts	• Shorter term, performance based RDT&E contracts
• Achieving concise economic efficiency goals	• Achieving high impact product/service effectiveness
• Highly administrative contracts	• Highly creative new product development contracts
• Mass production and high volume manufacturing	• Customer intensive, one off product/service solutions
• Highly predictable and stable market conditions	• Highly volatile and unstable market conditions
• Low margin industries such as commodities	• High margin, intellectually intensive industries
• Delivering value at the point of plan	• Delivering value at the point of sale

Pine, B. J. (1993). *Mass customization*: *The new frontier in business competition*. Boston, MA: Harvard Business School Press.
Rico, D. F. (2012). *Agile vs. traditional projects*. Retrieved February 6, 2013, from http://davidfrico.com/tpm-vs-apm-ii.pdf

Model of Agile Portfolio Mgt.

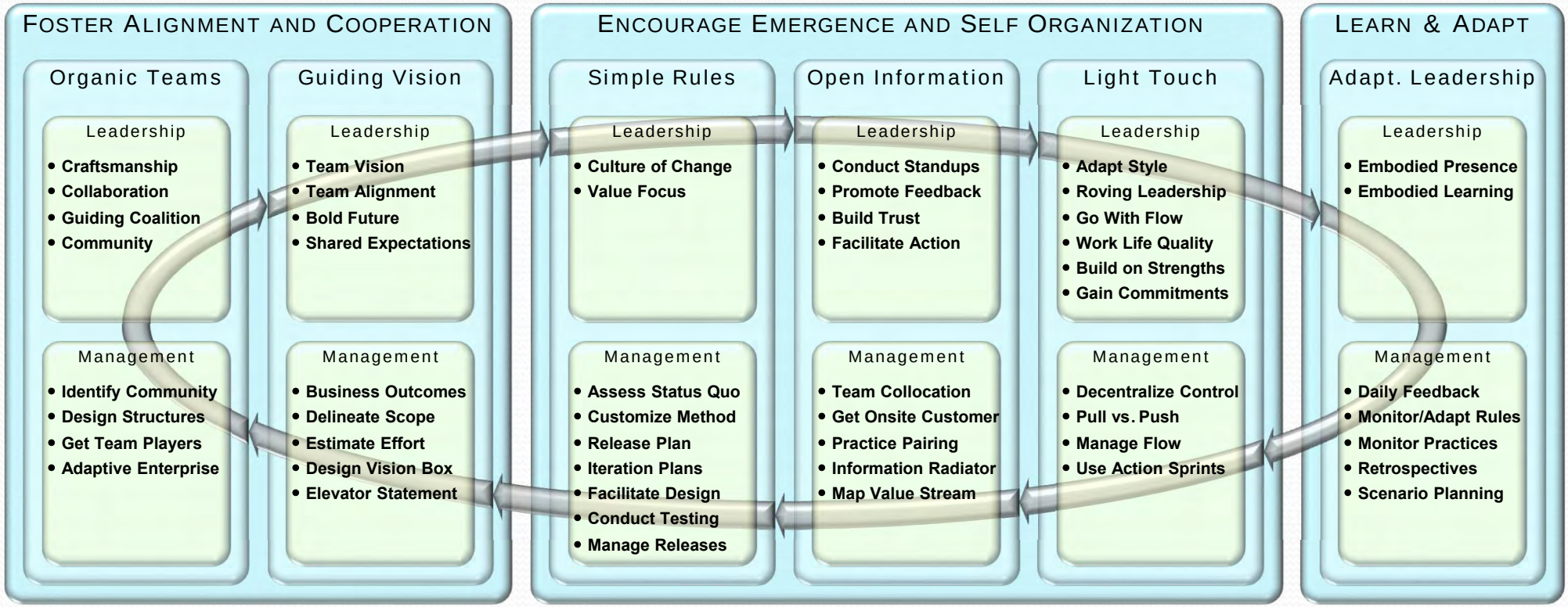
- Created by Dean Leffingwell of Rally in 2007
- Knowledge to scale agile practices to enterprise
- Hybrid of Kanban, XP release planning, and Scrum



Leffingwell, D. (2017). *Scaled agile framework (SAFe)*. Retrieved July 4, 2017 from http://www.scaledagileframework.com

Model of Agile Leadership

- Created by Sanjiv Augustine at CC Pace in 2005
- Builds agile cultures, mind-sets, & environment
- Leadership model for managing agile projects



Augustine, S. (2005). *Managing agile projects*. Upper Saddle River, NJ: Pearson Education.

Summary of Agile Project Mgt.

- Agile methods DON'T mean deliver it now & fix it later
- Lightweight, yet disciplined approach to development
- Reduced cost, risk, & waste while improving quality

What	How	Result
Flexibility	Use lightweight, yet disciplined processes and artifacts	Low work-in-process
Customer	Involve customers early and often throughout development	Early feedback
Prioritize	Identify highest-priority, value-adding business needs	Focus resources
Descope	Descope complex programs by an order of magnitude	Simplify problem
Decompose	Divide the remaining scope into smaller batches	Manageable pieces
Iterate	Implement pieces one at a time over long periods of time	Diffuse risk
Leanness	Architect and design the system one iteration at a time	JIT waste-free design
Swarm	Implement each component in small cross-functional teams	Knowledge transfer
Collaborate	Use frequent informal communications as often as possible	Efficient data transfer
Test Early	Incrementally test each component as it is developed	Early verification
Test Often	Perform system-level regression testing every few minutes	Early validation
Adapt	Frequently identify optimal process and product solutions	Improve performance

Rico, D. F. (2012). *What's really happening in agile methods: Its principles revisited*? Retrieved June 6, 2012, from http://davidfrico.com/agile-principles.pdf
Rico, D. F. (2012). *The promises and pitfalls of agile methods*. Retrieved February 6, 2013 from, http://davidfrico.com/agile-pros-cons.pdf
Rico, D. F. (2012). *How do lean & agile intersect*? Retrieved February 6, 2013, from http://davidfrico.com/agile-concept-model-3.pdf

Project Management—Bob Wysocki

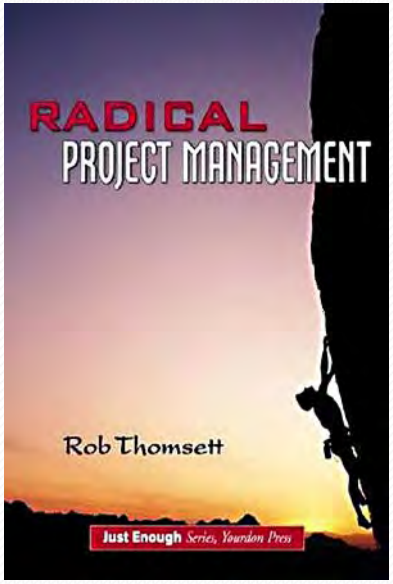
"The world of traditional project management belongs to yesterday"

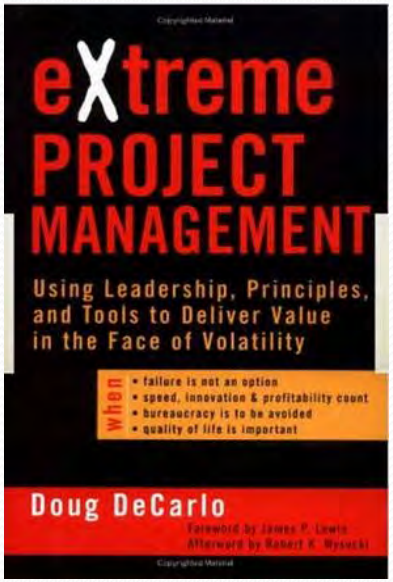
"Don't waste your time using traditional project management on 21st century projects"

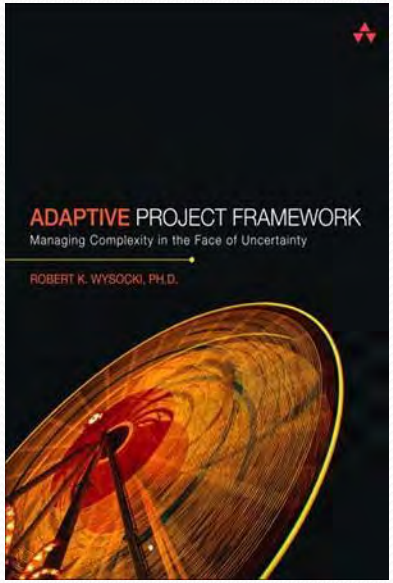
Wysocki, R.F. (2010). *Adaptive project framework: Managing complexity in the face of uncertainty*. Boston, MA: Pearson Education.

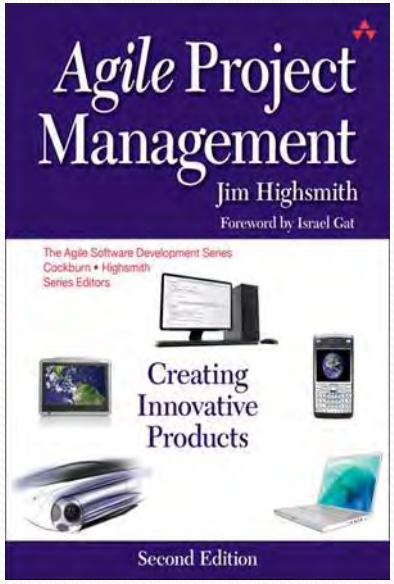
Resources for Agile Project Mgt.

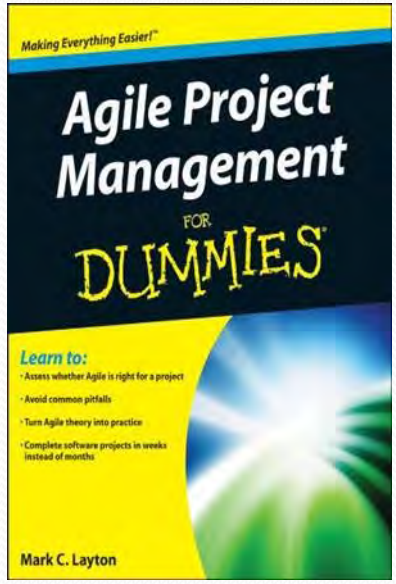
- Over 15 text books for agile project management
- Many of them stem from Planning XP by Kent Beck
- ☞ Highsmith's most complete, but Layton's most simple





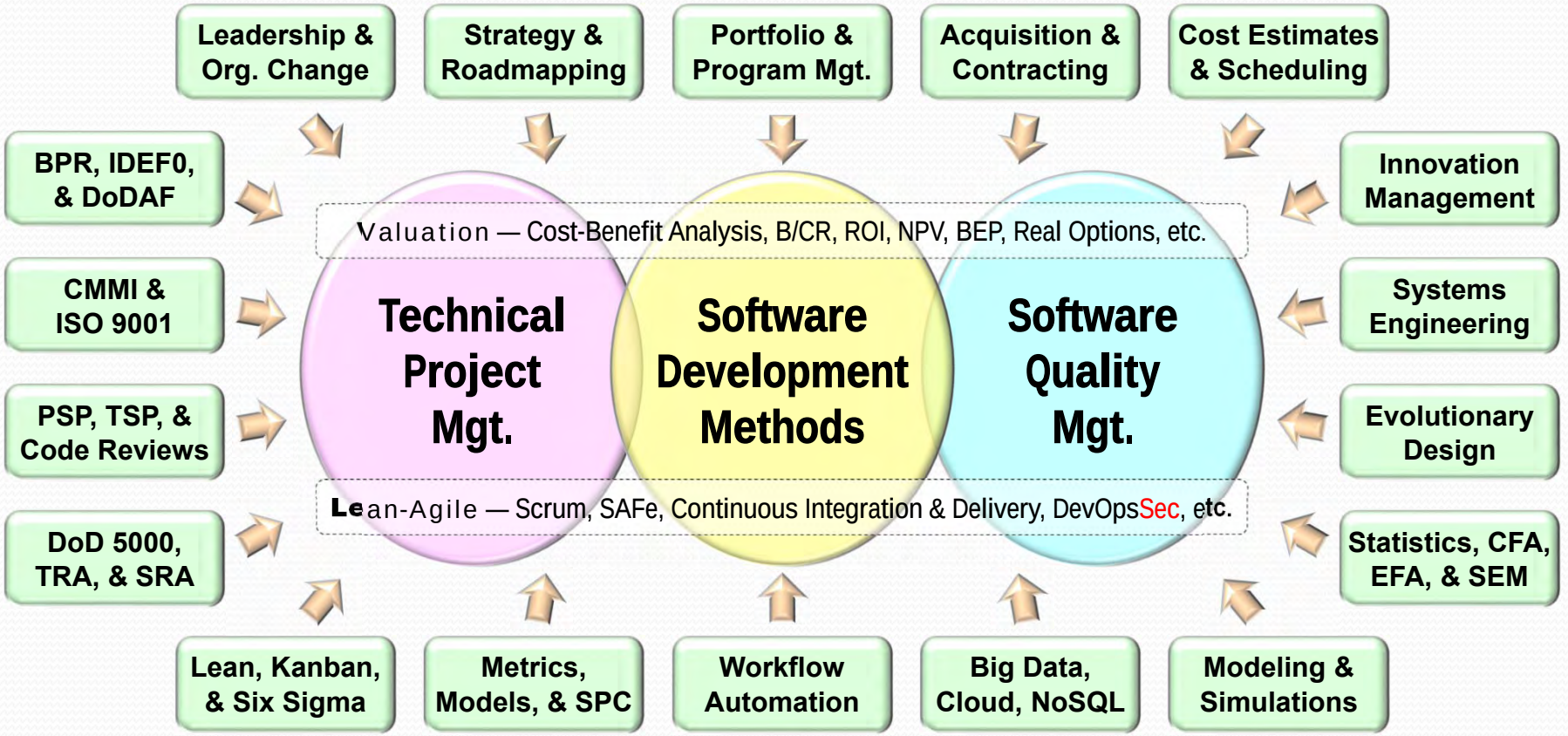






Thomsett, R. (2002). *Radical project management*. Upper Saddle River, NJ: Prentice-Hall.
DeCarlo, D. (2004). *Extreme project management*: *Using leadership, principles, and tools to deliver value in the face of volatility*. San Francisco, CA: Jossey-Bass.
Wysocki, R.F. (2010). *Adaptive project framework*: *Managing complexity in the face of uncertainty*. Boston, MA: Pearson Education.
Highsmith, J. A. (2010). *Agile project management*: *Creating innovative products*. Boston, MA: Pearson Education.
Layton, M. C., & Maurer, R. (2011). *Agile project management for dummies*. Hoboken, NJ: Wiley Publishing.

Dave's Professional Capabilities



STRENGTHS – Communicating Complex Ideas • Brownbags & Webinars • Datasheets & Whitepapers • Reviews & Audits • Comparisons & Tradeoffs • Brainstorming & Ideation • Data Mining & Business Cases • Metrics & Models • Tiger Teams & Shortfuse Tasks • Strategy, Roadmaps, & Plans • Concept Frameworks & Multi-Attribute Models • Etc.

35+ Years in IT Industry

- Data mining. Metrics, benchmarks, & performance.
- Simplification. Refactoring, refinement, & streamlining.
- Assessments. Audits, reviews, appraisals, & risk analysis.
- Coaching. Diagnosing, debugging, & restarting stalled projects.
- Business cases. Cost, benefit, & return-on-investment (ROI) analysis.
- Communications. Executive summaries, white papers, & lightning talks.
- Strategy & tactics. Program, project, task, & activity scoping, charters, & plans.

PMP, CSEP, FCP, FCT, ACP, CSM, SAFe, & DevOps