Scrum

It Depends on Common Sense

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Read this Project Background

Today's date is December 7, 2003. You have been selected to be part of a team for a complex project with a compressed schedule. Although the general nature of what is wanted is known, the specific functionality that will implement it will have to be determined as the project progresses.

Background:

Overall attendance at baseball games has increased over the last ten years. In some cities, such as Boston, almost all games are sold out and obtaining tickets through normal channels is nearly impossible. Major League Baseball (MLB) rules prohibit the resale of tickets at a profit. Scalping is illegal and has been recently limited. The primary distribution channel for buying tickets is eBay. Although all auctions for tickets on eBay are supposed to be capped at the retail price plus expenses, MLB has learned that, through a variety of workarounds, these tickets are being scalped for prices of up to 1000% of the retail price.

Project:

The MLB Commissioner's office has commissioned a project to control the resale of baseball tickets. Through recent legislation, as of the 2004 baseball season, all ticket resale can only take place through facilities authorized by MLB. MLB has decided to develop such a facility solely for its own purposes, through the presence of a dedicated website. The site will be known as MLBTix

Through functionality similar to eBay, but specific to MLB, buyers and sellers will be able to sell and buy tickets online. Sellers will auction the tickets to the highest bidder through an auction capability. The seller sets an initial bidding price of their own choice without floor or ceiling conditions established by MLBTix. The seller can also limit the duration of the auction, setting a start and end date and time. If the ticket(s) are successfully sold, the buyer pays the seller through MLBTix credit card facilities.. Then the seller will mail or express the tickets to the seller. MLBTix will have a facility for the buyer to notify it when the tickets have been received, at which time MLBTix will mail a check for the proceeds (less 25% MLB fee that is deducted) to the seller.

The Commissioner will be announcing MLBTix at a news conference on January 15. He hopes for some functionality to be available by opening day on March 30, 2004, and for the site to be fully functional by the All Star break on July 18, 2004. The anticipated release schedule is:

1. March 30, 2004 – MLBtix site is up. Buyers and sellers can register. Sellers can make tickets available at a fixed price, which buyers can pay in full via credit card. MLBTix is a middleman, all transfer of tickets is between buyer and seller. MLBTix receives 25% commission for all transactions.
2. June 30, 2004 – same as March 30 release except full-functioning auction capability is present.
3. August 30, 2004 - same as June 30, except buyers are able to get groups of collocated tickets, view the locations in parts, check inventory.

Funds for the project are ample and should not be considered an unreasonable constraint.. The date and functionality are the deliverables. Facilities or packaged software to support MLBTix can be either bought or developed, whichever supports meeting the date. The Commissioner needs a heads up on the likelihood that the MLBTix will be available by the above dates prior to his press conference.

Scrum Tutorial

Functional Requirements:

- Register as a potential seller of tickets and be assigned a userid and password.
- Register as a potential buyer of tickets and be assigned a userid and password.
- Maintain a profile under the userid, including email, addresses, preferences, and credit card information.
- Place tickets up for auction, declaring a floor price, start of auction time/date, and end of auction time/date. Indicate sufficient information so that buyers can ascertain that the tickets meet their requirements (for the right days, right teams, right number of seats located next to each other, and the seat locations in the ball park).
- Conduct an auction for the tickets to registered buyers.
- Successfully conclude the auction by awarding the tickets to the highest bidder by the end date and, at the same time, debiting the buyers credit card and placing the funds in a MLBTix account.
- Notifying the seller of the successful sale of the tickets and the delivery information for the buyer.
- Providing the buyer with a mechanism for indicating that the tickets were not successfully received by the selling date plus a specified period of time (a week?).
- Transferring the funds for the ticket sale less 25% to the seller at the end of the specified delivery time, unless the buyer has indicated otherwise.
- Transferring the 25% plus any interest to a corporate MLB account from the MLBTix account automatically.
- Providing inventory and inventory search capabilities for teams, tickets, dates, and seats within park.
- Providing for promotions on MLBTix.
- Ability to identify and ban abusers of MLBTix.

Nonfunctional Requirements:

- 250,000 simultaneous users with subsecond response time.
- Secure for the level of financial activity envisioned (2,000 tickets per day at an average selling price of $50).
- Scalable to 1,000,000 simultaneous users as needed.
- 99% availability 24x7.

Development Context:

1. A development environment for building Microsoft .Net products is ready for you. The system will be built using Intel technology and .Net software running on SQL Server.
2. The development team members all live within easy commuting distance of the development site.
3. There are currently cubicles in the development site.
4. The development environment is wireless and has all power and networking capabilities already operating.
5. The development environment uses Microsoft development tools such as Visual Studio.
6. You are required to use a source code library, check in code every time it's changed, built the software at least daily, and unit and acceptance test the software every time that it is built.
7. Scrum will be used as the development practice. Aspects of Extreme Programming or any other engineering practices, such as coding standards, are up to the team.
8. All of the developers have excellent engineering skills, but they have only heard of Scrum and Extreme Programming, or used them sparsely so far.
9. The team consists of all development engineers with excellent design and coding skills. However, they are still responsible for all testing and user documentation. They may acquire contractors to assist with this. The engineers on the team average 10 years of progressive experience on software projects using complex technology and Microsoft products.
10. All team members are baseball aficionados.
11. A QA environment already exists.
12. There are no adequate testing tools, continuous build tools, refactoring tools, and VSS is perhaps not adequate for the job.

Scrum

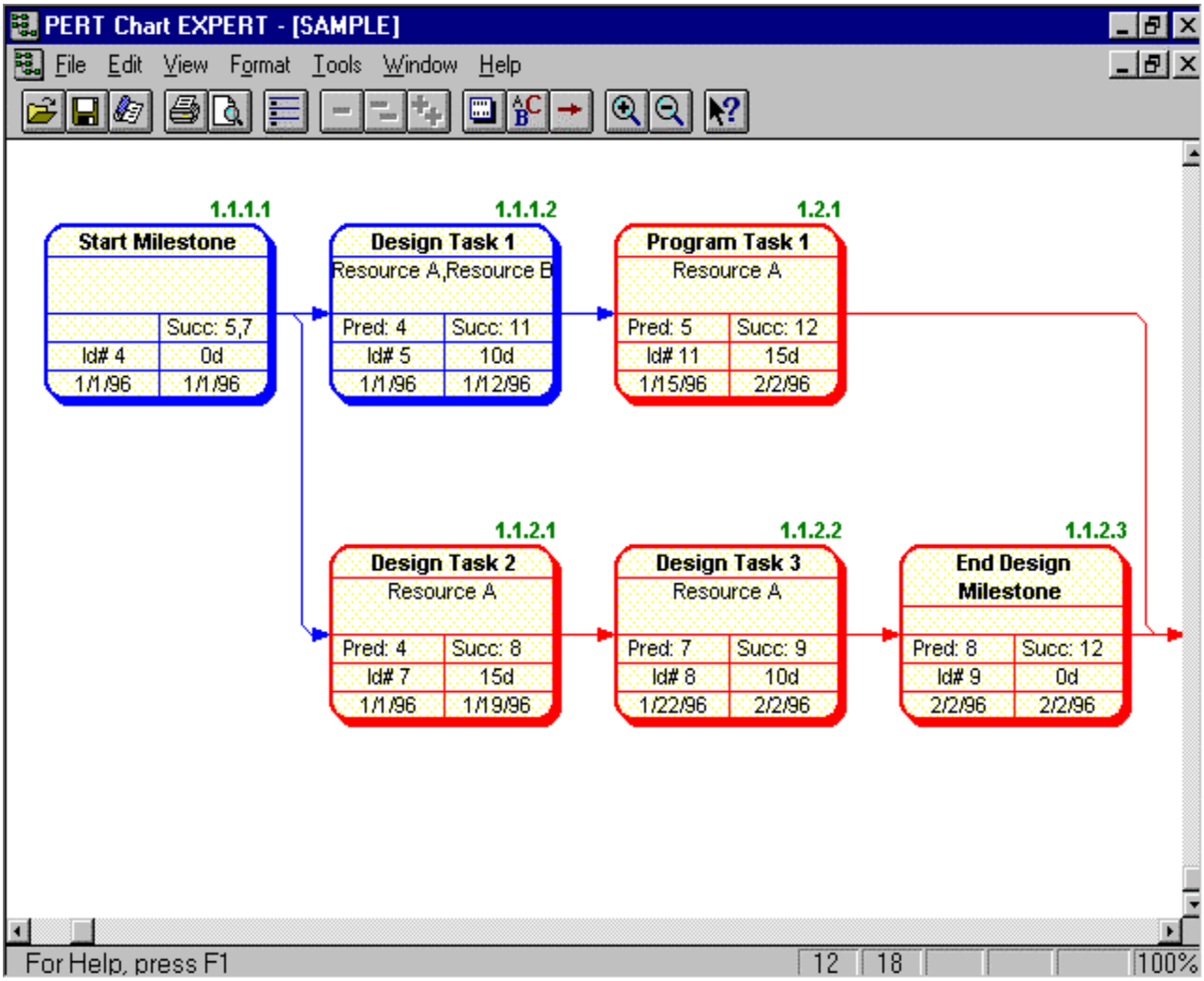
1. Speaker introduction – 5 min
2. Agile theory and framework – 30 min
3. Scrum Process – 30 min
4. Exercise 1 and Break – 30 min
5. Scrum Meetings – 30 min
6. Exercise 2 – 30 min
7. Scaling agile projects – 30 min

Agile Theory And Framework

"It is typical to adopt the defined (theoretical) modeling approach when the underlying mechanisms by which a process operates are reasonably well understood. When the process is too complicated for the defined approach, the empirical approach is the appropriate choice."

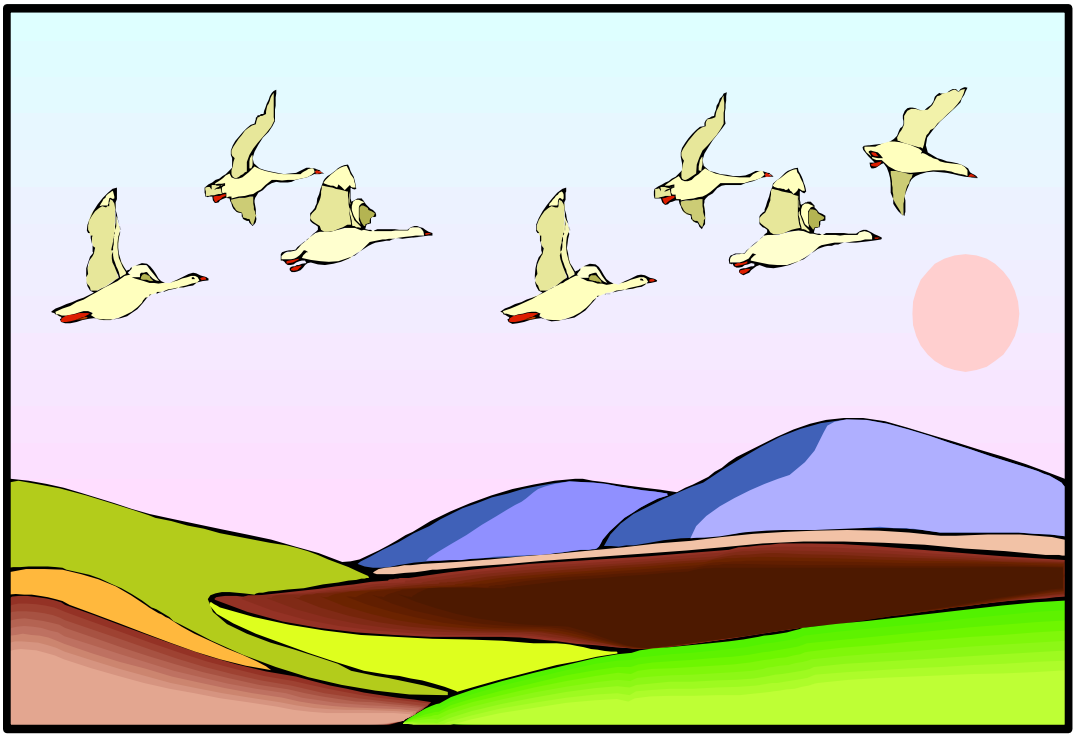
Process Dynamics, Modeling, and Control, Ogunnaike and Ray, Oxford University Press, 1992

Defined Processes



- Command and Control for simple projects
- Plan what you expect to happen
- Enforce that what happens is the same as what is planned
- Use change control to manage change

Empirical Processes



- When you can't define things enough so that they run unattended and produce repeatable, acceptable quality output;
- Empirical models are used when the activities are not predictable, are non-linear, and are too complex to define in repeatable detail; and
- Control is through inspection and adaptation.

Agile Skeleton

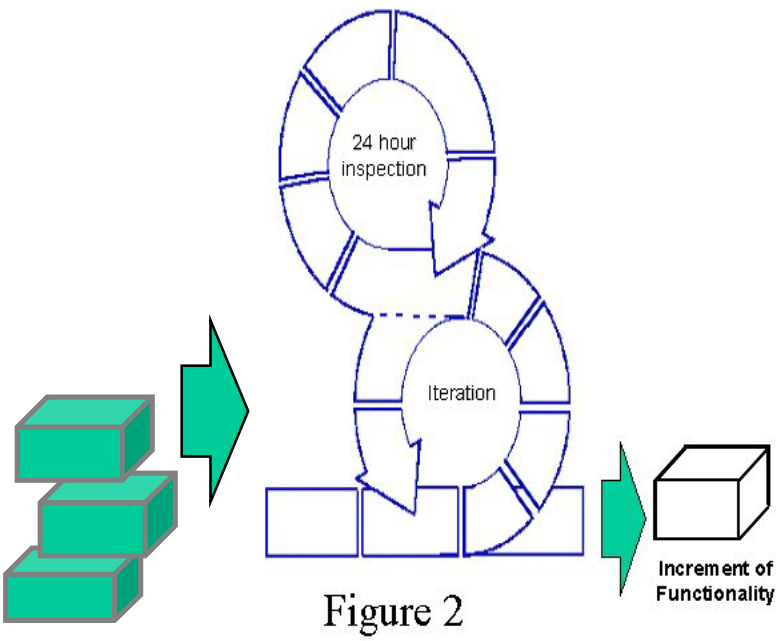


Figure 2

Product Backlog:

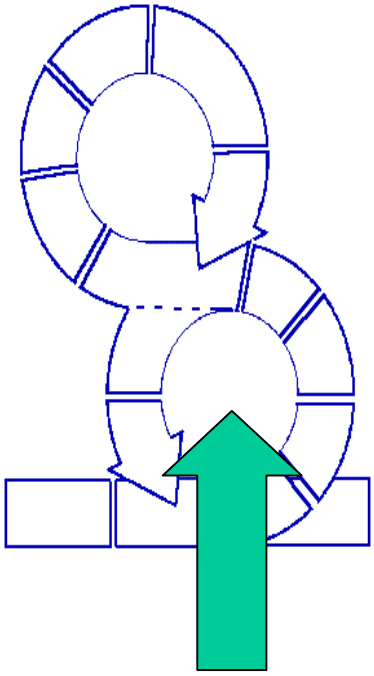
Doing the Right Thing

- Easy to implement within 1 day
- Improves ROI
- Solves customer involvement
- Removes floundering and politics
- Scrum

Building the Thing Right

- More time to implement
- Solid engineering practices
- Solid engineering infrastructure
- XP

Agile Heart



- Let people figure out the right thing to do, and then do it.
- Let people be creative.

OOPSLA'02

Doing the Right Thing the Right Way

- Hardest to implement
- Improves productivity
- Work becomes a pleasure
- Scrum

Agile Practices

Agile lays out a vision and then nurtures project resources to do the best possible to achieve the plan.

Agile is the "art of the possible."

Agile employs the following practices:

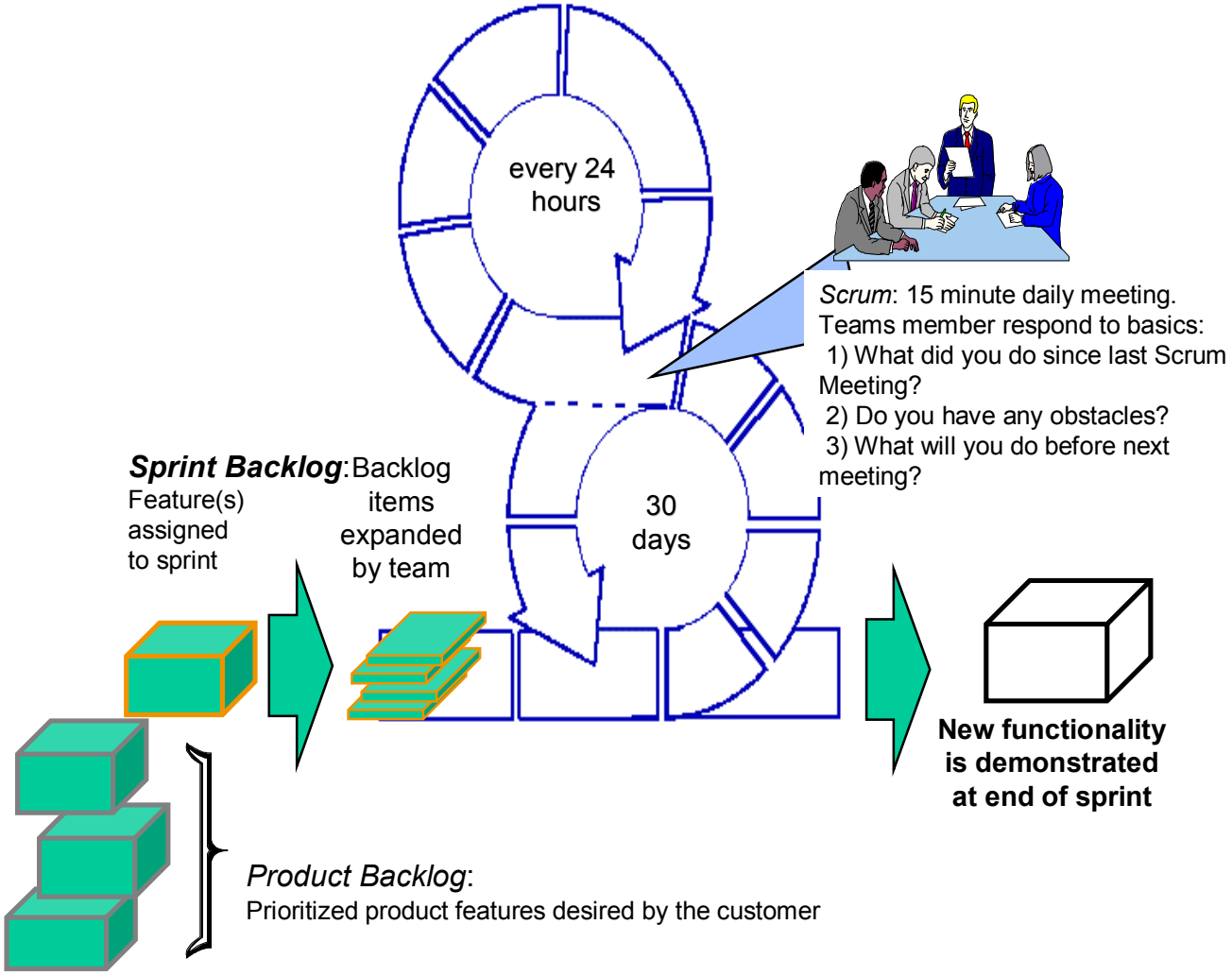
- Frequent inspection
- Emergence of requirements, technology, and team capabilities
- Self-organization and adaptation in response to what emerges
- Incremental emergence
- Dealing with reality, not artifacts
- Collaboration

SCRUM

Scrum Overview

- Empirical management and control process for development efforts;
- Used at product companies and IT organizations since 1990;
- Wraps existing engineering practices;
- Extremely simple but very hard;
- Common sense;
- CMM Level/2 and Level/3 compliant;
- Delivers business functionality in 30 days;
- Scalable; and
- Scrum feels completely different!

Scrum Tutorial



Roles

Activity	Owner	Responsibilities
Manage the vision	**Product Owner**	The Product Owner establishes, nurtures and communicates the product vision. He achieves initial and on-going funding for the project by creating initial release plans and the initial Product Backlog.
Manage the ROI	**Product Owner**	The Product Owner monitors the project against its ROI goals and an investment vision. He updates and prioritizes the Product Backlog to ensure that the most valuable functionality is produced first and built upon. He prioritizes and refines the Product Backlog and measures success against expenses.
Manage the development iteration	**Team**	During an iteration the team selects and develops the highest-priority features on the Product Backlog. Collectively, the team expands Product Backlog items into more explicit tasks on a Sprint Backlog and then manages its own work and self-organizes around how it desires to complete the iteration. The team manages itself to its commitments.
Manage the process	**Scrum Master**	The Scrum Master is responsible for setting the team up for success by ensuring the project and organizational culture are optimized for meeting the ROI goals of the project. This involves organizing a Sprint Planning Meeting (during which the team expands Product Backlog into Sprint Backlog), a Sprint Review Meeting (during which the newly developed functionality is demonstrated), shielding the team from outside disturbances, holding brief Daily Scrum meetings, and removing obstacles to progress.
Manage the release	**Product Owner**	The Product Owner makes decisions about when to create an official release. For a variety of reasons it may not be desirable to release at the conclusion of every increment. Similarly, if an official release is planned for after the fifth increment it may be released (with fewer features) after the fourth increment in order to respond to competitive moves or capture early market share. The Product Owner makes these decisions in a manner consistent with the investment vision that has been established for the project.

Roles – Product Owner

- Develops and maintains the Product Backlog
- Prioritizes the Product Backlog
- Empowered to make decisions for all customers and users
- Attends Sprint planning meeting and Sprint review meeting
- Presents and explains Product Backlog to team

Product Backlog

- List of functionality, technology, issues
- Issues are placeholders that are later defined as work
- Emergent, prioritized, estimated
- More detail on higher priority backlog
- One list for multiple teams
- Product Owner responsible for priority
- Anyone can contribute
- Maintained and posted visibly
- Derived from Business Plan or Vision Statement, which sometimes have to be created with customer.

Product Backlog with Estimates

Priority (1-9)	Function	Full Description	Raw Dev. Effort
1	General	Setup development environment	4
1	General	Confirm use of zope as development environment	2
1	Membership	Ability to sign up for various level of membership	4
1	Membership	Ability to use credit card to pay for membership	15
1	Membership	Provide extract from database to external sources	3
1	Membership	Notify members with membership data	5
1	Membership	Generate receipts and certificates	5
1	Membership	Tie membership program to bank accounts	5
1	Membership	Implement open access database (MySQL?)	6
2	News	Authoring environment for news	8
1	Website	Website look, feel, navigation, initial pages	10
3	Founders Page	Include agilealliance.org founders page	10
3	Sponsors	Display sponsors and link to web sites	6
4	Articles	Authoring environment for articles	10
4	Articles	Organizing and sorting capability for articles	4
4	Articles	Library catalog for articles	8

Product Backlog

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fjdkla
fdjklad;
fdjkla;s
fjdk
fjkdla;fjkdal;f
jfkdlsj;a
fjdkla;
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fdjsakl;fd
fdjkal;fdfddjfkdl
jfkdal;fjkdasl;fd

This Sprint : well defined work that can be done is <30 days & produce executable

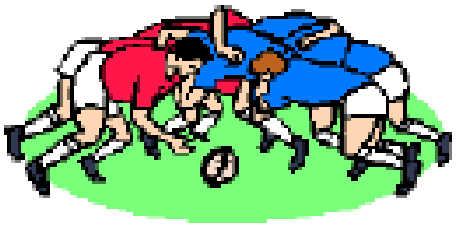
Probable next sprint : backlog next in priority, depends on results from prior Sprint

Planned Release

During a Sprint, that Sprint's backlog is fixed and can only be changed as a result of the work being performed in that Sprint.

Backlog outside the current Sprint is always changing, evolving, and being reprioritized.

Roles - Scrum Teams



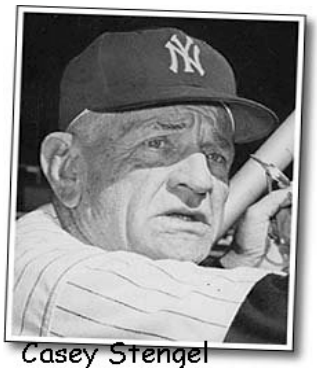
- Self-organizing;
- Cross-functional with no roles;
- Seven plus or minus two;
- Responsible for committing to work;
- Authority to do whatever is needed to meet commitment;
- Synchronizes at Daily Scrum; and
- Full autonomy and authority during a Sprint.

Sprint Backlog

- Tasks to turn product backlog into working product functionality
- Tasks are estimated in hours, usually 1-16
- Tasks with more than 16 hours are broken down later
- Team members sign up for tasks, they aren't assigned
- Estimated work remaining is updated daily
- Any team member can add, delete or change the Sprint Backlog (theirs or new)
- Work for the Sprint emerges
- If work is unclear, define a Sprint Backlog with a larger amount of time … break it down later.
- Update work remaining as more is known, as as items are worked

Date logged	RFA	Description	Remaining Effort in Days														
			2/11/2002	2/18/2002	2/25/2002	2/26/2002	2/27/2002	2/28/2002	3/1/2002	3/2/2002	3/3/2002	3/4/2002	3/5/2002	3/6/2002	3/7/2002	3/8/2002	3/9/2002	3/1
		TOTAL EFFORT IN Man Days	46	22	15	25	22	21	19	19	19	16	17	18	26	18	0	0
11-Feb-2002	1	UI Object Model	2	1	0	0												
11-Feb-2002	1	UI Framework	3	1	1	2	1	1	1	1	1	0	0	2	5	3		
11-Feb-2002	1	Learn Torque API	2	0	0													
11-Feb-2002	1	Learn Struts/Tiles API	3	3	0													
11-Feb-2002	1	Finish HTML admin UI workflow	1	1	0													
11-Feb-2002	1	Complete SRS use cases for 2nd iteration	2	0	0													
11-Feb-2002	4	Migrate CPM to WAS 4.0 to get a WAR jetspeed	5	5	4	4	4	4	4	4	4	4	4	4	4	4		
11-Feb-2002	4	Implement UT for J2EE (Cactus)	8	2	2	2	2	2	2	2	2	2	2	2	2	1		
13-Feb-2002	4	Automate DB test data upload	12	4	2	2	0	1	1	1	1	1	1	1	1	1		
13-Feb-2002	4	Extract CPM DB schema with Torque	4	1	0	0												
18-Feb-2002	1	Design Access Control	2	2	2	2	2	2	2	2	2	2	2	2	2	2		
18-Feb-2002	1	Design Business Entity Type	2	2	2	1	1	1	1	1	1	0	2	1	1	0		
25-Feb-2002	1	Set development environment			1	1	1	1	0	0	0	0						
25-Feb-2002	1	Verify what and how is used for attribute definition			1	0												
26-Feb-2002	4	Torque primary key generator for CPM				2	0											
26-Feb-2002	4	Torque/Struts/CPM OM prototype				2	2	1	0	0	0	0						
27-Feb-2002		Implement Business Entity Type UI					2	2	2	2	2	1	0	0	1	0		
27-Feb-2002	1	Define Access Group UI and workflow					1	1	1	1	1	1	1	1	1	0		
4-Mar-2002		BE Session façade				7	6	5	5	5	5	5	5	5	5	5		
7-Mar-2002	4	Torque Blob Problem													4	1		
8-Mar-2002	1	Deploy admin UI on WAS 3.5														1		

Sprint Backlog


Casey Stengel

Roles - ScrumMaster

- Project Manager
- Coach
- Responsible for the process
- Responsible for maximizing team productivity
- Sets up meetings
- Conducts meetings
- Representative to management
- Representative to team
- Characteristics of a border collie or sheepdog.

Exercise 1 and Break 30 min

Determine what Product Backlog must be developed to meet the first release goal and date. Add Product Backlog as necessary. Then estimate the Product Backlog items. Can your team meet the first release goals and date? If not, what can be done so that you can make this goal and date? Make specific recommendations.

Scrum Meetings

- Daily Scrum
- Sprint Planning
- Sprint Review

Activity: 7 Sprint Planning Meeting

The Product Owner, ScrumMaster, and development team meet prior to every Sprint to determine what product functionality the team will work on. The Product Owner presents the product backlog and the team selects what it believes it can build during the Sprint.

Customers, management, users and other interested parties, also known as "stake holders," are also welcome to this presentation. Regardless, the prioritization of the product backlog remains the exclusive responsibility of the product owner.

The Sprint planning meeting actually consists of two meetings. During the first meeting, the product backlog for the next Sprint is selected by the team. During the second meeting, the team identifies the Sprint backlog necessary to turn the product backlog into the increment of product functionality.

7.1 Facilitate Sprint Planning Meeting	ScrumMaster
7.2 Present Product Backlog	Product Owner
7.3 Select Product Backlog for Sprint	Team
7.4 Define Sprint Goal	Product Owner
7.5 Construct Sprint Backlog	Team
7.6 Attend the Sprint Planning Meeting	Chickens

Sprint Planning Meeting

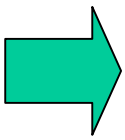
Product Backlog

Team Capabilities

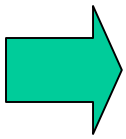
Business Conditions

Technology Stability

Executable Product Increment



Review, Consider, Organize



Next Sprint Goal

Product Backlog

Sprint Backlog

Sprint Planning Meeting

- 1 day
- 1st - 4 hours team selects Product Backlog and sets goal with product owner
- 2nd - 4 hours team defines Sprint Backlog to build functionality
- Anyone can attend, but primary conversation and work is between team and Product Owner

Product Backlog Selected for Sprint

- Cannot be added to or changed during Sprint
- Is frozen from Product Backlog for duration of Sprint
- Sprint Goal is constructed to describe objective if successfully turned into working functionality

Activity: 10 Daily Scrum

Each Scrum Team meets daily for a 15-minute status meeting called the Daily Scrum. During the meeting, the team explains what it has accomplished since the last meeting, what it is going to do before the next meeting, and what obstacles are in its way. The Daily Scrum meeting gets people used to team-based, rapid, intense, co-operative, courteous development. Daily Scrums improve communications, eliminate other meetings, identify and remove impediments to development, highlight and promote quick decision-making, and improve everyone's level of project knowledge. That's a lot of benefit from just 15 minutes a day!

The Daily Scrum is the only formal communication between the team and the people outside the team during a Sprint. If anyone wants to assess the progress of the team prior to the end of Sprint Review meeting, they can attend the daily Scrum meeting (as a "chicken") or inspect the Sprint Backlog. Nobody outside of the team is allowed to interfere with the team's time by calling any other type of review meeting, such as a "design review." The ScrumMaster should view such a meeting as an interference and remove the need for any team member to attend.

The Daily Scrum has three purposes:

1. The team members share status with each other.

2. The team members report any impediments or decisions that they can't make to the ScrumMaster so that the ScrumMaster can resolve them.

3. Team members and the ScrumMaster get to assess the team through observation.

10.1 Conduct the Daily Scrum	ScrumMaster
10.2 Commit and Status	Team
10.3 Decisions	Team, ScrumMaster, Product Owner
10.4 Attend the Daily Scrum	Chickens

Daily Scrums

- Daily 15 minute status meeting;
- Same place and time every day;
- Meeting room;
- Chickens and pigs;
- Three questions;
  - What have you done since last meeting?
  - What will you do before next meeting?
  - What is in your way?
- Impediments; and
- Decisions

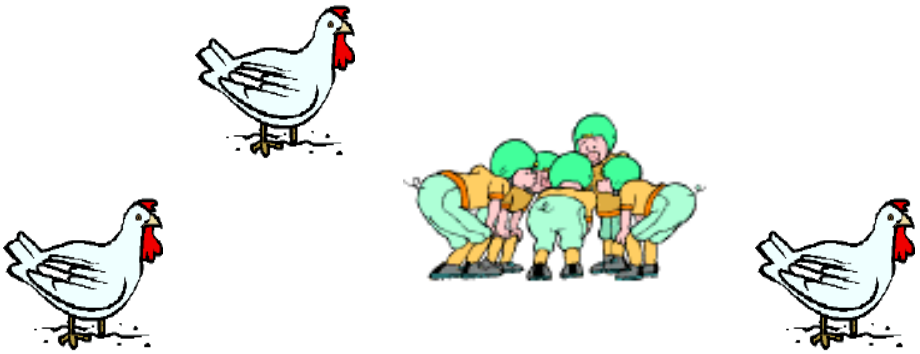
Chickens and Pigs

A chicken and a pig are together when the chicken says, "Let's start a restaurant!"

The pig thinks it over and says, "What would we call this restaurant?"

The chicken says, "Ham n' Eggs!"

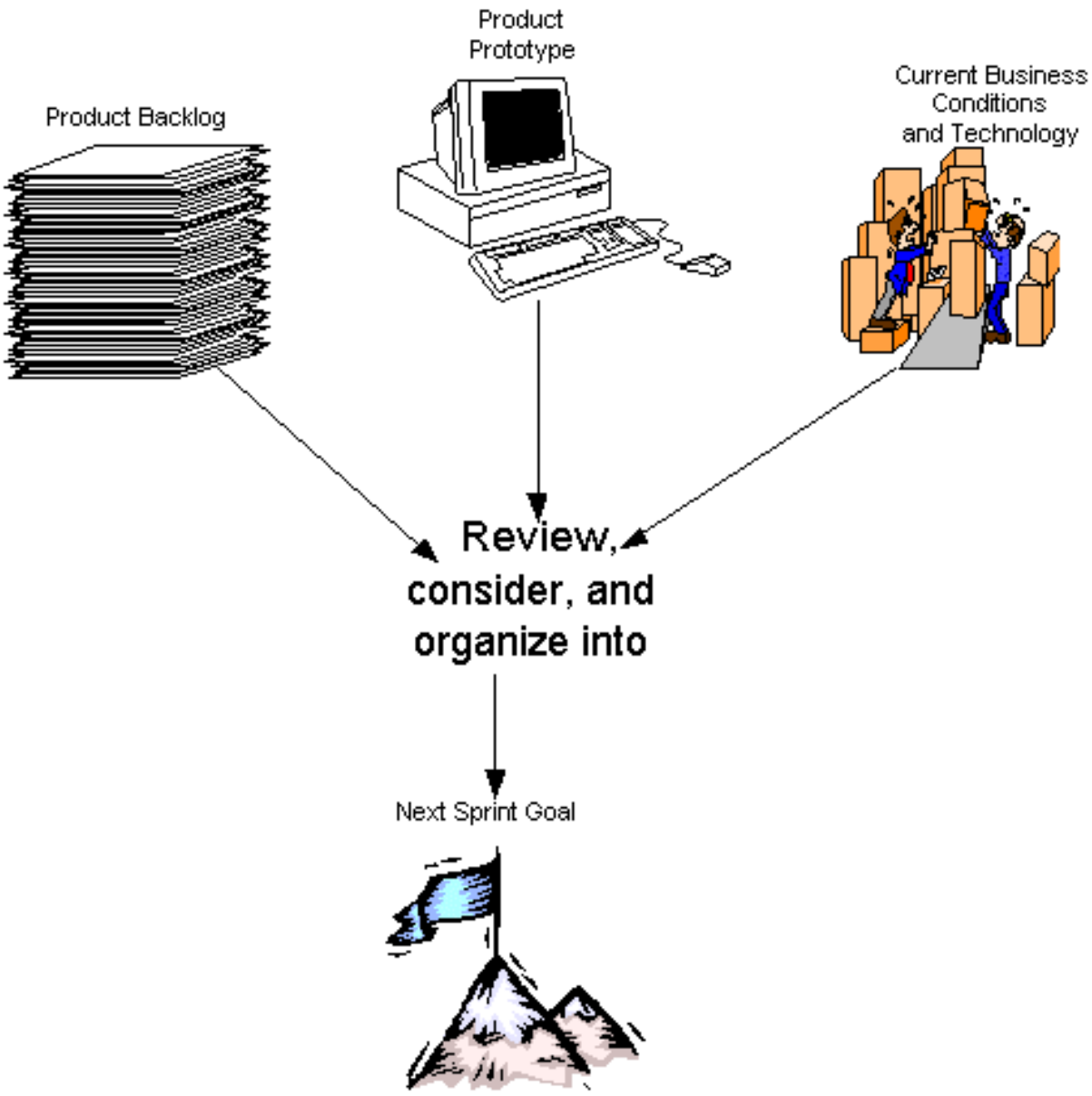
The pig says, "No thanks. I'd be committed, but you'd only be involved!"



Activity: 11 Sprint Review Meeting

11.1 Conduct Sprint Review Meeting	ScrumMaster
11.2 Present the Product Increment	Team
11.3 Evaluate the Functionality	Product Owner
11.4 Adjust the Product Backlog	Product Backlog
11.5 Project Reporting	ScrumMaster, Product Owner
11.6 Sprint Retrospective	ScrumMaster, Team, Product Owner
11.7 Attend the Sprint Review	Chickens

End-of-Sprint Review



Sprint Review Meeting

- 4 hours;
- Maximum 1 hour preparation;
- Done on equipment where software was developed and tested;
- Presented by team to Product Owner and customers/users;
- Basis for planning next Sprint; and,
- Must represent potentially shippable increment of product functionality.

Managing a Release

Value Driven Releases

business value = f(cost, time, functionality, quality)

80% of the business value can be derived from 20% of the functionality.

A successful project meets business objectives and delivers value, not functionality.

Managing a Release

Jfkdla;fjkdlajf;ds
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fjdksal;f
fdjsakl;fd
fdjkal;fdfddjfkdl
jfkdal;fjkdasl;fd

This Sprint : well defined work that can be done is <30 days & produce executable

Probable next sprint : backlog next in priority, depends on results from prior Sprint

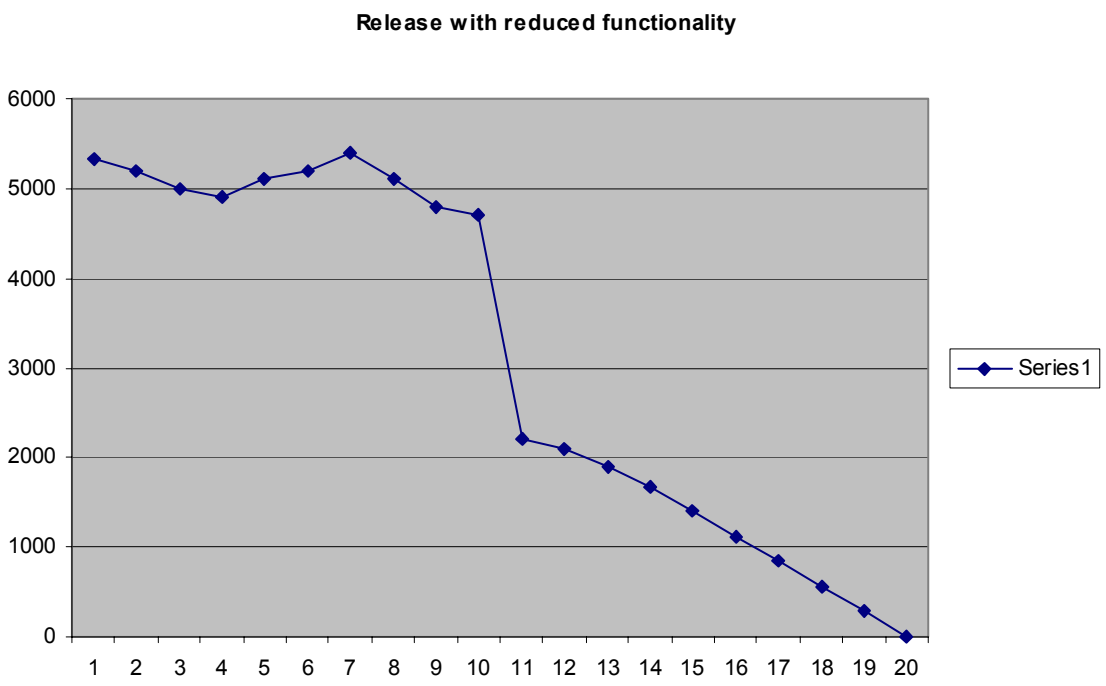
Planned Release

During a Sprint, that Sprint's backlog is fixed and can only be changed as a result of the work being performed in that Sprint.

Backlog outside the current Sprint is always changing, evolving, and being reprioritized.

1. Release depends on progress at burning down backlog
2. Burning down backlog dependent on
   - Required functionality and quality
   - Productivity of team(s)

Managing a Release



- Project slope of work remaining to determine probable release date
- By ninth month, not enough productivity to hit desired release date in 20th month
- Customer reduced expected functionality in release which raised the line for release date.

Exercise 2

It is the end of the third Sprint, February 28. At the end of the Sprint review meeting on February 28, and the team has conducted the Sprint review with George Steinbrenner, who is representing the Commissioner, and Mo Vaughan. The team is well on its way to bringing up all of the desired functionality for the first release at the end of March, but raises the following concerns:

1. During the Sprint, the team contacted several ecommerce retailers and determined that there were on average 100 visits for every sale.
2. The team is unable to estimate the exact number of hits that will occur the when the website first comes up. However, there are 40million avid baseball fans in the world. A major marketing campaign for MLBTix has been conducted after the commissioner's press conference in Mid-January, and the impact of the site has been the rage of all the sports pages and sports magazines.
3. Based on the MLB commissioner's research, the site is expected to sell 2000 tickets per day in April, 3000 per day in April and 5000 per day thereafter for the rest of the season. The average price that will be charge by a seller above retail is $30, of which 25% will go to the MLBTix.
4. As you had previously alerted the Commissioner, SQL Server scaling is an iffy proposition. Scaling tests to date have proven that the application is data base intensive. Even with all tuning efforts from consultants that have been brought in and running SQL Server on the fastest RAID devices possible, the maximum simultaneous transaction that can be served with sub-three second response time is 100 per second. Given that peak loads are expected at lunch time and after dinner, the team is concerned that peak volumes during normal production may overwhelm the server and that the knee of the performance curve is very close to the 110 per second rate.
5. You have determined that Oracle will readily support the scaling requirements predicted by the Commissioner, but it will take one more Sprint to trade out SQL Server and implement Oracle. The application can't come up until a month after the season opener.

What should you advise the commissioner based on the above risk/reward model and your best gut feel? Please quantify.

Scaling

1. Just doesn't "scale"
2. Not appropriate for mission critical and life critical systems because of their rigor, precision and quality requirements.
3. Inapplicable to larger projects.
4. Not sufficient when the risk is high and the degree of control needed is high.
5. Doesn't address fixed-price, fixed-date projects.
6. Not rigorous enough to meet the requirements of a mature process, such as defined by the Software Engineering Institute's Capability Maturity Model.

How Agile Methodologies Scale

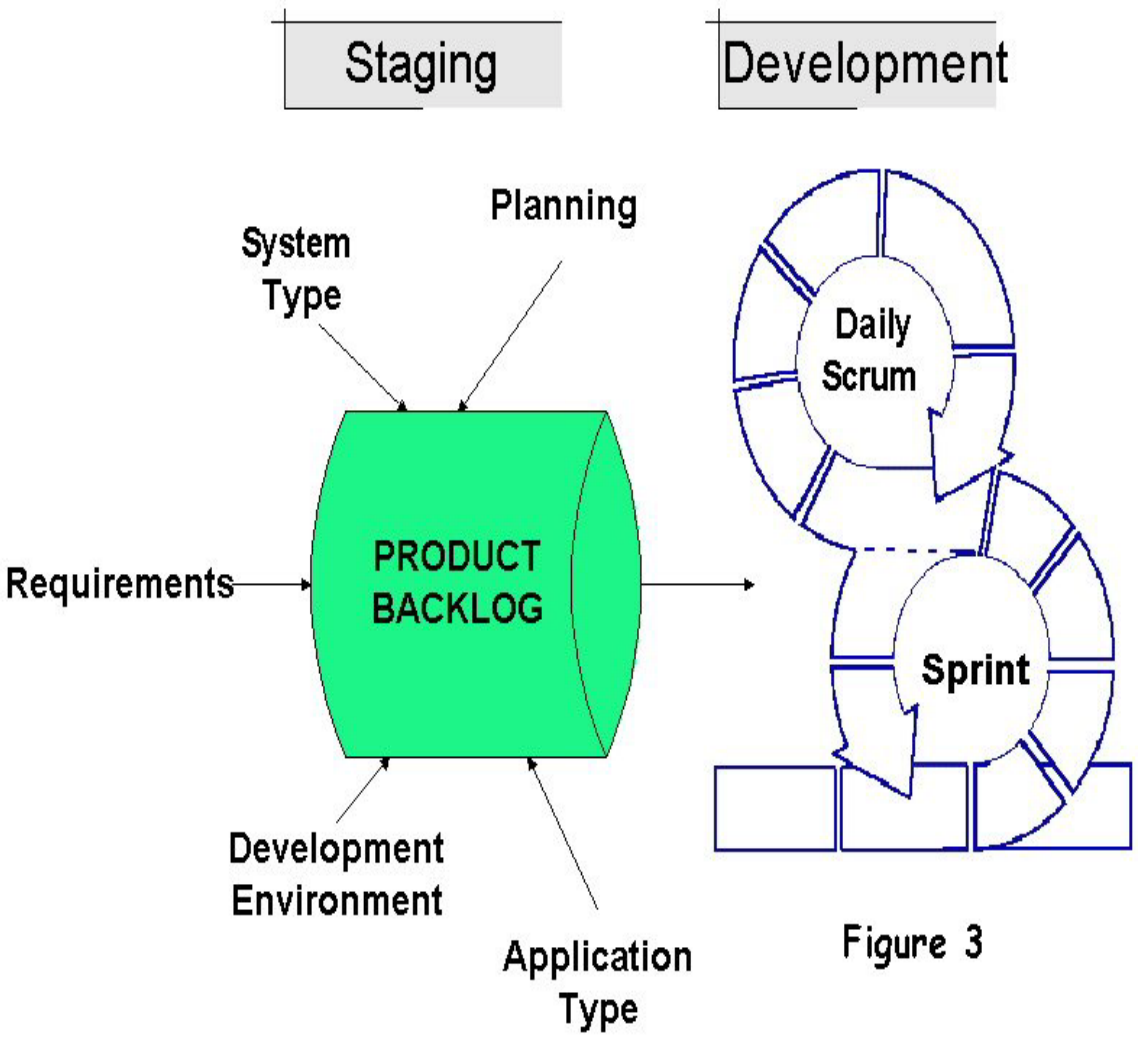
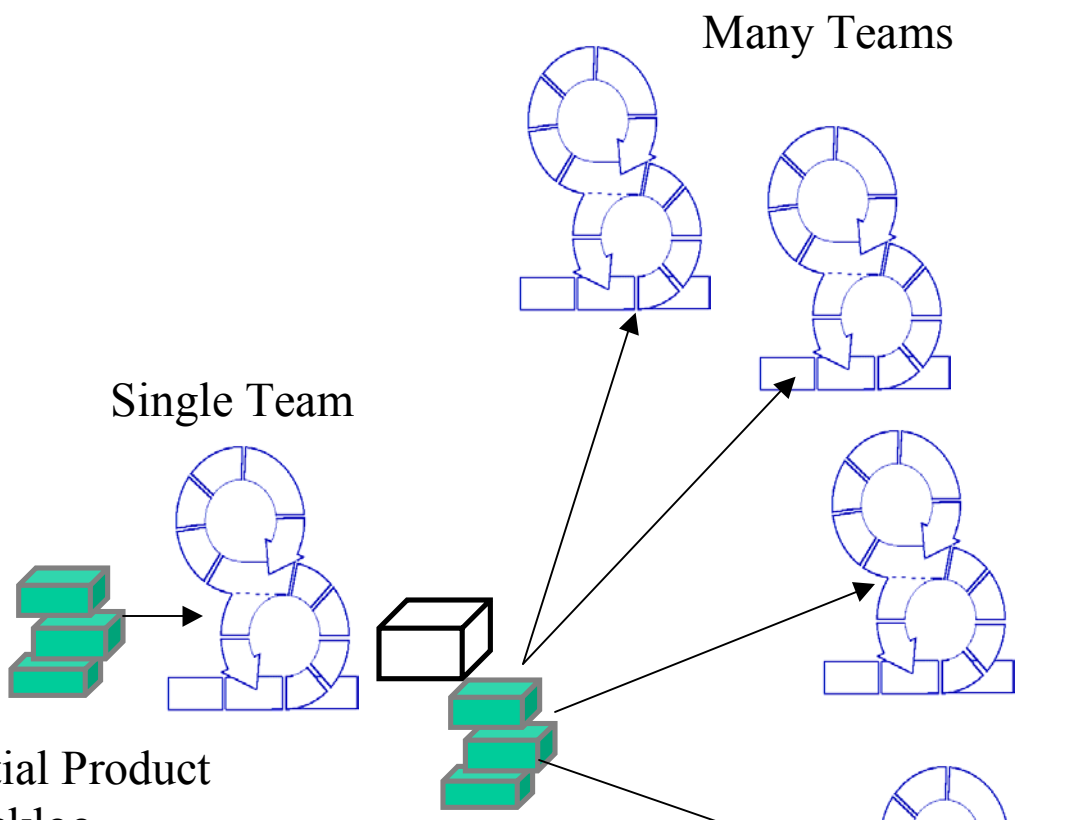


Figure 3

How Agile Methodologies Scale



Initial Product Backlog

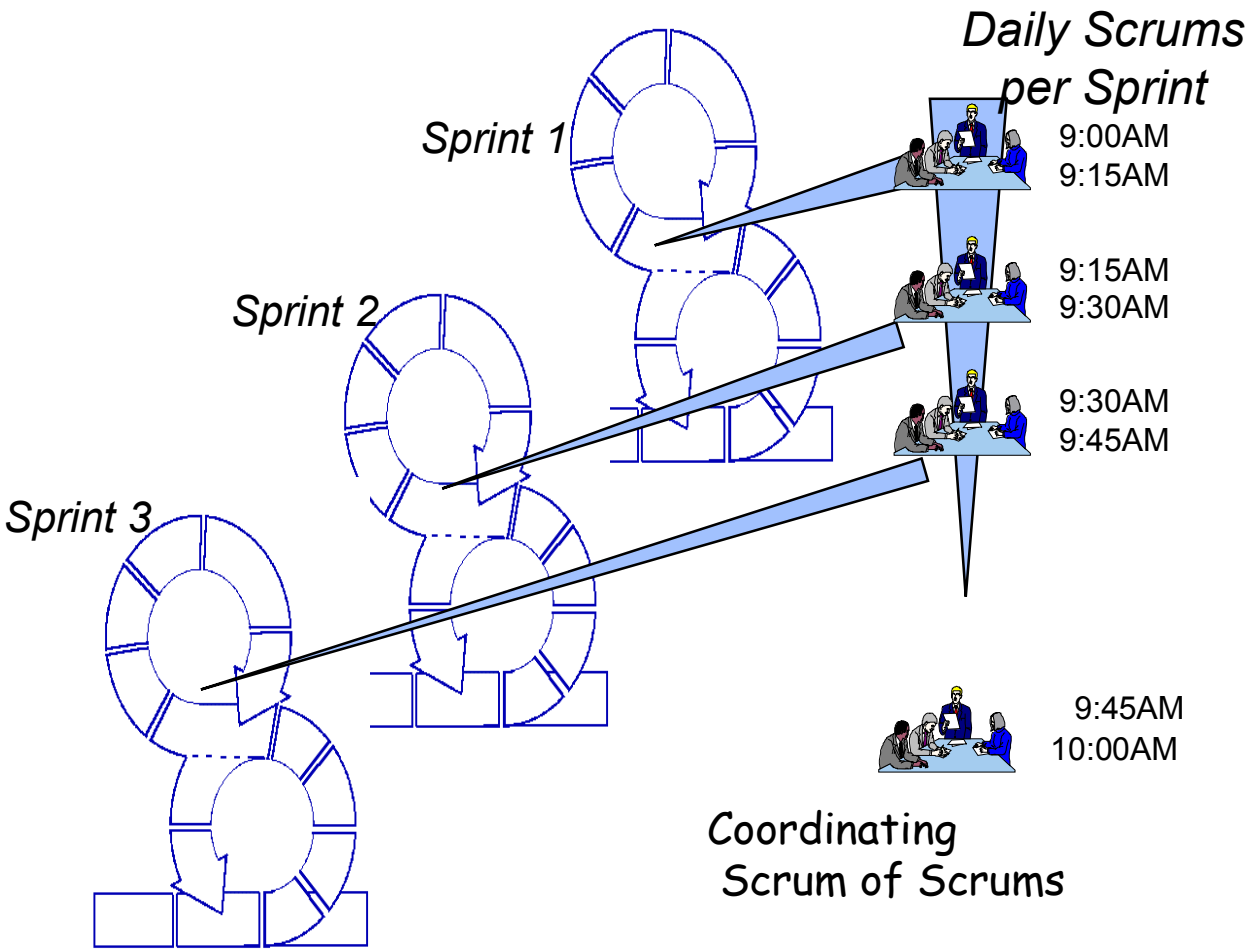
- Functional requirement
- Non-functional requirements
- Staged, scalability requirements
- the rest of the functional and non-functional requirements

Product Backlog

- Functional requirements
- Non-functional requirements

Large Project, Multiple Teams

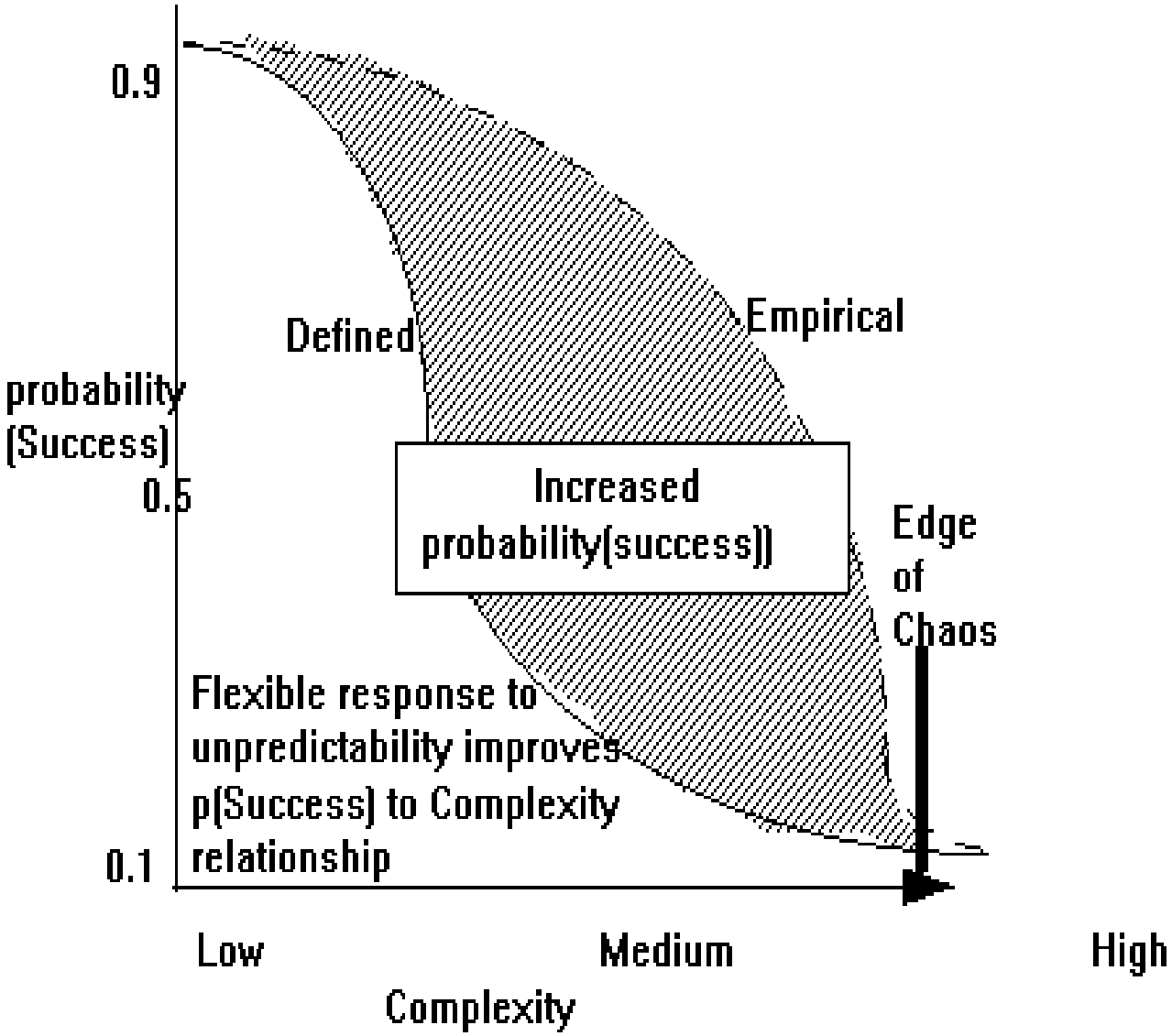
1. For smaller projects the vision statement coupled with emergence and refactoring is adequate.
2. Some architecture and design needed when multiple teams are used..



What Comprises a Potentially Shippable Product Increment

Single Use Software	Tested, debugged executable and documentation
Commercial Software	Tested, debugged executable, help, training materials, documentation
FDA Approved Software	Tested, debugged executable, training materials, documentation, requirements traceability, FDA required documentation
Mission Critical Software	Tested, debugged executable, training materials, documentation, requirements traceability, performance models
etc.	etc.

Maximized Control Through Inspection and Adaptation



Fixed Price, Fixed Date

Develop vision, value statement with prospect.

Create product backlog of functional and non-functional requirements.

Prioritize product backlog and review with customer in light of vision and value statements.

Create enough architecture and design to develop product backlog estimates; more accuracy on functionality that maximizes value.

Discuss with customer how value will be delivered incrementally and that they are free to change product backlog content and priority … as long as estimates stay the same.

Submit bid based on product backlog.

Fixed Price, Fixed Date

Or

Latest Date, Maximum Cost

Contract provisions:

1. Any requirement that hasn't already been worked on can be swapped out for another of equal value;
2. Priority of requirements can be changed;
3. Customer may request additional releases at any time at prevailing time and material fees;
4. Customer may terminate contract early if value has been satisfied for 20% of remaining unbilled contract value

Scrum Compliance with CMM Software Framework

Level	Key Practice Area	Rating
2	Requirements management	√√
2	Software project planning	√√
2	Software project tracking and oversight	√√
2	Software subcontract management	√√
2	Software quality assurance	√√
2	Software configuration management	√
3	Organization process focus	√
3	Organization process definition	√
3	Training program	√√
3	Integrated software management	√
3	Software product engineering	√√
3	Intergroup coordination	√√
3	Peer review	√

Scrum and XP Comparison

Scrum	XP
Product Backlog of requirements – less granular	Stories of Specifications – more granular
30 day iteration required to complete increment (starts with analysis)	1-2 week iteration required to create software increment (no analysis, just design)
Estimates gradually get better as a matter of course	Effort is made to increase precision of estimates
Customer interrelates at ROI level	Customer interrelates at specification level
Implements in 2 days, then gradually improves everything	Implements in 6-8 months, depending on existing engineering practices
Management process that wraps any existing business processes and methodologies	Engineering process that has borrowed some wrapping management practices, but is at odds with many organizational practices

Questions?

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