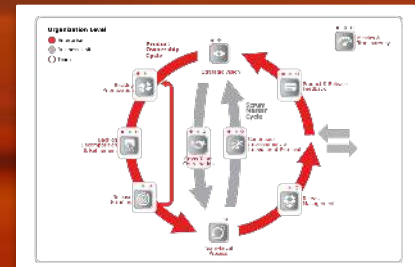


Scrum at Scale III

Expanding the Scaling Conversation



Scrum Inc. is the Agile leadership company of Dr. Jeff Sutherland, co-creator of Scrum. We are based at the MIT Cambridge Innovation Center, MA.

CEO Jeff Sutherland helps companies achieve the full benefits of Scrum leading our comprehensive suite of support services and leadership training:

- Adapting the methodology to an ever-expanding set of industries, processes and business challenges Training (Scrum Master, Product Owner, Agile Leadership, online courses, etc.)
- Consulting (linking Scrum and business strategy, customizing Scrum)
- Coaching (hands-on support to Scrum teams)



Chief Content Officer JJ Sutherland maintains the Scrum framework by:

- Capturing and codifying evolving best practices (Scrum Guide)
- Conducting original research on organizational behavior
- Publishing (3 books) and productizing ScrumLab



Principal Hardware Engineer Joe Justice leads our hardware consulting practice:

- Worldwide consulting at leading hardware companies
- 700-800% performance improvement in hardware development
- Builds 100 mpg cars in his garage with help from 500 people in 32 countries



We run our company using Scrum as the primary management framework, making us a living laboratory on the cutting edge of “Enterprise Scrum”

Find out more at www.scruminc.com.

Agenda

- Explore additional Scrum@Scale modules
- New Scrum@Scale component – Organizational Development
- Discuss most requested components
- Announce Scrum@Scale Workshops
- Closing

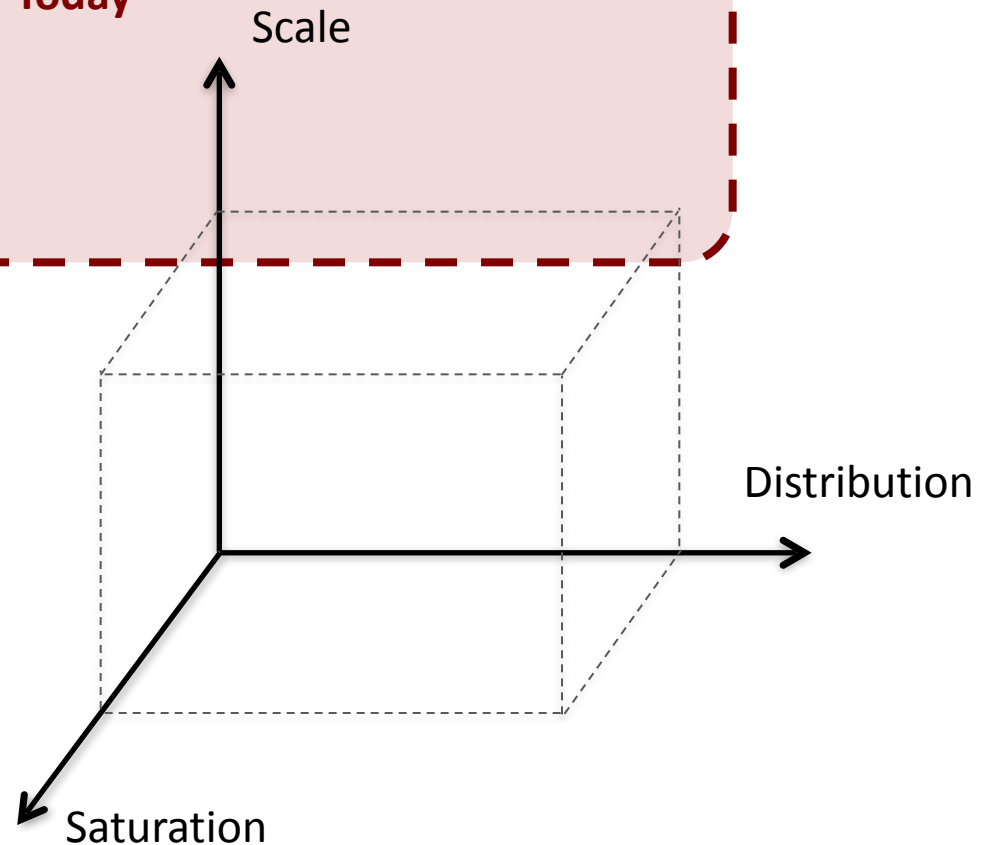
Three Dimensions of Growing your Scrum

Focus for Today

Scale = number of coordinating teams;
Complexity of projects

Distribution = number of different coordinated geographic locations

Saturation = Degree Agile principles have pervaded organization → Breaking down traditional “silos”



Improvements along any dimension will grow your Scrum

1

We Will Use 3 Very Different Example Companies to Illustrate the Benefits of Modular Scaling

A

Large Defense Contractor



Name Classified

- Top-down agile transformation motivated by perceived external market pressure
- Company vision to halve the cost of projects

Key Context:

- Complex, integrated multi-year hardware/software projects
- Each project has one customer
- Reliability a key priority
- Must deliver to detailed contract requirements

B

Mid-size Software Company



Autodesk

- Opportunistic agile implementation triggered by acquisition of a small Scrum company
- Market leader Looking to stay ahead of competition

Key Context:

- Redeploying a legacy software product to cloud-based SaaS model
- Goal to increase pace of innovation
- Historically, releases a disruption for customers

C

Growing "Agile Native" Company



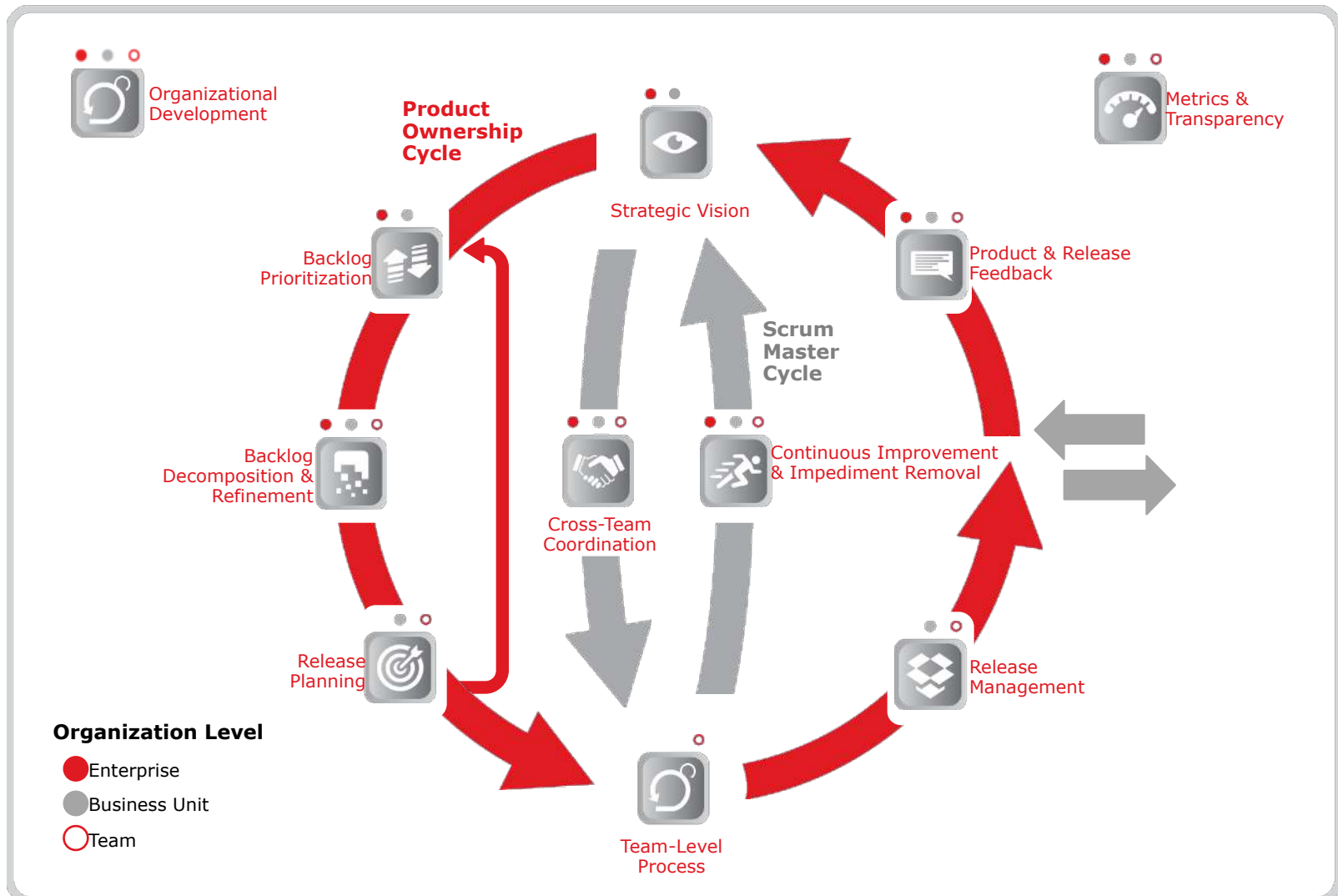
Spotify

- Disruptive technology innovator with successful product looking to scale to keep up with demand
- Leadership are steeped in agile principles

Key Context:

- Web/app-based product
- Product and company set up modularly
- Allows teams to work independently with minimal coordination
- Teams co-located

Modular Framework for Scaling Scrum



Scrum at Scale Modules are Defined by their Goals, Inputs and Outputs

Goals

Define what the module is intended to accomplish

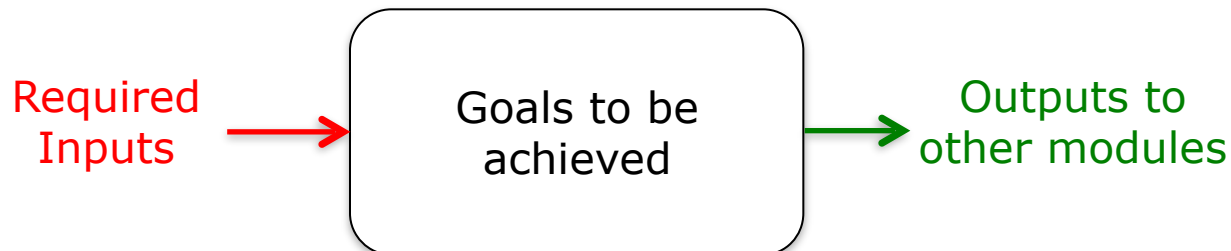
Inputs

Describe the information or resources needed from other modules to accomplish those goals

Outputs

Outline what information or product this module generates that are needed by other modules

ANY specific practice that meets the module's required Goals, Inputs and Outputs will work with all of the other Scrum at Scale modules...This is "Contract-First Design."



Your Requests

- Cross Team Coordination

- Covered in Scrum@Scale Part 2
- Free at: scruminc.com/scrum_at_scale_part_ii

Cross-team
Coordination



- Backlog Decomposition

- Covered in Scrum@Scale Part 1
- Free at: scruminc.com/scrum_at_scale_part_ii

Backlog Decomposition
& Refinement



- Release Planning Management

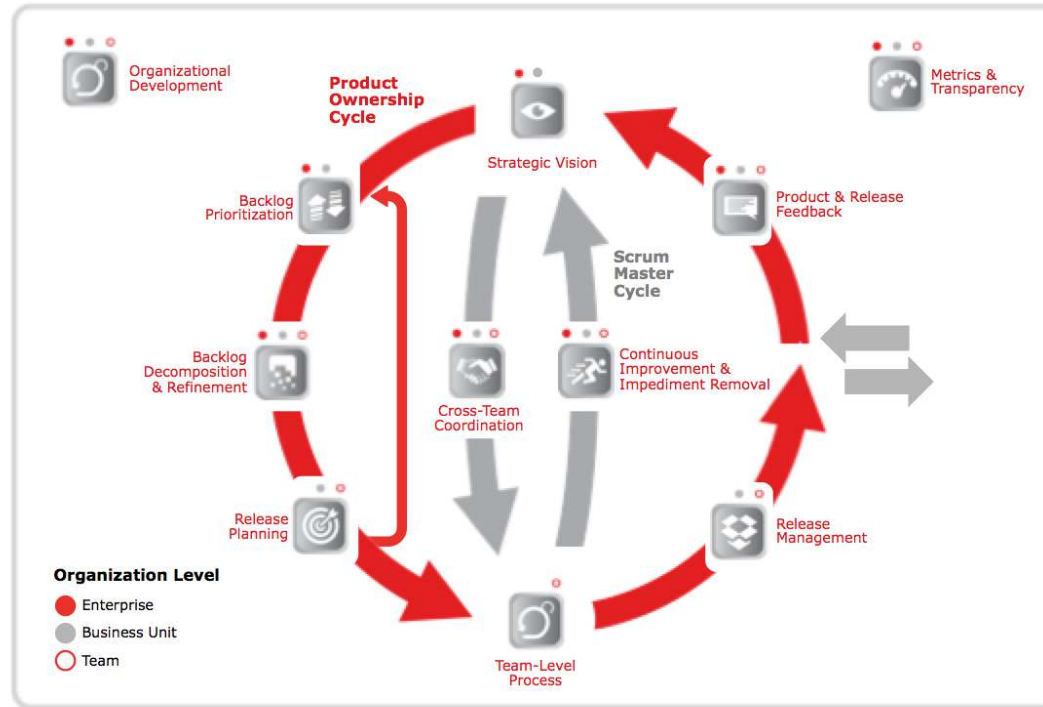
- Covered in Scrum@Scale Part 1
- Free at: scruminc.com/scrum_at_scale_part_i



Release
Management

Final Backlog

Modular Framework for Scaling Scrum



- **Organizational Development** – Module #0
- **Strategic Vision** – Module #2
- **Release Planning** – Module #5
- **Continuous Improvement** – Module #8

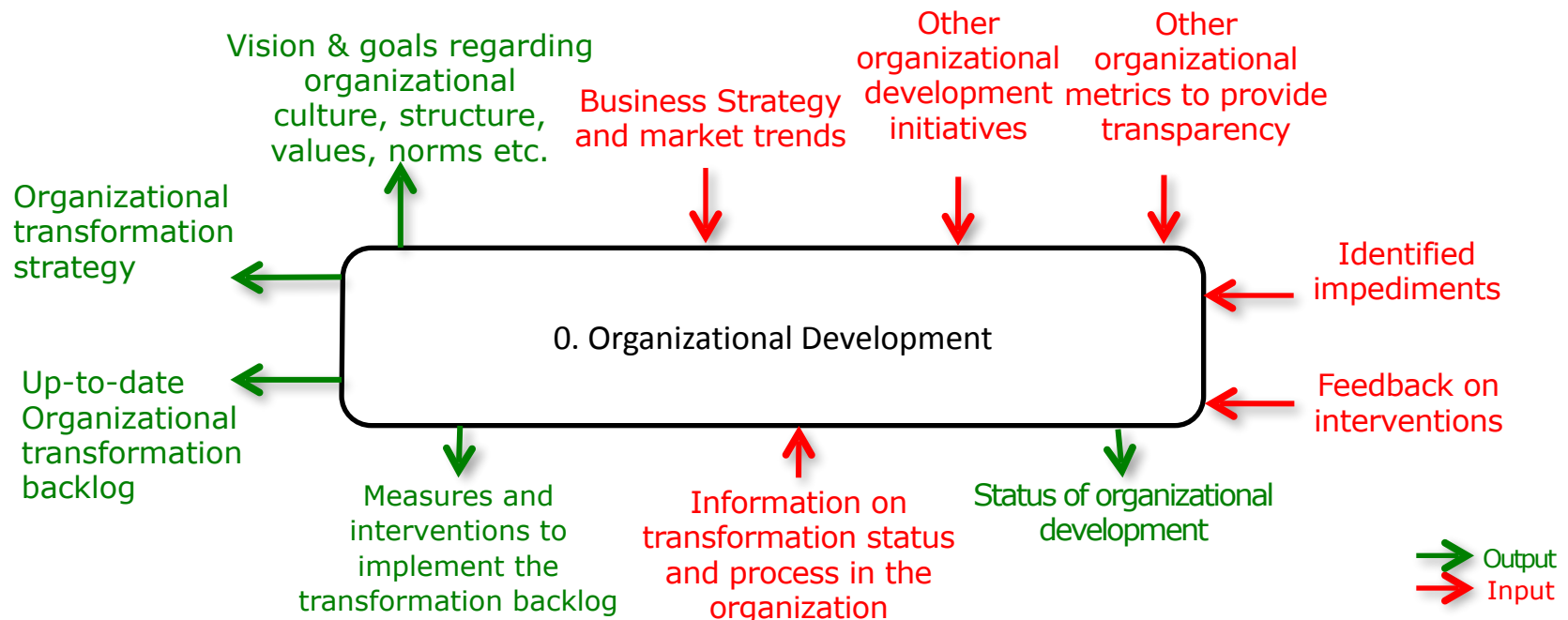
Leadership needs to implement the Organizational Development Module to assist the organization in scaling



0. Organizational Development (Transformation)

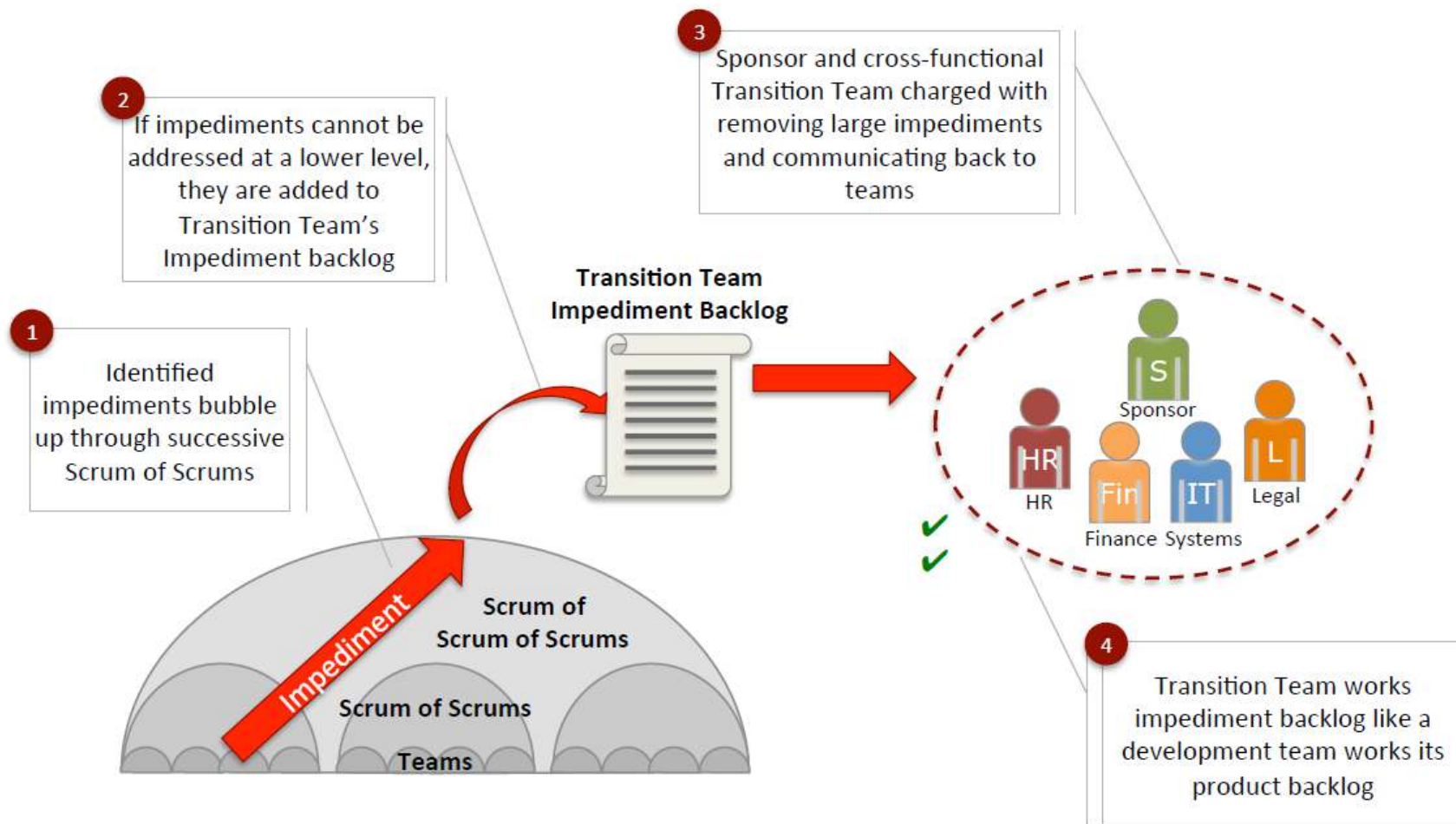
Module Goals:

- Align the development of the entire organization along a shared and transparent organizational transformation strategy
- Manage the high level transformation process based on a prioritized organizational transformation backlog with a primary focus on removing waste
- Continuously inspect and adapt the approach according to identified needs, results and impediments
- Support the PO and SM cycle of the Scrum@Scale model through mentoring, coaching and challenging





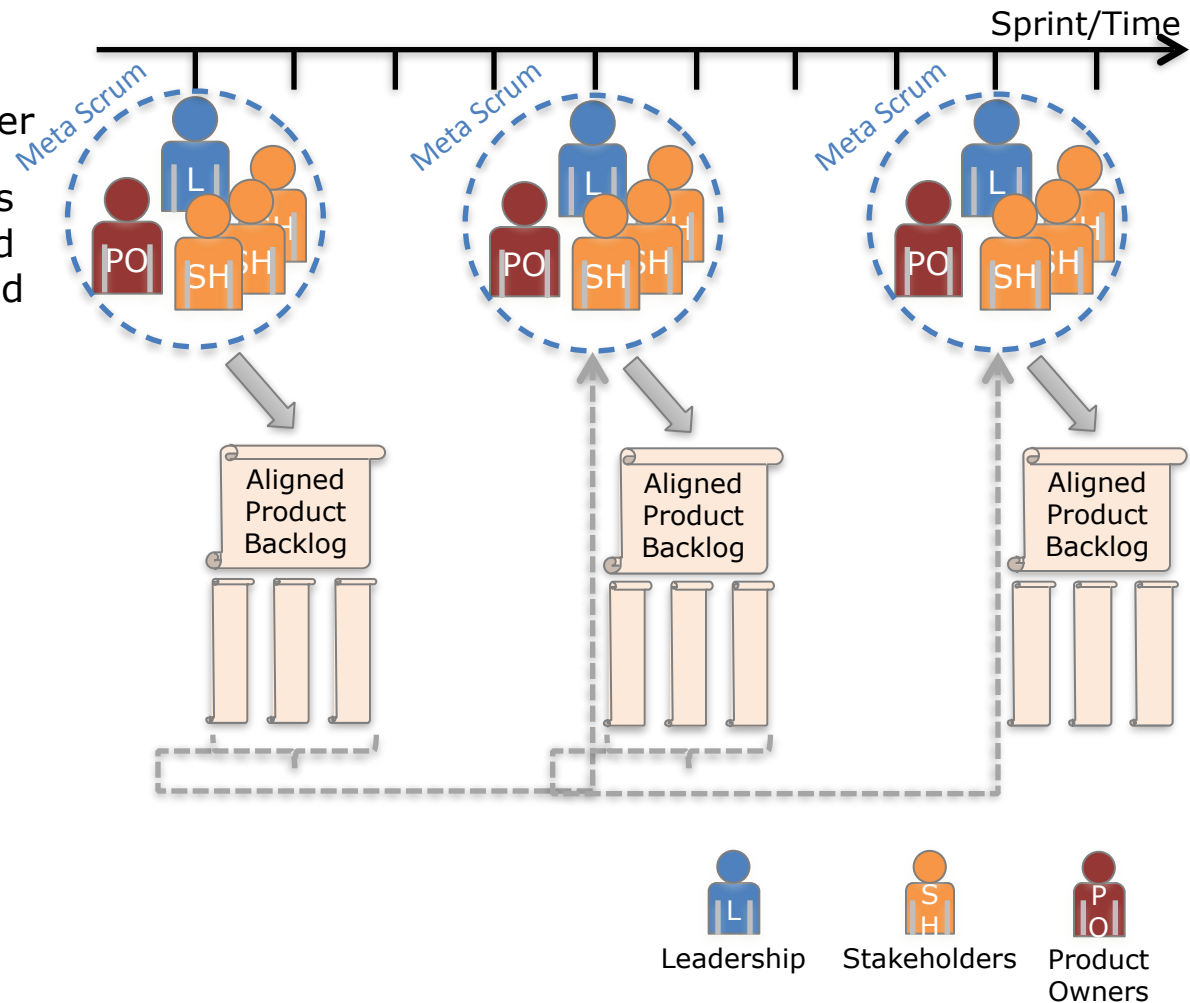
How the Executive Action Team Works



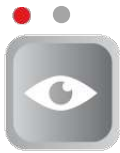


The Meta Scrum: Operational Execution of Scaled Scrum

- A gathering of Key Stakeholders, Leadership, and Product Owners
- Run by Chief Product Owner
- The forum for stakeholders to express preferences and remove blocks (they should not try to alter product vision between Meta Scrums)
- Can be held at regular intervals or on an ad-hoc basis
- Allows teams to progress efficiently down a single work path



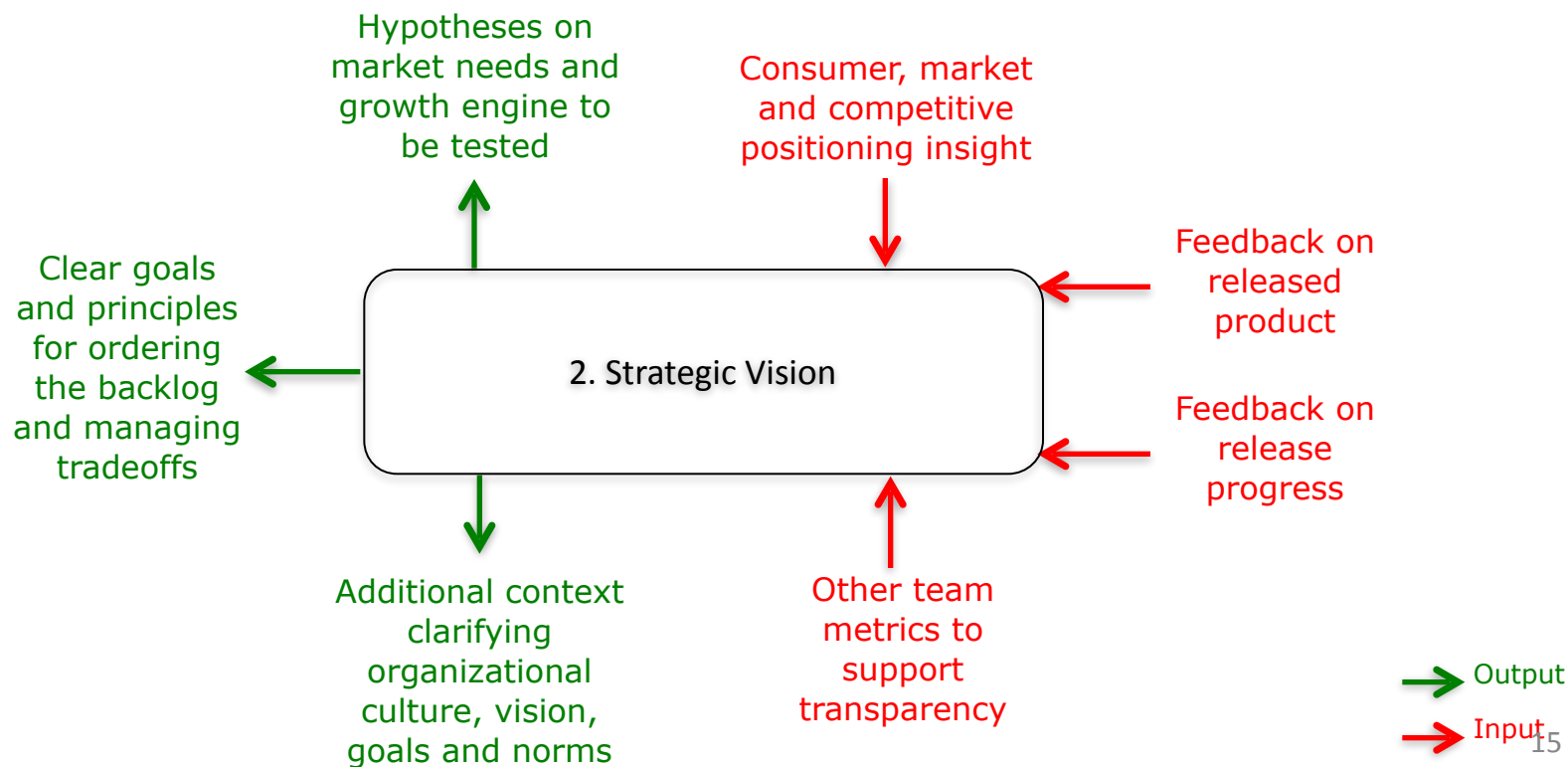
**As an organization, we need a
Strategic Vision to scale Scrum
successfully**

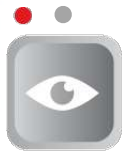


2. Strategic Vision

Module Goals:

- Clearly align the entire organization along a shared path forward
- Compellingly articulate why the organization exists
- Describe what the organization will and won't do to leverage key assets in support of its mission
- Update and fine-tune vision continuously based on feedback to outmaneuver the competition





Example: Vision Statement for ScrumLab™

For experienced Scrum practitioners (Jill) who are “in the trenches”

Who need clear and actionable information to answer specific Scrum questions whenever they arise

ScrumLab Is the authoritative, curated on-demand source for Scrum Inc.’s leading edge thinking

That:

- Clearly explains Scrum and its underlying principles (the why)
- Shares successful advanced practices for different contexts
- Provides actionable solutions to implement successfully
- Is available whenever you need it

Unlike other online Scrum resources

Our product captures decades of successful experience and wisdom from the co-creator of Scrum and his hand-picked team of thought leaders



Alternate Approaches to Satisfy the “Strategic Vision” Module

A



Contract Mgmt. Team

- Corporate vision still set and established in traditional model
- Vision includes goals to halve project delivery cost thru agile
- Corporate vision translated to project-level vision and goals through customer discussion & contract negotiation

Pro: Does not yet require large organization or customers to change what they are used to doing; meets core productivity goals

Con: Still very traditional “waterfall” process that limits ability to innovate faster using customer feedback

B



PO Team

- Corporate leadership articulates enterprise-level vision and goals and updates to reflect market
- Chief PO for each product maps these goals to given product and maintains working vision that incorporates regular feedback and team discussion

Pro: Provides a highly centralized vision, while also responding to change and leveraging product/team-level input

Con: Still quite hierarchical and enterprise-level vision, in particular, not updated as frequently

C



Empowered POs

- Strong culture of team empowerment & collective ownership
- Leadership articulates corporate “objectives & key results” quarterly
- “Tribes” of component teams work together facilitated by POs to interpret that vision at the component level

Pro: Lightweight approach; leadership focused on big picture only, and teams develop ownership of vision

Con: Stronger potential for conflicting views on how to achieve objectives; Risk of sub-optimizing vision at component level

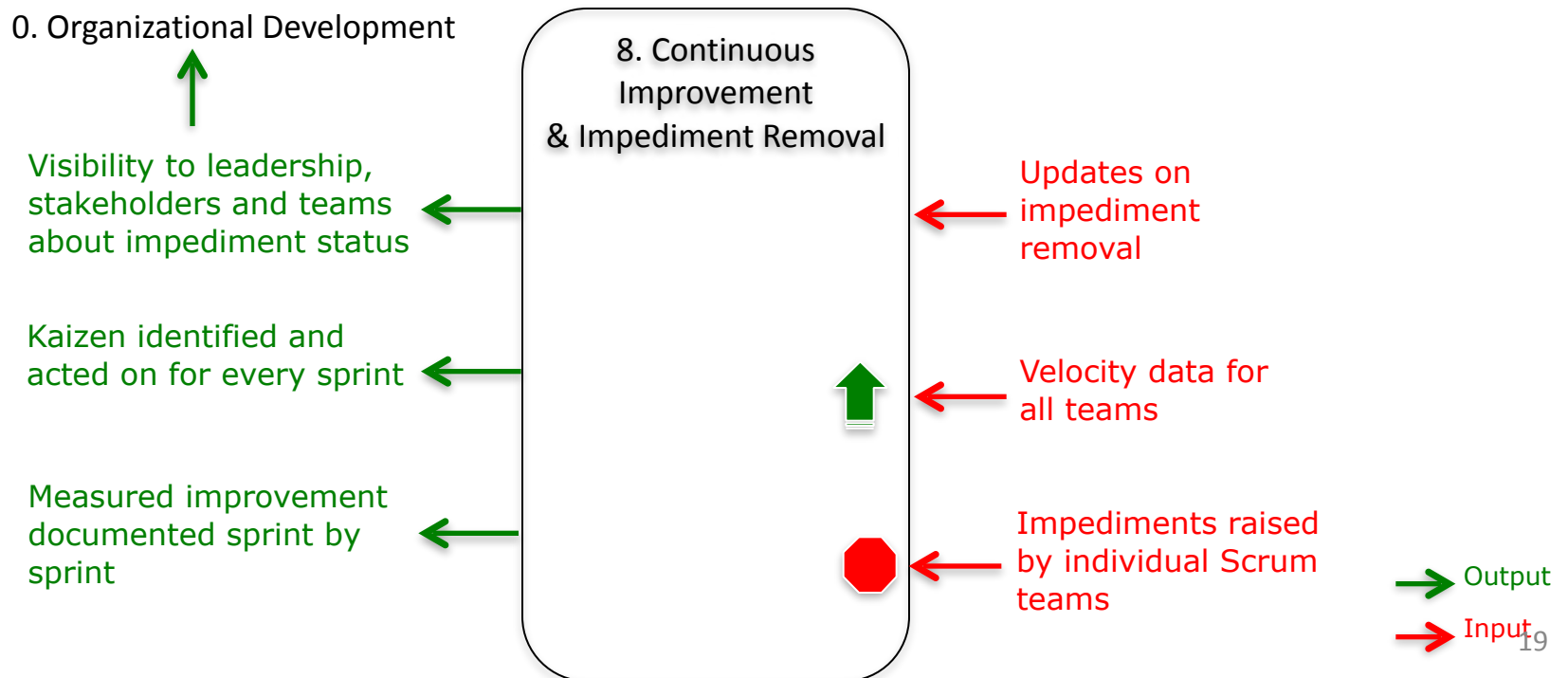
**As an organization we need
Continuous Improvement to
maximize success**



Continuous Improvement and Impediment Removal

Module Goals:

- Identify impediments that slow teams down and reframe them as opportunities to get faster
- Maintain a safe and structured environment for prioritizing and removing impediments, and then verifying the resulting improvement
- Ensure visibility at the right level(s) in the organization to effect change





Alternate Approaches to Satisfy the “Continuous Improvement” Module

A



Agile PMO

- Individual teams identify impediments
- Impediments discussed at regular Scrum of Scrums, and escalated if needed
- “Agile PMO” is available to support removal of corporate, contract, or systematic impediments
- Agile PMO logs and tracks impediments

Pro: Structured process to provide teams with support to remove impediments; provides audit trail for ISO and contract requirements

Con: Involves greater overhead; in practice, has a mixed record removing impediments in a timely way

B



Escalation with Exec. Support

- Individual teams identify impediments
- Impediments discussed at regular Scrum of Scrums, and escalated if needed
- Executive “sponsor team” tasked with removing major impediments fast
- Systemic impediments referred to functional “Centers of Excellence”

Pro: Traditional escalation model for removing impediments; teams get support, but impediments removed at lowest level possible

Con: Requires greater overhead in terms of meetings and staffing; can take time for impediments to percolate up

C



Flexible

- Individual teams identify impediments
- Cross-cutting issues can be discussed in “chapters,” “guilds”, ad hoc, or with team’s executive mentors
- Culture of continuous improvement encourages employees to help resolve team impediments

Pro: Very informal approach allows for different solutions to different impediments; reinforces culture of collaborative empowerment

Con: Little formal structure can make it difficult to recall what was or wasn’t done; depends on supporting culture

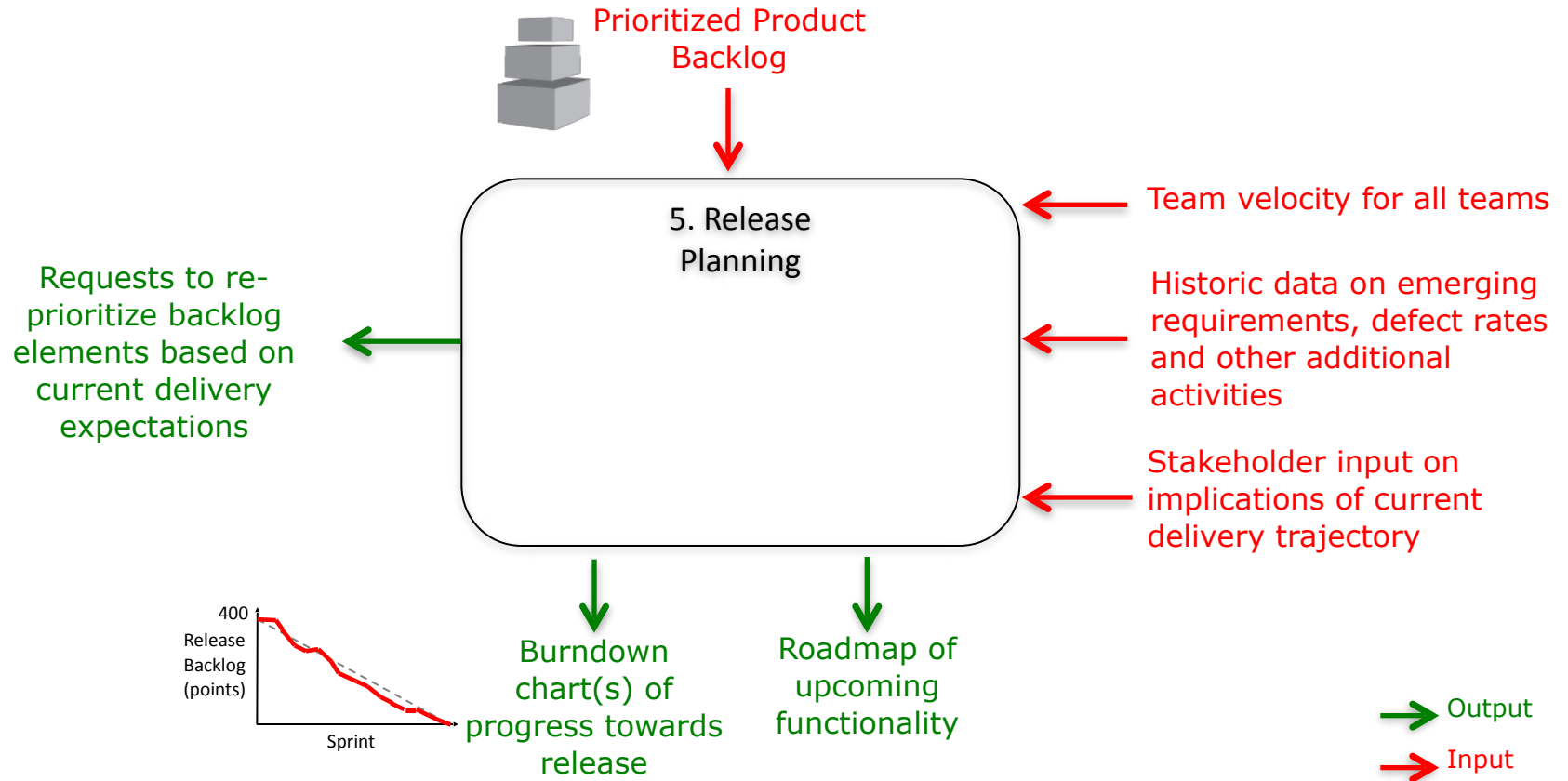
**As an organization, we need
Release Planning to align
stakeholders and anticipate delivery**



5. Release Planning

Module Goals:

- Forecast delivery of key features and capabilities
- Communicate snapshot of delivery expectations to stakeholders
- Inform updated prioritization, as needed, based on stakeholder input





Alternate Approaches to Satisfy the “Release Planning” Module

A



Tightly Managed Deliverables

- Contract management team outlines and verifies feasibility of meeting contractual release milestones
- Monitors burndown progress and emerging requirements
- Identifies “at risk” deliverables early and negotiates responses

Pro: Better than traditional waterfall planning because forecasts based on actual progress, and interventions can happen much earlier.

Con: Still relatively rigid, hierarchical, and not as responsive to new learning

B



Release Train Burndown

- Product Owner team meets regularly to:
 - Discuss progress
 - Update release plan
 - Re-prioritize backlogs as needed to align complementary functions for quarterly releases
- Stakeholders updated of any changes

Pro: Straightforward way to plan releases that align key dependencies across teams and provide transparency to all teams and stakeholders

Con: Process not automated; Requires more overhead than independent release approach

C



Stakeholder Transparency

- Team Product Owners update metrics and backlog at end of each sprint
- Individual team tools and information radiators available to anyone
- Provides visibility, if stakeholders disagree with current plan, they can raise concerns

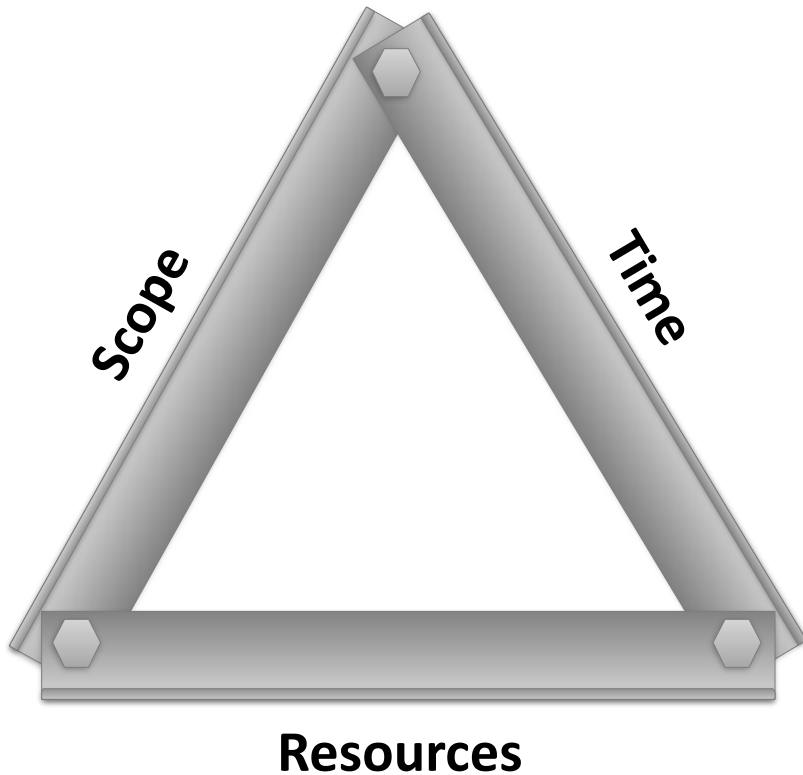
Pro: Provides transparency for all stakeholders; low overhead for teams and POs

Con: Requires product modules to be largely independent; not systematic across all teams; burden of proof for identifying conflicts falls on stakeholders



Scrum Allows us to Break the Iron Triangle

Complete More Scope in Less Time with Fewer People

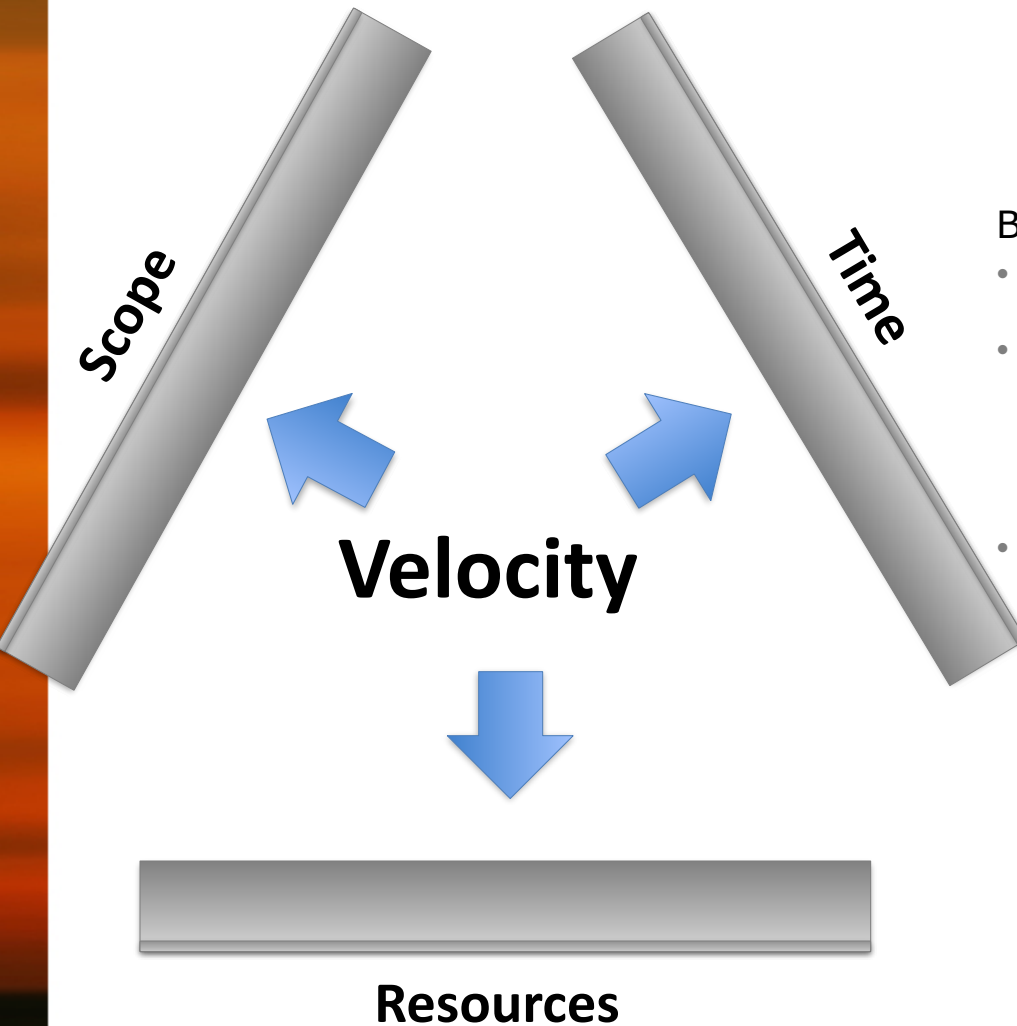


- Traditional planning views Scope, Time and Resources as locked in a fixed relationship
 - In theory, any dimension can change to meet release requirements...
 - ...But, in practice resources seen as easiest to change, while scope & time seen as fixed constraints



Scrum Allows us to Break the Iron Triangle

Complete More Scope in Less Time with Fewer People

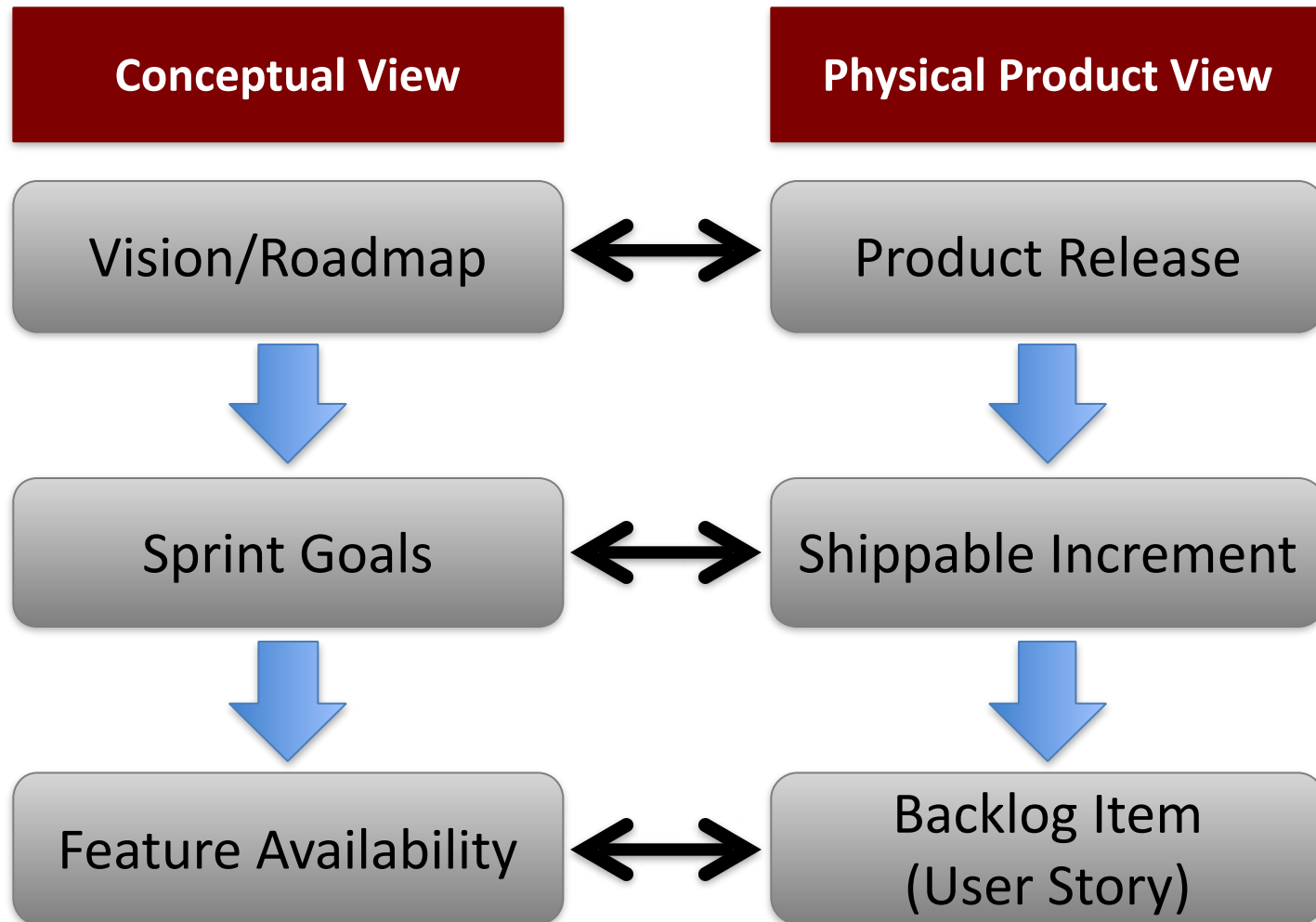


But in Scrum we find:

- Small & stable teams are key
- Flexing scope actually much easier than changing resources
 - Requires scope defined as independent features, and prioritized by value
- Increasing velocity allows team to get more done in the same time
 - Accomplished by removing impediments



Release Plan Links Concept and Physical Worlds





Elements of a Scrum Release Plan

1 Clear Vision

- Tied to concrete business value
- Aligns stakeholders

2 Vision decomposed into independent features

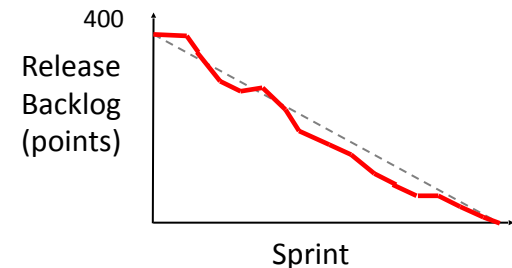
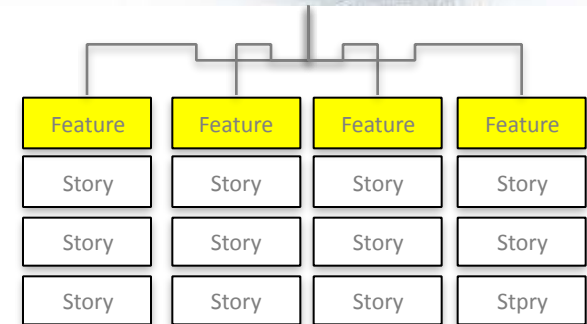
- Prioritized and estimated
- ROI and customer need driven

3 Burndown chart of progress on prioritized backlog items

- Measured in Points!

4 Feature availability timeline

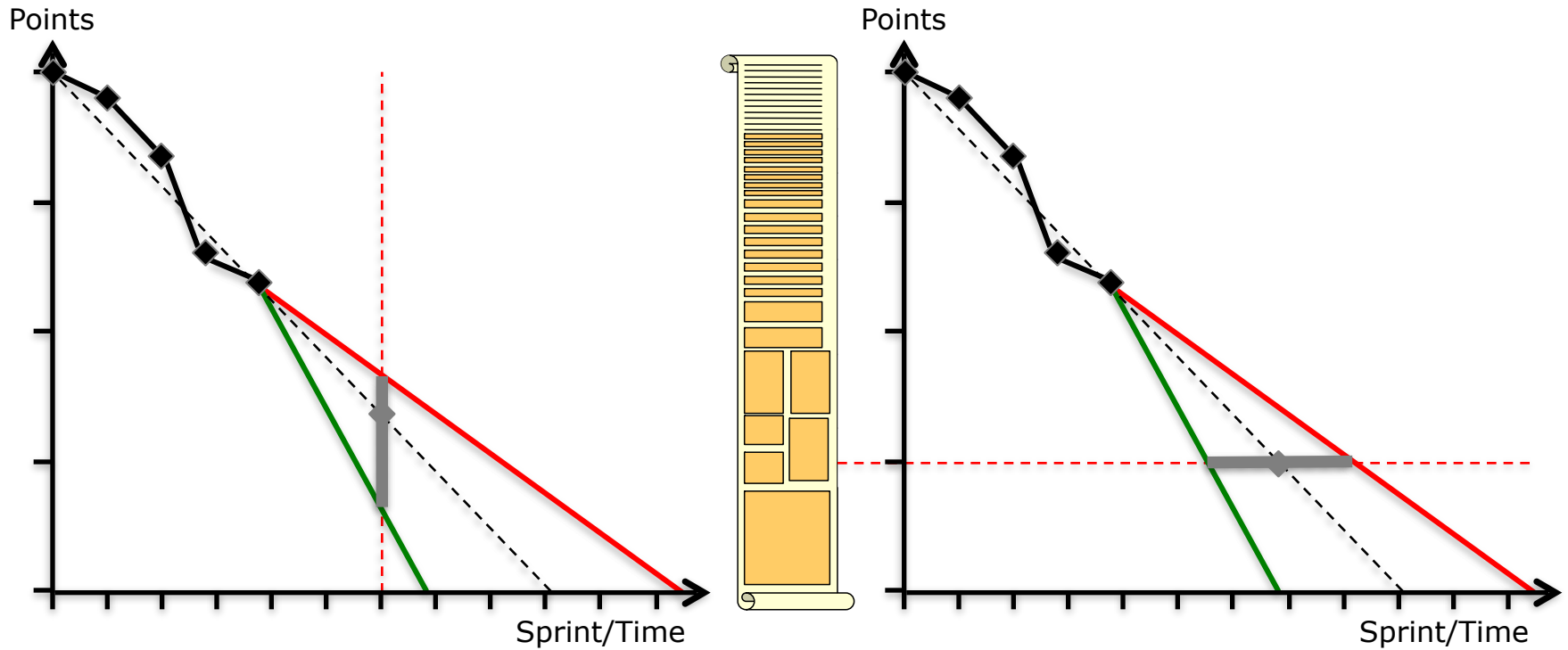
- Best guess – subject to change



- Q1
 - Basic platform with ability to create new user
 - Homepage and introduction
 - Ability to view account status
- Q2
 - Ability to update account information/address
 - Select communication options and preferences
 - "Share with friends" link
- Q3
 - Ability to rate individual articles
 - Ability to sort by top rated articles
 - Ability to refer friends for a referral bonus
- Q4
 - New premium content offering
 - Corporate portal for company viewing



Release Burndown Chart Makes Team's Velocity Implications Visible





Three More Considerations for Anticipating Burndown

Undone Work

Additional work needed to release features to the customer. Teams without a robust Definition of Done will leave work undone that must be completed before release.

This often materializes as software that isn't fully tested or integrated, documentation that isn't written, or an involved release process. Analyze how many points of additional work are consistently needed before a product can be released and factor that amount into your release plan.

Emerging Requirements

Additional user stories beyond those known in the backlog that are "discovered" as the project evolves and require the team to do more work.

Generally happens as a consistent percentage of estimated work, which can either be added to the backlog as a "buffer" or subtracted from velocity in calculating burndown.

Bugs and Customer Feedback

Additional work that cannot be anticipated in the release plan, but you know it will come up as product functionality is released.

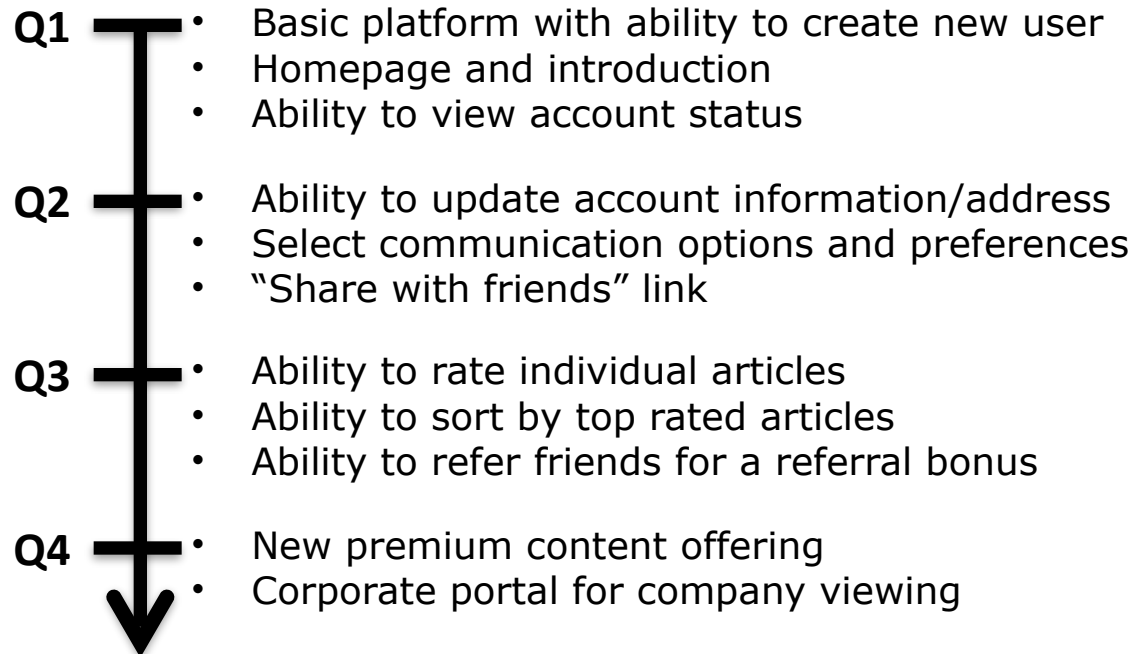
Track as a separate buffer as a percent of estimated work, and try to manage down the percent of velocity devoted to bugs as a way to speed up the team.

All three factors must be accounted for to determine accurate burndown



Roadmap Helps Stakeholders Know when to Expect New Features

- Facilitates conversations on feature priority
- Aligns stakeholders and heads off distraction
- Ground rule: Timeline is only an estimate, and subject to change



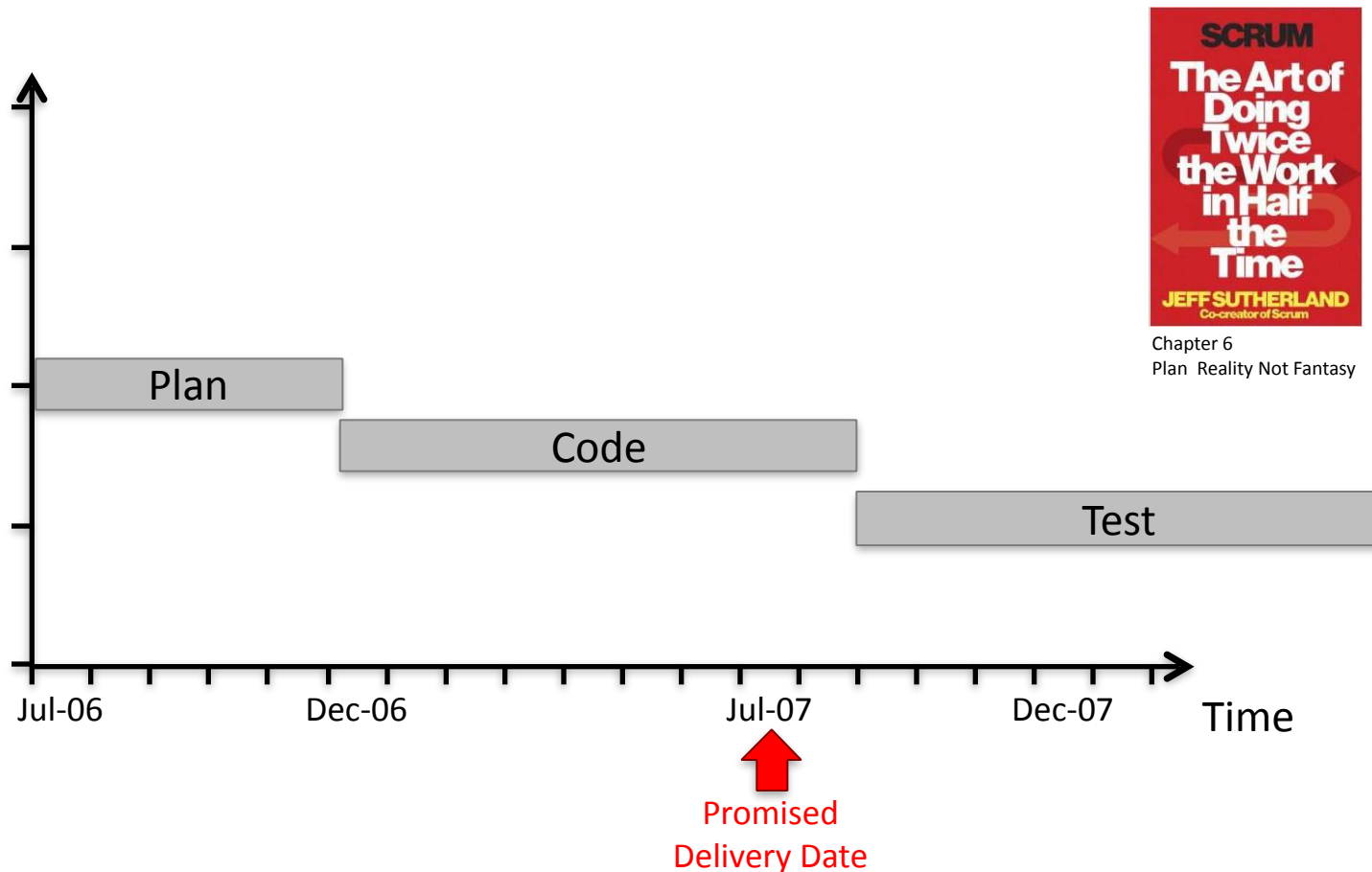


Deadline-Based Release Planning

Medco Case Study

On July 7 2006, Medco CEO promised Wall Street analysts a completely new pharmacy fulfillment system to be implemented by July 7, 2007

- Unfortunately, he didn't check with the development team first!



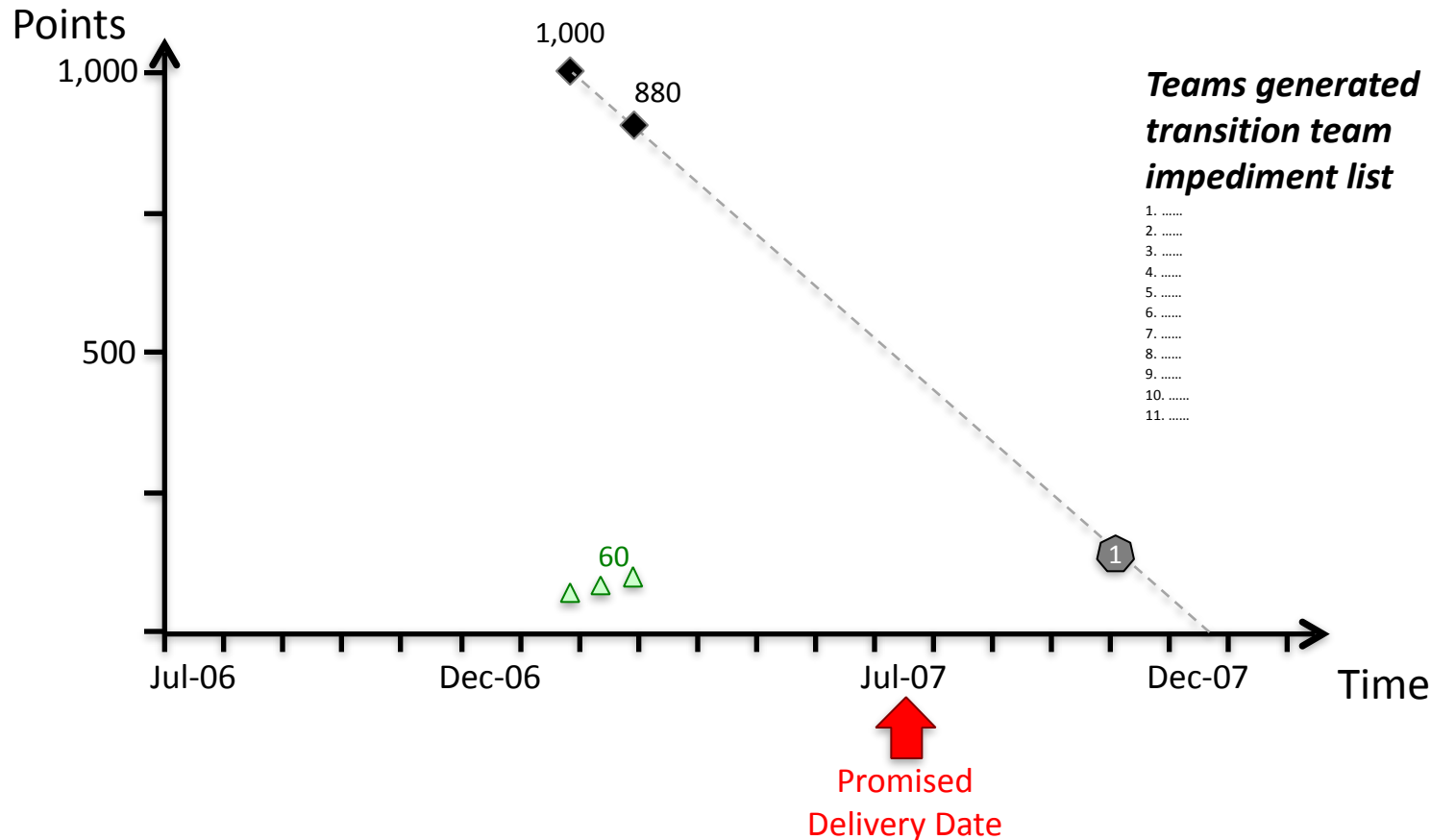


Deadline-Based Release Planning

Medco Case Study

On July 7 2006, Medco CEO promised Wall Street analysts a completely new pharmacy fulfillment system to be implemented by July 7, 2007

- Scrum Inc team did week long release planning in January

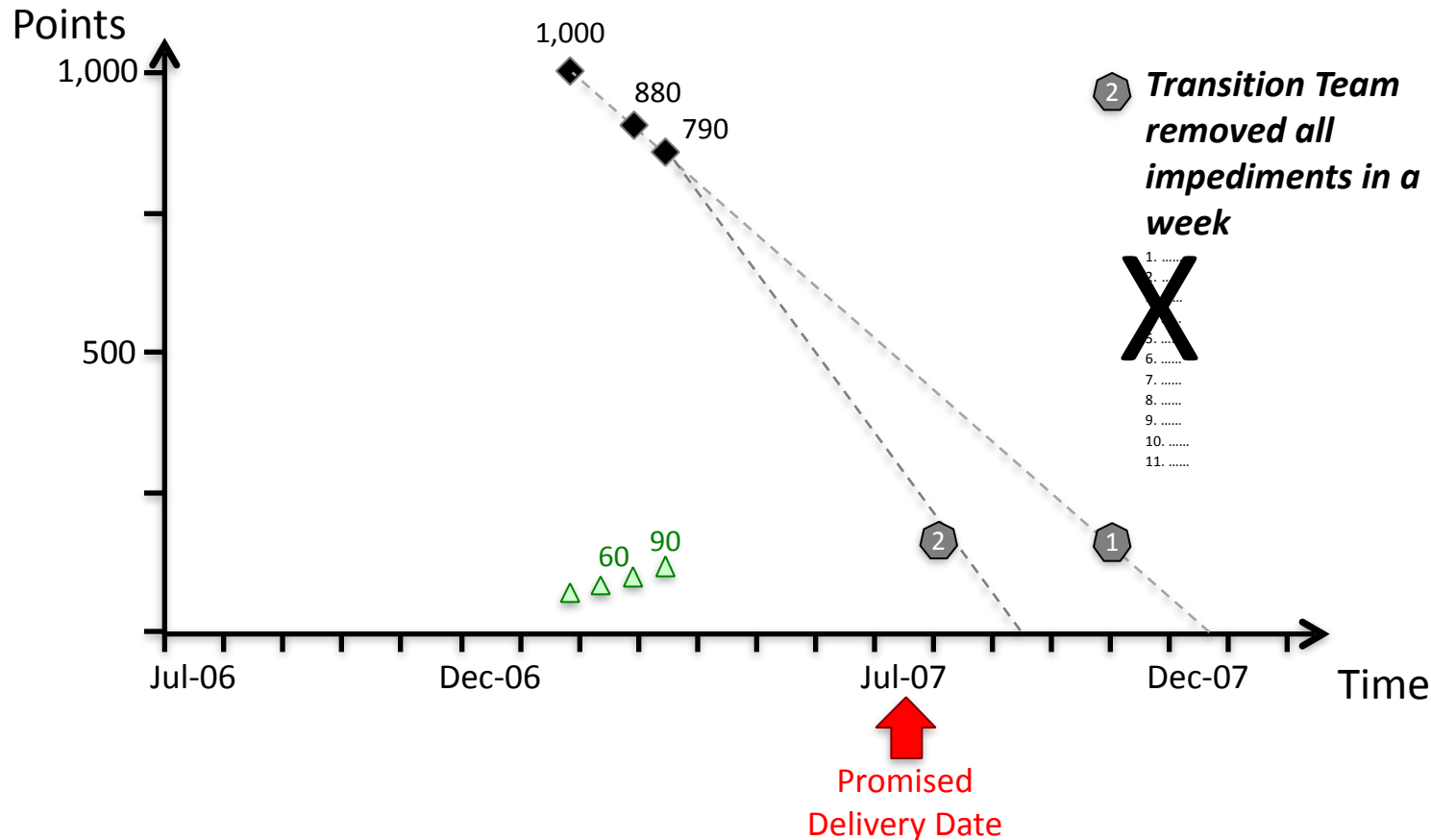




Deadline-Based Release Planning

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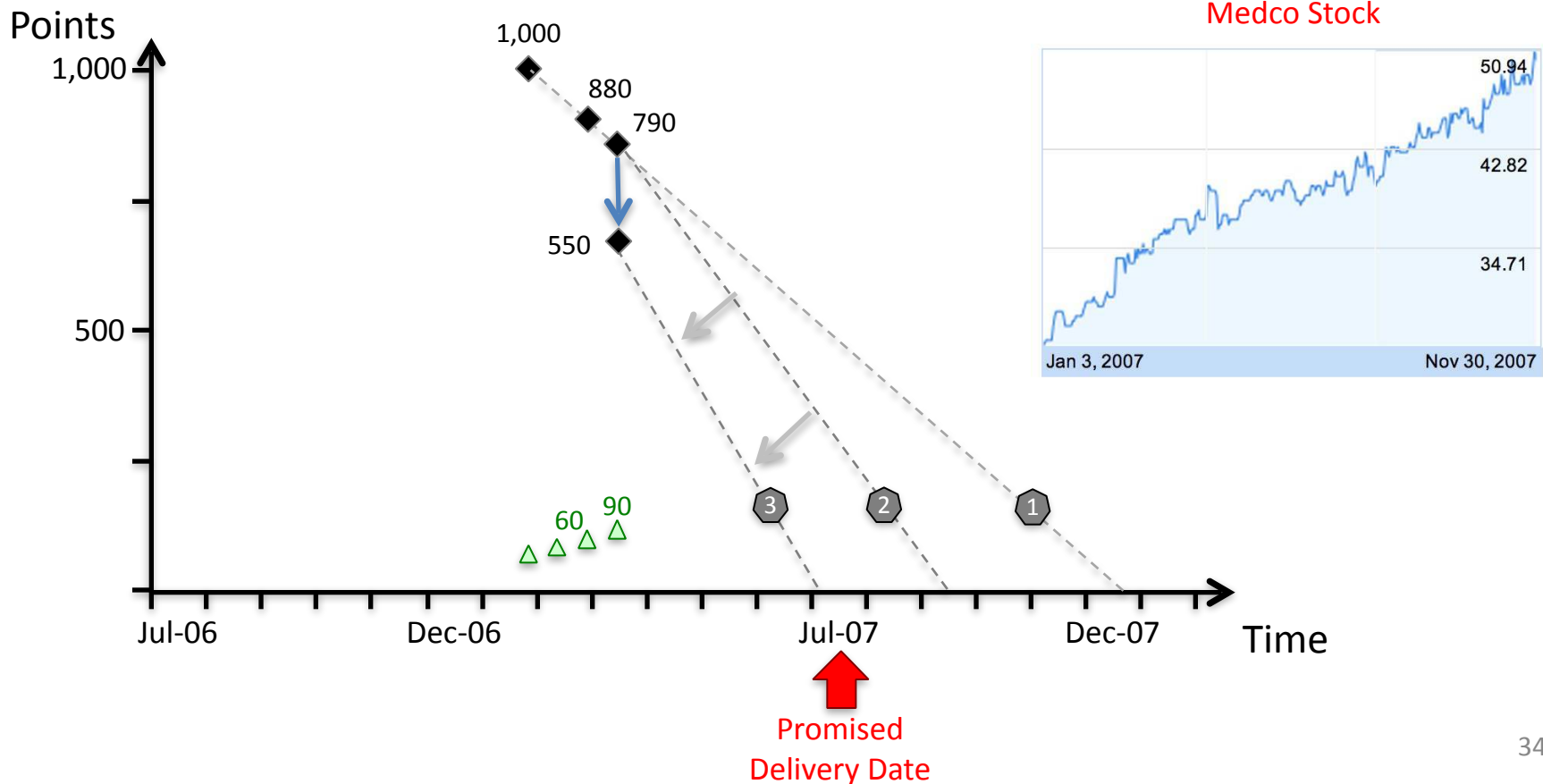


Deadline-Based Release Planning

Medco Case Study

On July 7 2006, Medco CEO promised Wall Street analysts a completely new pharmacy fulfillment system to be implemented by July 7, 2007

- ③ Team executed Scrum Emergency Procedure (scrumplow.org)



Scrum@Scale Workshop

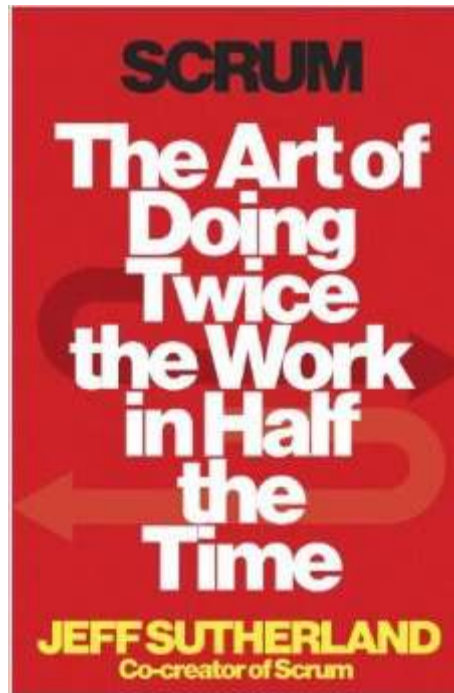
- *Are you concerned that a cookie-cutter approach to scaling won't work for your organization?*
- Join Scrum Inc. at Salesforce.com on 11 February in San Francisco or 4 March in Stockholm to:
 - Lay out the business case for your organization to use a modular scaling framework
 - Present an overall vision for modular scaled Scrum that spans the Team, Business Unit, and Enterprise levels to link vision with effective execution
 - Share specific examples of different successful practices within each module
 - Help attendees work through their own scaling challenges in the context of the framework
- Participants will leave with a workbook showing tailored progress towards their scaling solution, and the experience will equip them to lead a productive conversation of what the organization really needs from scaling Scrum.

11 February 2015



Salesforce.com
1 California Street
San Francisco
California

Questions?



“Scrum is mandatory reading for any leader, whether they’re leading troops on the battlefield or in the marketplace. The challenges of today’s world don’t permit the luxury of slow, inefficient work. Success requires tremendous speed, enormous productivity, and an unwavering commitment to achieving results. In other words success requires Scrum.”

General Barry McCaffrey

Available from Crown Business
Order at Amazon or Barnes and Noble

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