Recent Changes

- Updated self-organization section
- Replaced stories to tasks to stories with cake slicing (similar exercise)

- Changed Agile Manifesto Exercise
- Small updates to backlog grooming and iteration planning
- New material on story points
- New explanation of velocity

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

Instructor Session Preparation

- Create parking lot area
- Post start/stop times and breaks
- Create a transformation backlog area
- Have the participants make name tags
- Don’t forget the retro at the end!

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

Agile Whole Team Training

Mixing it Up

5 min

- No more than 7 people per table
- Each team/table needs
  - At Least 1 person with a business or marketing background
  - At least one person with a project management background
  - Everybody else
    - 1 or more people with a development background (code, dba, etc)
    - 1 or more people with a testing background

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

There Will be Check-in Time at the Breaks

See posted start/stop and break times for details

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Brent Hurley

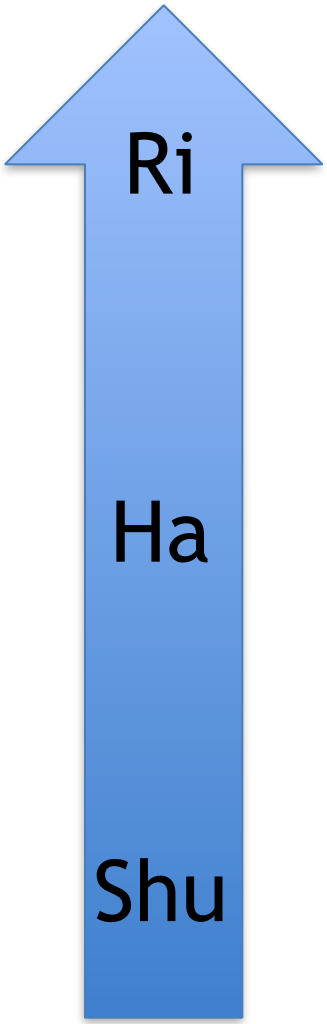
Credentials:
Certified DSDM Coach
Certified Scrum Master
Kanban Practitioner
MBA, Open University, UK

- **AGILE REGIONAL DELIVERY LEAD** with the **ELIASSEN GROUP**
- Enterprise Agile practitioner with a proven track record leveraging agile concepts to develop value and consistently deliver results on behalf of Fortune 500 clients, start-ups and Governmental organizations.
- **Organizational:** Practiced Agile/Lean: Marketing, Finance and HR;
- **Industry expertise**: Financial Services, New Media, Cable & Telecommunications, Government, High Tech and Startups.
- **Geolocated**: used to dealing with Offshore models and worked in UK, Australia, Belgium and US, with teams all over the world.

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Learning Agile



Transcend – Agile has become second nature.

Innovate – break the rules, introduce new things.

Follow - learn and follow the rules by the book

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Learning Outcomes

- Agile
- Deming Cycle
- Shippability 
- Scrum 101
- The value of Agile & Scrum
- Self-organization
- How to Go Agile

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Agenda

- Overview of Agile
- Cross Functional Teams
- Product Vision, Epics, MVIs
- User stories
- Story splitting
- Agile Technical Practices
- Agile Planning
- Scrum
- Agile Flow
- Self-organization
- Distributed Agile
- Going Agile
- Wrap-up

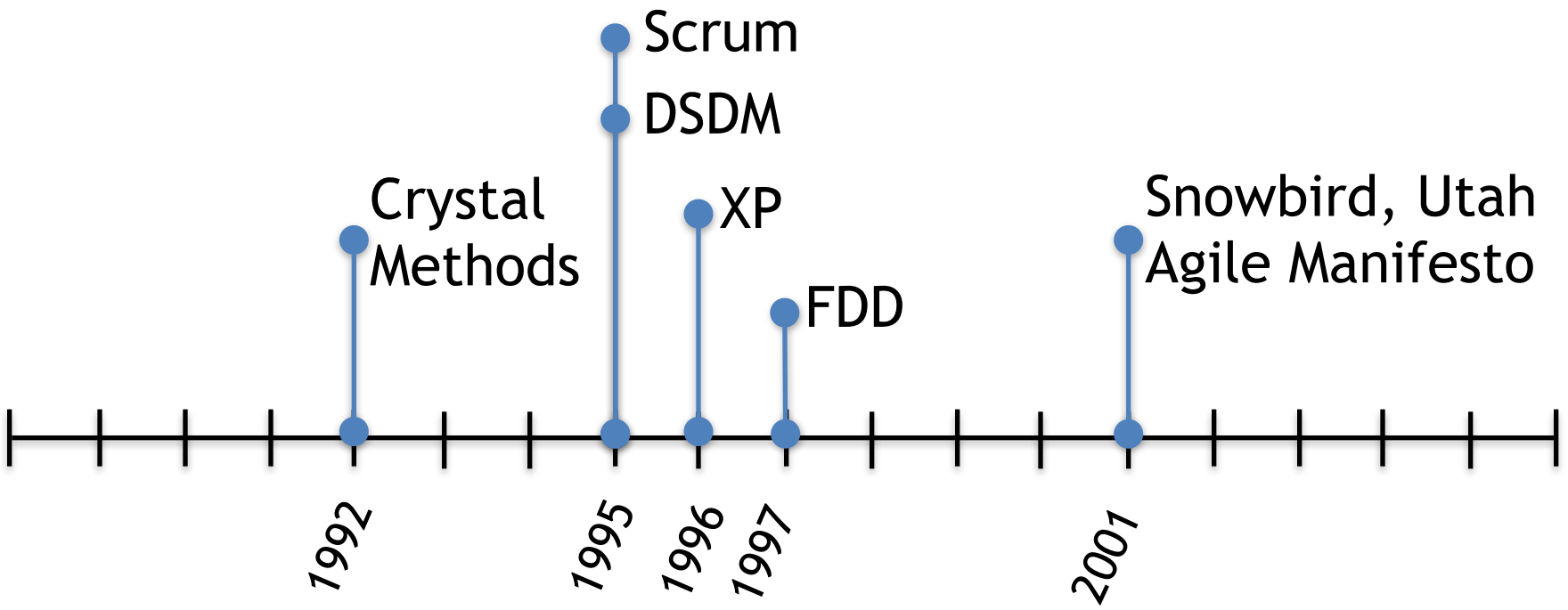
Agile: Simple and Disciplined

- 24/7 Operation
- Depends on human interaction
- Life-critical

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

A Partial Agile Timeline



© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Agile Manifesto – Values and Principles

We are uncovering better ways of developing software by doing it and helping others do it.

Values

"Individuals and interacti… and tools"	*"Working software over comprehensive documentation"*	*"Customer collaboration over contract negotiation"*	*"Responding to change over following a plan"*

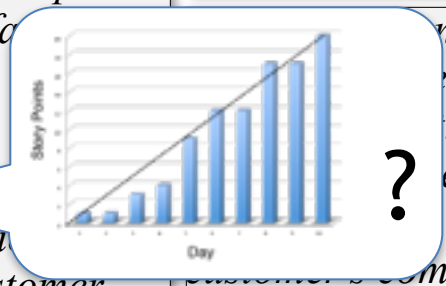
Principles

"Build projects around motivated individuals, give them the environment and support they need, and trust them to get the job done."	*"Deliver working software frequently, from a couple of weeks to a couple of months, with a preference to the shorter timescale."*	*"Business people and developers must work together daily throughout the project."*	*"At regular intervals, th… l… e effective, then tunes and adjusts its behavior accordingly."*
"Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely."	*"Working software is the primary measure of progress."*	*"The most efficient and effective method of conveying information to and within a development team is face-to-fa… conversation."*	…nging …ven late …. Agile …ess
"The best… requirements, and designs emerge from self-organizing teams"	*"Simplicity -- the art of maximizing the amount of work not done – is essential."*	*"Our highest pri… to satisfy the customer through early and continuous delivery of valuable software."*	…mpetitive *advantage."*
	"Continuous attention to technical excellence and good design enhances agility."		

Scrum?

Kanban?

XP?



© …
Agile Consulting Services

Strongly Agree	Agree	Disagree	Strongly Disagree
SA	A	D	SD
1			
2			
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			
16			

Exercise: What do you believe?

5 min

- Read each value and principle
- What do you personally believe?
- In general, not within any particular circumstances.
- For each, decide if you
  - Strongly agree
  - Agree
  - Disagree
  - Strongly Disagree

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Behaviors of a Person who “Strongly Agrees”

- You speak up when you see a value or principle being violated
- You look for opportunities to explain the values and principles
- When it is clearly not possible to practice one of the values or principles, you point it out and look for opportunities to make it possible
- You model the principles and values

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

1: While process and tools are important, individuals and interactions are more important.

2: You should build projects around motivated individuals, give them the environment and support they need, and trust them to get the job done.

3: The sponsors, development team, and users should work at a pace that they can sustain indefinitely.

4: The best architectures, requirements, and designs emerge from self-organizing teams (working in conjunction with users).

5: While sufficient documentation is important, working software is more important.

6: Deliver working software frequently. Every couple of months is good, but every couple of weeks is better.

7: Working software is the primary measure of progress.

8: We should focus on the simplest way to fully meet the need and only do something more elaborate when it is clear that a more elaborate solution is needed.

9: Continuous attention to technical excellence and good design is a good thing.

10: Contract negotiation is important, but customer collaboration is more important.

11: Business people and developers must work together daily throughout the project.

12: The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.

13: Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.

14: Planning is important, but responding to change is more important.

15: At regular intervals, the team should reflect on how to become more effective, then tune and adjust its behavior accordingly.

16: It should be easy and safe to replace unstarted work on the day before release with new work of higher customer value.

Agile Techniques Come From the Agile Community

Agile Manifesto

Agile Community

Agile Toolkit

Scrum
User stories
Continuous Integration
TDD
Unit testing
Kanban
XP
SAFe
Enterprise Agility
Etc.

Agile – an adjective that describes anything that supports the values and principles of the Agile Manifesto.

© 2012-2014 Eliassen Group. All Rights Reserved -<#>-

ELIASSEN GROUP
Agile Consulting Services

Producing Value When it Really Matters

What does it take to get a hotfix/patch to your customer?

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Exercise: Benefits of “Done”

5 min

- As a team, create a list of the benefits of getting to “Done”
- Write a bulleted list on a card
- When you are done, bring your card(s) to the instructor

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Getting to Done Frequently

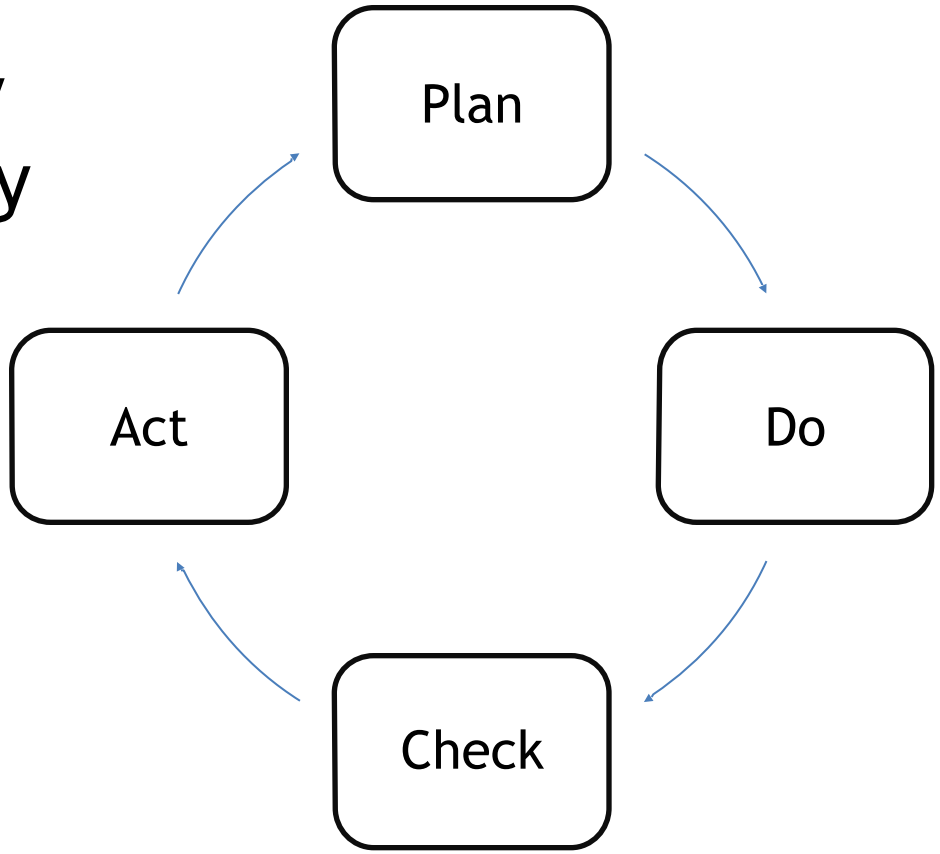
- Promotes discipline rather than bureaucracy
- Promotes skill building
- Enables empowerment
- Increases responsibility and accountability
- Amplifies all of the benefits of getting to done
- If it is good to be done, it is better to be done frequently
- People get better at things they do frequently

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Continuous Improvement Management Cycle

- Flexibility
- Real visibility
- Higher quality

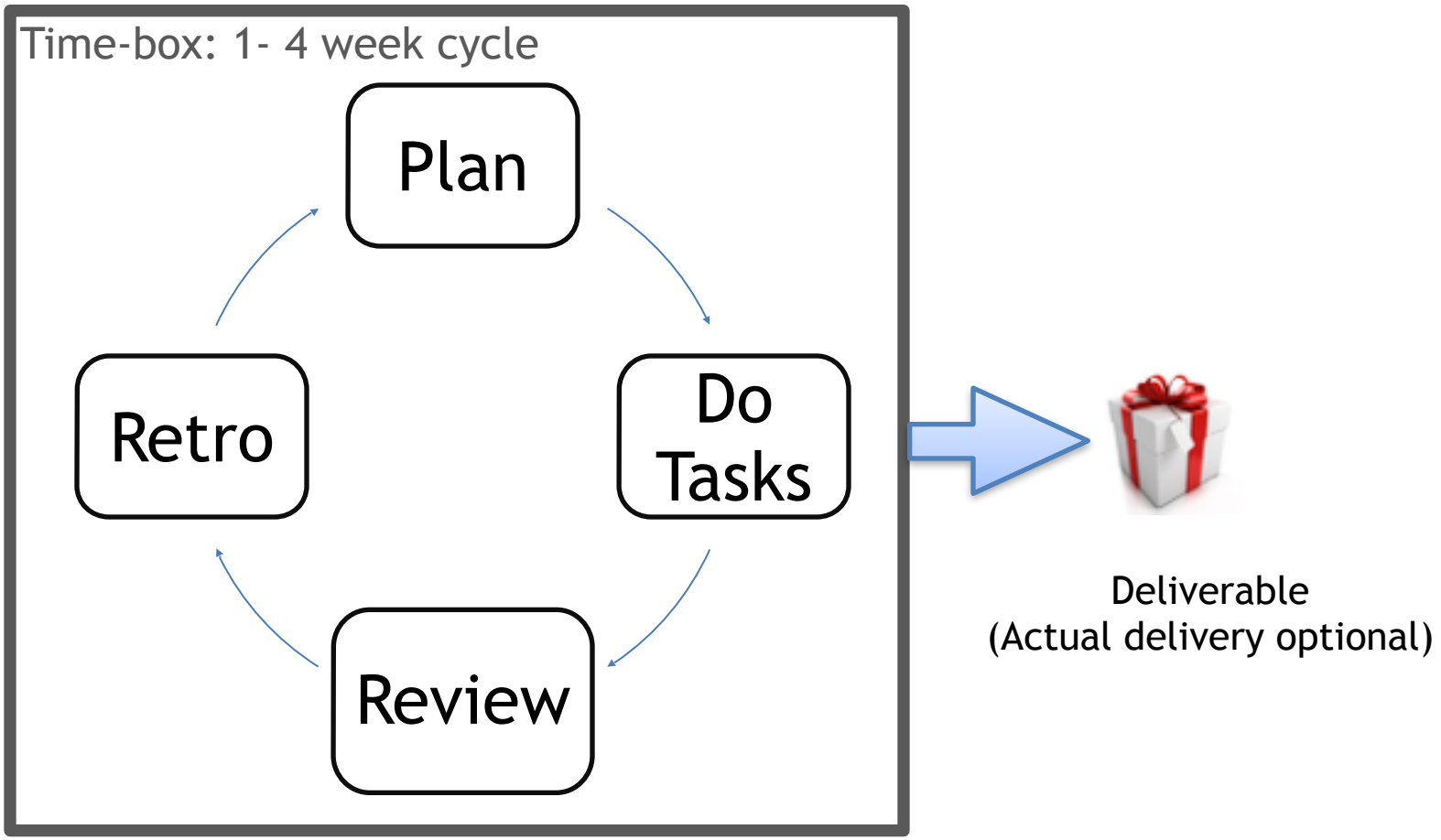


Popularized by
Dr. W. Edwards Deming

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success, Our Intent

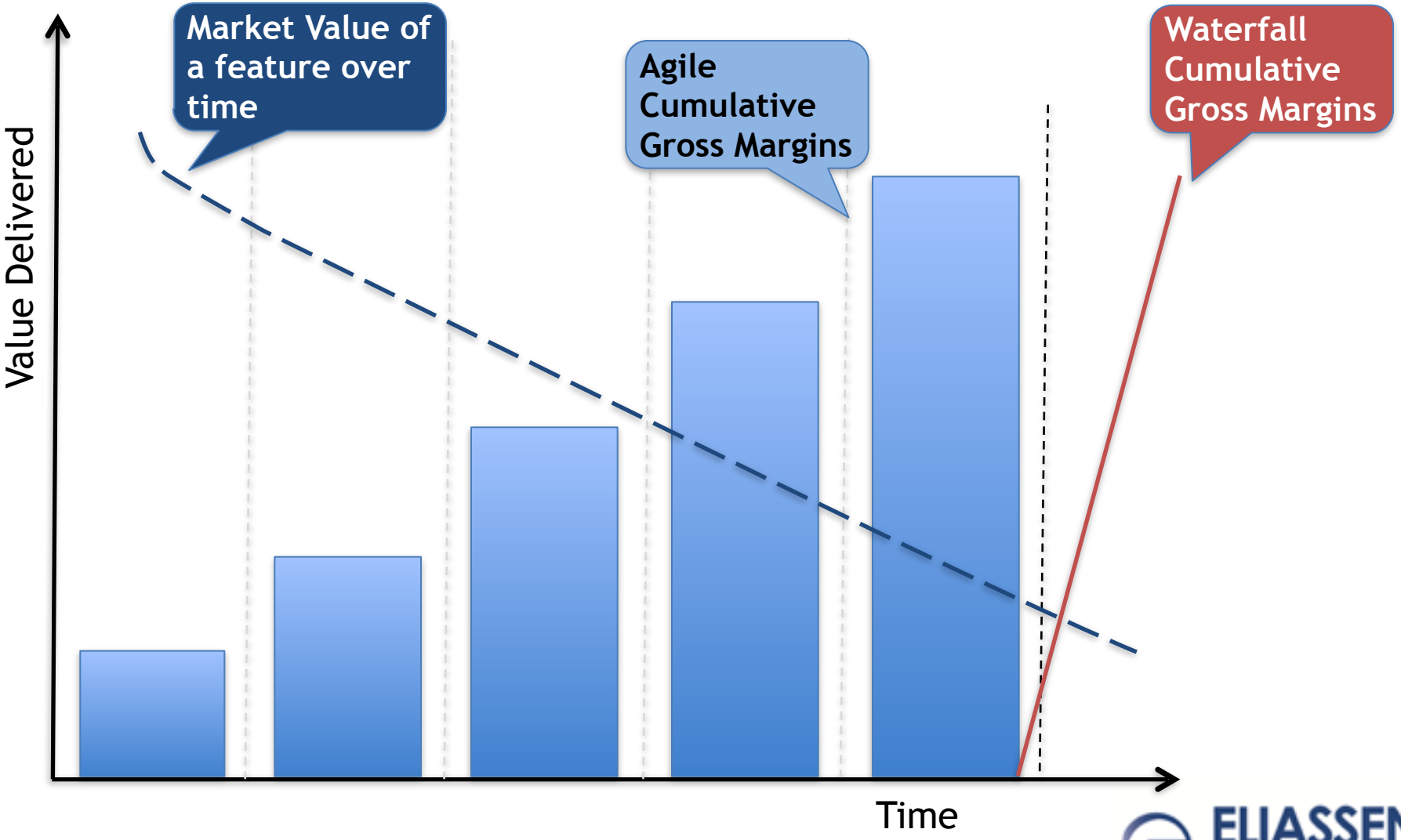
Basic Scrum Cycle



© 2012-2013 Eliassen Group. All Rights Reserved --

Makes Money faster

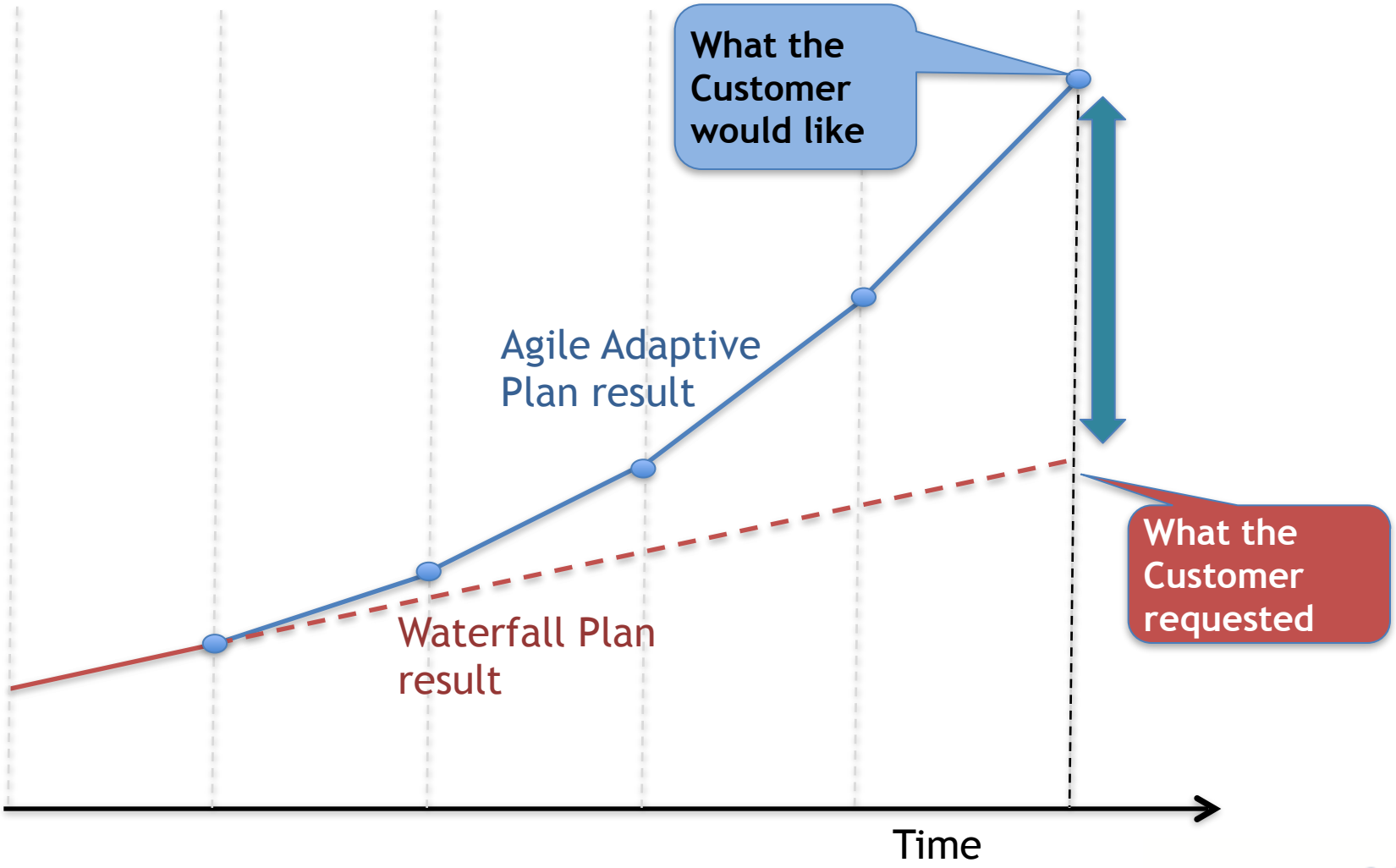
Early delivery drives first to market, fast feedback, and profitability



© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Agile Consulting Services

Better fit for purpose



© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Agile Consulting Services

Continuous Improvement Management Cycle

- Flexibility
- Real visibility
- Higher quality

Deliverable
(Actual delivery optional)

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Agile Development Within an SDLC

Funding

Req & Est

Design

Plan

Development

Test

UAT

Releas
e

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

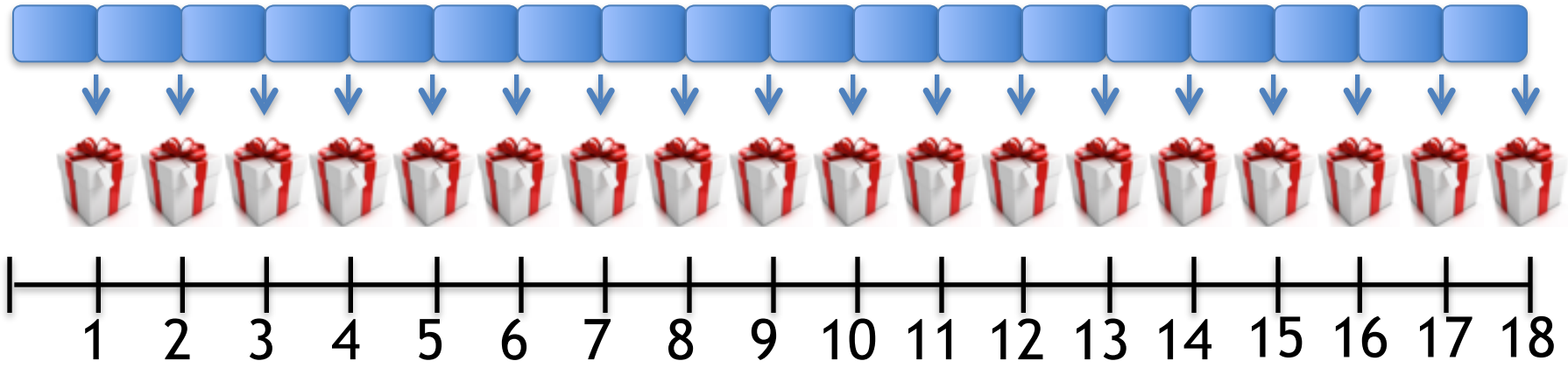
© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Iterations (aka Sprints)

Iterations – regular intervals of time, from 1-4 weeks, in which the team produces a *deliverable* increment of work.

Sprints – the term Scrum uses for iterations.



© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

“Agile Sounds Interesting But…”

We have to have people work on multiple projects

Our auditors wouldn’t like it

We do fixed bid contracts

We can’t keep teams together

We have people spread across timezones

Our projects are too big for that

We use manual testing

I think quality will suffer

We have yearly budgeting

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

The Objections and Problems are Your Todo List

People want to be on long standing teams to increase productivity

Auditor needs new process to pass audit

Clients need new contract method to do business with us

Large projects need new methods to scale Agile

We need to reconfigure projects to work across timezones

We need to automate testing to maintain quality at speed

Execs needs new method to invest to maintain fiduciary responsibility

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Create Your Agile Todo List

People want to be on long standing teams to increase

We need to automate testing to maintain quality at sp

We need to reconfigure projects to work across

Execs needs new method to invest to maintain fiduciary r

Large projects need new methods to

Clients need new contract method to

Auditor needs new process to pass audit

© 2012-2014 Eliassen Grou

ELIASSEN GROUP
Agile Consulting Services

Changes to Make

- What needs to change?
  - Personally?
  - In your team?
  - In your organization?
  - In your organization's partners or vendors?
- One item per sticky, create as many stickies as you want
  - A belief that will need to be changed
  - A value that will need to be changed
  - A risk that will need to be mitigated
  - A concern that will need to be addressed
  - An impediment that will need to be removed

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

Review

- What is “Agile”?

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

A Note about Distributed Teams

- Most Agile implementations include distributed teams
- For Agile to work, it has to work with distributed teams
- Everything in this training takes this into account

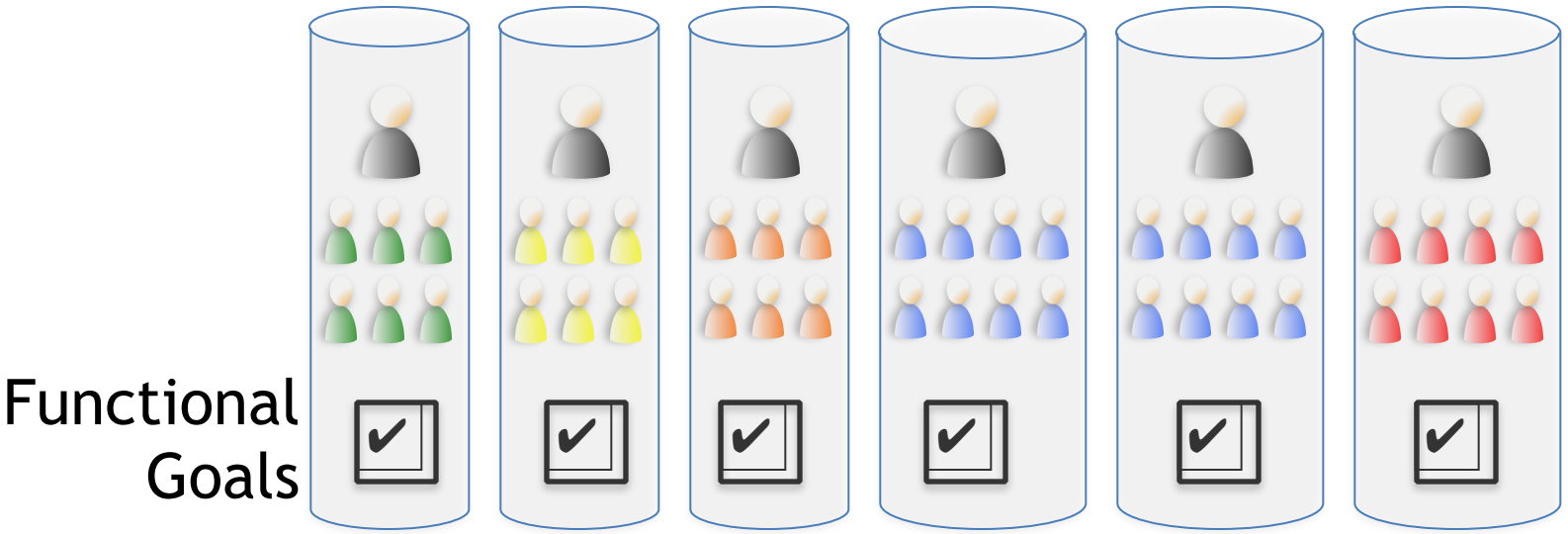
© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Agenda

- Overview of Agile
- 
  Cross Functional Teams
- Product Vision, Epics, MVIs
- User stories
- Story splitting
- Agile Technical Practices
- Agile Planning
- Scrum
- Agile Flow
- Self-organization
- Distributed Agile
- Going Agile
- Wrap-up

Misaligned, Functional Goals



Late, missing scope

Project A

Project B

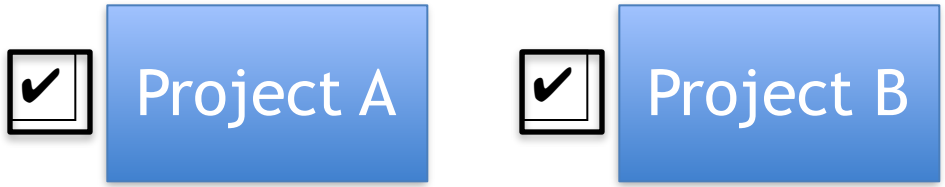
Not as relevant as hoped

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

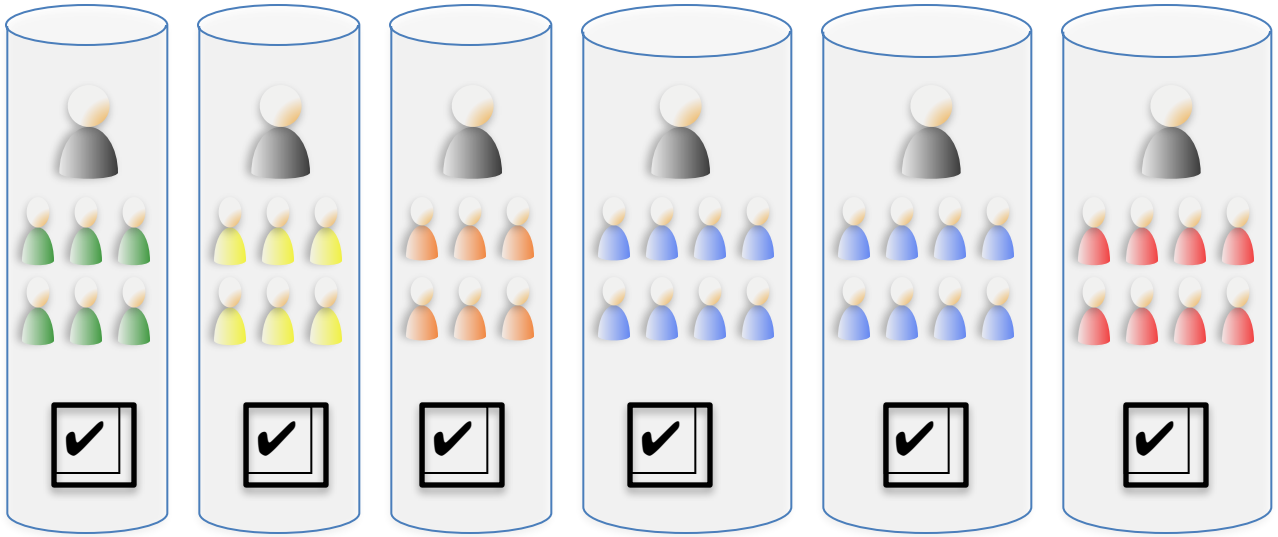
ELIASSEN GROUP
Agile Consulting Services

Customer Focused, Fully Aligned Goals

Primary Goals



Secondary Goals

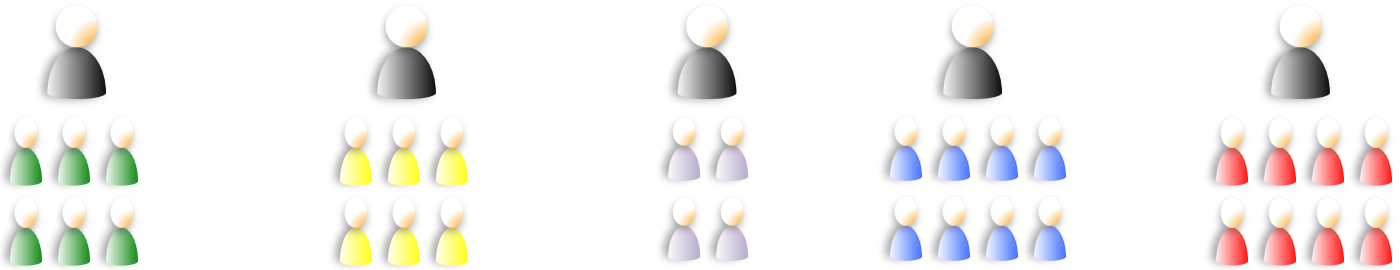


- Working towards the same goals at the same time creates alignment which produces better results.

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

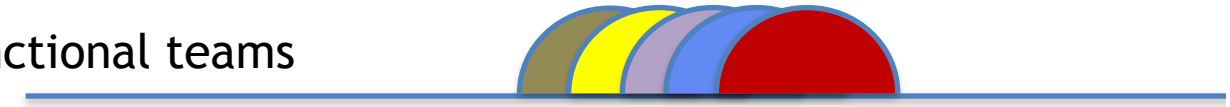
Reducing Silos



Traditional
Functional
Silos

Functional
Managed Groups

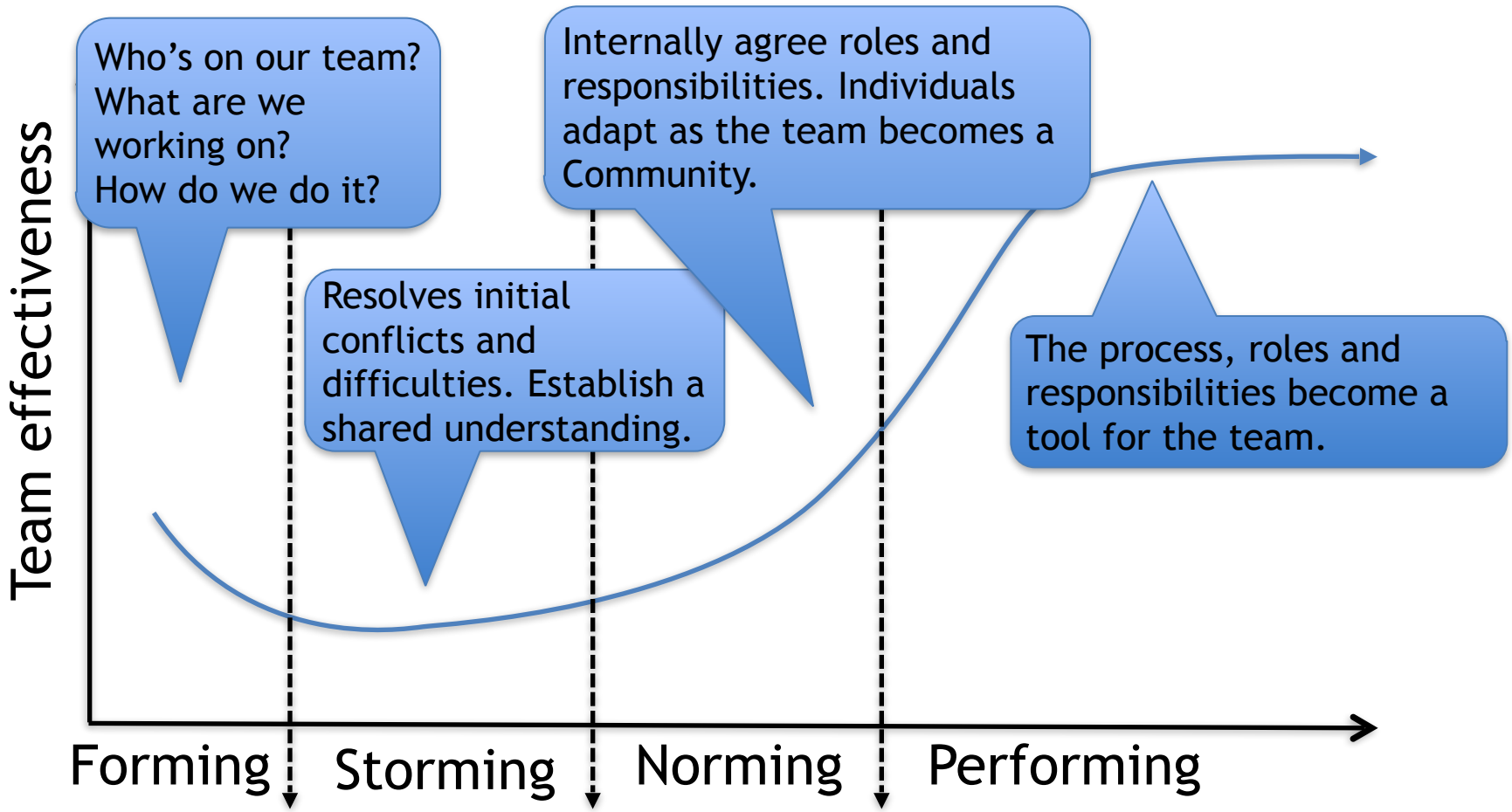
Cross Functional teams



© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Agile Consulting Services

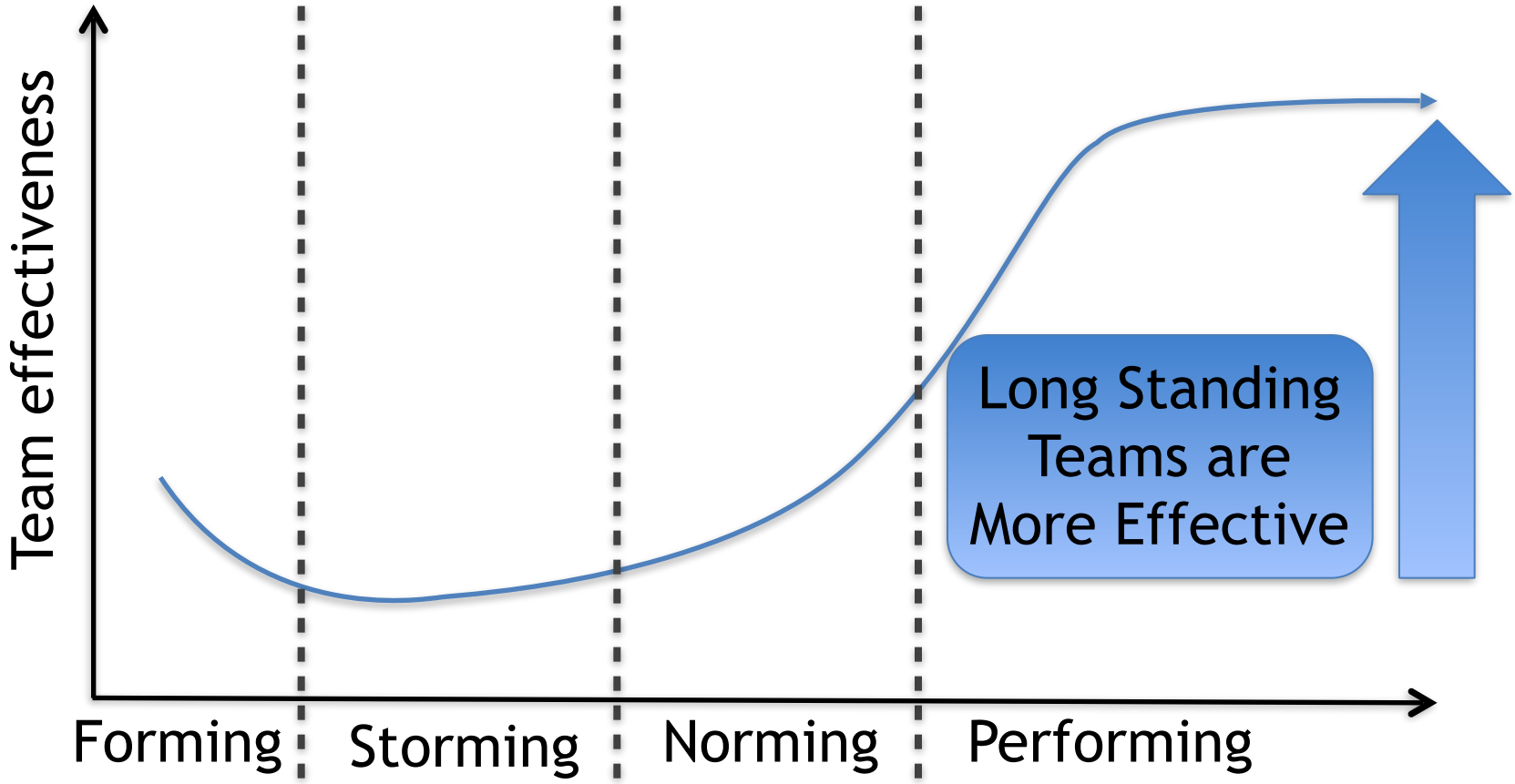
Tuckman Teamwork Theory



Model created by Bruce Tuckman in 1965

© 2012-2013 Eliassen Group. All Rights Reserved --

Long Standing Teams



Model created by
Bruce Tuckman in 1965

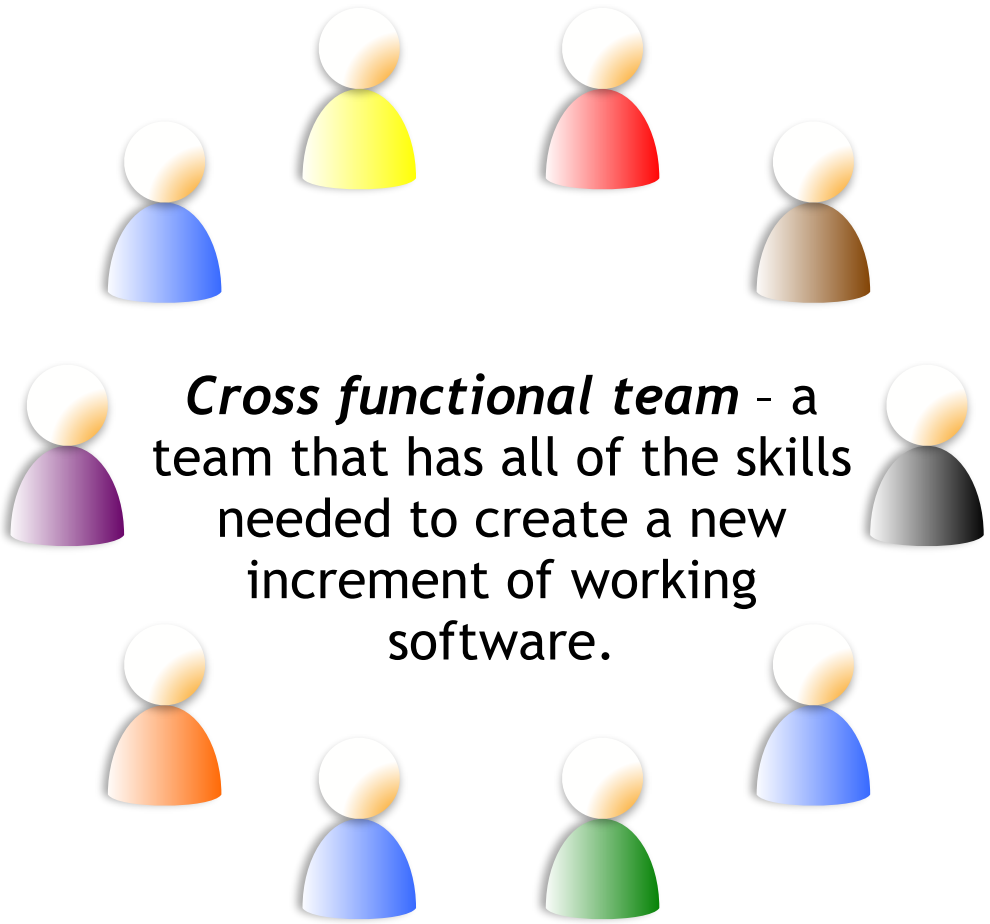
© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Small, Cross-Functional Teams

*Cross functional by **skills**, not roles*

- Architecture
- Domain expertise
- Development
- UX
- Managing / leading
- Business savvy
- User story writing
- Testing
- Coaching / mentoring



Cross functional team – a team that has all of the skills needed to create a new increment of working software.

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

The Scrum Master

The Scrum Master is responsible for ensuring Scrum is understood and enacted.

Scrum Masters do this by ensuring that the Scrum Team adheres to Scrum theory, practices, and rules.

The Scrum Guide, Ken Schwaber and Jeff Sutherland, June 2013

© 2012 Eliassen Group. All Rights Reserved -‹#›-

Scrum Master – Initial Introduction

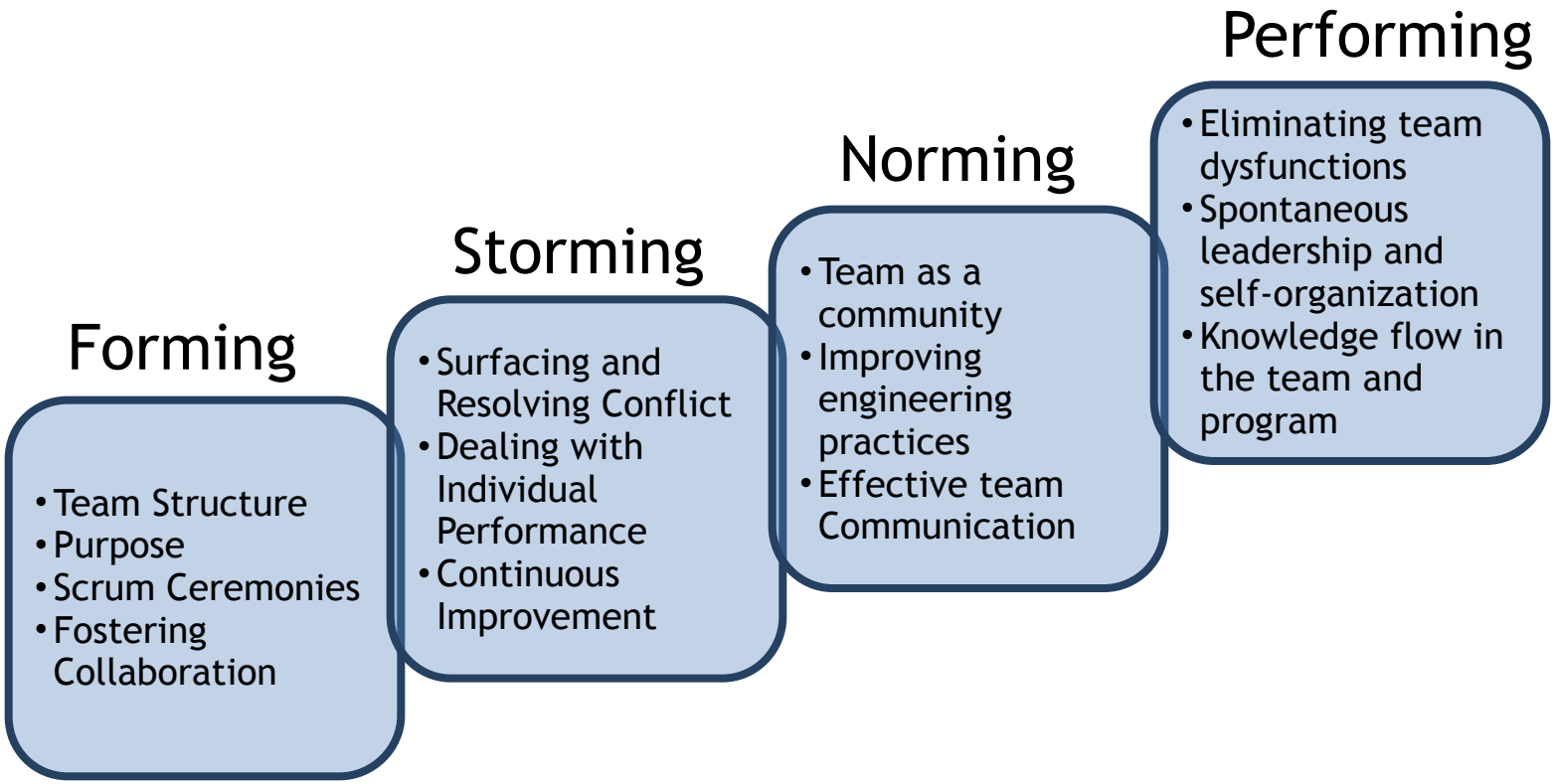
- Includes skills not typically in a software/IT role
- Can be challenging if people manager / SM for same team
- Usually not a product owner
- Agile process steward – keeps the process on track
- Is often a full-time position for 1 or more teams
- More on this role later…

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Evolving the Team

The Scrum Master has a special role in helping the team quickly progress thru the stages. Some teams never reach Stage 4, because there is nobody to guide them on their journey.



Based upon Model created by Bruce Tuckman, 1965

© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP

Product Owner – Initial Introduction

- Includes skills not typically in a software/IT role
- Overlaps with but not the same as Product Manager role
- Does Agile product management work for a Scrum team
- Sometimes handled by a Product Manager
- Usually not a Scrum Master
- More on this role later…

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

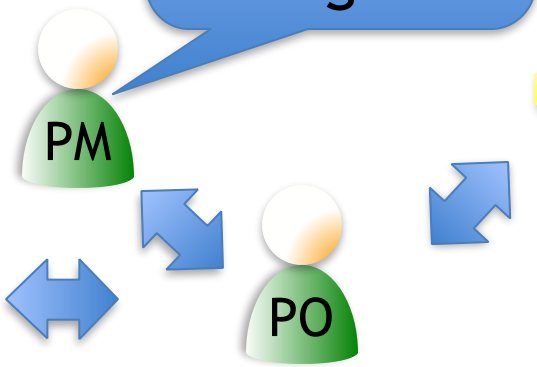
Product Owner – a New Profession

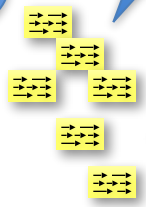
Proxy for the customer/ market

Partner with product manager

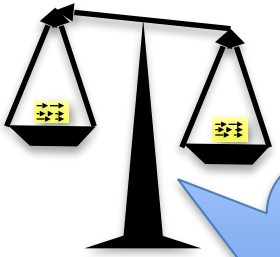
Facilitates user story writing

Customer / Market





User story expert
- I.N.V.E.S.T
- Vertical slices
- Story splitting



Assesses fine-grained business value

Is available to the team most of the time

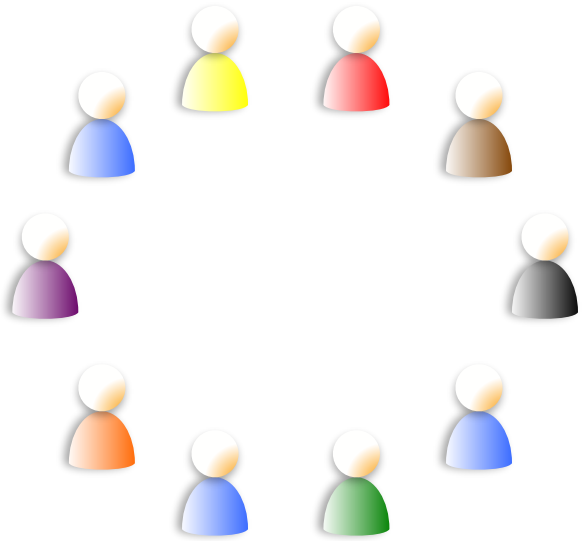
© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Form Cross Functional Teams

5 min

- No more than 7 people per team/table
- As close to the same # of people per table as possible
- Each team/table needs
  - 1 Product Owner
  - 1 Scrum Master
  - Everybody else
    - 1 or more people with an implementation (code, dba, etc) background
    - 1 or more people with a testing background

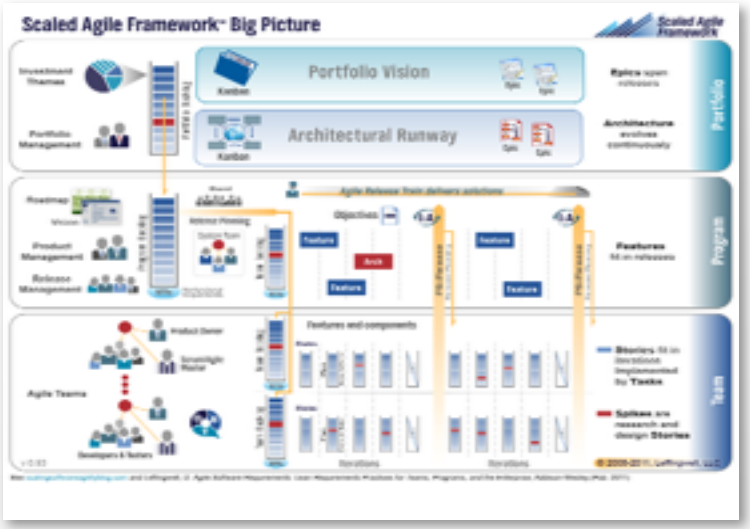


© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

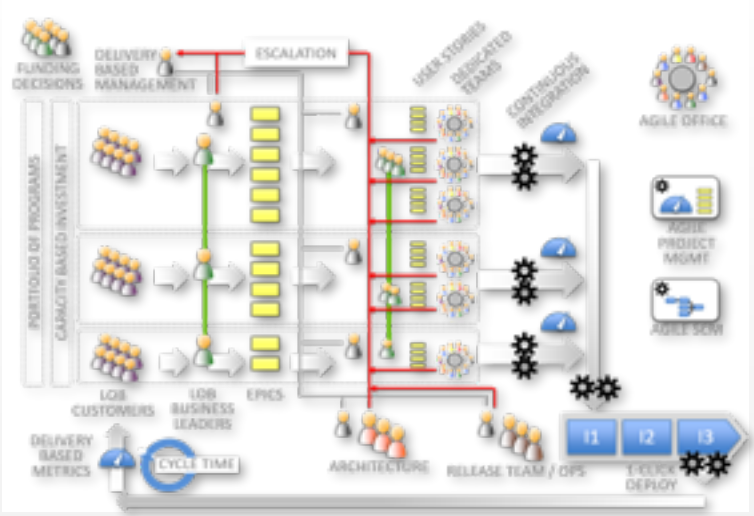
ELIASSEN GROUP
Agile Consulting Services

Multi-Team Enterprise Wide Approaches

Framework: SAFe

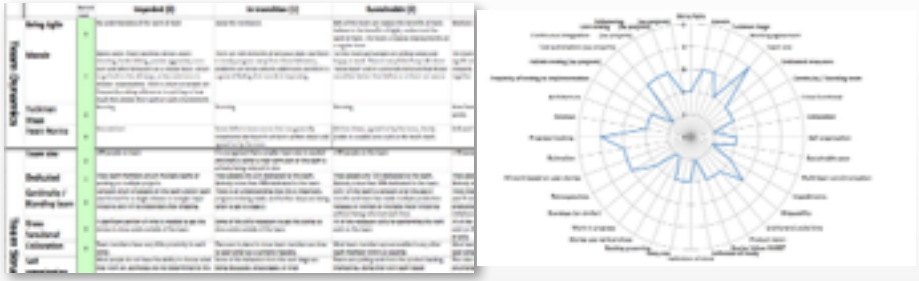


Guidance: Enterprise Agility

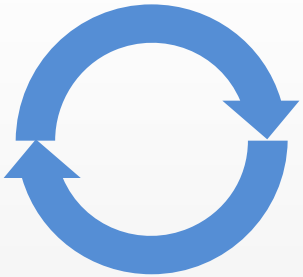


Enterprise Agility Change Management Approach

Kotter Change Model



Enterprise Agility Maturity Matrix



Run as an Agile Project

© Z

Exercise: Team Identity

10 min

- Create a team identity
- It should be fun!
- Suggestions
  - Team name
  - Team colors
  - Team mascot
  - Team logo
  - Team cheer
  - And/or anything else along these lines

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Materials

- Scrum Master, come up and get materials
  - 20-30 index cards
  - 3 sheets of smiley stickers
  - 1 set of poker cards for each team member
    - Each pack contains 4 sets
    - You will either need 1 deck or 2

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

Review

- What is a “real” team?
- Why is a “real” team important?

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

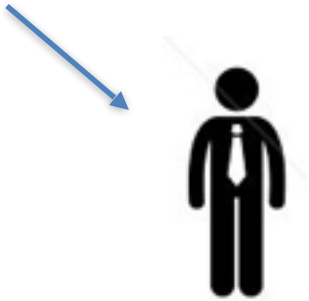
ELIASSEN GROUP
Agile Consulting Services

Agenda

- Overview of Agile
- Cross Functional Teams
- Product Vision, Epics, MVIs
- User stories
- Story splitting
- Agile Technical Practices
- Agile Planning
- Scrum
- Agile Flow
- Self-organization
- Distributed Agile
- Going Agile
- Wrap-up

Support the Product Owner

Stakeholders



Product Owner

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success. Our Talent

Product Vision

Movie Going Planner

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

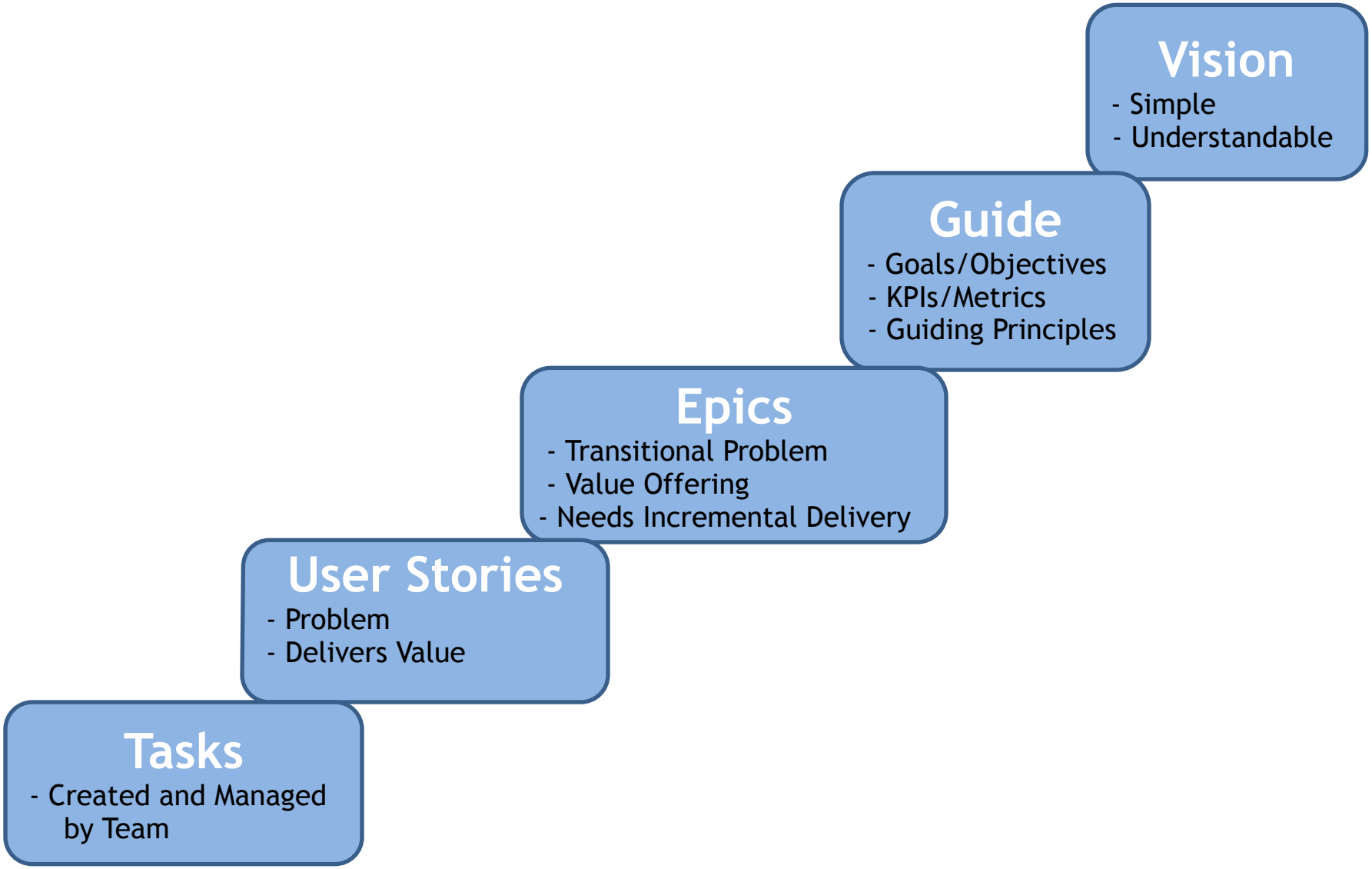
VISION TO TASK

Roadmap and Product Backlog Creation Process

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success. Our Talent

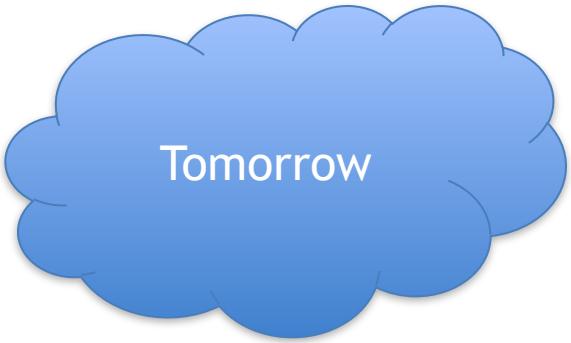
Vision to Task

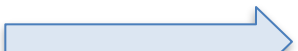


© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Guiding the Vision





- Define Goals/Objectives
  - Sequence to aid Prioritisation
- Understand the Constraints
- Agree a set of KPIs/Metrics
  - Use them to aid future enhancements
- Guiding Principles, set of global acceptance criteria

©2012-2013 Eliassen Group. All Rights Reserved --
©2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success. Our Intent

Exercise: Choose a Product

- Something that involves software
- Something the whole team finds interesting
- Unrelated to your current project
- Fun!
- Examples:
  - Mall map/information app
  - Kid tracker
  - Online recipe trading
  - App to find stuff on your grocery list while shopping

5 min

© 2012-2013 Eliassen Group. All Rights Reserved --

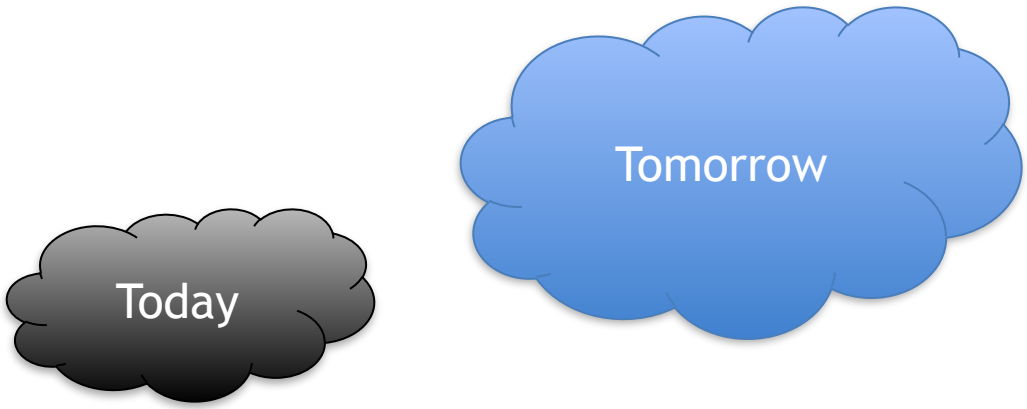
Exercise: Product Objectives

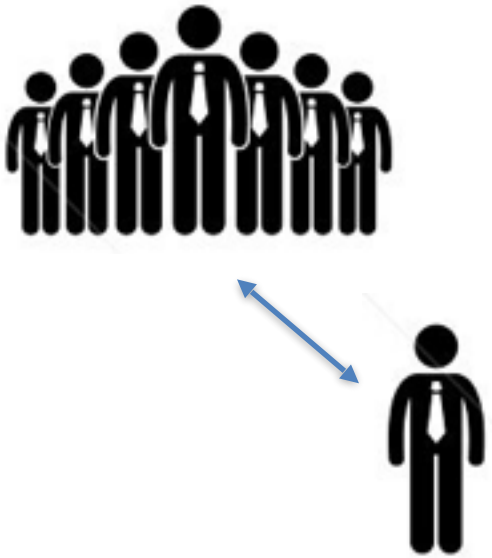
- Using your Product
- Create 3-5 objectives/goals of the product 15 min
- For each Objective/goal, describe one measure/ metric that will indicate the performance of the objective
- Prioritize those objectives
- Examples:
  - Increased client engagement - *volume of interactive feedback*
  - Increased sales of X - *Sales numbers of X*
  - Improved process process efficiency - *# of drop-offs for a process/# of completions and total time*

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Creating a Vision





A Vision

"Vision is the art of seeing things invisible,"
- *Jonathan Swift*.

- A picture of the future that draws people in.
- Who are the customers, what they need, and how these needs will be met
- Captures the essence of the product
  - The critical information
- Simple and understandable
  - Plain language

© 2012-2013 Eliassen Group. All Rights Reserved --
© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success. Our Talent.

Product Vision – First Draft

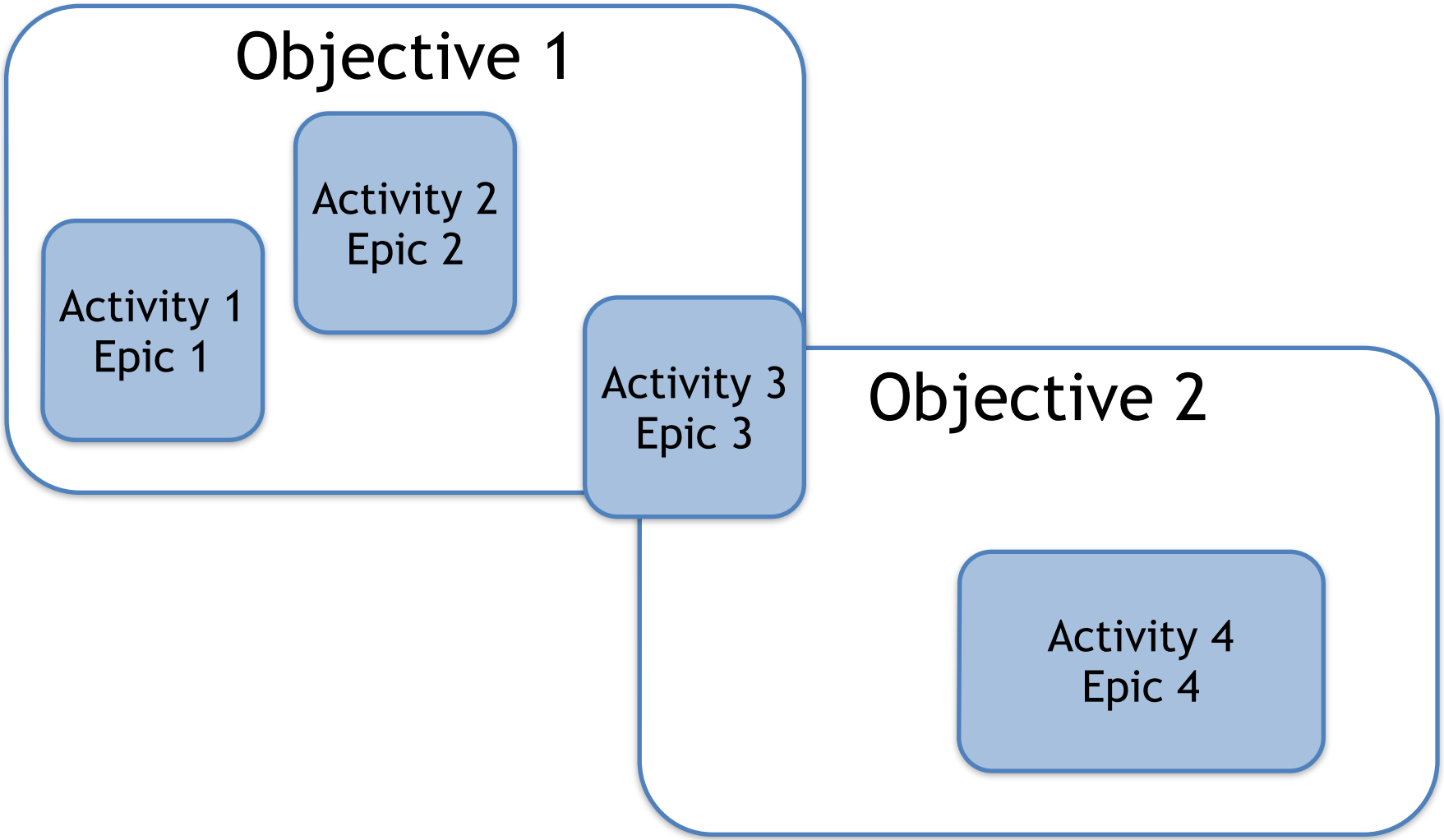
15 min

- Create a 2-5 sentence product vision in plain English with no jargon
- List the top 5-10 things which provide the most value to the user(s)

© 2012-2013 Eliassen Group. All Rights Reserved --
© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success. Our Intent

Objective to Epic



© 2012-2013 Eliassen Group. All Rights Reserved --

User Activities

"What do people do with this system?"

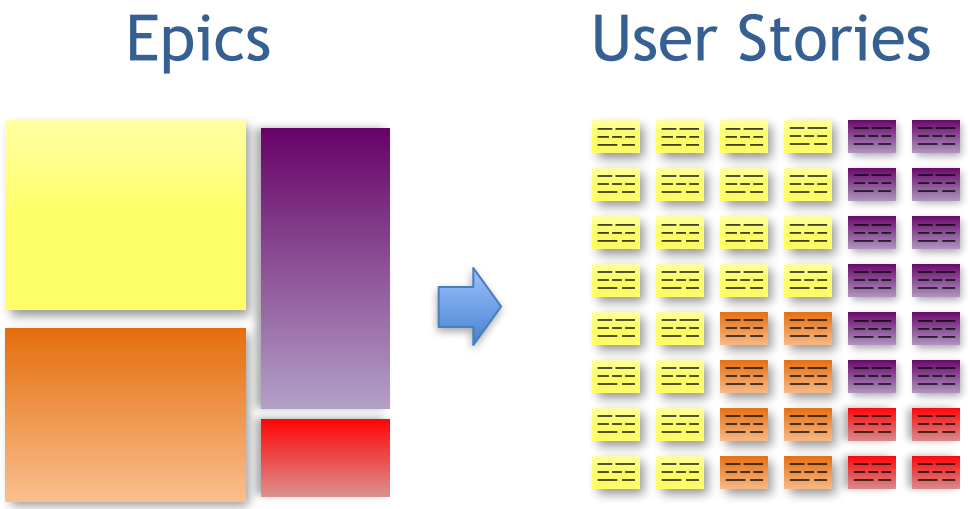
- **Then answer this question, by defining the activities the user needs to perform to achieve his/her goals**

- An Activity is:
  - A substantial undertaking that a user performs
  - Is composed of many steps or tasks
  - Does **not** always have a precise workflow
  - Is **not** defined for each separate user of the system

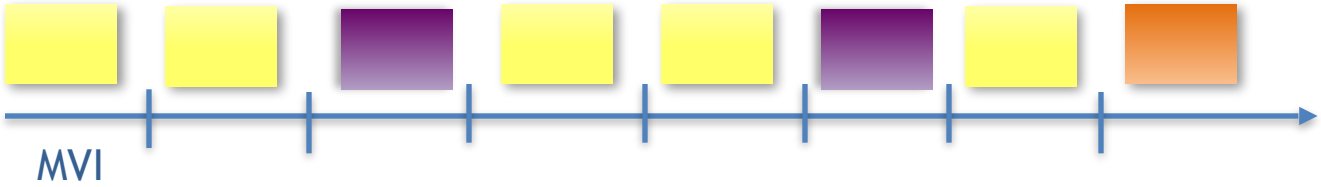
© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success, Our Intent

The Epics Road to User Stories



Roadmap

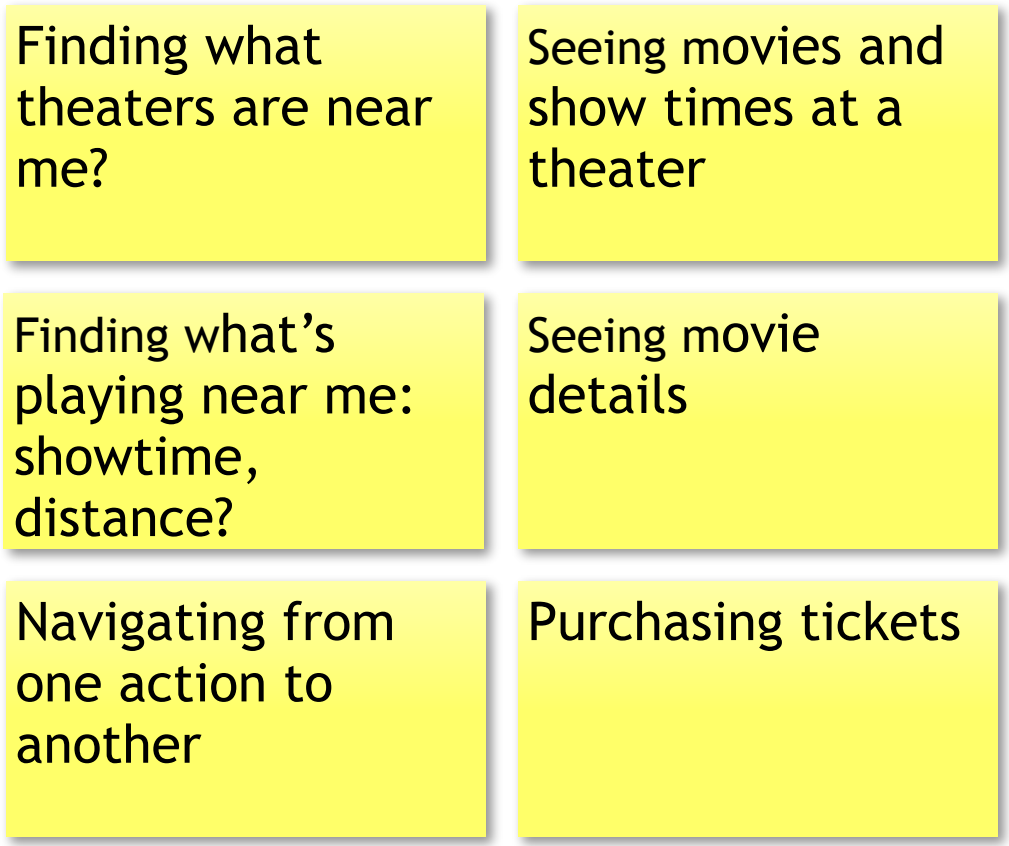


Release Plan

© 2012-2013 Eliassen Group. All Rights Reserved --
© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Epics



Epic – a large chunk of value which typically breaks down into multiple smaller pieces.

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Product Epics

15 min

- Create 4-6 Epics
- Activities as to how your Product will be used, linked to an objective
- Distinct areas of value
  - No more than 15 words
  - Action words, but no implementation words
  - One Epic each per index card

- Prioritize the Epics

© 2012-2013 Eliassen Group. All Rights Reserved --
© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success. Our Talent

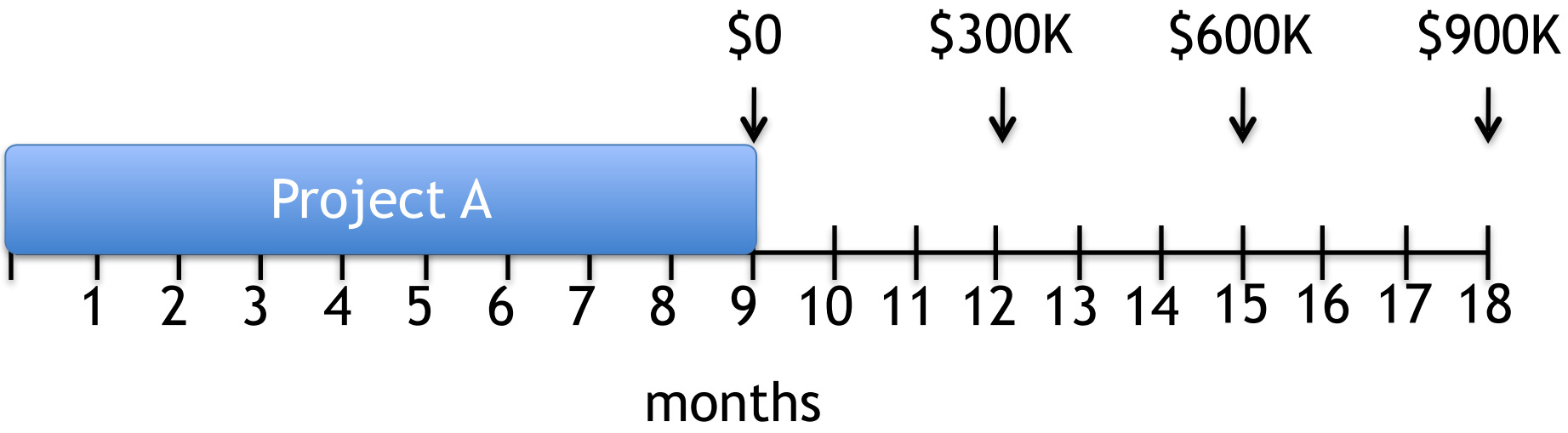
Minimum Viable Increments

Considering other elements to change the prioritization, and Identifying the MVI

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success. Our Talent

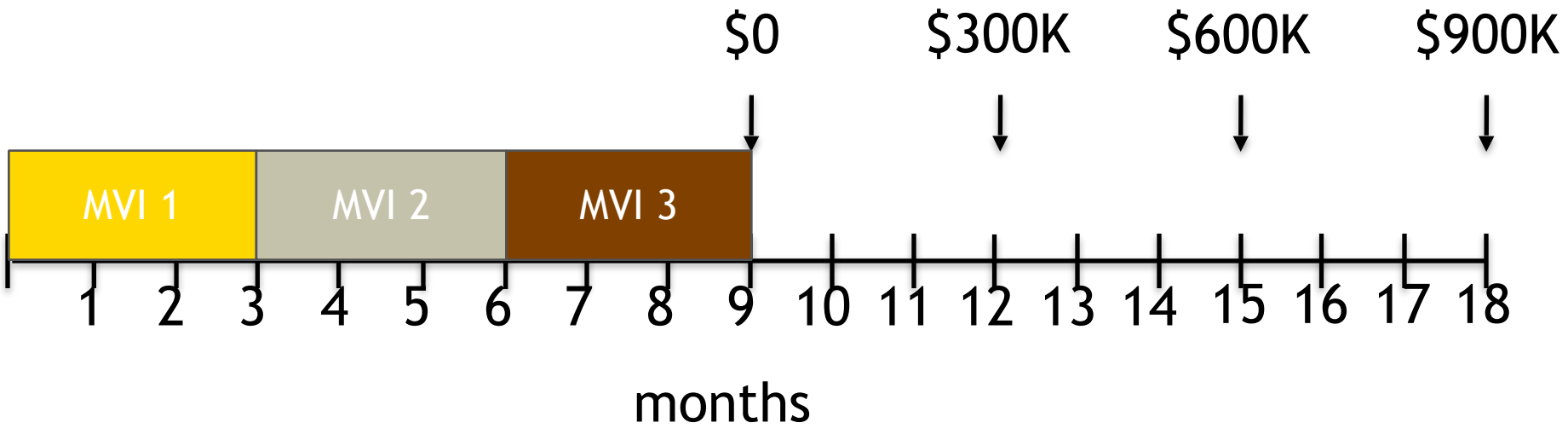
Translating MVI to Business Benefits



© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Translating MVI to Business Benefits

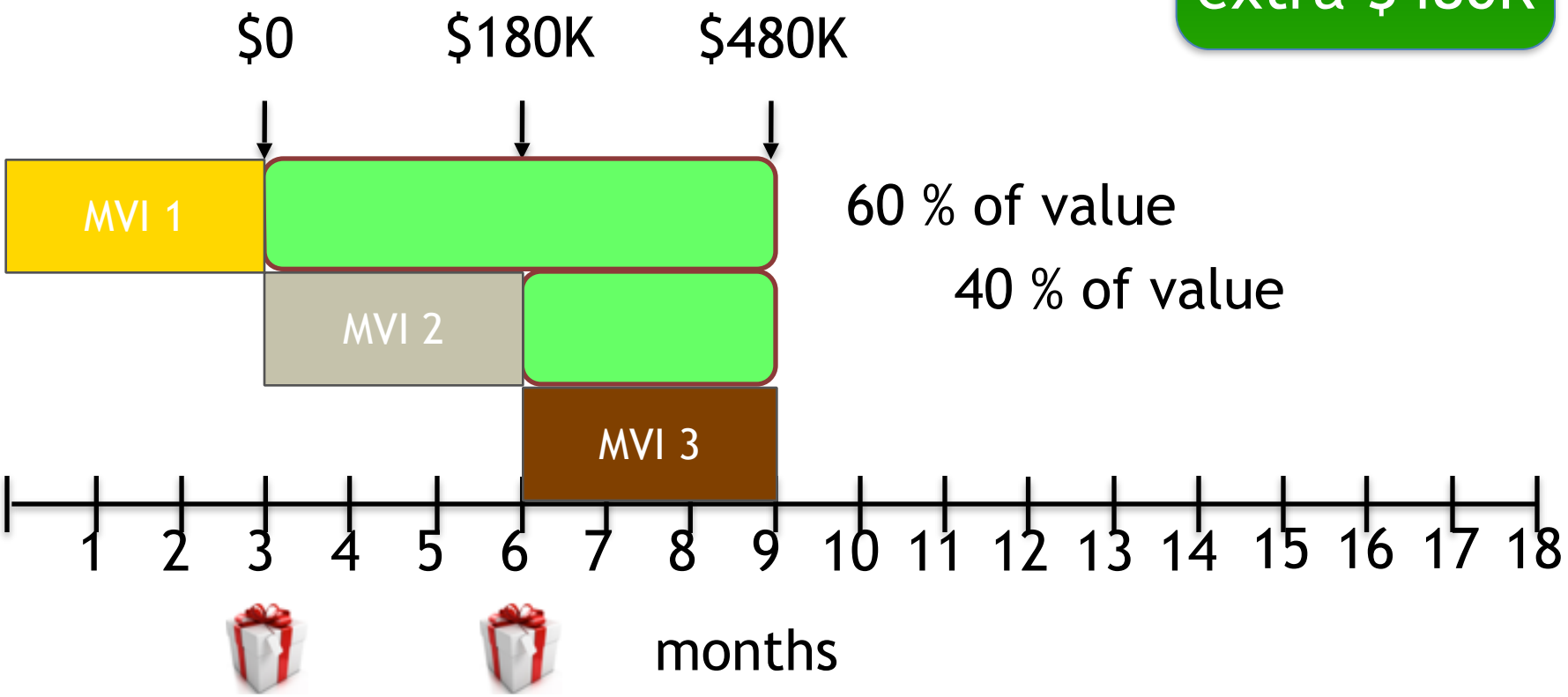


© 2012-2014 Eliassen Group. All Rights Reserved

ELIASSEN GROUP

An Example of the Effect of Working by MVI

Receive an extra $480K



© 2012-2014 Eliassen Group. All Rights Reserved

ELIASSEN GROUP

Take-aways from the activity?

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Review

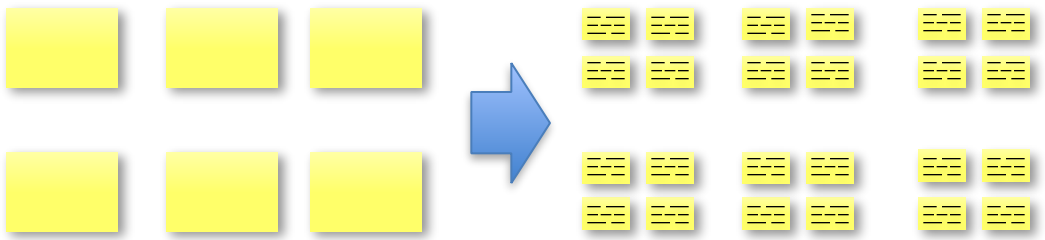
- What is an Epic?
- What is an MVI and why is it important?

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

Agenda

- Overview of Agile
- Cross Functional Teams
- Product Vision, Epics, MVIs
- User stories
- Story splitting
- Agile Technical Practices
- Agile Planning
- Scrum
- Agile Flow
- Self-organization
- Distributed Agile
- Going Agile
- Wrap-up

Epics Break Down into User Stories



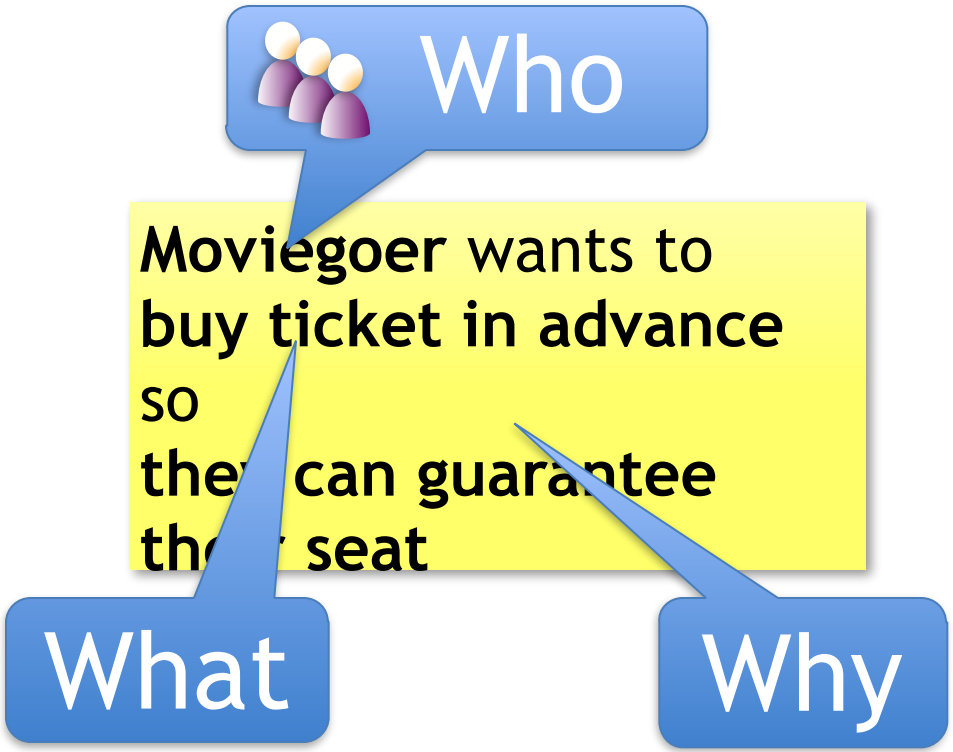
Epics

User Stories

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

User Story



User Story – a description in language that everybody can understand that includes ***who*** the story is for, ***what*** is needed, and ***why*** it is needed.

- Business value (customer/market) focused
- Keeps Customer, Business, IT on the same page
- Separates the “what” (need) from the “how” (implementation)

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Information Associated with a Story

Headline: a conversation starter

Body

Headline: Moviegoer wants to buy ticket in advance so they can guarantee their seat

Story points : 3
Assigned to : Tom

Acceptance tests:

1. User can select number of tickets
2. User can get a receipt via e-mail
3. User can pay using a credit card
4. User can pay using reward points

Other information:

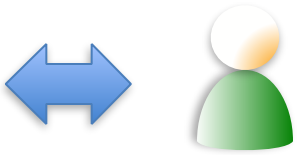
- Attachments
- Screenshots
- UML
- Discussion
- Non-goals
- Additional details

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Traditional Use of Up-Front Documents

Customer, market, business stakeholders



UFD AUTHOR(S)

TEAM

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

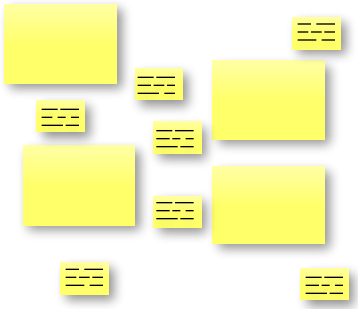
ELIASSEN GROUP
Agile Consulting Services

Agile Introduces New Techniques and Artifacts

Product Vision

Empathy Maps

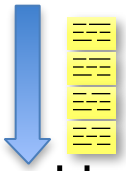
Story Mapping



Epics & Stories

PRODUCT OWNER

AGILE TEAM



Backlog

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Agile Techniques First, Link UFDs Back

Customer, market, business stakeholders

PRODUCT OWNER

AGILE TEAM

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

There are Always Multiple Users

Users of a travel system

Tom the Traveller

Alice the Travel Agent

Gary the Gate Agent

Harry on the Help Desk

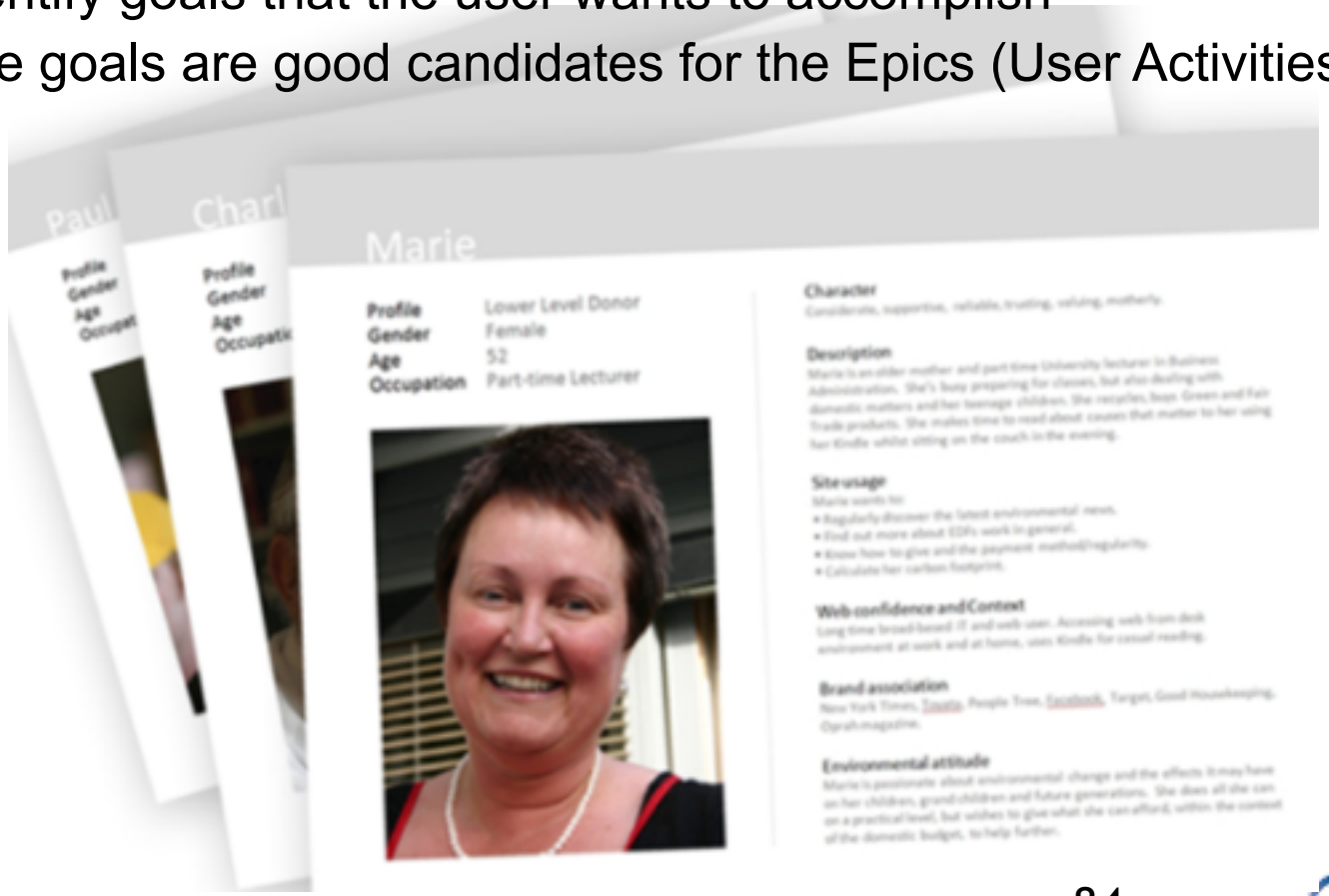
Sally the Salesperson

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Roles and Personas

- **Start with understanding the user's experience**
  - Identify the users of the system
  - Develop personas for each user
  - Identify goals that the user wants to accomplish
  - The goals are good candidates for the Epics (User Activities)



© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success. Our Talent

Who are Your Users?

- Who will use what you produce?
- Work as a group to create a list of users for your product.

5 min

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Empathy Mapping Exercise

10 min

- Create an empathy map for one of your users
- Brainstorm!
- 3-4 items per area
- Either way or both ways is/are fine
  - Before they have your product
  - As they are using your product

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Exercise: User Story Creation

10 min

- Produce at least 5 user stories
- Write each story on a single index card
- No more than 15 words per story
- No implementation oriented words
- Leave room at upper right for a number
- Brainstorm! You can create more than 5 stories
- Everyone can write stories, de-dupe later
- Format:

  As a <user role> I want to <perform some action> so that <I achieve some goal>

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

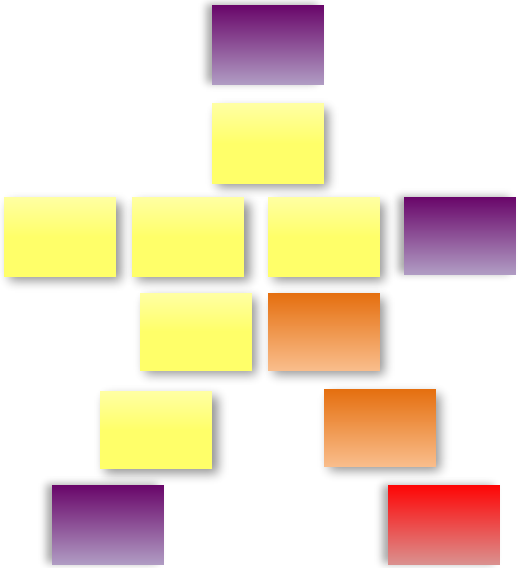
Take-aways from the activity?

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

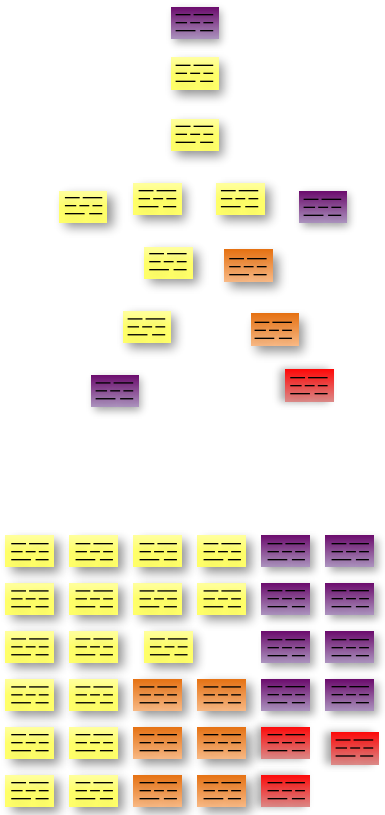
ELIASSEN GROUP
Agile Consulting Services

Skeletal System

System of Epics



System of Stories



© 2012-2013 Eliassen Group. All Rights Reserved --

Building Complex Systems

- Our very first release should be the "**Walking Skeleton**" of our system
- Alistair Cockburn developed this pattern in the late 90s and defines the **Walking Skeleton** as:
  - A tiny implementation of the system that performs a small end-to-end function.

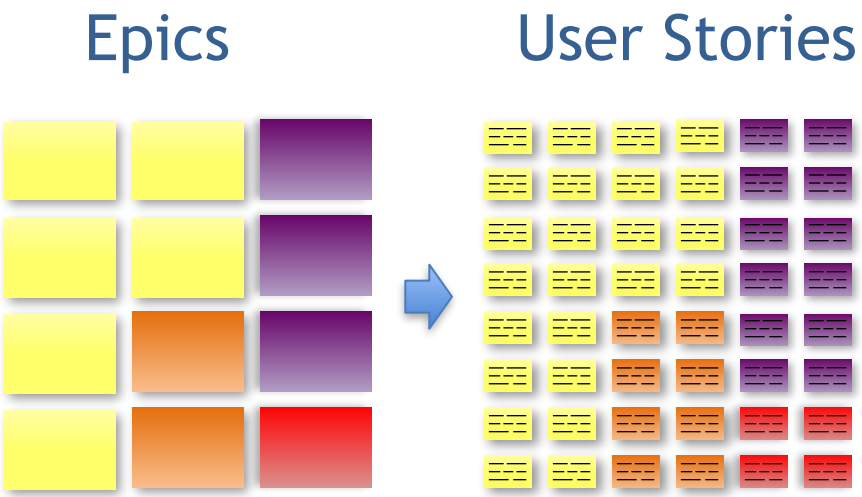
For more information:
http://alistair.cockburn.us/Walking+skeleton

90

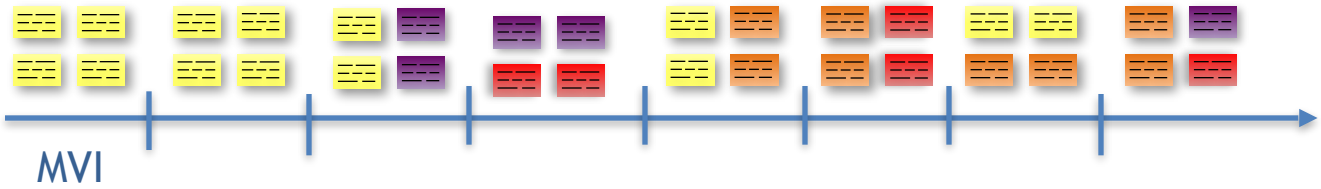
© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success. Our Talent.

Minimum Viable Increment



Roadmap



Release Plan

© 2012-2013 Eliassen Group. All Rights Reserved --
© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Acceptance Criteria

- “The story is done when…”

Acceptance criteria - Acceptance criteria are the story-specific definition of “done”. They spell out what the customer and QA expect and what a team needs to accomplish.

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

Acceptance Criteria Example #1

Traveler wants to send a travel e-mail to the site. 8

Acceptance Criteria

1. Handles a hotel booking
2. Handles an airline booking
3. Handles a car booking
4. Sends a rejection e-mail for any other kind of booking

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Create Acceptance Criteria

- As a team
  - Choose a story to add acceptance criteria to[5 min]
  - Write acceptance criteria on the back of the card

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

S.M.A.R.T. goals

The concept of “Smart Goals” is a great tool for making sure you have good acceptance criteria

- **S**pecific
- **M**easurable
- **A**ttainable
- **R**elevant
- **T**ime-sensitive (if appropriate)

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Create Acceptance Criteria

5 min

- Choose a story to add acceptance criteria to
- Write acceptance criteria on the back of the card
  - **S**pecific
  - **M**easurable
  - **A**ttainable
  - **R**elevant
  - **T**ime-sensitive (if appropriate)

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Bill Wake's "INVEST" Guidelines

- **I**ndependent
  - To the extent possible, doesn't depend on other stories
- **N**egotiable.
  - A story is a conversation starter, not the end result.
  - Nothing about "how"
- **V**aluable to the user
  - Something the user can use, not a piece of something the user can use
- **E**stimate-able
  - No research required, well understood
- **S**mall
- **T**estable

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Exercise: User Story Creation

10 min

- Write more stories until you have at least 10
- Write each story on a single index card
- No more than 15 words per story
- No implementation oriented words
- Leave room at upper right for a number
- Brainstorm! You can create more than 10 stories
- Everyone can write stories. De-dupe later
- Format:
  As a <user role> I want to <perform some action> so that <I achieve some goal>

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Review

- What are the 3 parts of a user story?
- What are acceptance criteria?

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

Changes to Make

- What needs to change?
  - Personally?
  - In your team?
  - In your organization?
  - In your organization's partners or vendors?
- One item per sticky, create as many stickies as you want
  - A belief that will need to be changed
  - A value that will need to be changed
  - A risk that will need to be mitigated
  - A concern that will need to be addressed
  - An impediment that will need to be removed

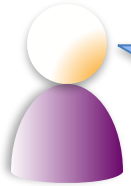
© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

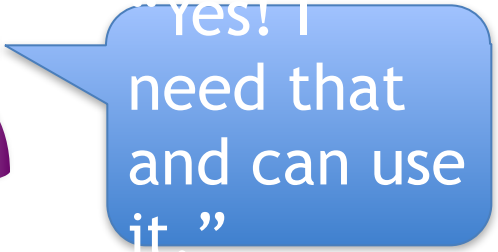
Agenda

- Overview of Agile
- Cross Functional Teams
- Product Vision, Epics, MVIs
- User stories
- Story splitting
- Agile Technical Practices
- Agile Planning
- Scrum
- Agile Flow
- Self-organization
- Distributed Agile
- Going Agile
- Wrap-up

Splitting out the Gold

User needs... 8





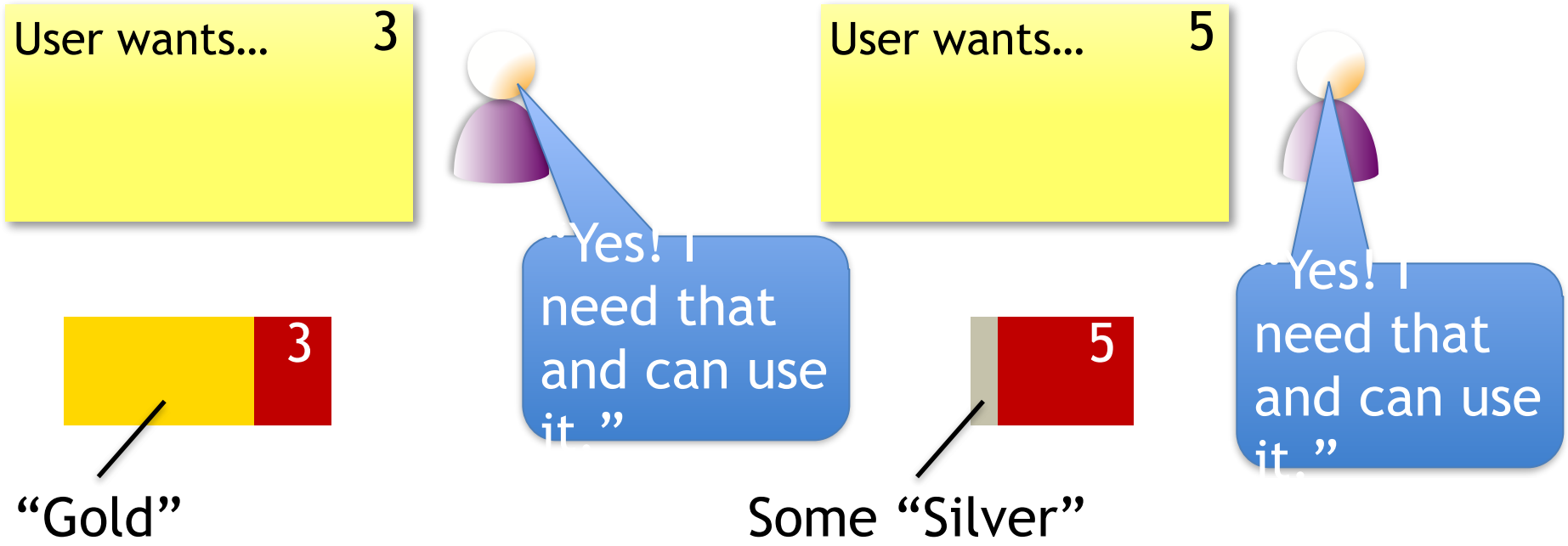
Perceived value (judgment call)

Effort

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

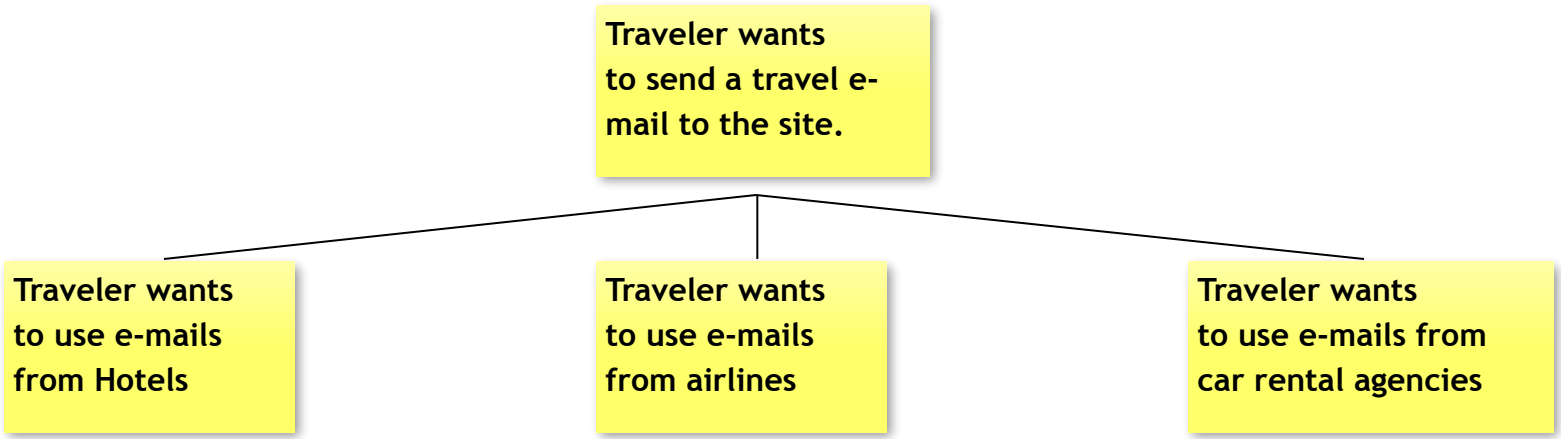
Splitting out the Gold



© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Splitting by Acceptance Criteria



Acceptance Criteria

1. Handles a hotel booking
2. Handles an airline booking
3. Handles a car booking

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Splitting by Keywords

Person wants to send a happy birthday card, a valentine's day card, or a Christmas card with a gift card using either Fedex or UPS overnight or ground

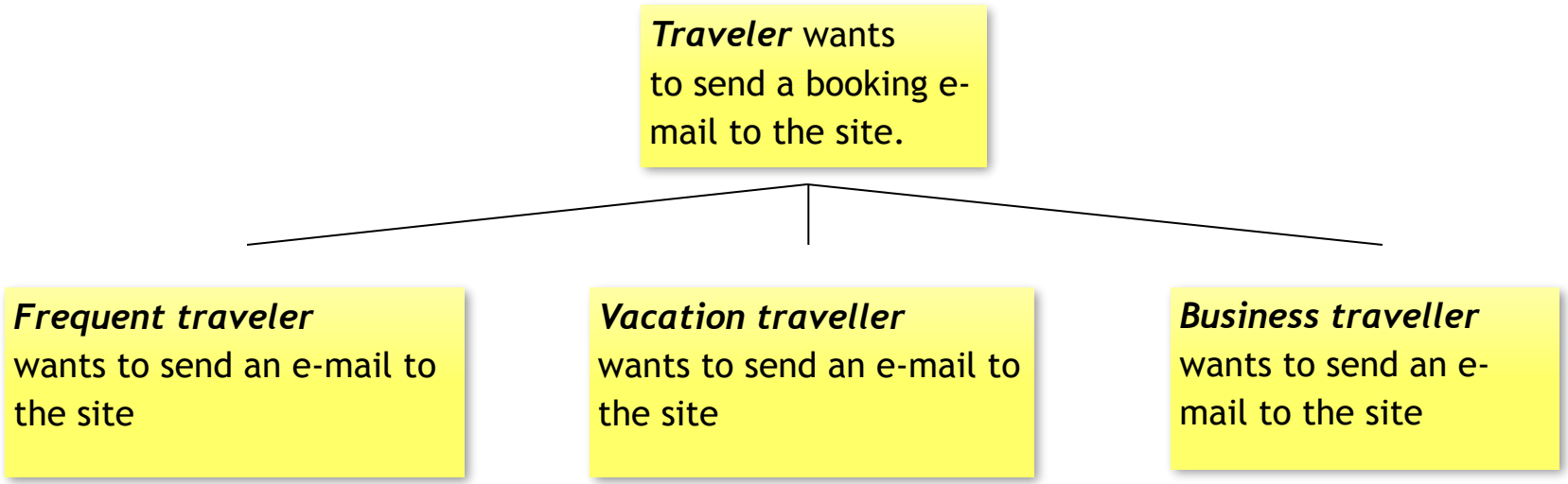
- **Person wants to send a happy birthday card**
- **Person wants to send a valentine's day card**
- **Person wants to send a Christmas card**
- **Person wants to send a gift card**
- **Person wants to send via UPS ground**

- And
- Or
- Either
- With
- Using
- “ ,”

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Splitting by User



© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

Exercise: User Story Splitting

5 min

1. Find a story to split and split it into at least two new stories
2. Discard the original stories and replace with the new stories

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Take-aways from the activity?

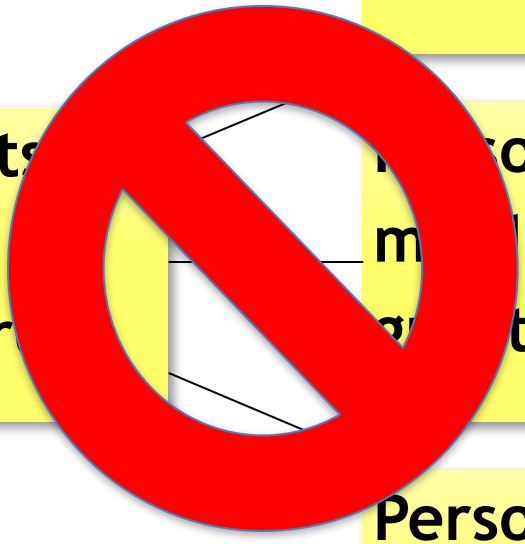
© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Breaking Down by Layer

Person wants
UI for sending a greeting card

Person wants
to send a
greeting car



Person wants
m lleware for sending a
g ting card

Person wants
back end for sending a
greeting card

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Cake Slicing

Select card type	UI for card type selection	Get card types from db	Create card type artwork	
Select specific card	UI for card selection	Get card data from db	Create card artwork	
Customize card	Textbox for card message	Choose color scheme	Add additional images	
Recipient info	Textbox for name	Collect recipient e-mail address	Textbox for address	
Create / preview card	UI to show card preview	Generate card		
Delivery options	UI for delivery options	Integrate with UPS	Integrate with Fedex	Integrate with USPO
Payment options	UI for payment options	Integrate with MC	Integrate with Visa	Integrate with Amex
Fulfill order	Place card order with partner	Send e-mail version of card		

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Cake Slicing

Select card type	UI for card type selection	Get card types from db	Create card type artwork	
Select specific card	UI for card selection	Get card data from db	Create card artwork	Set card as HAPPY_BDAY_1
Customize card	Textbox for card message	Choose color scheme	Add additional images	
Customize card	Textbox for name	Collect recipient e-mail address	Textbox for address	
Create / preview card	UI to show card preview	Generate card		
Delivery options	UI for delivery options	Integrate with UPS	Integrate with Fedex	Integrate with USPO
Payment options	UI for payment options	Integrate with MC	Integrate with Visa	Integrate with Amex
Fulfill order	Place card order with partner	Send e-mail version of card		

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Cake Slicing

Person wants to send a happy birthday card to show they care

- Set card as HAPPY_BDAY_1
- Collect recipient e-mail address
- Textbox for name
- Generate card
- Send e-mail version of card

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Strawman

Person wants to send a happy birthday card to show they care

Send a “Happy Birthday” mes

Shippable

To: Grandma Betty

Address: 3 New England Drive
Boston,

Ok Cancel

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Adding on to the Smallest Story

Other stories are now INDEPENDENT and can be added on in any order

Always moving from shippable to shippable

Person wants to send a happy birthday card to show they care

Person wants to send other types of cards

Person wants to customize the card

Person wants to select delivery options

Person wants to check a proof of the card

Person wants to pay for the card

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Example of Removing Dependencies

Movie-goer wants **5** to sort results by ***showtime***

Movie-goer wants **8** to sort results by ***distance***

Movie-goer wants **5** to sort results by ***theater***

Movie-goer wants **5** to sort results by ***movie name***

Movie-goer wants **5** 1 way to sort results ***(eg: by movie name)***

Movie-goer wants **2** to sort results by ***showtime***

Movie-goer wants **5** to sort results by ***distance***

Movie-goer wants **2** to sort results by ***theater***

Movie-goer wants **2** to sort results by ***movie name***

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Exercise: User Story Splitting

5 min

1. Find a story to split and split it into at least two new stories
2. Discard the original stories and replace with the new stories

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Review

- How does story splitting help?
- What are some methods for splitting stories?

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Agenda

- Overview of Agile
- Cross Functional Teams
- Product Vision, Epics, MVIs
- User stories
- Story splitting
- Agile Technical Practices
- Agile Planning
- Scrum
- Agile Flow
- Self-organization
- Distributed Agile
- Going Agile
- Wrap-up

Agile Technical Practices

© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Your Success. Our Talent

Agile & Quality

- Multiple aspects of quality
  - High value to users
  - Lack of bugs
  - Technical excellence
- Agile Technical Practices promote quality
- Defining "done" for your organization, program, project, team defines your quality standard

> *"Continuous attention to technical excellence and good design enhances agility."*

© 2012 Eliassen Group. All Rights Reserved -‹#›-

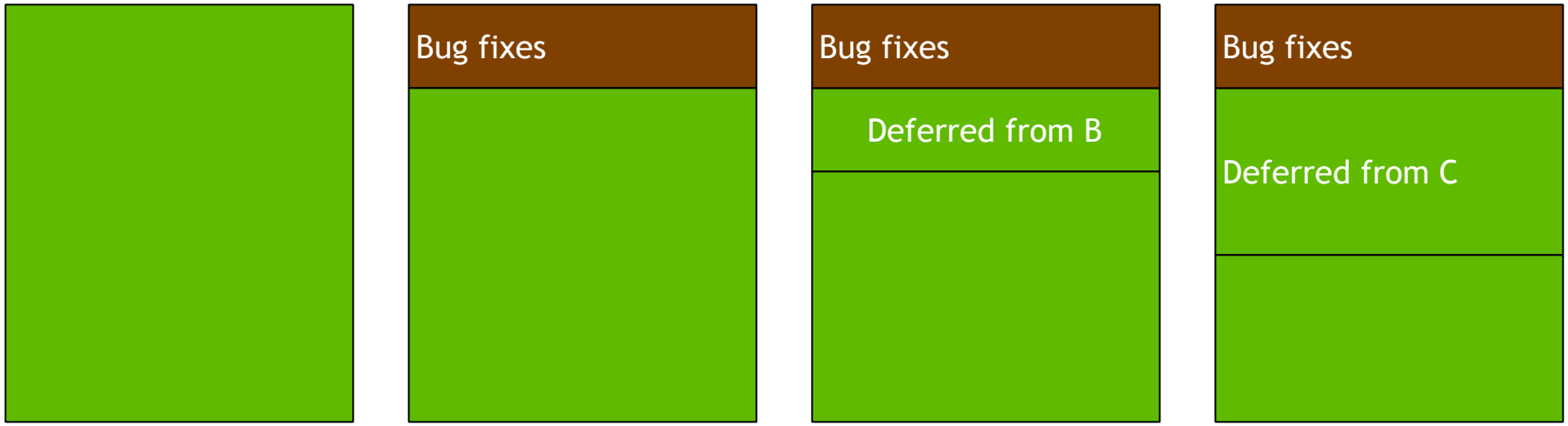
ELIASSEN GROUP

Testing

© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Your Success. Our Talent

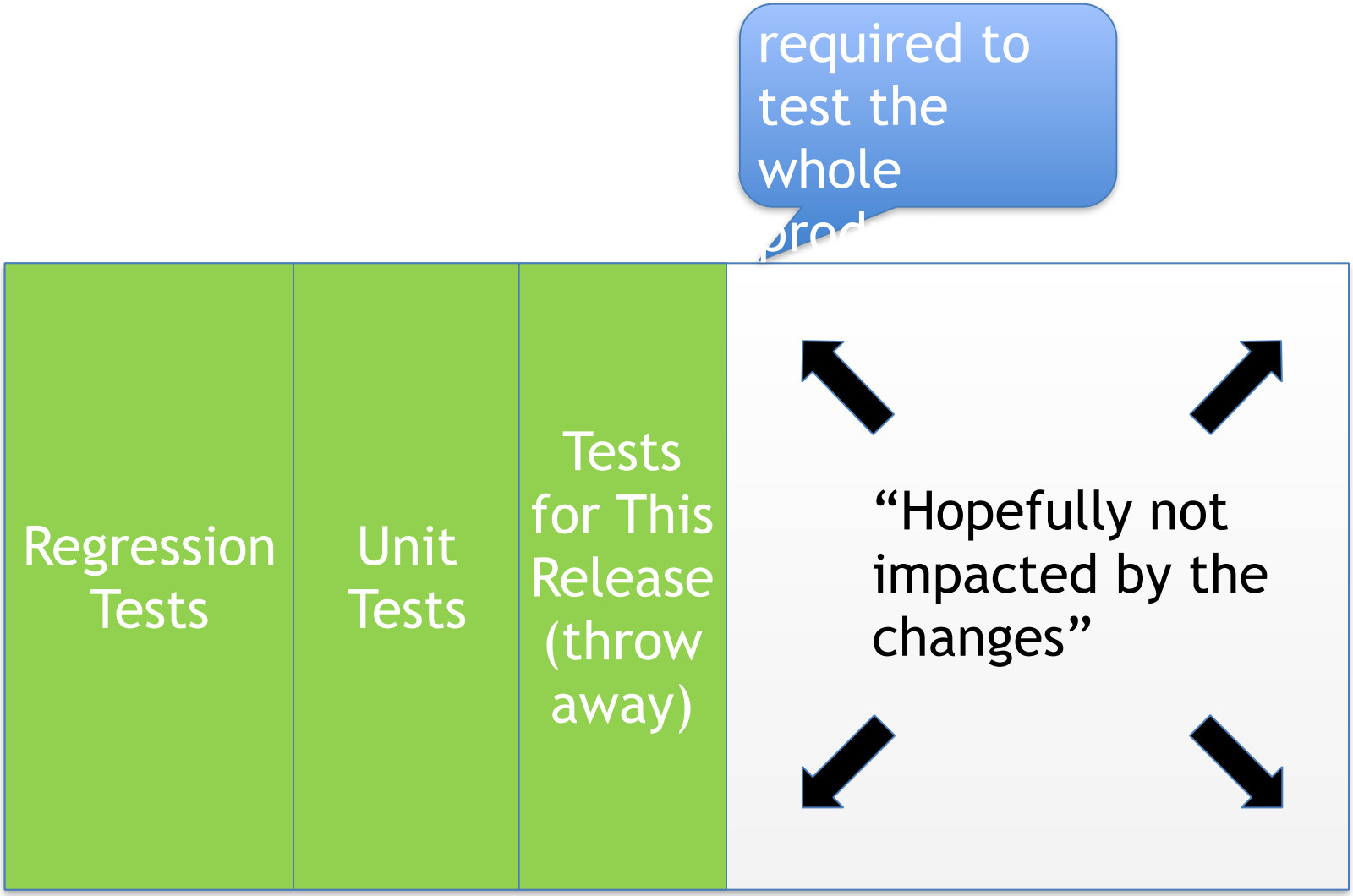
Bugs Displace Value



© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP

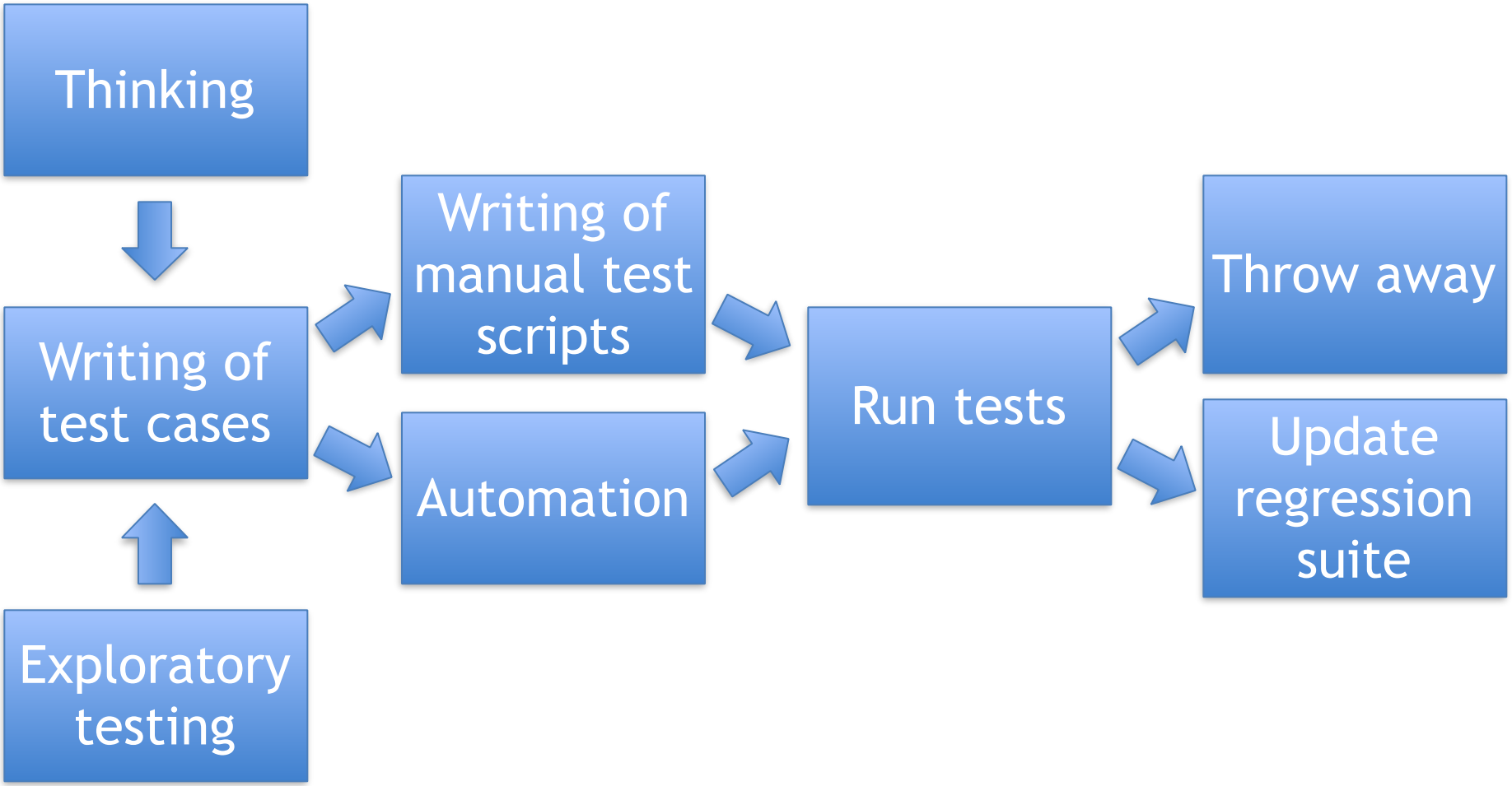
Traditional Testing



© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP

Typical Test Cycle

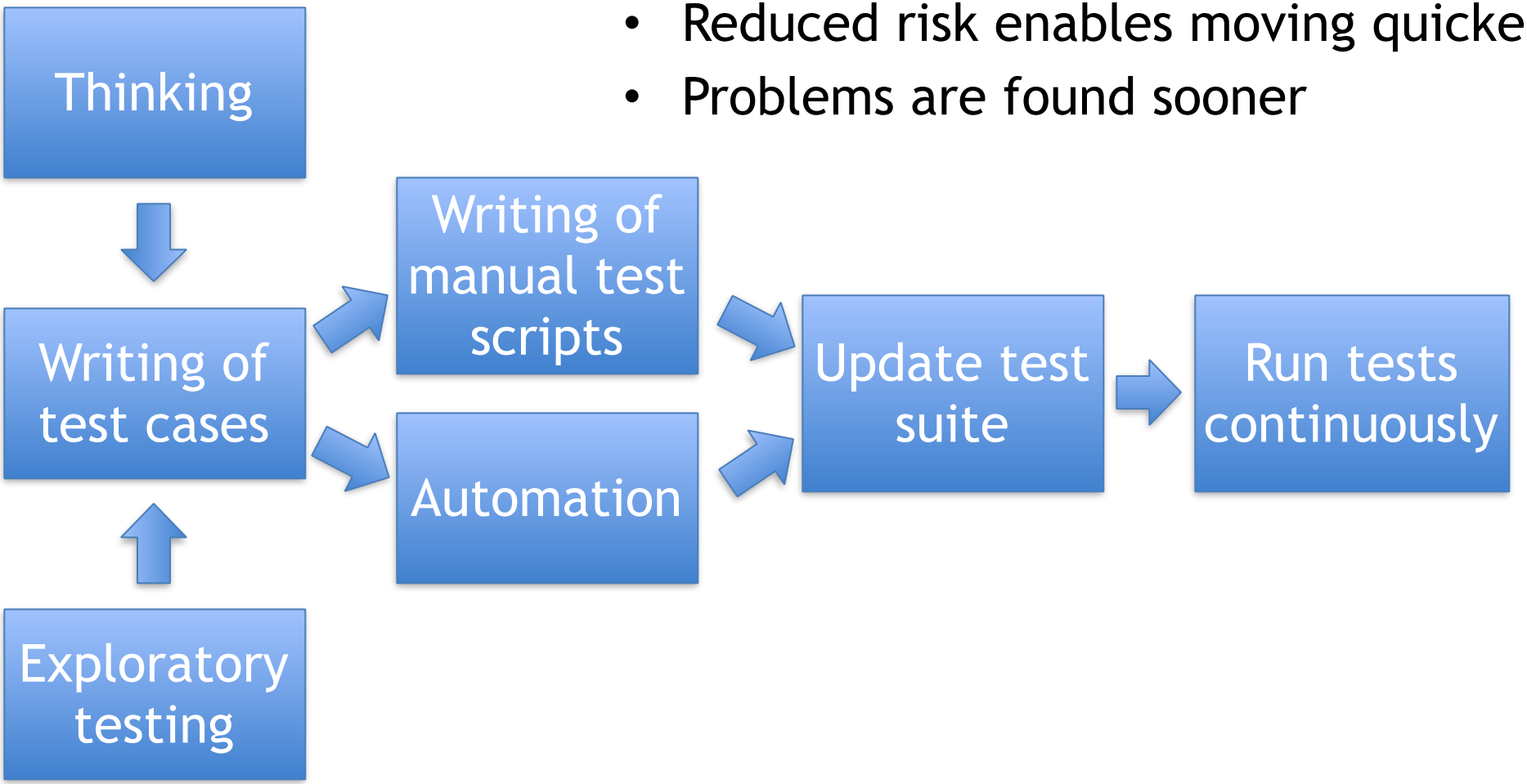


© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP

Moving away from concept of “regression” testing

- Reduces the risk of making a change
- Reduced risk enables moving quicker
- Problems are found sooner



© 2012 Eliassen Group. All Rights Reserved -‹#›-

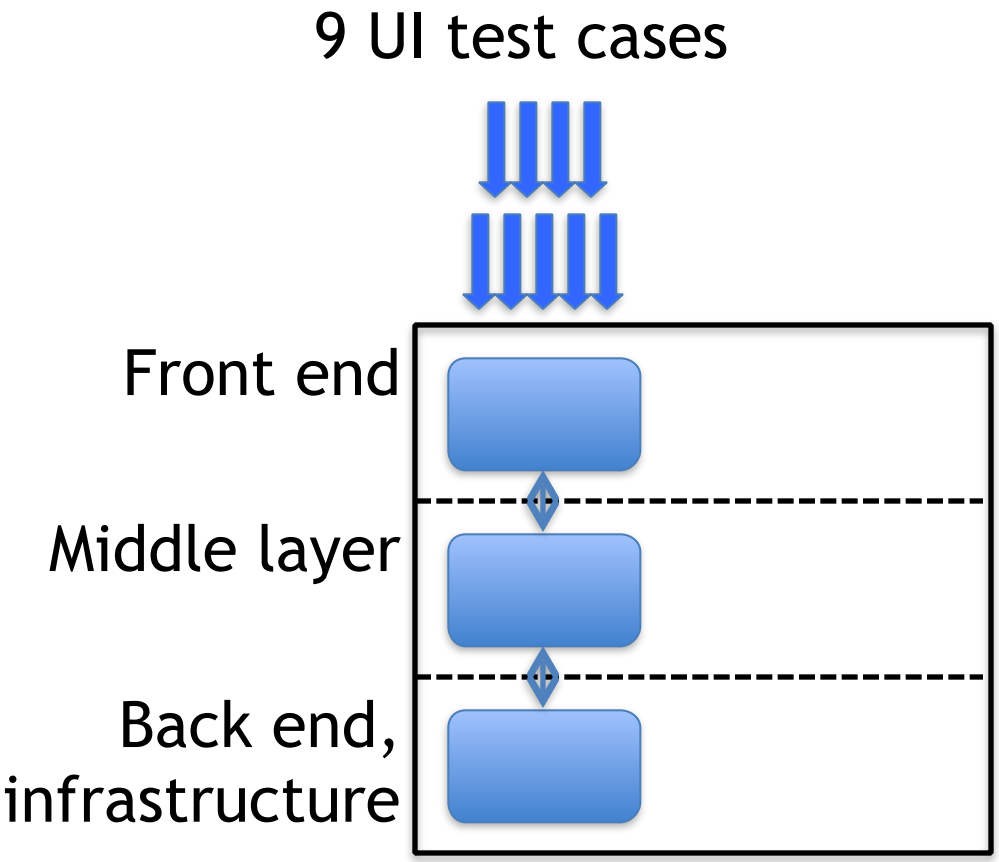
ELIASSEN GROUP

Holistic Testing

- Typical
  - Dev tests based on their understanding
  - QA tests much later based on their understanding
  - UAT has the final say
  - Interaction is delayed
- Agile
  - Dev, QA, UAT confer during iteration planning
  - Shared understanding of need
  - Delegate testing appropriately

© 2012 Eliassen Group. All Rights Reserved -‹#›-

Holistic testing



© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP

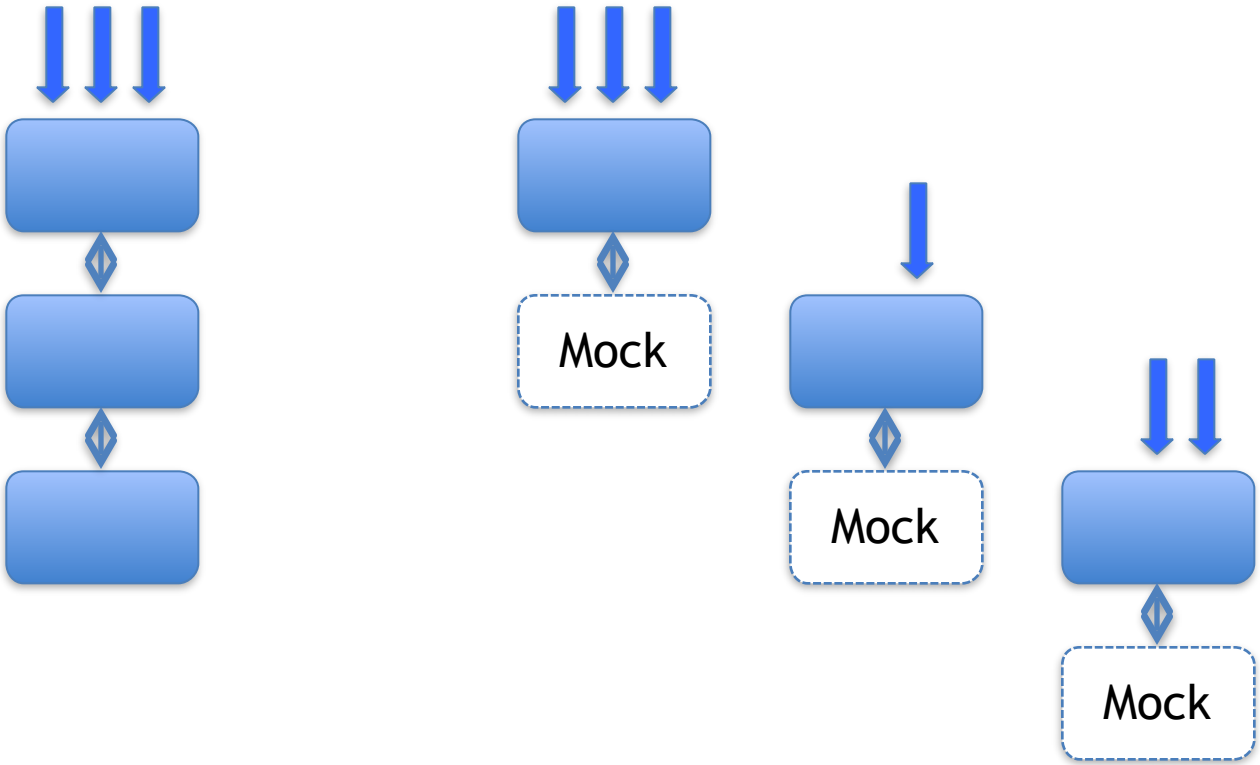
Holistic Testing

9 total test cases

Front end (QTP+Unit)

Middle layer (SoapUI+Unit)

Back end, infrastructure (Unit+others)



© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP

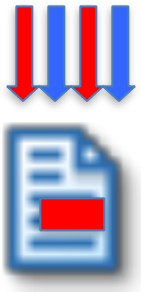
Unit Testing

- Unit tests are code that tests code
- The tests are code written in the same language as the code they are testing

© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Your Success. Our Talent

Unit Testing

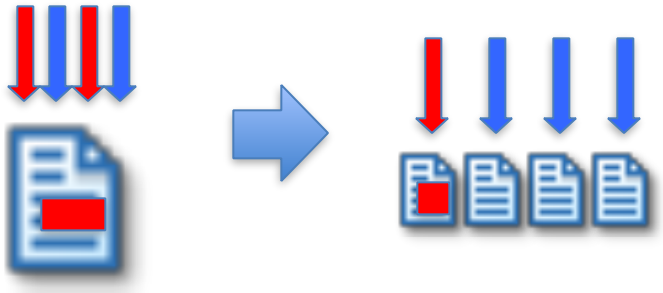


© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Your Success. Our Talent

Unit Testing

Refactor



Follows these principles from OO programming:

- Single Responsibility principle
- Open/closed principle

© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Your Success, Our Talent

Unit Testing

Additional guidelines for refactoring:

- Should be part of every story (DoD?)
- Factor into story estimates, don't do as separate stories!!

© 2012 Eliassen Group. All Rights Reserved -‹#›-

Properties of Good Unit Tests: FIRST

- ***F***ast (which requires automation)
- ***I***solated
  - Only tests one thing
  - Uses mock objects/stubs
- ***R***epeatable
- ***S***elf-Verifying
  - No eyeballing required
- ***T***imely
  - Write tests as close to the same time as the code as possible
  - Test Driven Development (TDD) is best

© 2012 Eliassen Group. All Rights Reserved -‹#›-

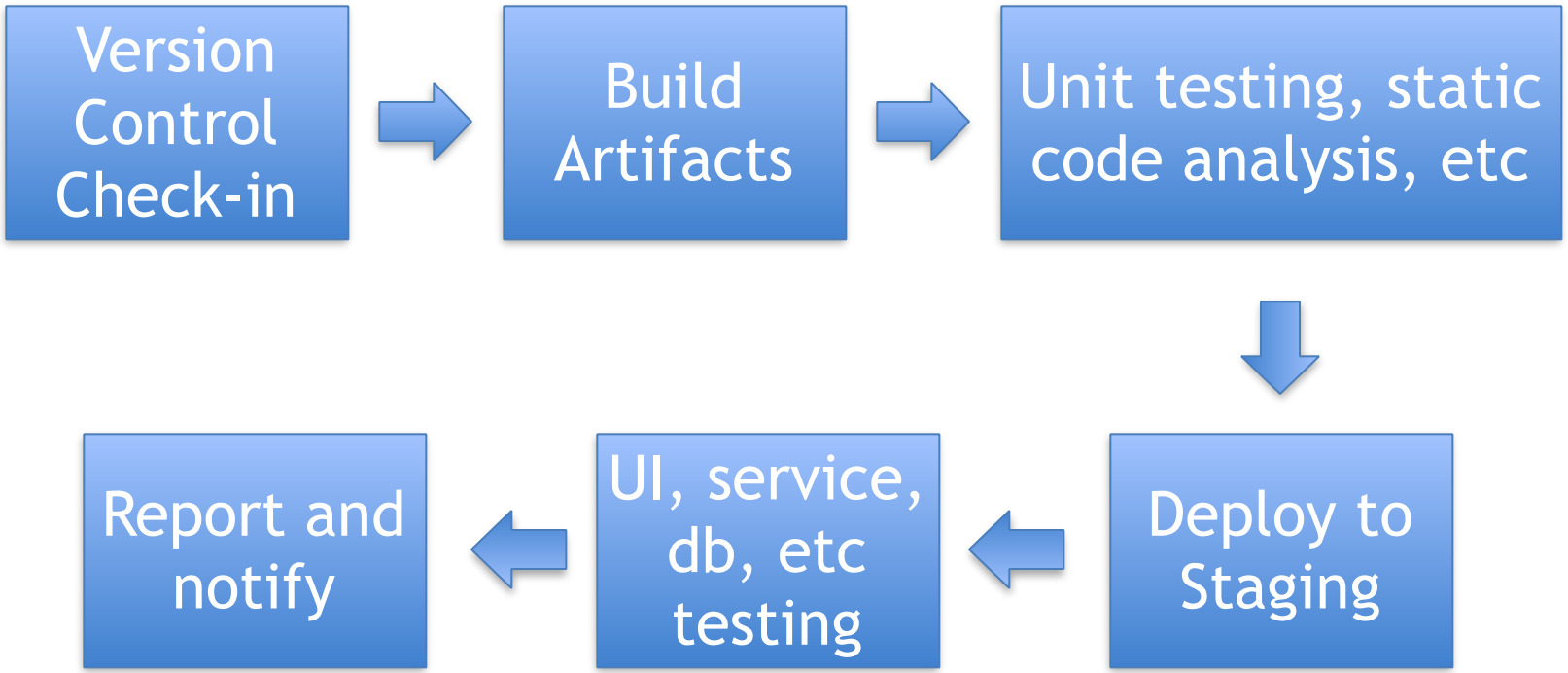
ELIASSEN GROUP
Your Success. Our Talent

Test Driven Development (TDD)

- Programmers write unit tests prior to coding
- If you can't write a test, you aren't ready to code
- Writing tests first will change how you write code
- Writing tests after coding is "too late"
- Writing test cases (not test scripts) prior to writing should also be considered

© 2012 Eliassen Group. All Rights Reserved -‹#›-

Continuous Integration



© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP

Fail-Fast Approach

- Order tests such that fast tests that are the most likely to fail if there is a problem run first.
- Examples
  - Run all unit tests before integration tests
  - Run “smoke test” unit tests for all functional areas before running all other unit tests
  - Run the integration tests that involve the areas with the most dependencies before
  - Run “smoke” test integration tests for all functional areas before running all other integration tests
- Invest in infrastructure to run as many tests in parallel as possible

© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Your Success. Our Talent

Test Automation

- Break testing into test plan writing and test execution
- Anything that would currently get a test case should be a candidate for automation
- Write unit tests first, or at least think about them first
- Use mock objects
- Write all new tests holistically (test matrix)

© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP

Agile Testing is “Free”

- Unit Testing + Refactoring + CI = better code
- Time spent writing unit tests and refactoring replaces time spent debugging and manual testing

© 2012 Eliassen Group. All Rights Reserved -‹#›-

Architecture

© 2012 Eliassen Group. All Rights Reserved -‹#›-

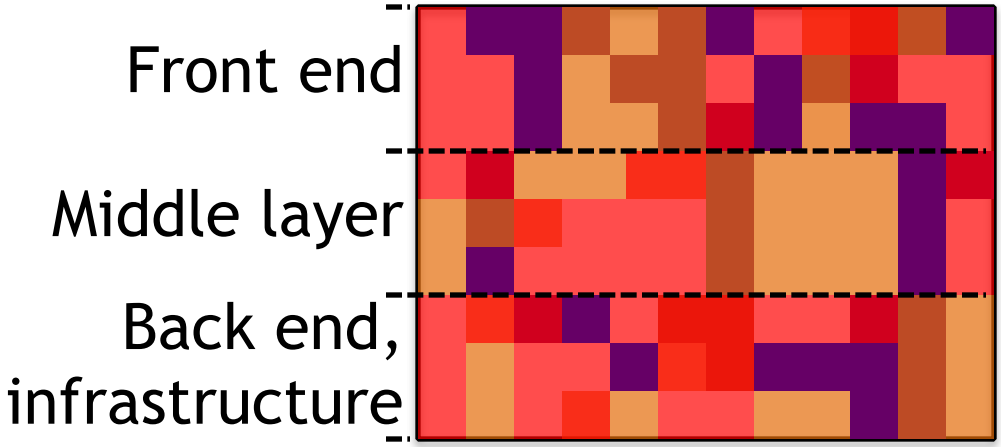
ELIASSEN GROUP
Your Success. Our Talent


"Simplicity -- the art of maximizing the amount of work not done – is essential."
10
$50
10 Lanes:
Money for another investment: $60M

Traveller wants to use e-mails from Hotels

Traveller wants to use e-mails from airlines

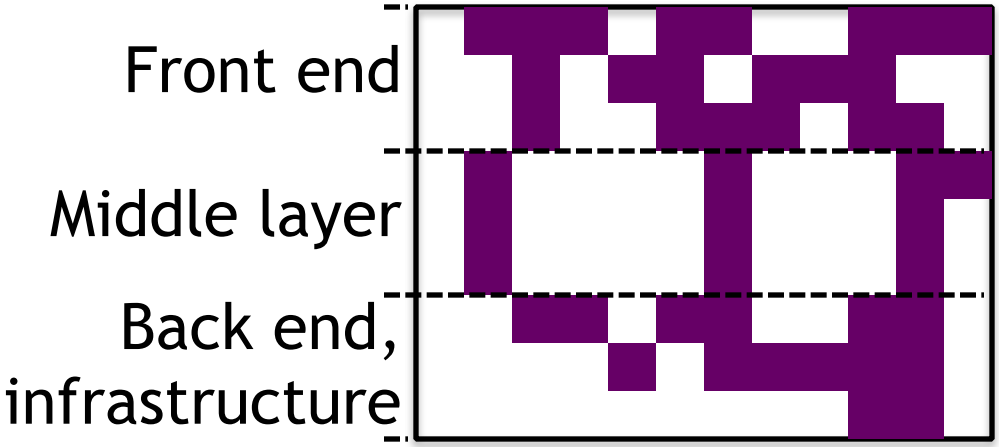
Traveller wants to use e-mails from car rental agencies



© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Your Success, Our Talent

Traveller wants to use e-mails from Hotels



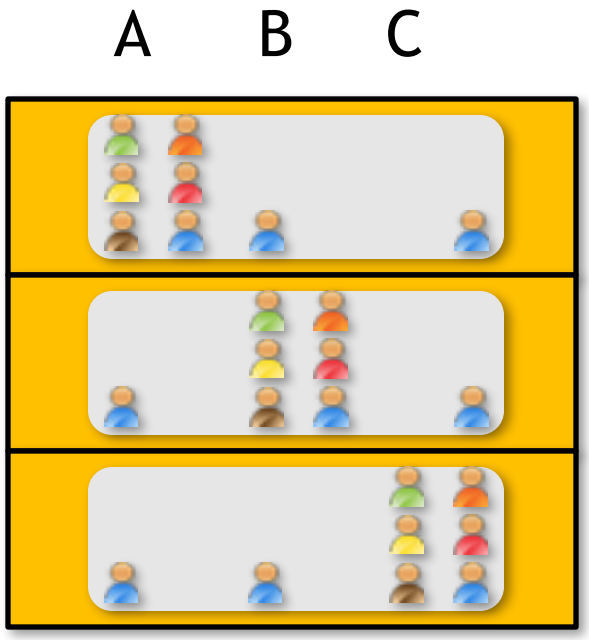
© 2012 Eliassen Group. All Rights Reserved -‹#›-

Cross Functional Architecturally

Front end

Middle layer

Back end,
infrastructure



© 2012 Eliassen Group. All Rights Reserved -‹#›-

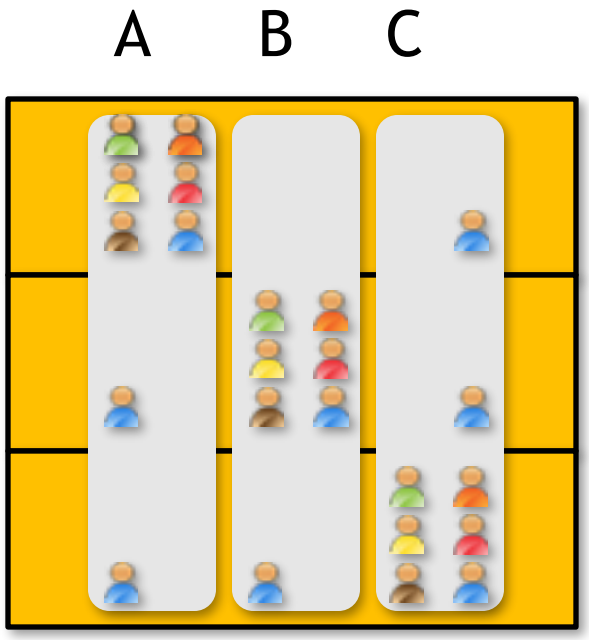
ELIASSEN GROUP

Cross Functional Architecturally

Front end

Middle layer

Back end,
infrastructure



© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP

Continuous Delivery

© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Your Success. Our Talent

What does it take to get a hotfix/patch to your customer?

© 2012 Eliassen Group. All Rights Reserved -‹#›-

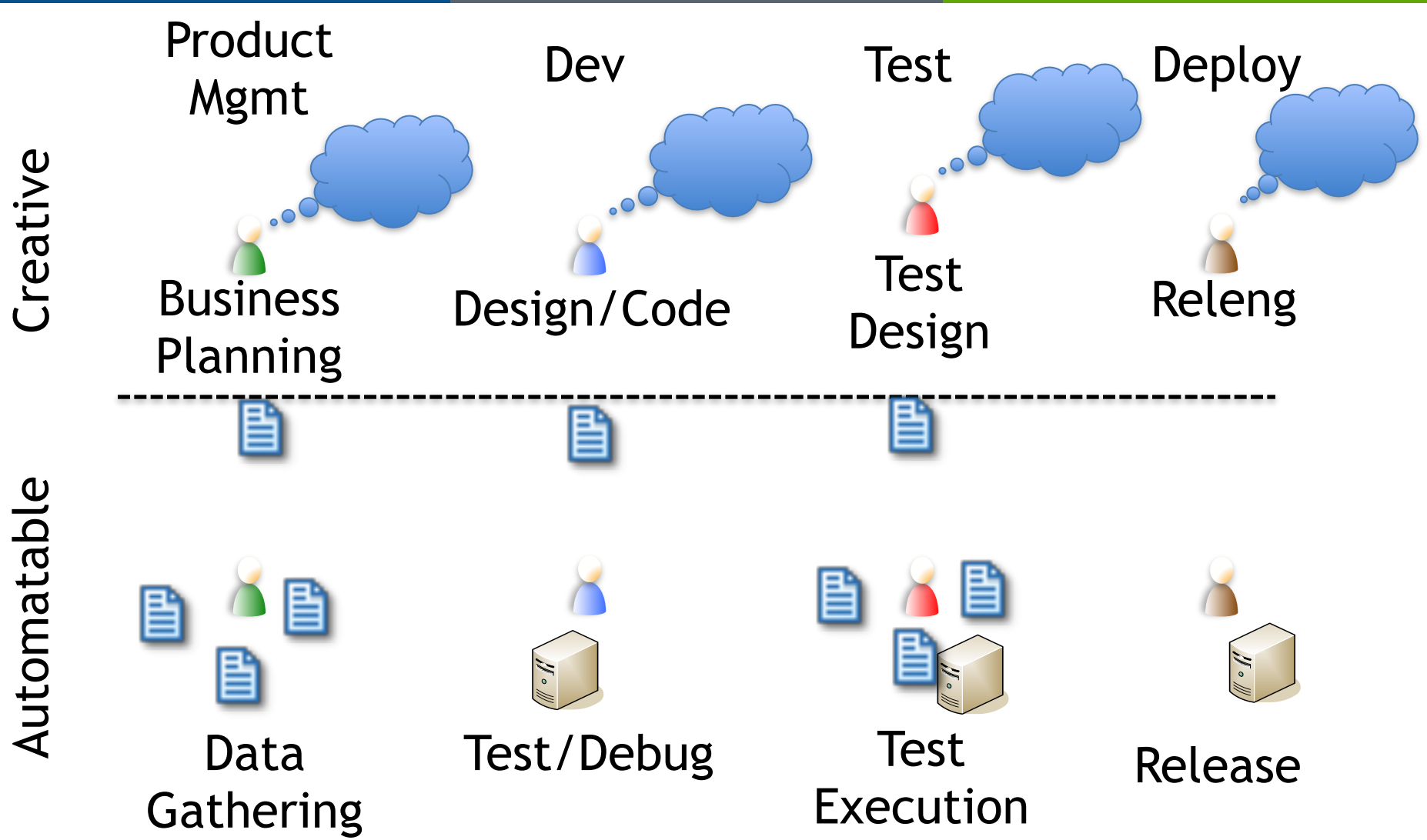
ELIASSEN GROUP

EVERYTHING

Continuous Integration 

© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Your Success. Our Talent.



© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP

Creative

Business Planning

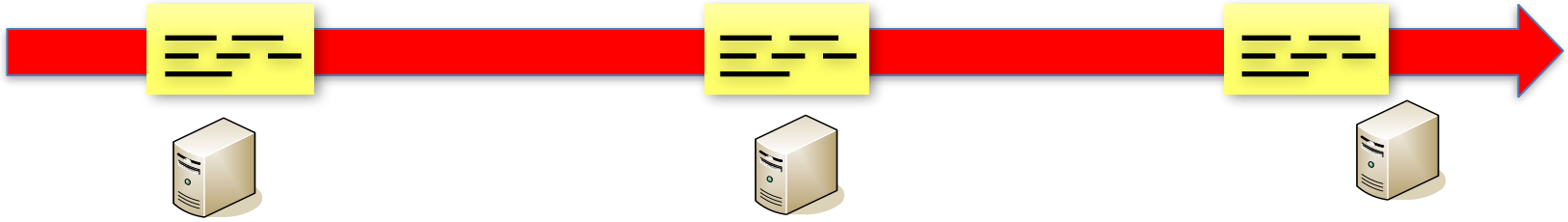
Design/Code

Team

Test Design

Releng

Automatable



Data Gathering

Build/ Test

Release

© 2012 Eliassen Group. All Rights Reserved -‹#›-

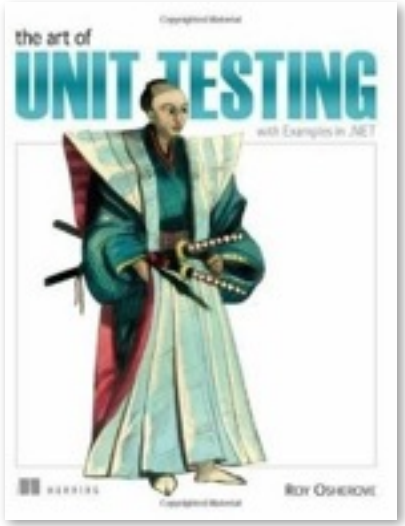
ELIASSEN GROUP

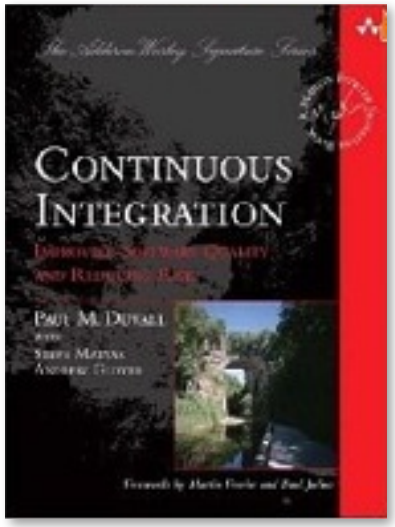
Tool Support

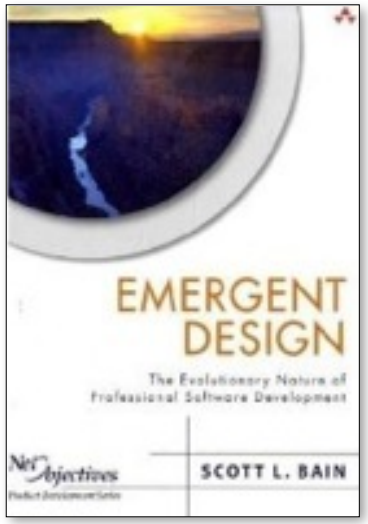
- Web-based Ideation tools
- Agile-friendly SCM
- Build
  - Continuous Integration
  - DevOps savvy build/deploy management
- Agile Project Management
- Test automation

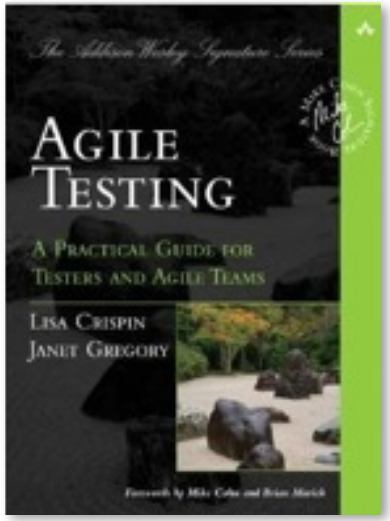
© 2012 Eliassen Group. All Rights Reserved -‹#›-

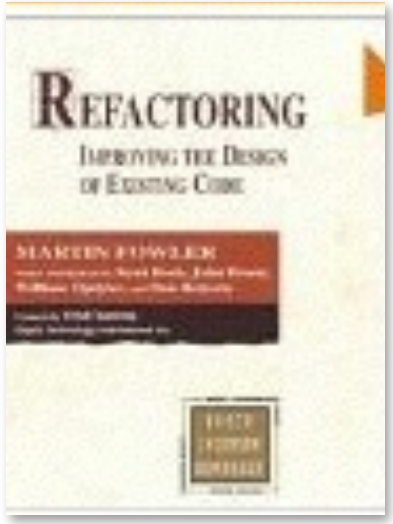
Recommended Books

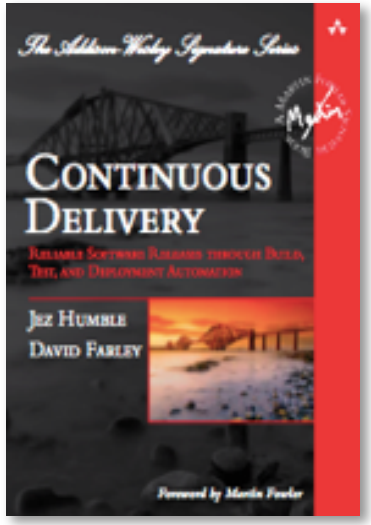


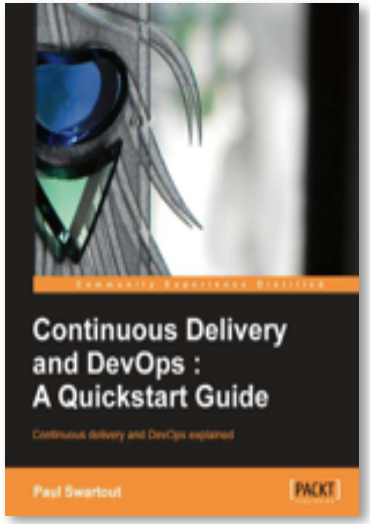












© 2012 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Your Success. Our Talent.

Review

- What is holistic testing?
- What is a unit test?
- What is refactoring?
- What is Test Driven Development?
- What is the cost of moving to Agile Testing?

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Agenda

- Overview of Agile
- Cross Functional Teams
- Product Vision, Epics, MVIs
- User stories
- Story splitting
- Agile Technical Practices
- Agile Planning
- Scrum
- Agile Flow
- Self-organization
- Distributed Agile
- Going Agile
- Wrap-up

Agile Planning

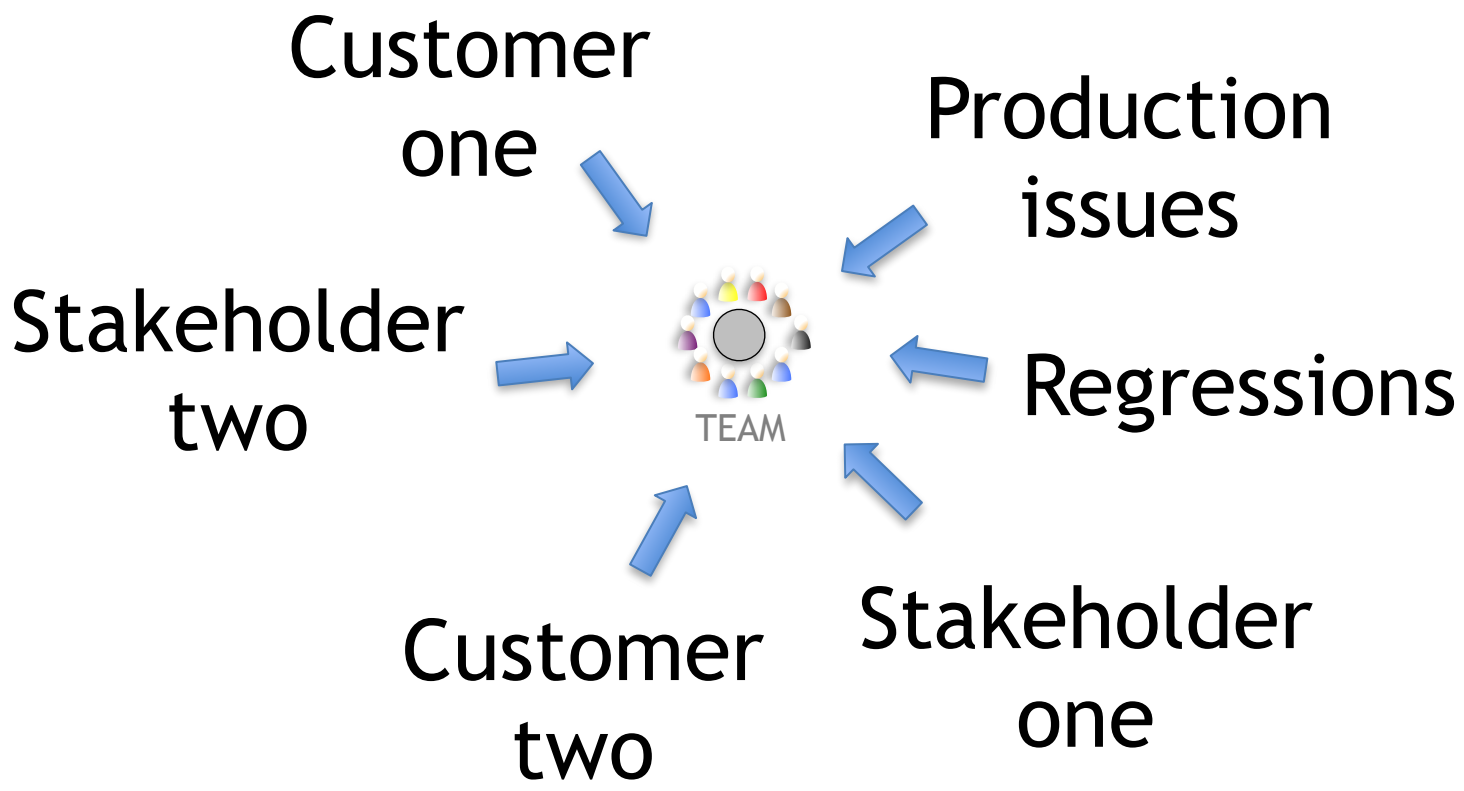
- Backlog
- Story Points
- Story point estimation with:
  - Finity Sizing
  - Planning Poker
- Iteration length
- Velocity
- Release planning (Delivery planning)

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success, Our Talent

Multiple Competing Requests

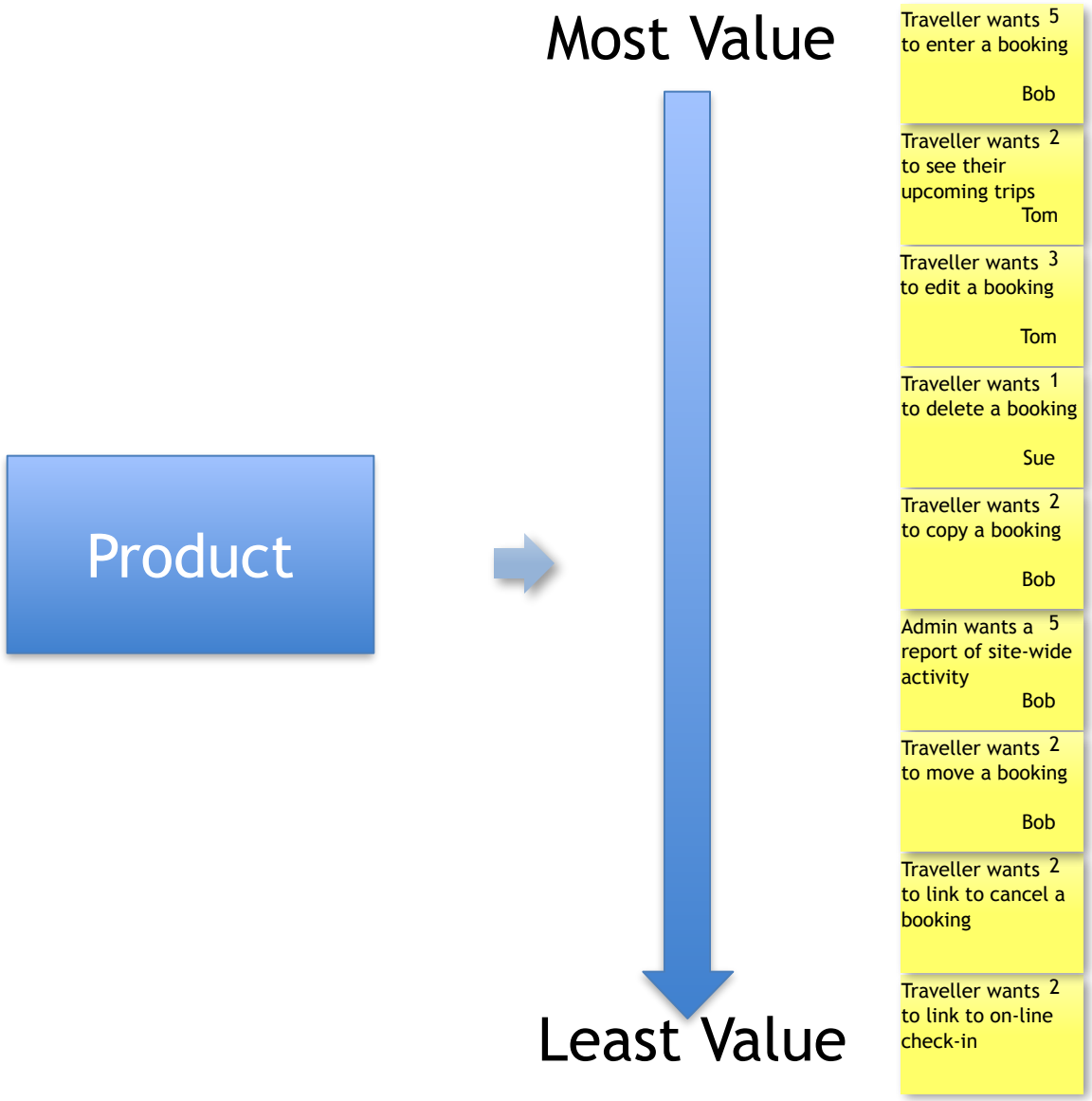
Members of the team are bombarded by conflicting requests



© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

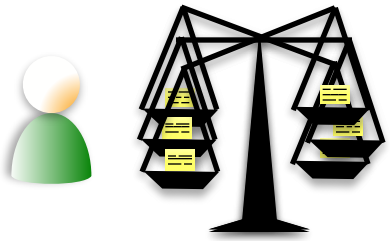
Backlog



© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Backlog Negotiation



Backlog – a list of user stories ordered in descending business value order.

Most Value

Traveller wants to e-mail an airline booking 2

Traveller wants to enter a booking 5
Bob

Traveller wants to see their upcoming trips 2
Tom

Traveller wants to edit a booking 3
Tom

Traveller wants to delete a booking 1
Sue

Traveller wants to copy a booking 2
Bob

Admin wants a report of site-wide activity 5
Bob

Traveller wants to move a booking 2
Bob

Release

Traveller wants to link to cancel a booking 2

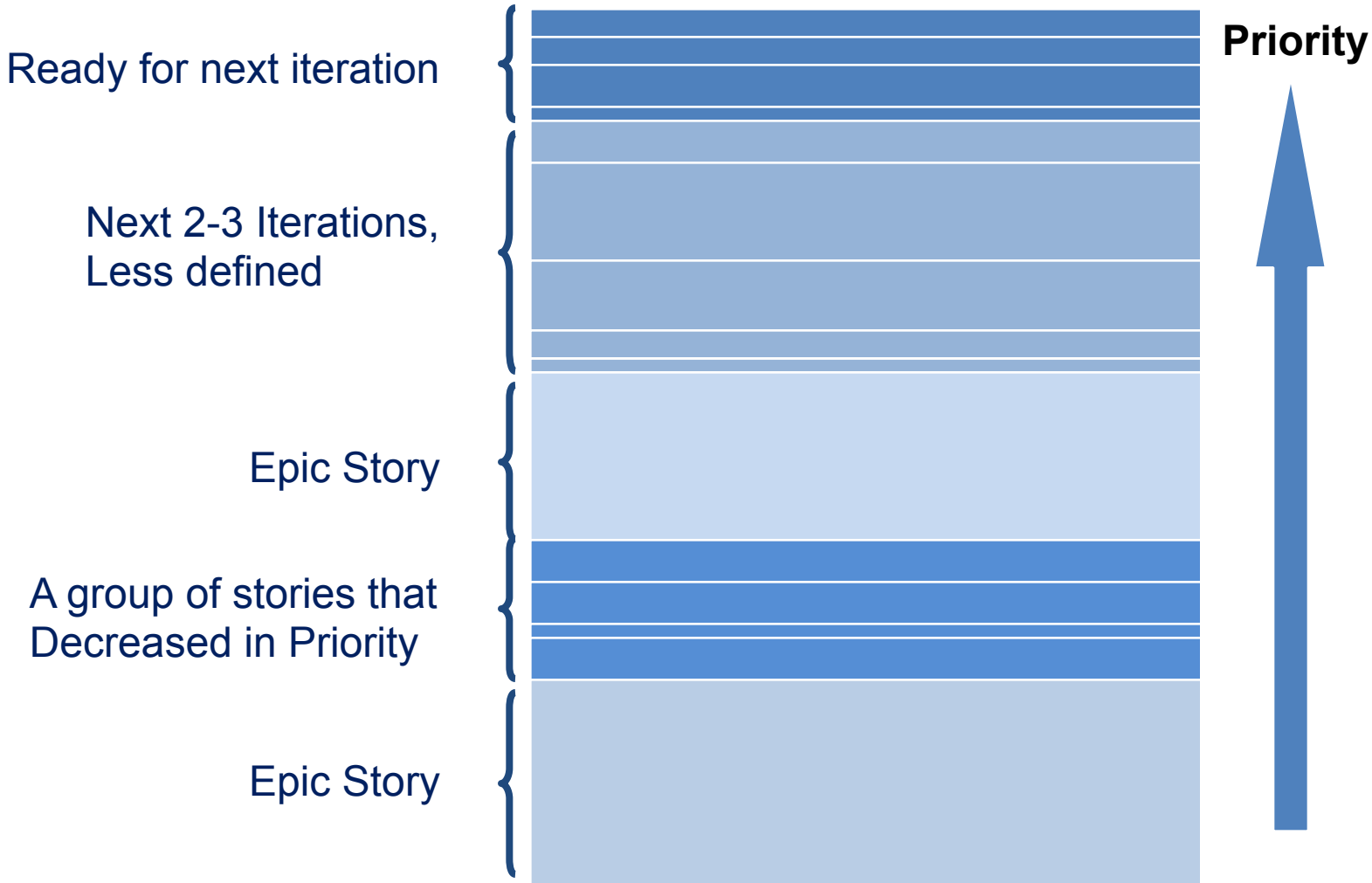
Traveller wants to link to on-line check-in 2

Least Value

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success, Our Talent

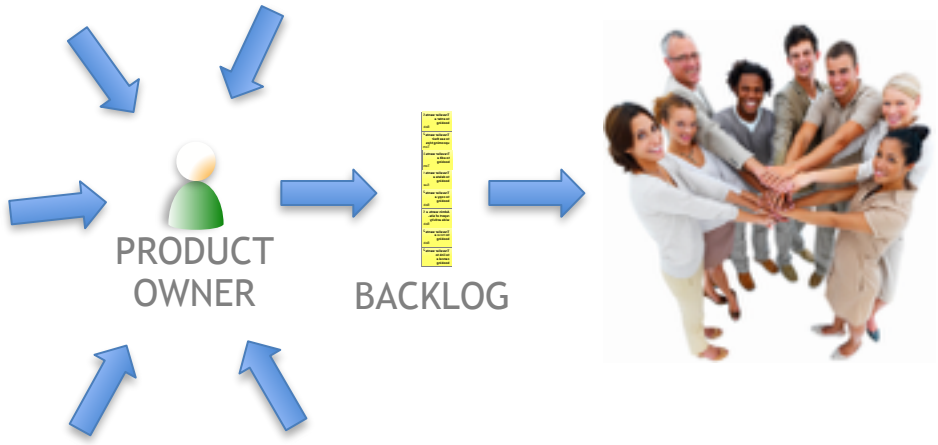
A Product Backlog



© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

All requests go through the PO and are prioritized in a ***SINGLE*** backlog



© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success. Our Talent

Other Considerations for Sequencing

- Risk
  - Technical, Business, Design
- Constraints
  - Regulatory, Market-driven
- Dependencies
  - Program level, Legacy Systems
- Market Conditions
  - Speed wins?

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success. Our Intent

Exercise: Backlog Creation

5 min

Most Value

Least Value

Traveller wants to enter a booking	5
Traveller wants to see their upcoming trips	2
Traveller wants to edit a booking	3
Traveller wants to delete a booking	1
Traveller wants to copy a booking	2
Admin wants a report of site-wide activity	5
Traveller wants to move a booking	2
Traveller wants to link to cancel a booking	2
Traveller wants to link to on-line check-in	2

- **Turn your stories into a backlog**
- **No “ties” or buckets**
- **Single file backlog only**
- **Top twelve(12) user stories**

© 2012-2013 Eliassen Group. All Rights Reserved --

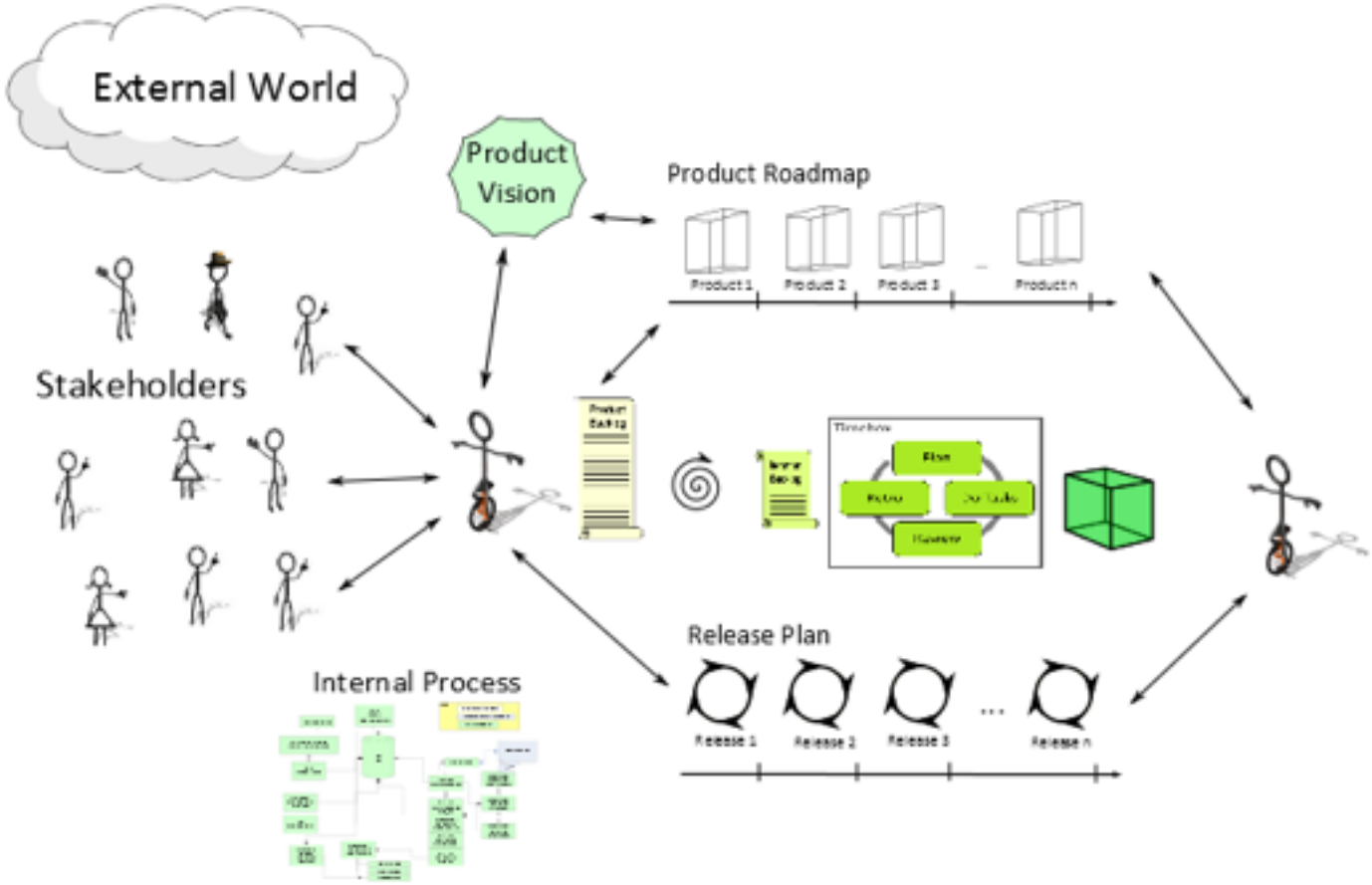
ELIASSEN GROUP

Take-aways from the activity?

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success. Our Talent

‘Big’ PO Responsibility



© 2012-2013 Eliassen Group. All Rights Reserved --

Ready? and Done?

TEAM

PRODUCT OWNER

SCRUM MASTER

BACKLOG

Iteration

Plan | Do | Check | Act

Traveller wants 5
Traveller wants 2
Traveller wants 3
Traveller wants 1
Traveller wants 2
Admin wants a 5
Traveller wants 2 to move a booking
Bob

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Exercise: Definition of Ready

5 min

Definition of Ready – specific ”entrance criteria” that need to be met for a user story to be considered ready for a team to start working on it. It is an agreement between the product owner and the team.

- As a team, come up with a definition of ready
- Consider everything you’ve learned about preparing a user story
- What do you need before starting work on a story?
- Write a bulleted list on a card
- When you are done, bring your card(s) to the instructor

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Exercise: Definition of Done

5 min

- The definition of done is the “exit criteria” for a story to be included in a release
- You are basically creating your definition of “Quality”
- As a team, come up with a definition of when a story is “done”
- Consider everything you’ve learned about getting to done
- Think about what would make you feel comfortable about:
  - Demonstrating the story to the Product
  - Software: issuing a hotfix/patch
  - Non-software: doing an expedited change
- Write a bulleted list on a card
- When you are done, bring your card(s) to the instructor

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

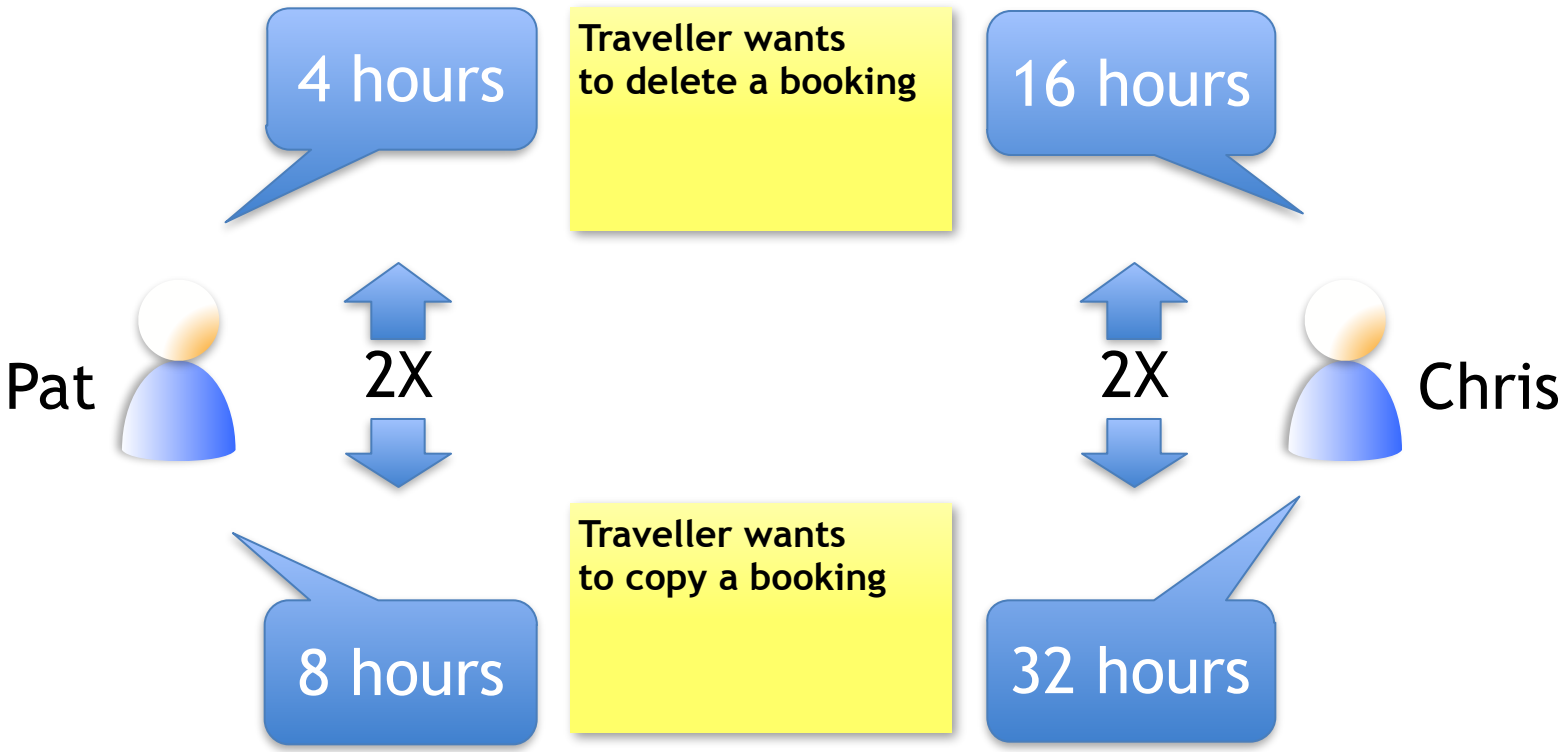
Typical Ingredients in Definition of Done

- All targeted work is completed
- All acceptance criteria are met
- All test cases written, executed, passing
- Performance testing passes
- All UAT procedures documented
- All signoffs obtained
- All UAT steps performed
- All audit and risk requirements satisfied
- Any other organization specific items

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Hour-based Estimation

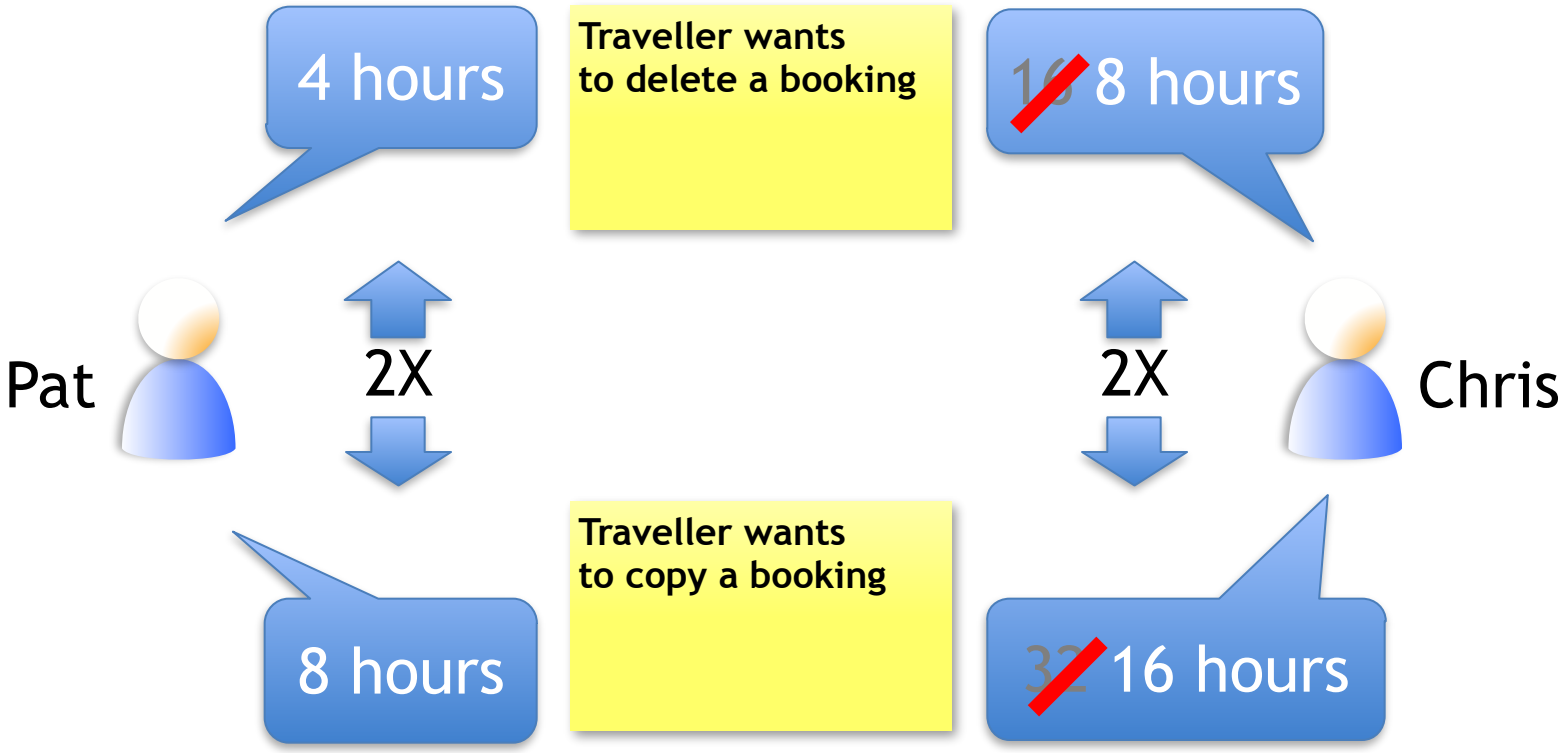


© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Hour-based Estimation

6 months later…

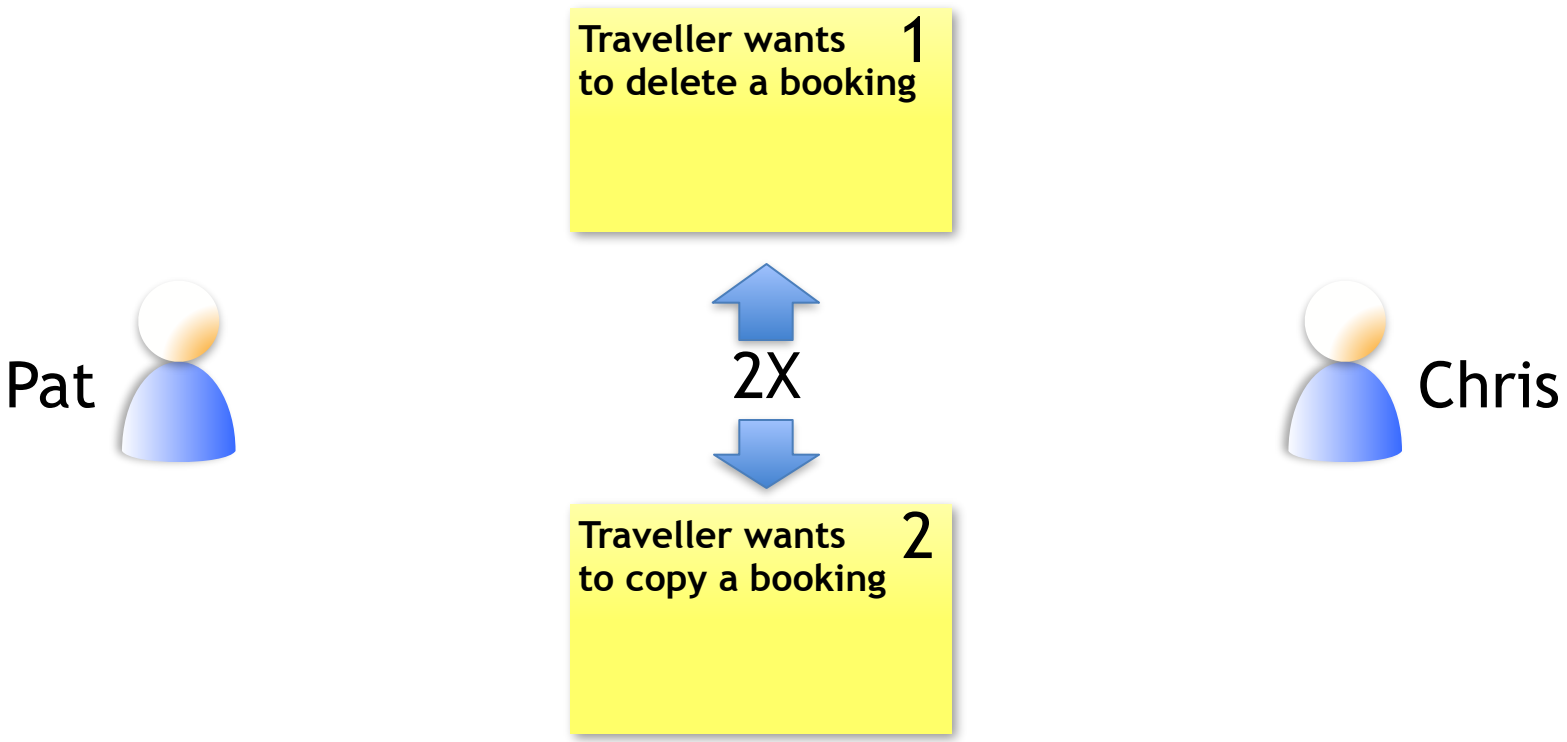


Who does the work or how quickly it can be done is more likely to change than the *relative complexity*.

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

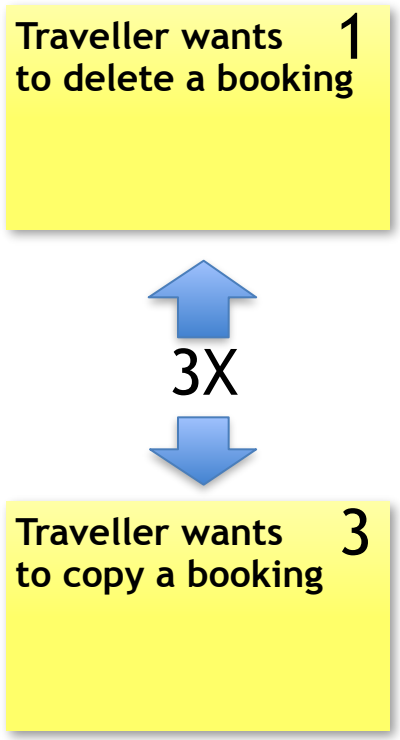
Relative Complexity

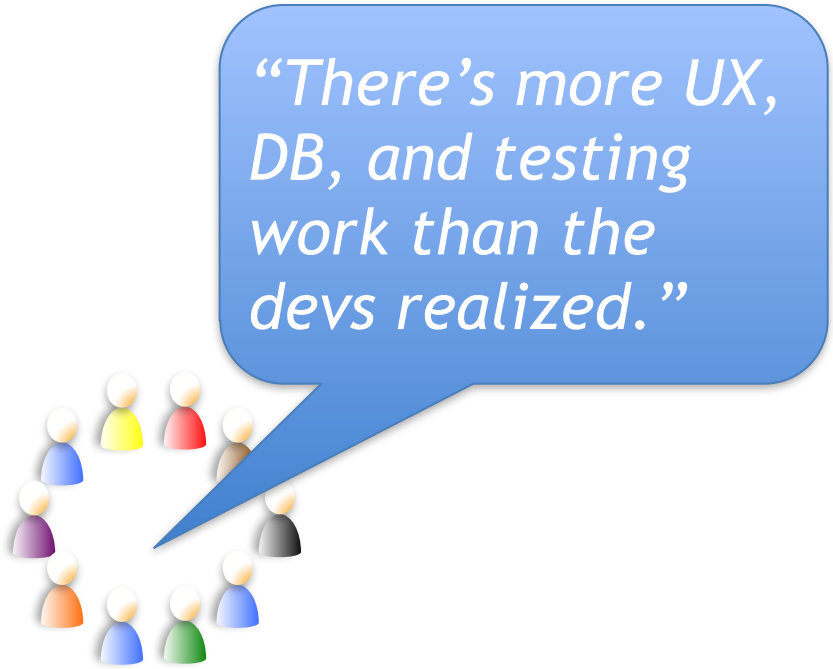


© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Story Points





Story points

- Independent of who does the work
- Includes all of the effort required
- Unlikely to change over time

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Getting to Done

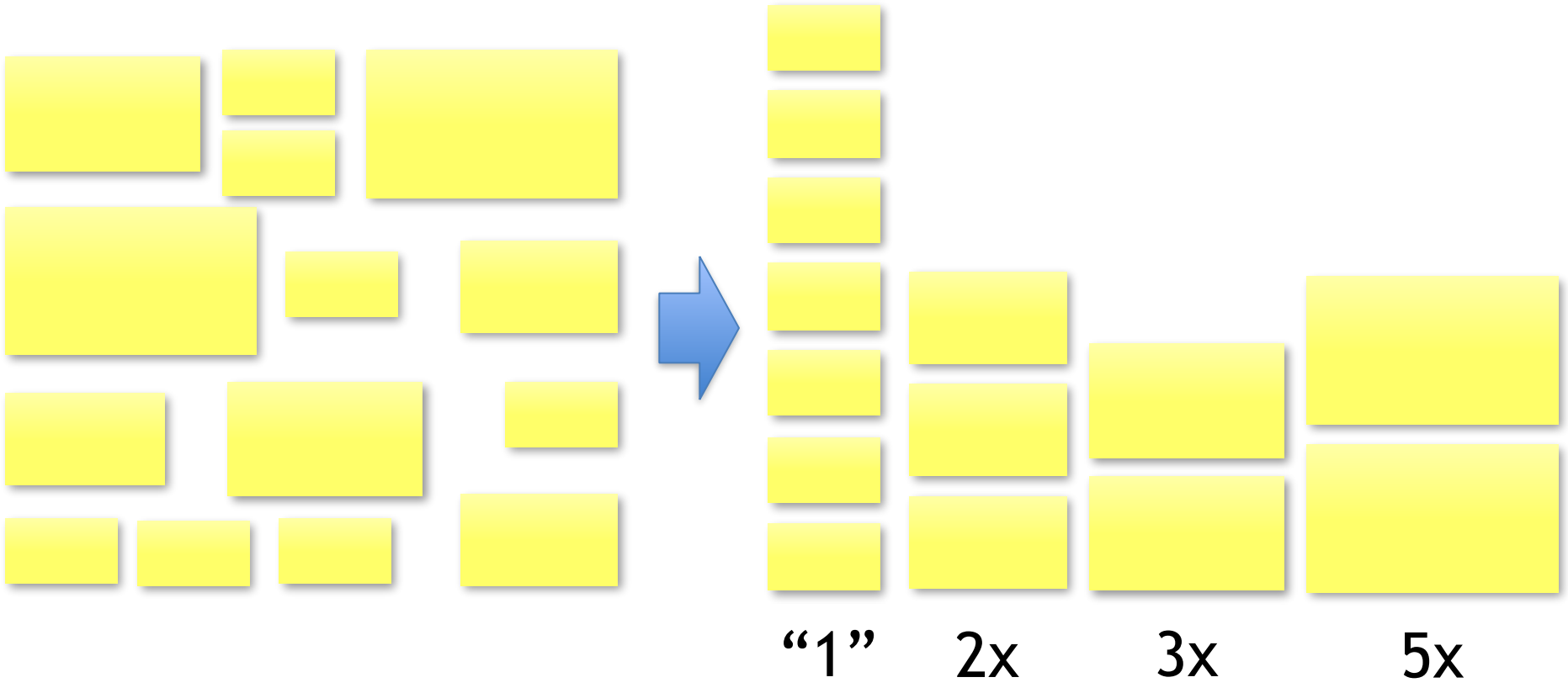
- Your estimates must include everything it takes to get a story to meet your definition of done

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success. Our Talent

Story Points

Typical work of the team



© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Representative Stories - Finity Sizing

25 min

- Choose 2 representative user stories each which, if estimated out, will help you when estimating the rest
- Don’t include dependencies
- Consider all of these factors
  - Coding
  - Configuring
  - Testing
  - Documenting
  - Artwork
  - User interface
  - Database related work
- Size them relatively in columns

© 2012-2013 Eliassen Group. All Rights Reserved --

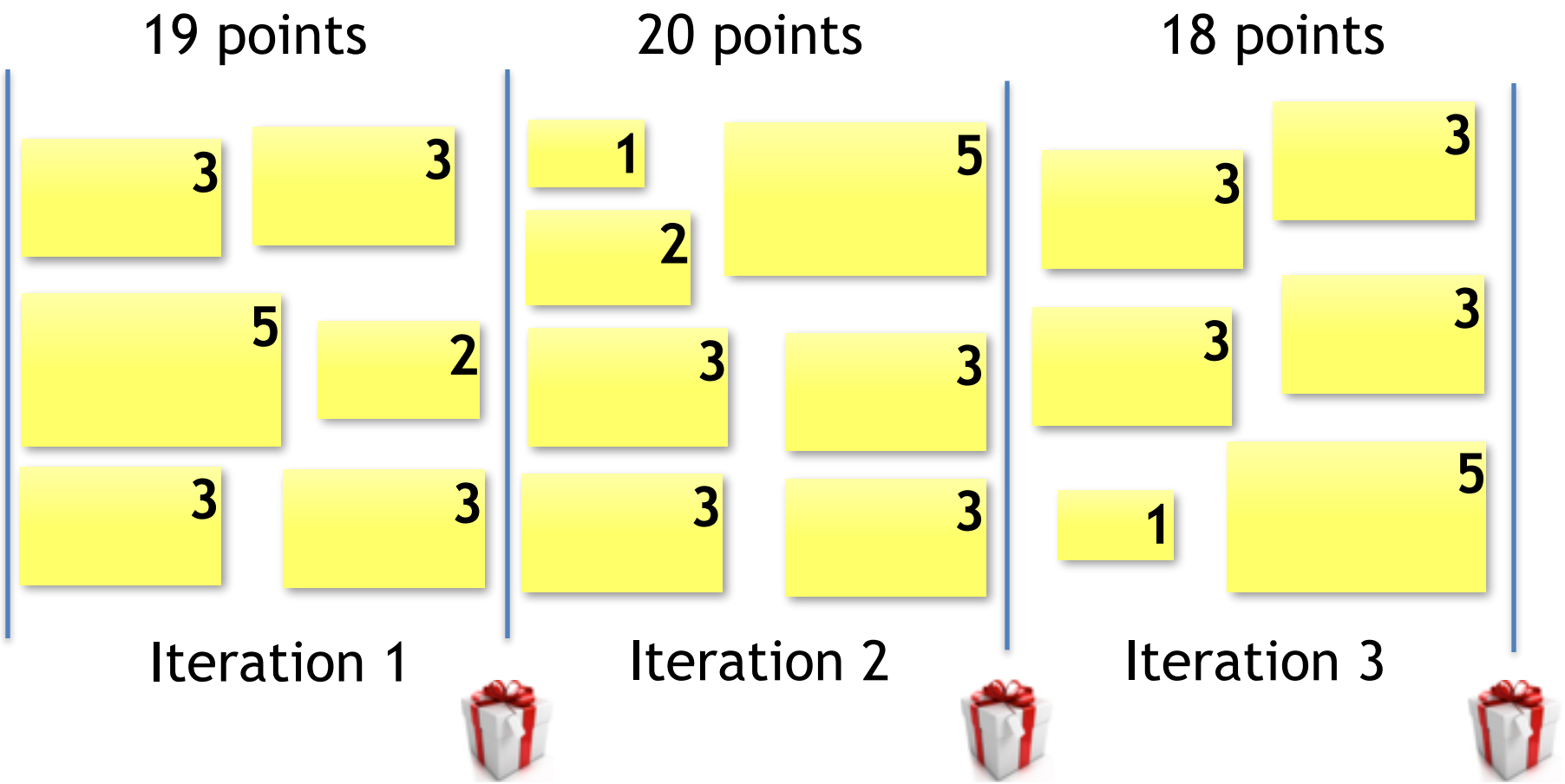
ELIASSEN GROUP

Exercise: Planning Poker

- Implementers and testers each get a set of cards.
- The numbers are multipliers, eg, 8 means “8X”
- Don’t include dependencies
- Consider all of these factors
  - Coding
  - Configuring
  - Testing
  - Documenting
  - Artwork
  - User interface
  - Database related work

© 2012-2013 Eliassen Group. All Rights Reserved --

Velocity – a Measure of Capacity

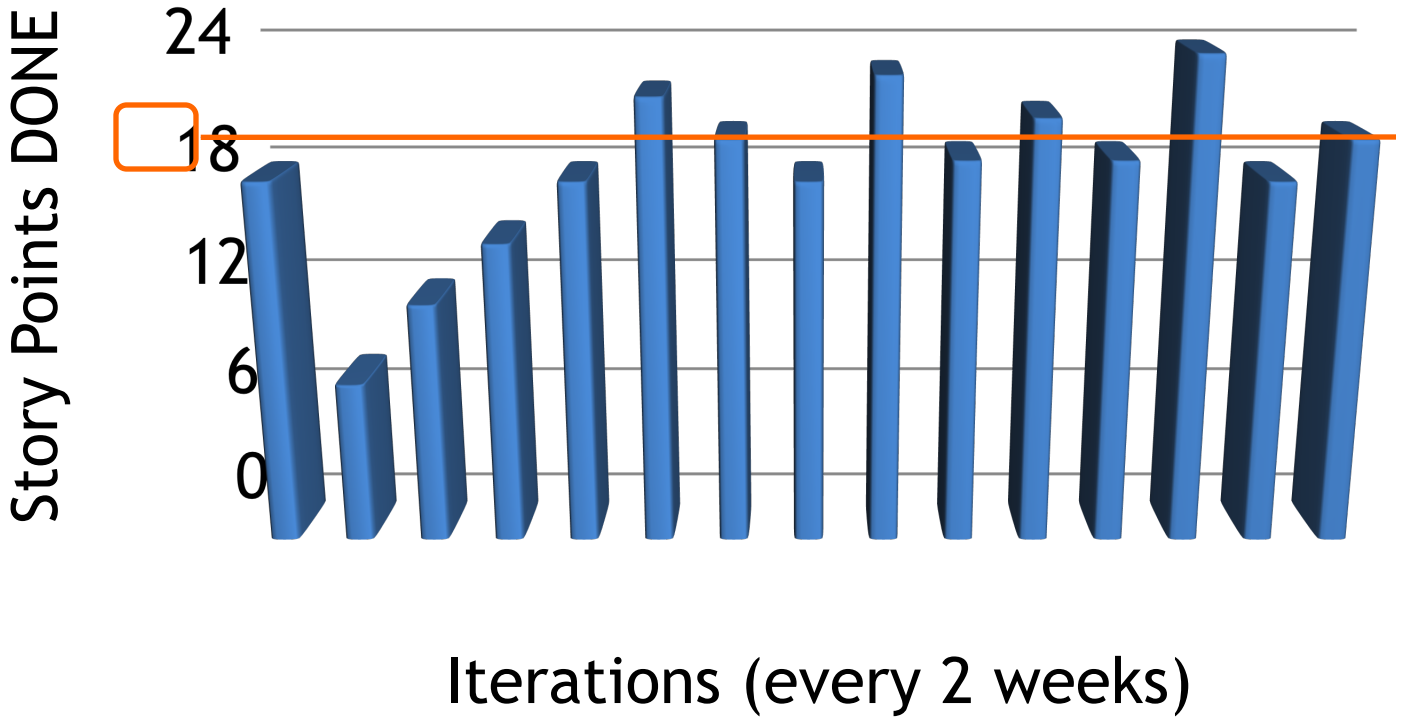


Velocity is a team's ***measured*** capacity. It is the amount of work they can get to ***done***, as a team, over a given period of time.

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Iteration Velocity



© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Estimating Your Initial Velocity

We think we can do this much in 2 weeks

We want to do 2 week iterations

Traveller wants	5
Traveller wants	2
Traveller wants	3
Traveller wants	1
Traveller wants	2
Admin wants a	5
Traveller wants	2
Traveller wants	2
Traveller wants	2
Hotel owner	2
Airline wants to	2
Car rental agency	2
Seller wants to	5
Seller wants to show an ad	5

20 points worth of stories

Chosen iteration length: 2 weeks
Estimated initial velocity: 20 story points

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

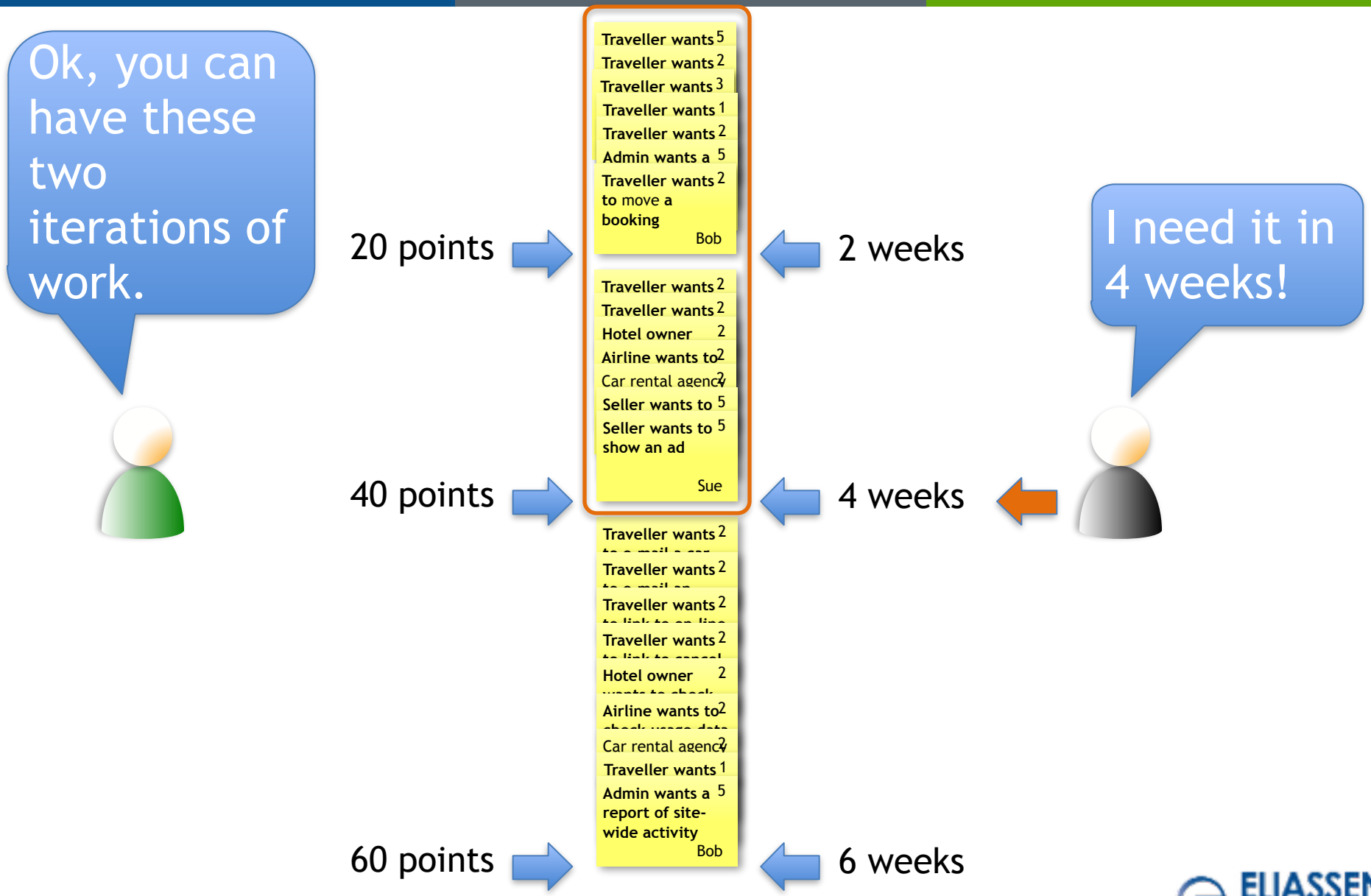
Quality and Velocity

- Velocity is based on ***DONE*** stories
- Violating your definition of done means lowering your quality
- A “higher” velocity based on violating your definition of done is robbing from the future
- This results in unfinished work
- Unfinished work piles up and creates
  - Bugs
  - Technical debt
  - More effort for future work

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success. Our Talent

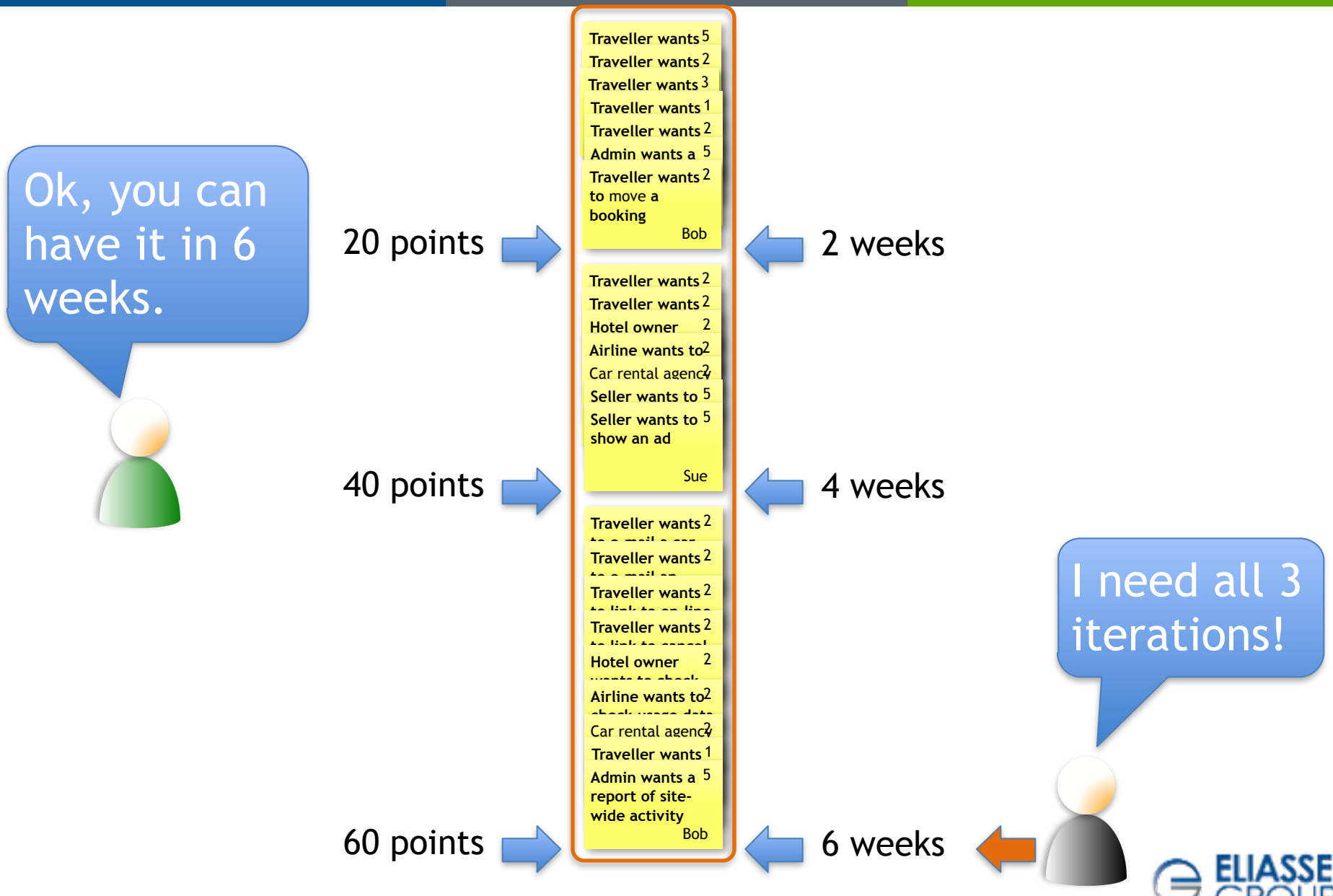
Release Planning (Delivery Planning)



© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Release Planning (Delivery Planning)



© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Financial Planning

Fully loaded cost $30K / week

Traveller wants	5
Traveller wants	2
Traveller wants	3
Traveller wants	1
Traveller wants	2
Admin wants a	5
Traveller wants to move a booking	2
Bob	

← 2 weeks, 20 points, $60K

Traveller wants	2
Traveller wants	2
Hotel owner	2
Airline wants to	2
Car rental agency	2
Seller wants to	5
Seller wants to show an ad	5
Sue	

← 4 weeks, 40 points, $120K

Traveller wants	2
Traveller wants	2
Traveller wants	2
Traveller wants	2
Hotel owner	2
Airline wants to	2
Car rental agency	2
Traveller wants	1
Admin wants a report of site-wide activity	5
Bob	

← 6 weeks, 60 points, $180K

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Getting to Ready – Backlog Grooming

Initial draft

Initial place in backlog

Check for Who, What, Why

Splitting

Acceptance Tests

Details

Research

Input from whole team

Estimation

Ready

Within 4-8 weeks

Within 2-4 weeks

Before starting implementation

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success. Our Intent.

Backlog Grooming

Story	Points	Status
Traveller wants to enter a booking	*3*	*Ready*
Traveller wants to register with the		*New*
Traveller wants to see their upcoming	*2*	*Ready*
Admin wants a report of site-wide	*5*	*Ready*
Traveller wants to edit a booking		*New*
Traveller wants to delete a booking	*1*	*Ready*
Traveller wants to move a booking		*New*
Traveller wants to copy a booking	*2*	*Ready*
Traveller wants a link to cancel a	*2*	*Ready*
Traveller wants a link to on-line check-		*New*
Traveller wants to e-mail a hotel	*2*	*Ready*

Team & PO get story ready

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Backlog Grooming

Story	Points	Status
Traveller wants to enter a booking	*3*	*Ready*
Traveller wants to register with the	*2*	*Ready*
Traveller wants to see their upcoming	*2*	*Ready*
Admin wants a report of site-wide	*5*	*Ready*
Traveller wants to edit a booking		*New*
Traveller wants to delete a booking	*1*	*Ready*
Traveller wants to move a booking		*New*
Traveller wants to copy a booking	*2*	*Ready*
Traveller wants a link to cancel a	*2*	*Ready*
Traveller wants a link to on-line check-		*New*
Traveller wants to e-mail a hotel	*2*	*Ready*

Team declares not ready

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Backlog Grooming

Story	Points	Status
Traveller wants to enter a booking	*3*	*Ready*
Traveller wants to register with the	*2*	*Ready*
Traveller wants to see their upcoming	*2*	*Ready*
Admin wants a report of site-wide	*5*	*Ready*
Traveller wants to edit a booking	*?*	*Need Info*
Traveller wants to delete a booking	*1*	*Ready*
Traveller wants to move a booking		*New*
Traveller wants to copy a booking	*2*	*Ready*
Traveller wants a link to cancel a	*2*	*Ready*
Traveller wants a link to on-line check-		*New*
Traveller wants to e-mail a hotel	*2*	*Ready*

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Backlog Grooming

15 min

- For your first 5 user stories, check against the following definition of ready.
- Fix any stories that don't meet all of the criteria
- Definition of Ready for the exercise:
  - Has a Who, What, and Why
  - Independent
  - Negotiable
  - Valuable to the user
  - Estimated (use planning poker if needed)
  - Small (split if needed)
  - Testable (has acceptance criteria)

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Review

- What is a backlog and why is it important?
- How are story points different than hours?
- What is an iteration?
- What does velocity measure?

© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success. Our Talent

Agenda

- Overview of Agile
- Cross Functional Teams
- Product Vision, Epics, MVIs
- User stories
- Story splitting
- Agile Technical Practices
- Agile Planning
- Scrum
- Agile Flow
- Self-organization
- Distributed Agile
- Going Agile
- Wrap-up

Scrum

TEAM

PRODUCT OWNER

SCRUM MASTER

BACKLOG

PROGRESS TRACKING

Iteration 1	Iteration Planning	Stand-up	Stand-up	Stand-up	Stand-up	
	Stand-up	Stand-up	Stand-up	Stand-up	Iteration Review & Retro	Deliverable
Iteration 2	Iteration Planning	Stand-up	Stand-up	Stand-up	Stand-up	
	Stand-up	Stand-up	Stand-up	Stand-up	Iteration Review & Retro	Delivered!
Iteration 3	Iteration Planning	Stand-up	Stand-up	Stand-up	Stand-up	

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Scrum

TEAM

PRODUCT OWNER

SCRUM MASTER

BACKLOG

PROGRESS TRACKING

Iteration 1	Iteration Planning	Stand-up	Stand-up	Stand-up	Stand-up	
	Stand-up & Backlog grooming	Stand-up	Stand-up	Stand-up	Iteration Review & Retro	Deliverable
Iteration 2	Iteration Planning	Stand-up	Stand-up	Stand-up	Stand-up	
	Stand-up & Backlog grooming	Stand-up	Stand-up	Stand-up	Iteration Review & Retro	Delivered!
Iteration 3	Iteration Planning	Stand-up	Stand-up	Stand-up	Stand-up	

© 2012-2014 Eliassen Group. All Rights Reserved -<#>-

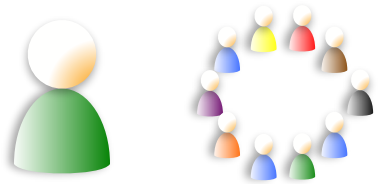
ELIASSEN GROUP
Agile Consulting Services

Capacity Planning

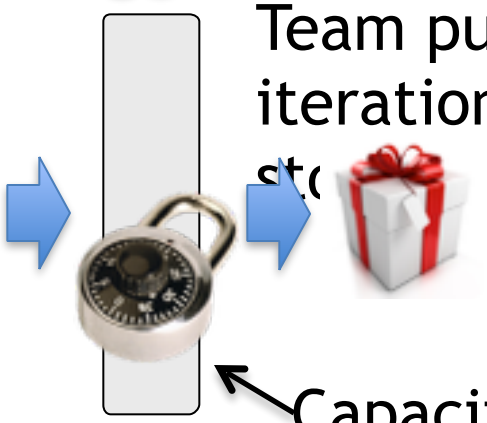
- Start with your default planning velocity
- Discuss any considerations for reducing or increasing the forecast velocity for this iteration
- Example considerations
  - An expected change (up or down) in prod support
  - Planned non-story time (training, vacation, etc)
  - The addition of a new team member
- Decide (as a team) on the forecast velocity for this iteration

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

Sprint Planning Meeting



Product owner responsible for a prioritized Backlog



Team pulls an iteration of ready st

Capacity (measured velocity)

Demand

Ready

Not Ready

Definition of Ready	Definition of Done

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Iteration Planning – Same as Backlog Grooming

Story	Points	Status
Traveller wants to enter a booking	*3*	*Ready*
Traveller wants to register with the	*2*	*Ready*
Traveller wants to see their upcoming	*2*	*Ready*
Admin wants a report of site-wide	*5*	*Read*
Traveller wants to edit a booking	*?*	*Nee*
Traveller wants to delete a booking	*1*	*Ready*
Traveller wants to move a booking		*New*
Traveller wants to copy a booking	*2*	*Ready*
Traveller wants a link to cancel a	*2*	*Ready*
Traveller wants a link to on-line check-		*New*
Traveller wants to e-mail a hotel	*2*	*Ready*

Team & PO get story ready

Goal: 20 points

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Team is Ready to Start Iteration!

Story	Points	Status
Traveller wants to enter a booking	*3*	*Ready*
Traveller wants to register with the	*2*	*Ready*
Traveller wants to see their upcoming	*2*	*Ready*
Admin wants a report of site-wide	*5*	*Ready*
Traveller wants to edit a booking	*?*	*Need Info*
Traveller wants to delete a booking	*1*	*Ready*
Traveller wants to move a booking	*3*	*Ready*
Traveller wants to copy a booking	*2*	*Ready*
Traveller wants a link to cancel a	*2*	*Ready*
Traveller wants a link to on-line check-		*New*
Traveller wants to e-mail a hotel	*2*	*Ready*

Goal: 20 points

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

PDCA with Agile

TEAM

PRODUCT OWNER

SCRUM MASTER

BACKLOG

Iteration

ITERATION PLANNING

Traveller wants 5
Traveller wants 2
Traveller wants 3
Traveller wants 1
Traveller wants 2
Admin wants a 5
Traveller wants 2 to move a booking
Bob

Do

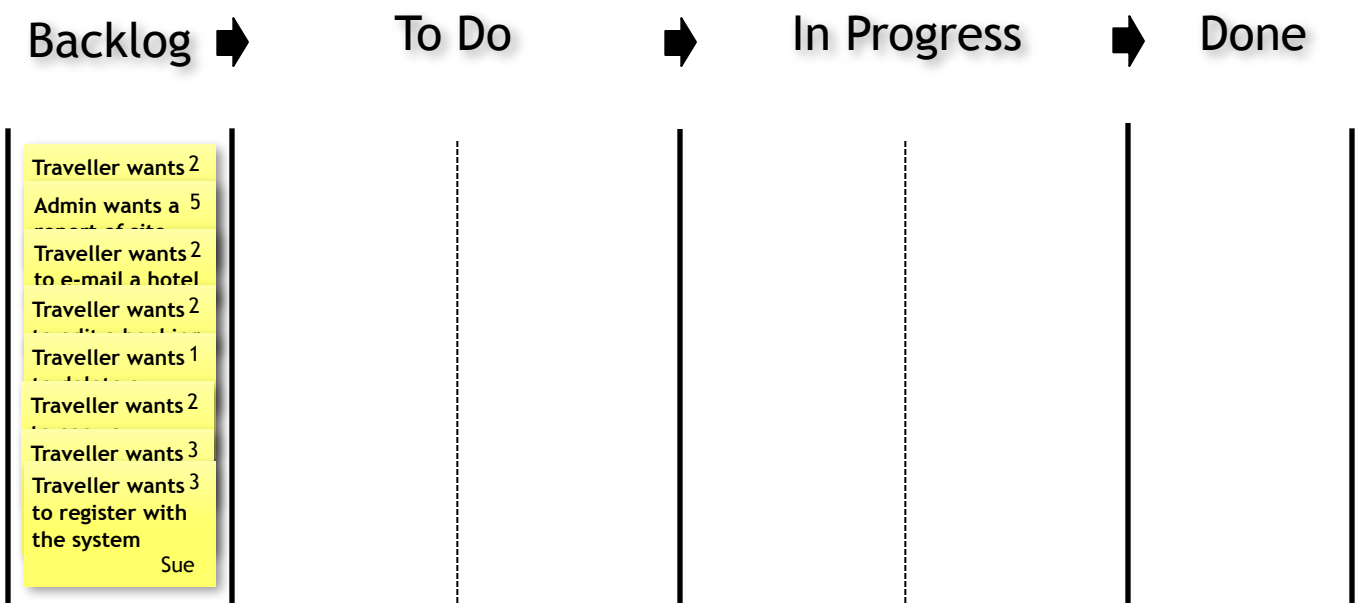
Check

Act

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

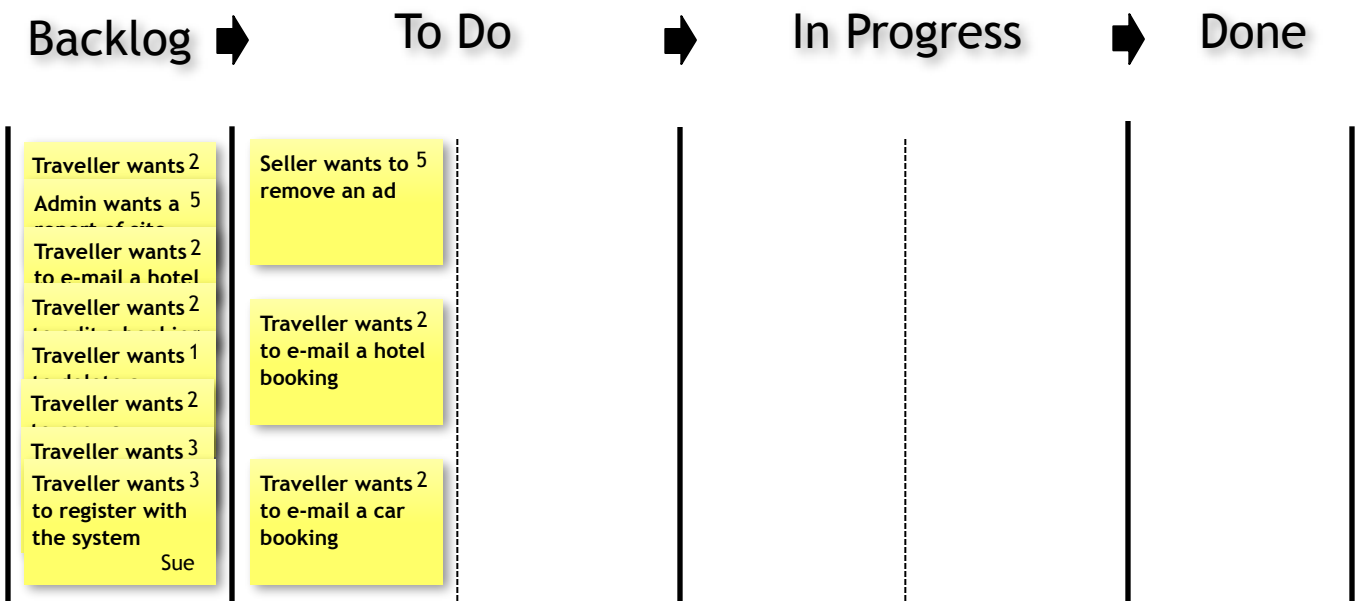
Card Wall & Measuring Progress



© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success. Our Talent

Card Wall & Measuring Progress



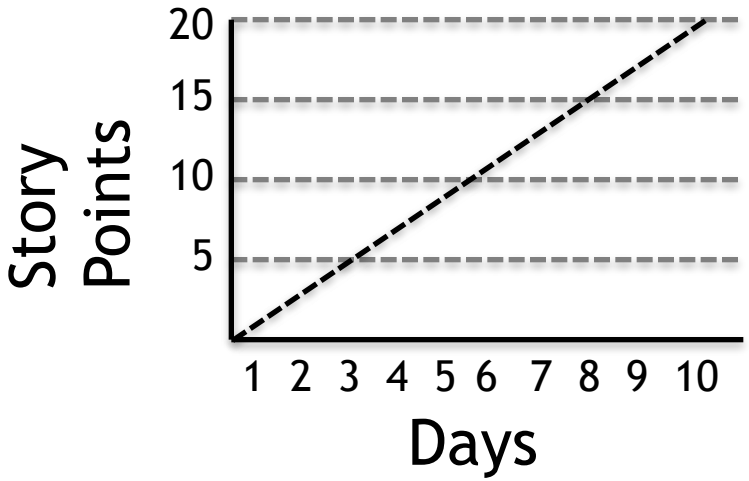
© 2012-2013 Eliassen Group. All Rights Reserved --

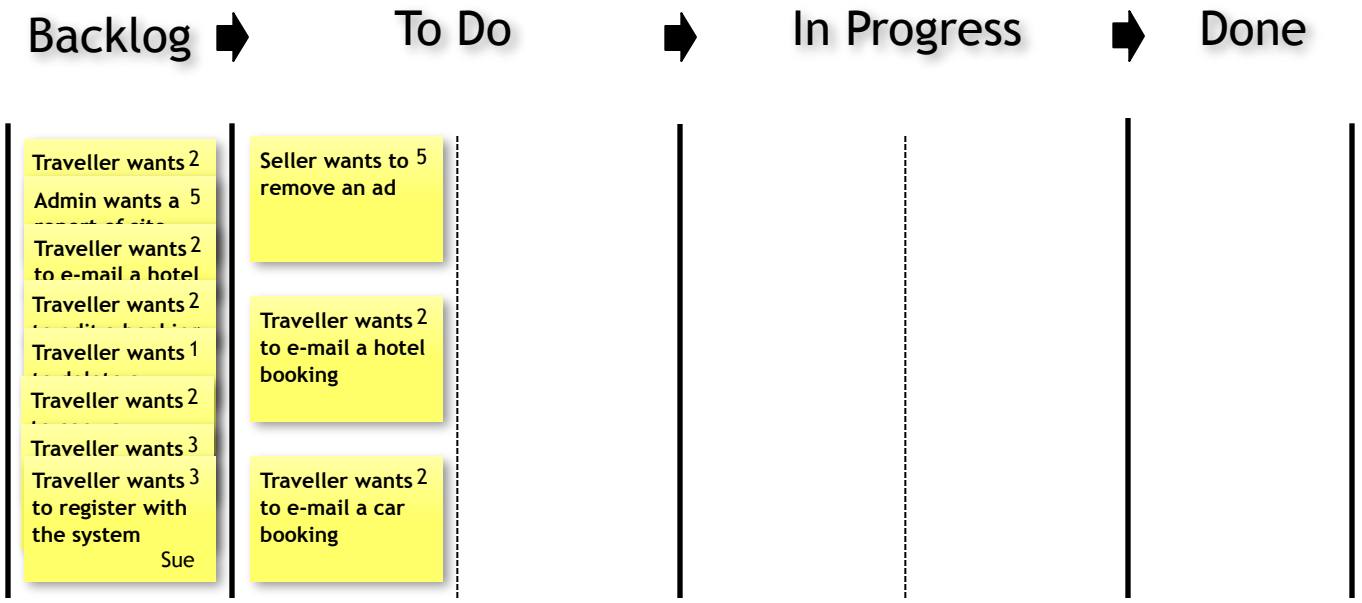
ELIASSEN GROUP
Your Success. Our Talent

Activity vs Accomplishment

© 2012-2013 Eliassen Group. All Rights Reserved --

Card Wall & Measuring Progress

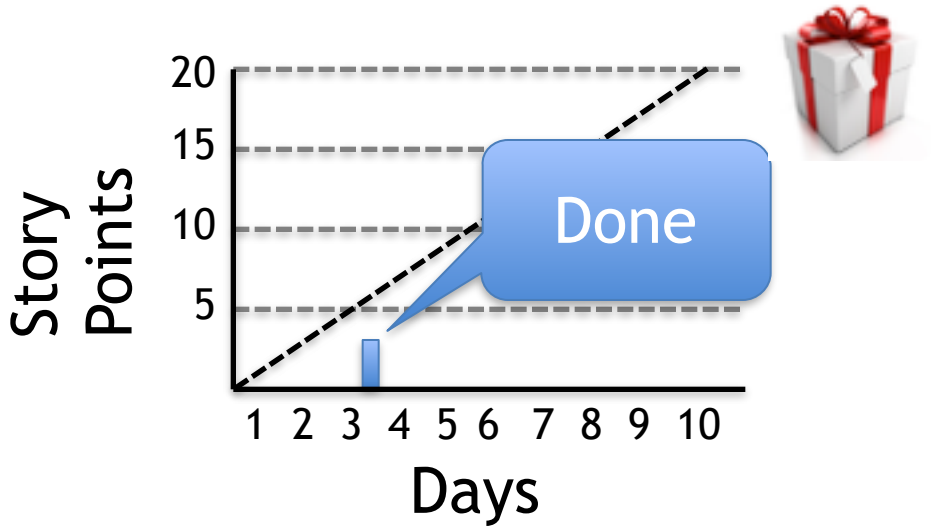


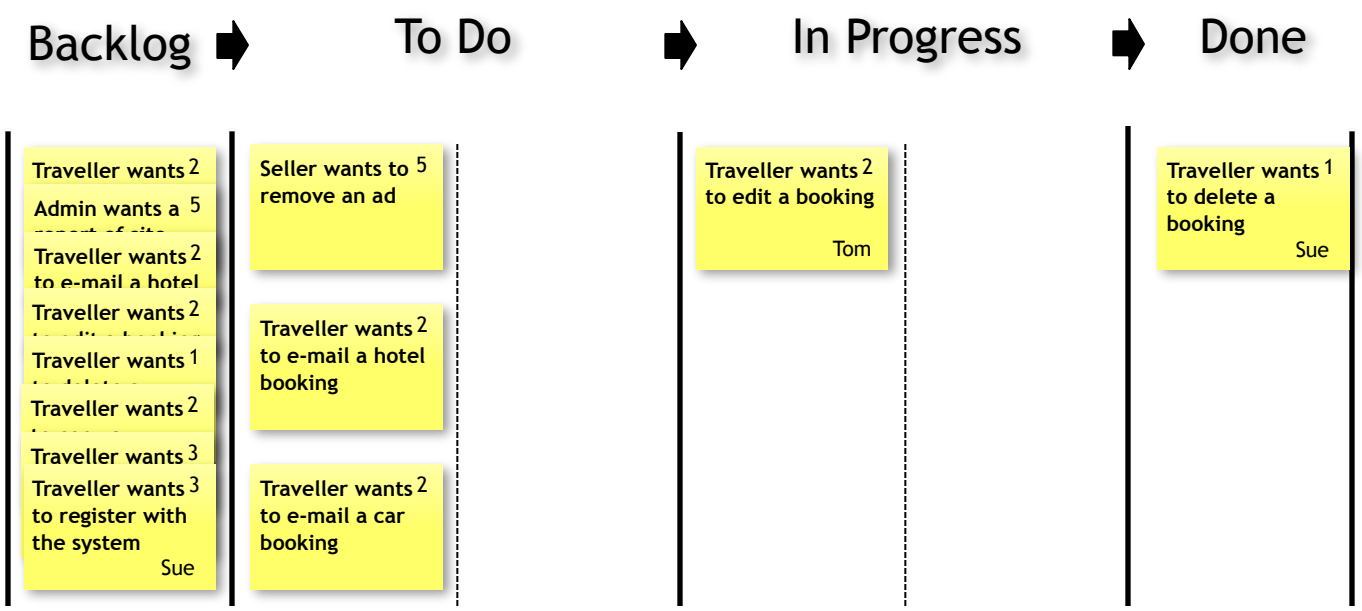


© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Card Wall & Measuring Progress

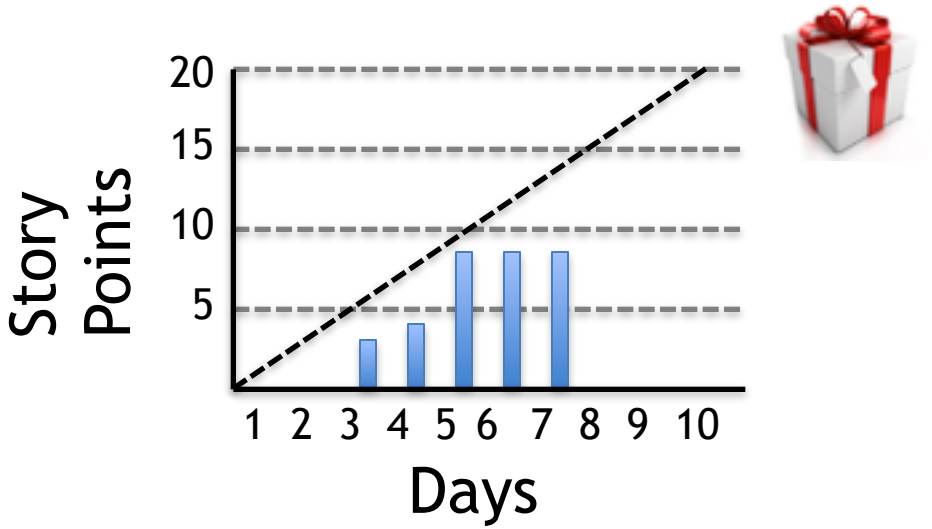




© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Card Wall & Measuring Progress

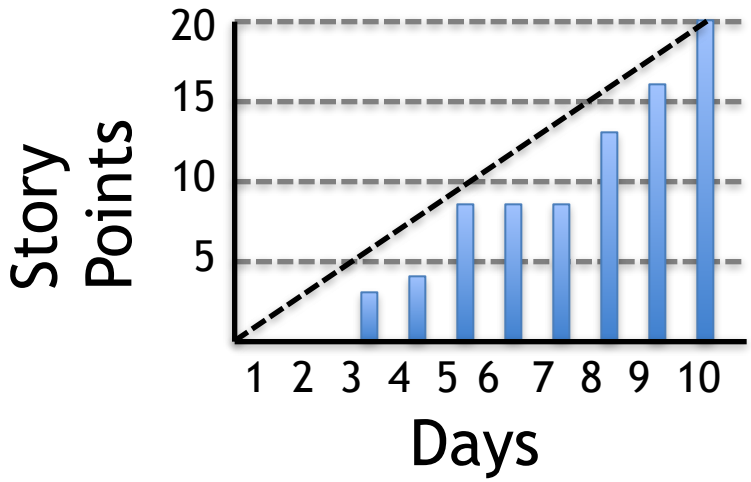


Backlog	To Do	In Progress	Done
Traveller wants 2	Seller wants to remove an ad 5	Traveller wants 2 to edit a booking — Tom	Traveller wants 1 to delete a booking — Sue
Admin wants a 5			Traveller wants 3 to register with the system — Sue
Traveller wants 2 to e-mail a hotel	Traveller wants 2 to e-mail a hotel booking		
Traveller wants 2			Traveller wants 3 to enter a booking — Bob
Traveller wants 1			
Traveller wants 2 to copy a booking — Bob	Traveller wants 2 to e-mail a car booking		

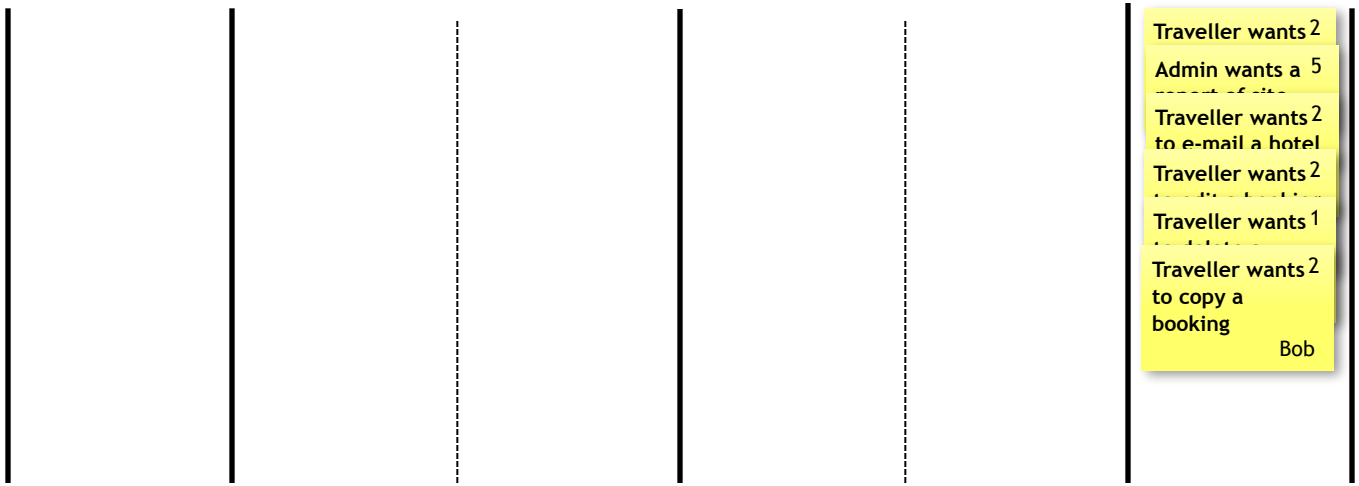
© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP

Card Wall & Measuring Progress



Backlog ➡ To Do ➡ In Progress ➡ Done



© 2012-2013 Eliassen Group. All Rights Reserved --

ELIASSEN GROUP
Your Success, Our Intent

Daily Stand-up Meeting

- Related to the stories for this team for this iteration…
  - What did you do since the last meeting?
  - What are you working on next?
  - What impediments do you see?
- Don't go into great detail!
- All other discussion is deferred.
- Follow-up as needed in smaller groups.

- Anything that impacted your capacity for ***this team*** is an impediment.

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Additional Daily Stand-up Guidelines

- Limit the time to fifteen minutes.
- Pick a regular meeting time
- Start on-time no matter what

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

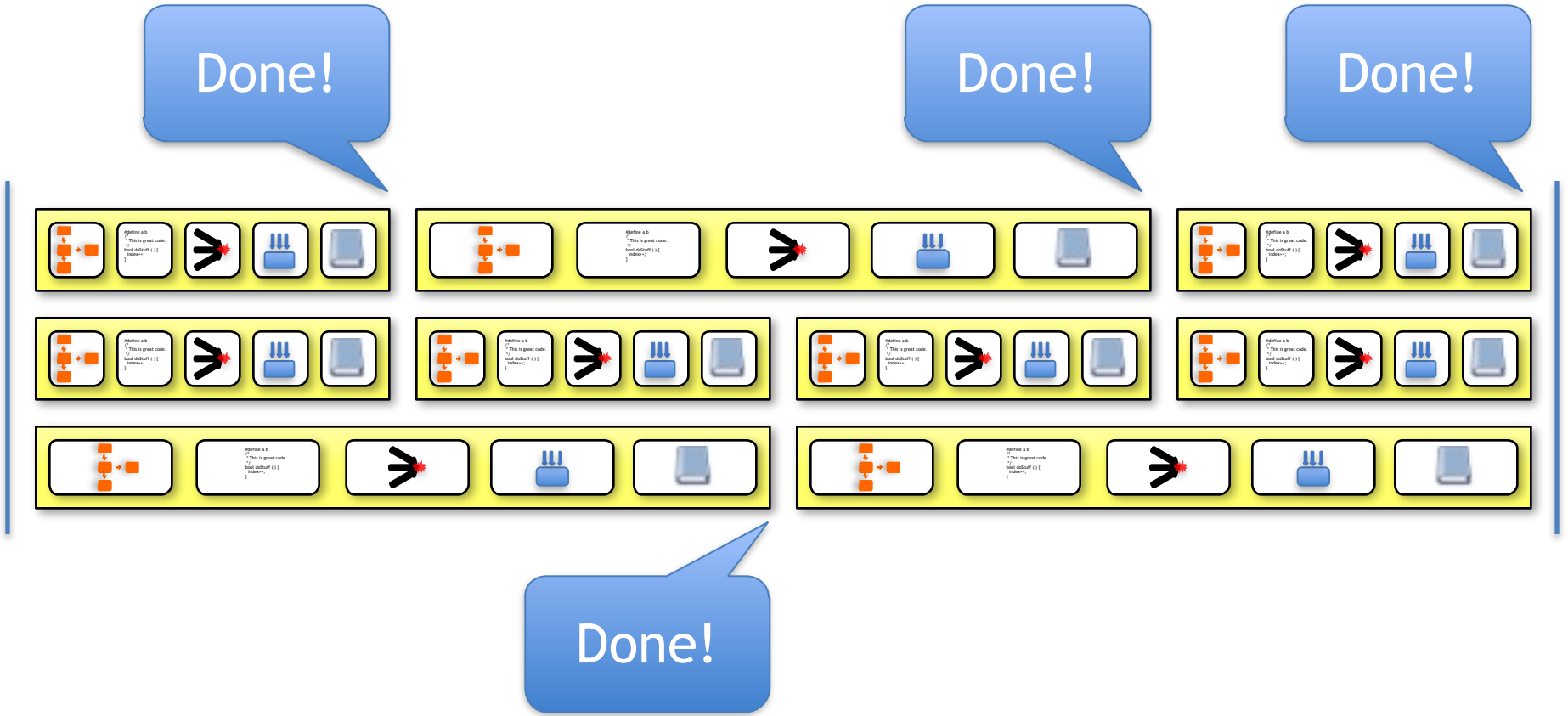
Stand-up Don’ts

- Don’t explain how busy you are
- Don’t talk about anything except what you did to advance stories for this team and this iteration to done
- Anything that is unrelated to work to advance stories to done for this team and this iteration is an IMPEDIMENT to the work for this team for this iteration
- Don’t dive into details
- Don’t focus on the Scrum Master and/or Product Owner

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

“One Piece Flow”



© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Origins of Kanban

- Roots in Lean
  - Toyota Production System
- Eliminate: Muda; Muri; Mura
  - Waste, Unreasonableness, Unevenness
- Goals of Lean
  - Leaning to recognize waste
  - Enhances shareholder value – Improved ROIC
  - Improves Quality
  - Reduces Time
  - Reduces Total Cost

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Kanban Principles

- Pull not Push
- Agree on a Team capacity, Limit WIP to that capacity
- Measure and Optimize Flow
- Explicit Policies (definition of done, WIP limits, etc…)
- Make work visible - Kanban Board
- There is a Sequenced queue of work
- A Developer takes (Pulls) a task from the Sequenced backlog.
- When work is completed in one State, the developer moves it on to the next State

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

PDCA with Agile

TEAM

PRODUCT OWNER

SCRUM MASTER

BACKLOG

PROGRESS TRACKING

Iteration

ITERATION PLANNING

Traveller wants 5
Traveller wants 2
Traveller wants 3
Traveller wants 1
Traveller wants 2
Admin wants a 5
Traveller wants 2 to move a booking
Bob

Do

ITERATION REVIEW

Act

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Iteration Review

CUSTOMERS / USERS

PRODUCT MANAGER

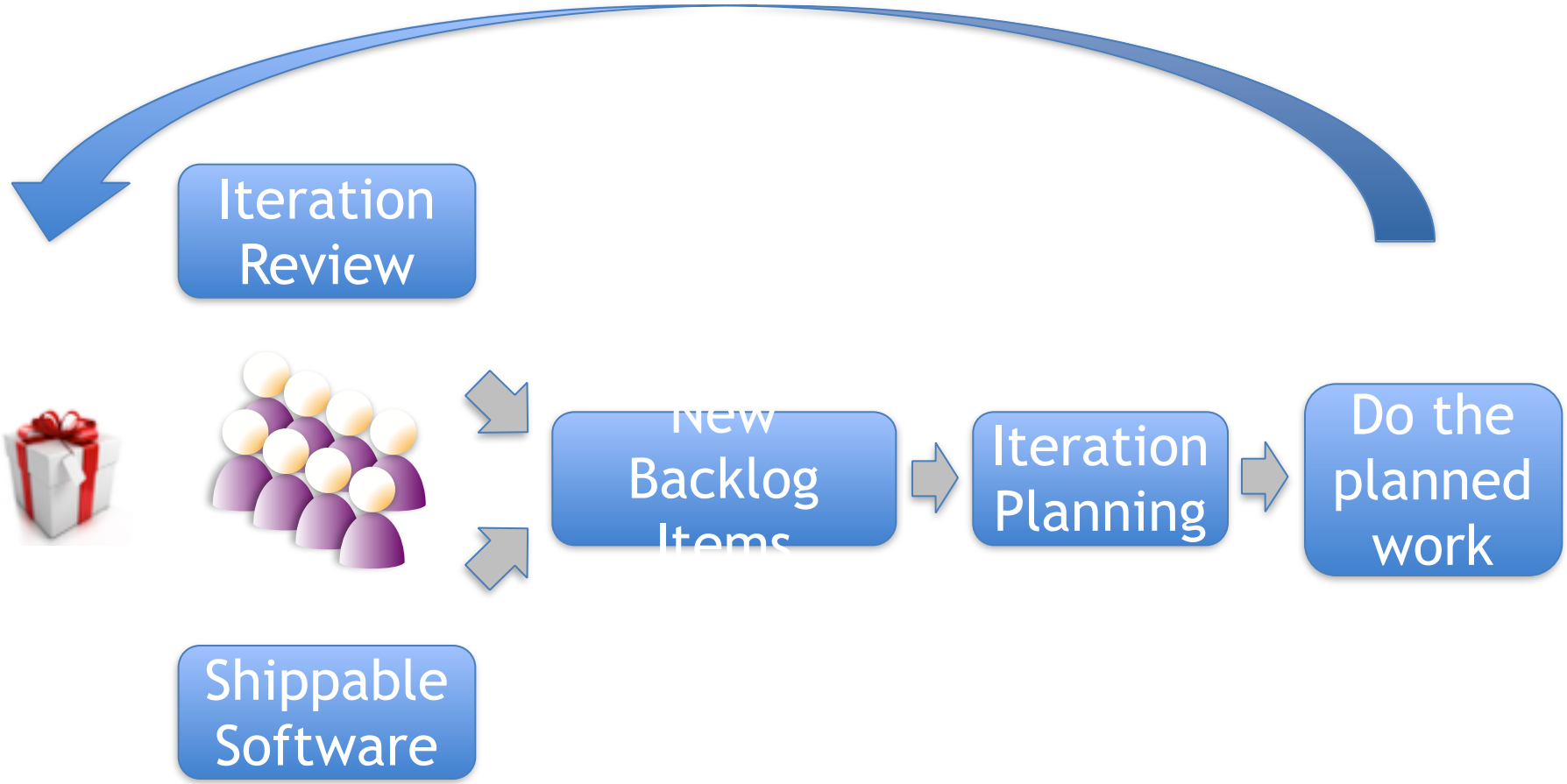
PRODUCT OWNER

Did we finish everything?
Is it shippable?

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Agile Feedback Loop



© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

PDCA with Agile

TEAM

PRODUCT OWNER

SCRUM MASTER

BACKLOG

PROGRESS TRACKING

Iteration

ITERATION PLANNING

Traveller wants 5
Traveller wants 2
Traveller wants 3
Traveller wants 1
Traveller wants 2
Admin wants a 5
Traveller wants 2 to move a booking
Bob

Do

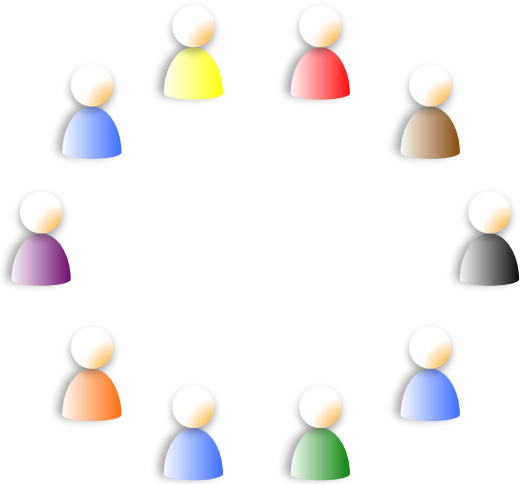
ITERATION REVIEW

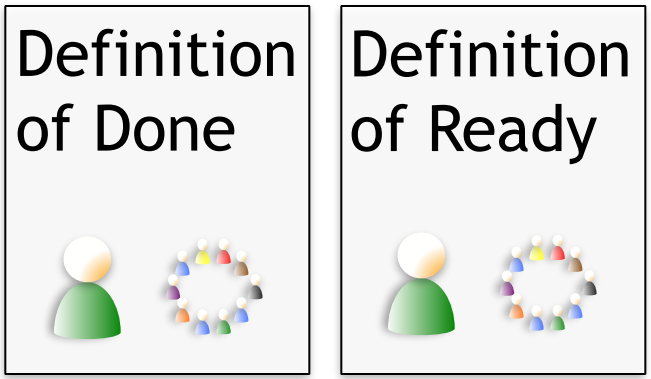
RETROSPECTIVE

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Retrospective – Looking in the Mirror





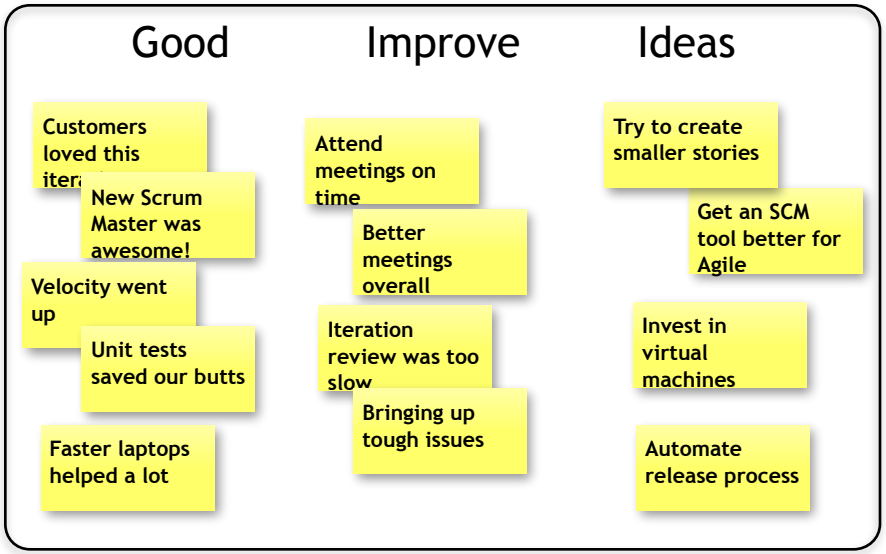
- Hold the retrospective in the team area
- Look back at how the iteration went
- Consider how well the iteration review went
- What went well or needs to be improved?
- Create a short list of changes for the next iteration

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Retrospective

- Here is one retrospective technique that people often use
- Create three columns: “Good”, “Improve”, “Ideas”
- Everybody creates stickies, one thought per card
- Discuss
- Produce action items



© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Scrum

TEAM

PRODUCT OWNER

SCRUM MASTER

BACKLOG

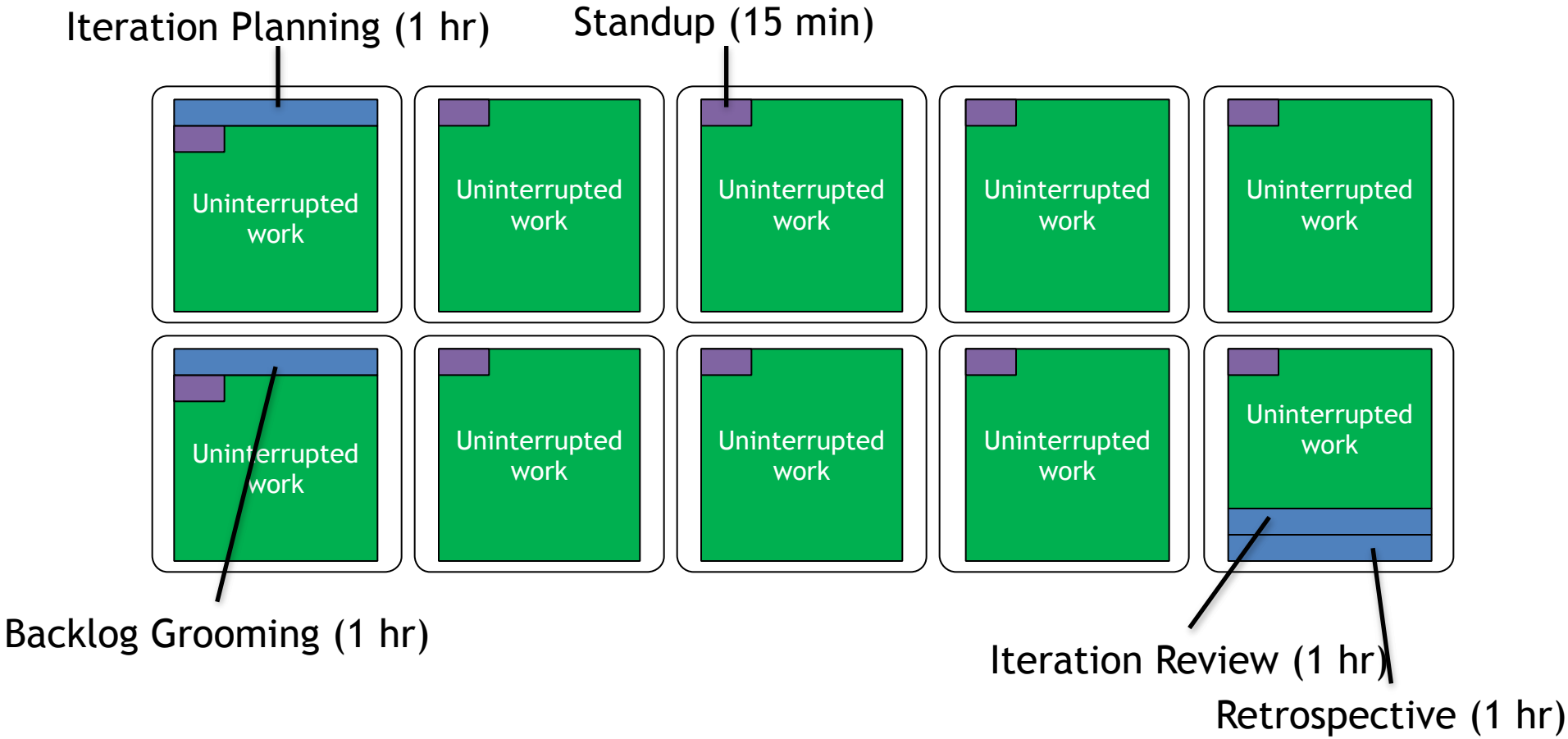
PROGRESS TRACKING

Iteration 1	Iteration Planning	Stand-up	Stand-up	Stand-up	Stand-up	
	Stand-up	Stand-up	Stand-up	Stand-up	Iteration Review & Retro	Deliverable
Iteration 2	Iteration Planning	Stand-up	Stand-up	Stand-up	Stand-up	
	Stand-up	Stand-up	Stand-up	Stand-up	Iteration Review & Retro	Delivered!
Iteration 3	Iteration Planning	Stand-up	Stand-up	Stand-up	Stand-up	

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Example Schedule



Total: 6:30 / 2 weeks (avg 3:15 / week)

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

- Benefit
  - Physical travel for one person
  - Travelling 3,000 miles from point of departure
  - Less than 6 hour travel time
  - Less than $1,000 cost

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

- Benefit: travelling 3,000 miles in 6 hours for < $1,000
- Plane
  - Control surfaces
  - More lift than weight
  - Landing gear
  - Fuel
- Trained Captain
- Trained co-pilot
- Air traffic control
- Take-off runway
- Landing runway

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Review

- What is Scrum?
- What is a card wall and how can it help?
- What is a burn-up chart for?
- How is a retrospective different than a post-mortem?

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Dot Voting

Don’t forget the Retro!

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Agenda

- Overview of Agile
- Cross Functional Teams
- Product Vision, Epics, MVIs
- User stories
- Story splitting
- Agile Technical Practices
- Agile Planning
- Scrum
- Agile Flow
- Self-organization
- Distributed Agile
- Going Agile
- Wrap-up

Agile Game: Implementation Simulation

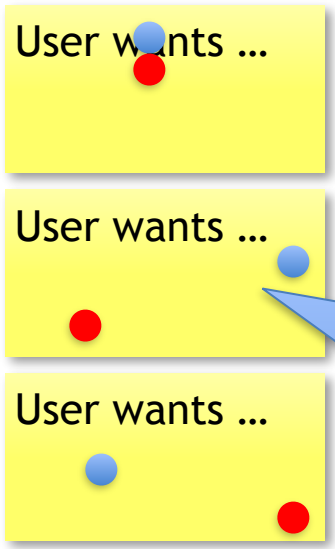
- You are going to “implement” your user stories
- Every story needs to be implemented and have test cases written
- Implementation and test case writing can be done simultaneously on a story if desired.

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

- Implementation
- Write Test Cases

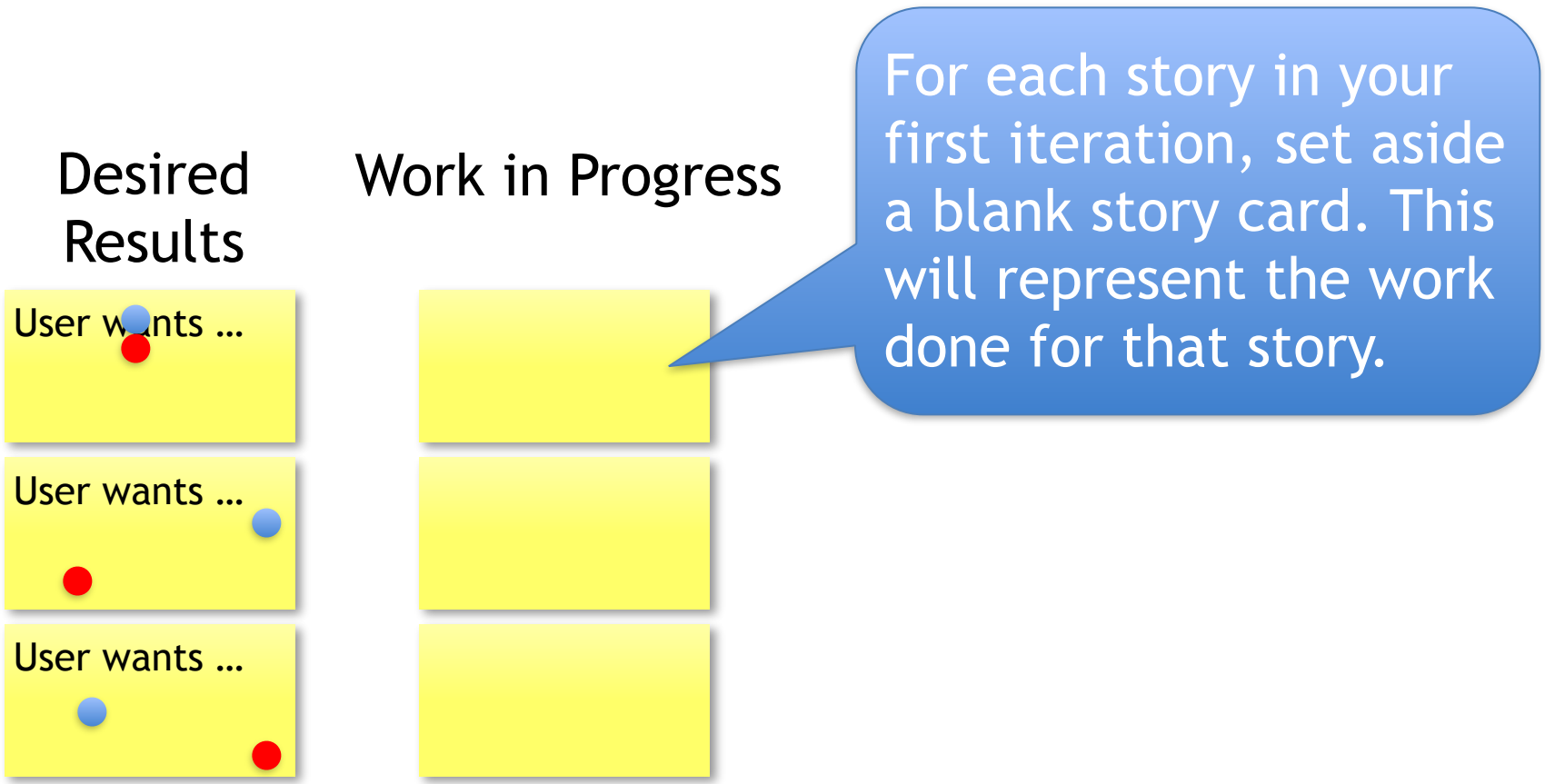
Choose two colors of stickers; one for dev, one for test.

Desired Results



Product owners, place one of each sticker on each user story. Each story should have a different sticker placement. The exact pattern does not matter.

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-



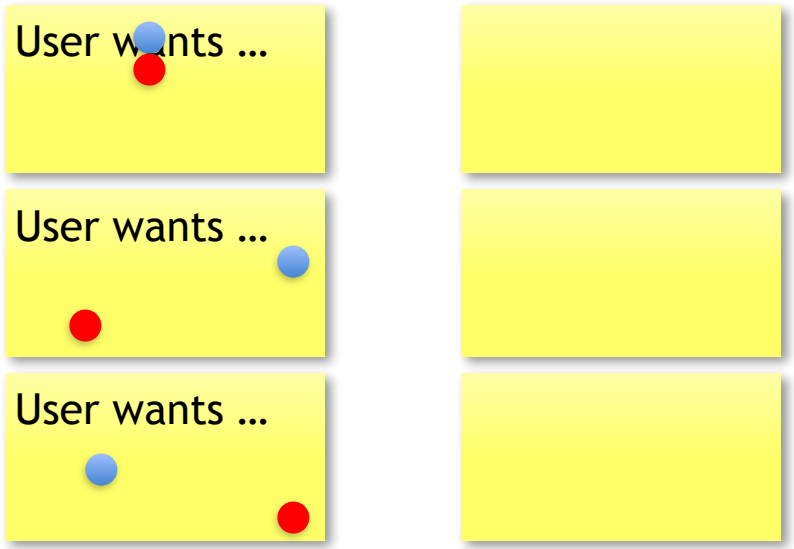
© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Set aside an area for Done stories.

Desired Results

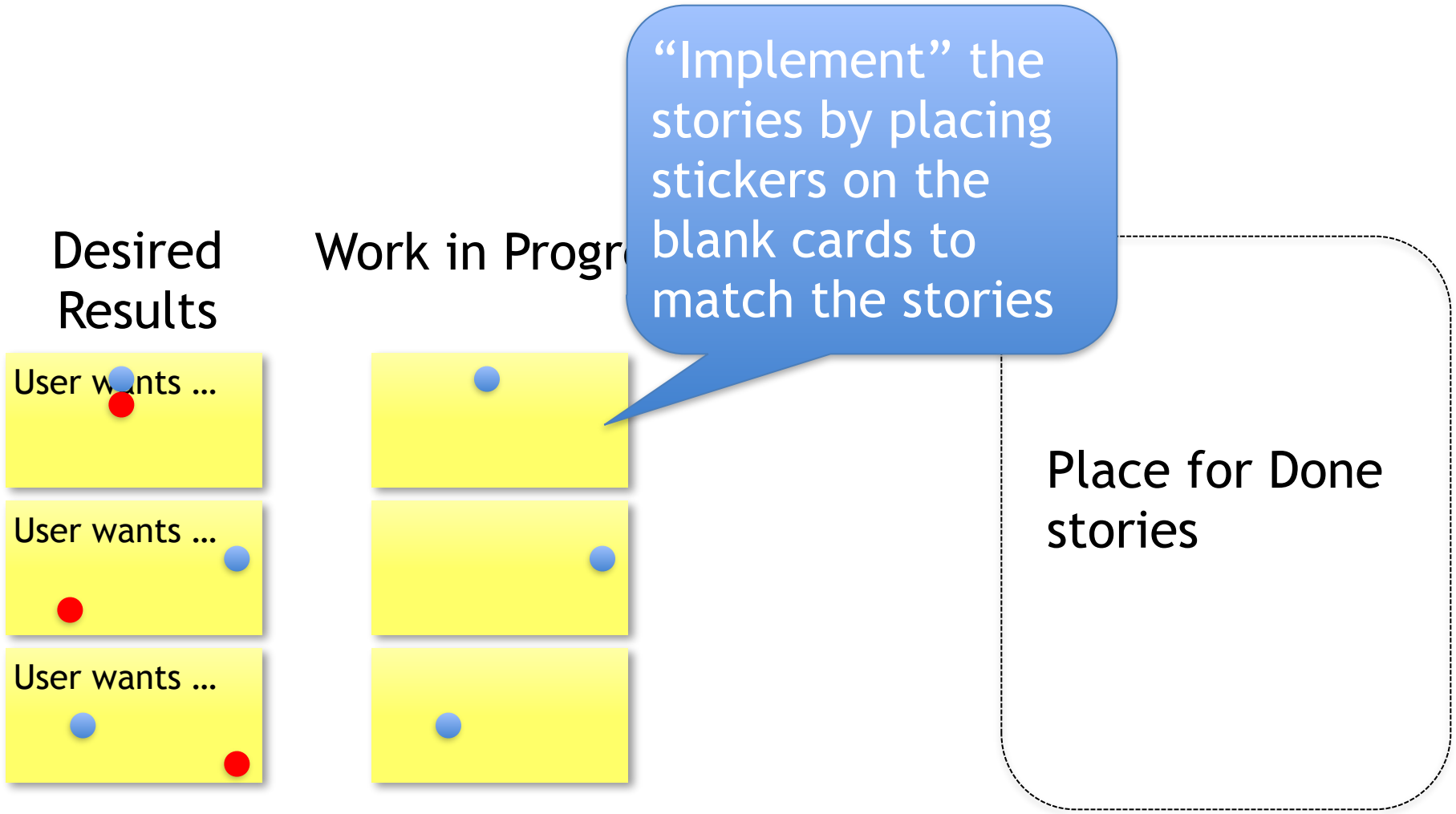
Work in Progress



Place for Done stories

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

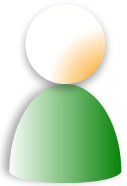


© 2012-2014 Eliassen Group. All Rights Reserved -<#>-

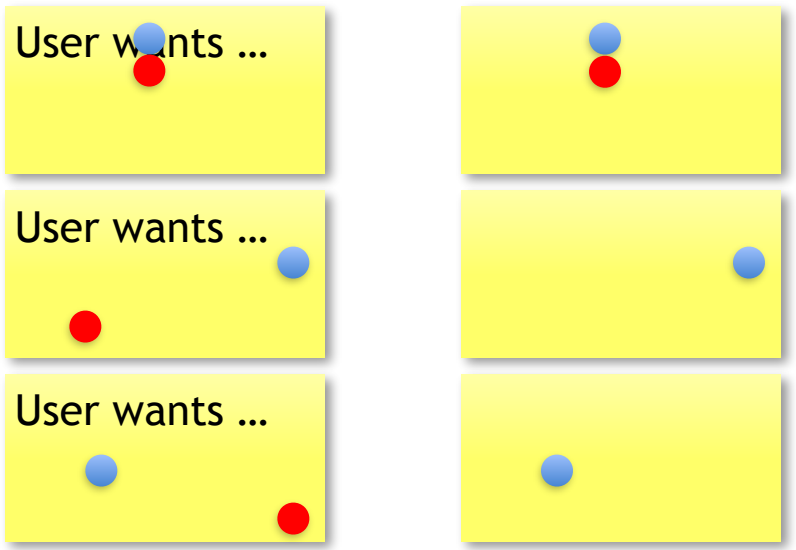
Desired Results

Work in Progress

Product Owner



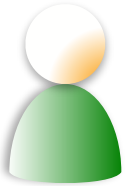
Once a story is implemented, hand it to the product owner for acceptance.



Place for Done stories

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services



Only the product owner can move a card to Done.

Desired Results	Work in Progress	Product Owner
User wants …		
User wants …		
User wants …		

Place for Done stories

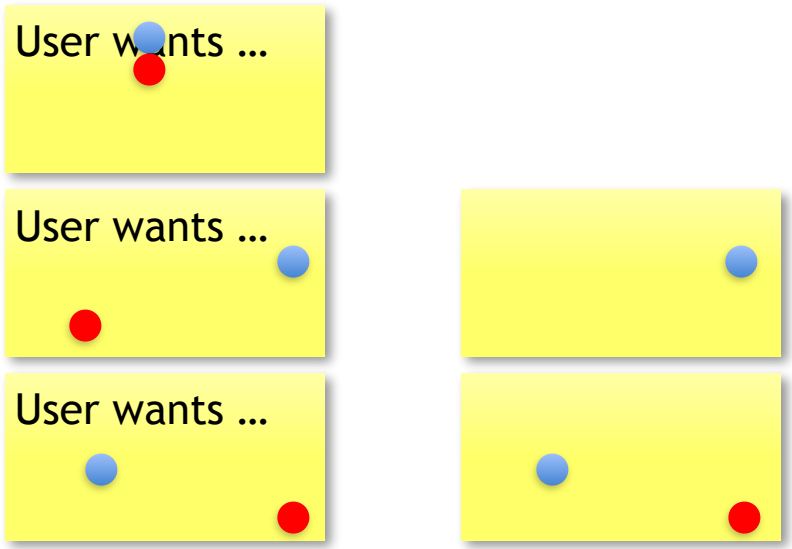
© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Desired Results

Work in Progress

Product Owner



Pl[illegible]e stories

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Desired Results

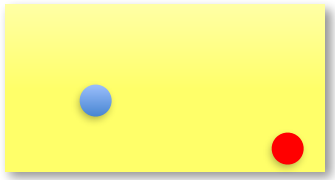
Work in Progress

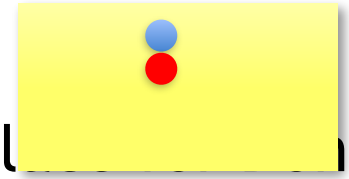
Product Owner

User wants …

User wants …

User wants …





Pl e stories

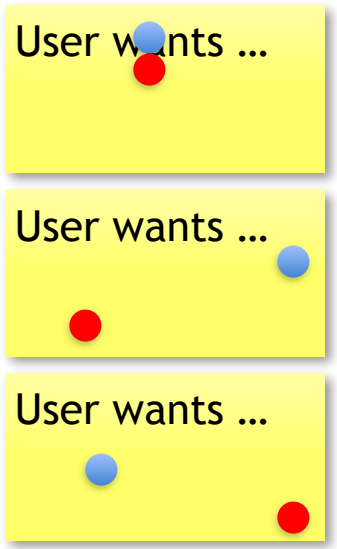
© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

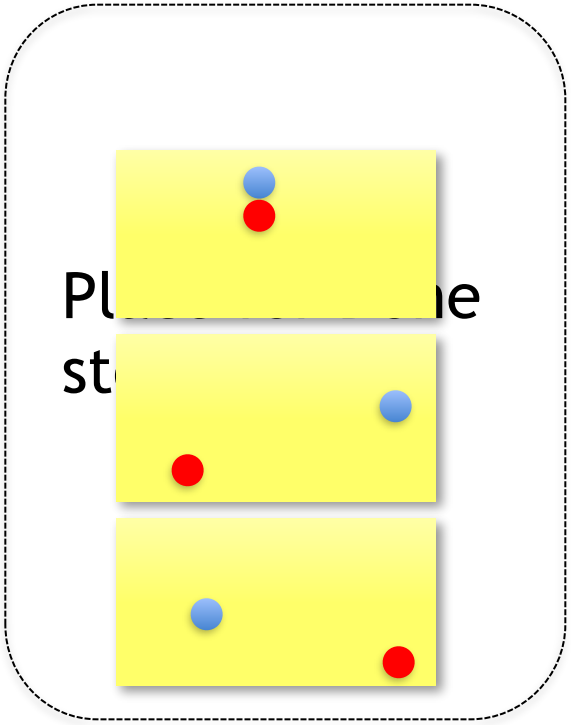
ELIASSEN GROUP
Agile Consulting Services

Desired Results

Work in Progress

Product Owner





© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

Exercise: Implementation Simulation

- Product owners, come with me for special instructions
- Everybody else, hang on for a couple of minutes…

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Exercise: Implementation Simulation

10 min

- Go!

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Take-aways from the activity?

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Agile Game: Iteration Retrospective

10 min

- Coming up soon: you are going to re-run the simulation as a race!
- In order to win, you need to improve
- You have 10 minutes to retrospect and come up with an action plan to be the winning team

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

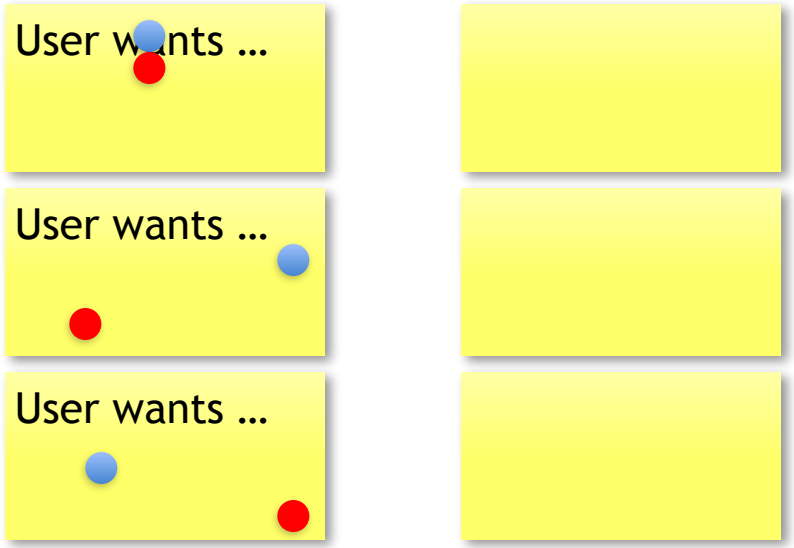
Reset the Simulation

10 min

- All teams should have exactly 3 stories
- Wait for the instructor to say “go”

Desired Results

Work in Progress



Place for Done stories

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Each Story is Comprised of Many Aspects

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Agenda

- Overview of Agile
- Cross Functional Teams
- Product Vision, Epics, MVIs
- User stories
- Story splitting
- Agile Technical Practices
- Agile Planning
- Scrum
- Agile Flow
- Self-organization
- 
  Distributed Agile
- Going Agile
- Wrap-up

Introduction to Self-Organizing Teams

- What you were doing during the simulation was an example of a self-organizing team
- What you are doing during the whole session is an example of a self-organizing team
  - Figuring out what is expected together
  - Answering each other's questions
  - Making decisions as a team
- This section goes into more detail on how to foster self-organization

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Self-Organizing Team

- A team that has everything they need to make most decisions on their own
  - Team decides which work is ready to start
  - Team estimates work
  - Individuals select work from iteration
  - Team decides how to do the wor

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Benefits of a Self-Organizing Team

- Increased motivation
- More creativity and innovation
- Fosters learning and career development
- Increased sense of responsibility and accountability
- Higher level of commitment from team members
- Higher quality
- Increased productivity

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

More Management Roles and Skills

Project Management
People Management
Product Management

Project Management
People Management
Product Management
Scrum Master
Product Owner
Agile Coach
Coach
Domain expert

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Scrum Master

- Is or is becoming an Agilist
- Is a profession unto itself
- Often a full-time role serving one or more teams
- Usually not serving as a people manager or product owner
- Skills and responsibilities
  - Servant leadership
  - Facilitation: meetings and impediment removal
  - Agile process stewardship – keeps the process on track
  - Scheduling of Scrum meetings
  - Keeping focus of whole team on “getting to done”
  - Change agent
  - Teaching, mentoring, coaching
  - Keeping up with the Agile community and introducing new ideas
- Removes need for Scrum Master role on team
  - Moves on to other teams or becomes internal Agile Coach

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Internal Agile Coach Sketch

- Is a profession unto itself
- Has all of the skills of a Scrum Master
- Just a few things that a coach does
  - Works with multiple teams
  - Identifies and mentors Scrum Masters and Product Owners
  - Focuses on Scrum Masters, Product Owners and managers
  - Cross-pollinates internal Agile learning across teams
  - Proactively identifies issues

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Boundary management – Management of the team's environment

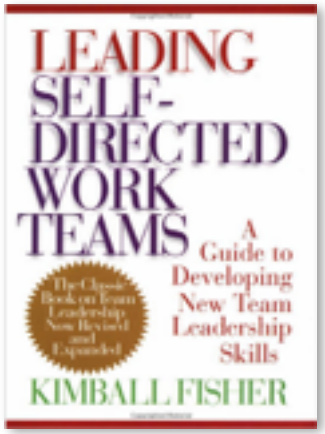
Corporate Governance

External impediments

Two-way representative

Budgeting

Defining the boundary



© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Management of the Team

- Focusing on enabling rather than directing
- Programs for skill building
- Removing impediments
- Conflict resolution
- Team building
- Monitoring and managing the health of the team and its memb
- Compensation structure
- Including Agile-oriented individual and team goals
- Setting up performance assessment
- Providing vision and inspiration

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

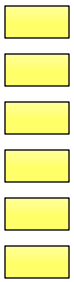
ELIASSEN GROUP
Agile Consulting Services

Interaction Interfaces

Any Time

Product Vision

Product Owner



Future Priorities (Backlog)

On a regular cadence (eg once per iteration

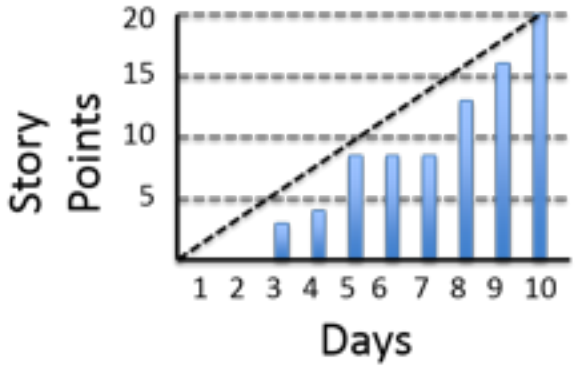
Review

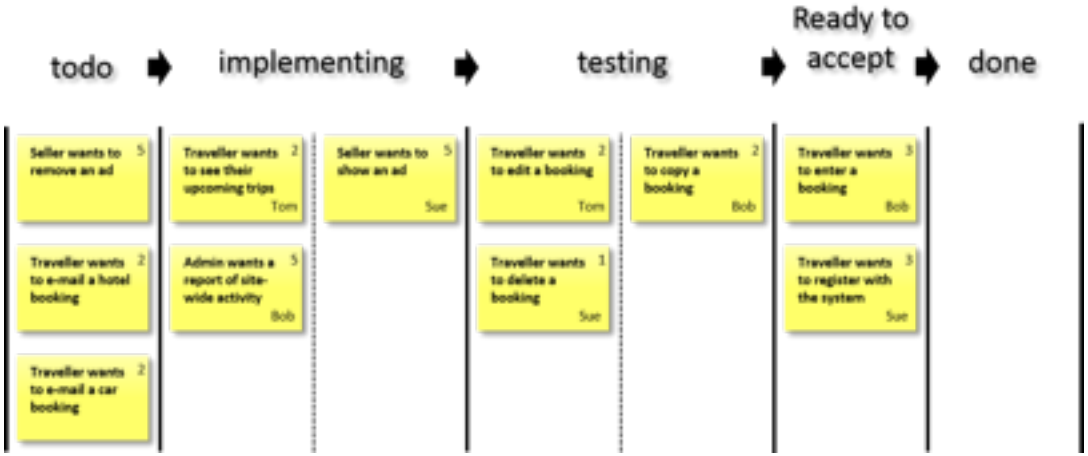
Investment levels (# of teams)

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Information Radiators





Definition of Done

Definition of Ready

Team Norms

Process Agreement

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Co-located Teams

Co-location – the practice of locating all or most of the members of an Agile team together, ideally in a shared team environment.

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Effective Communication Channels

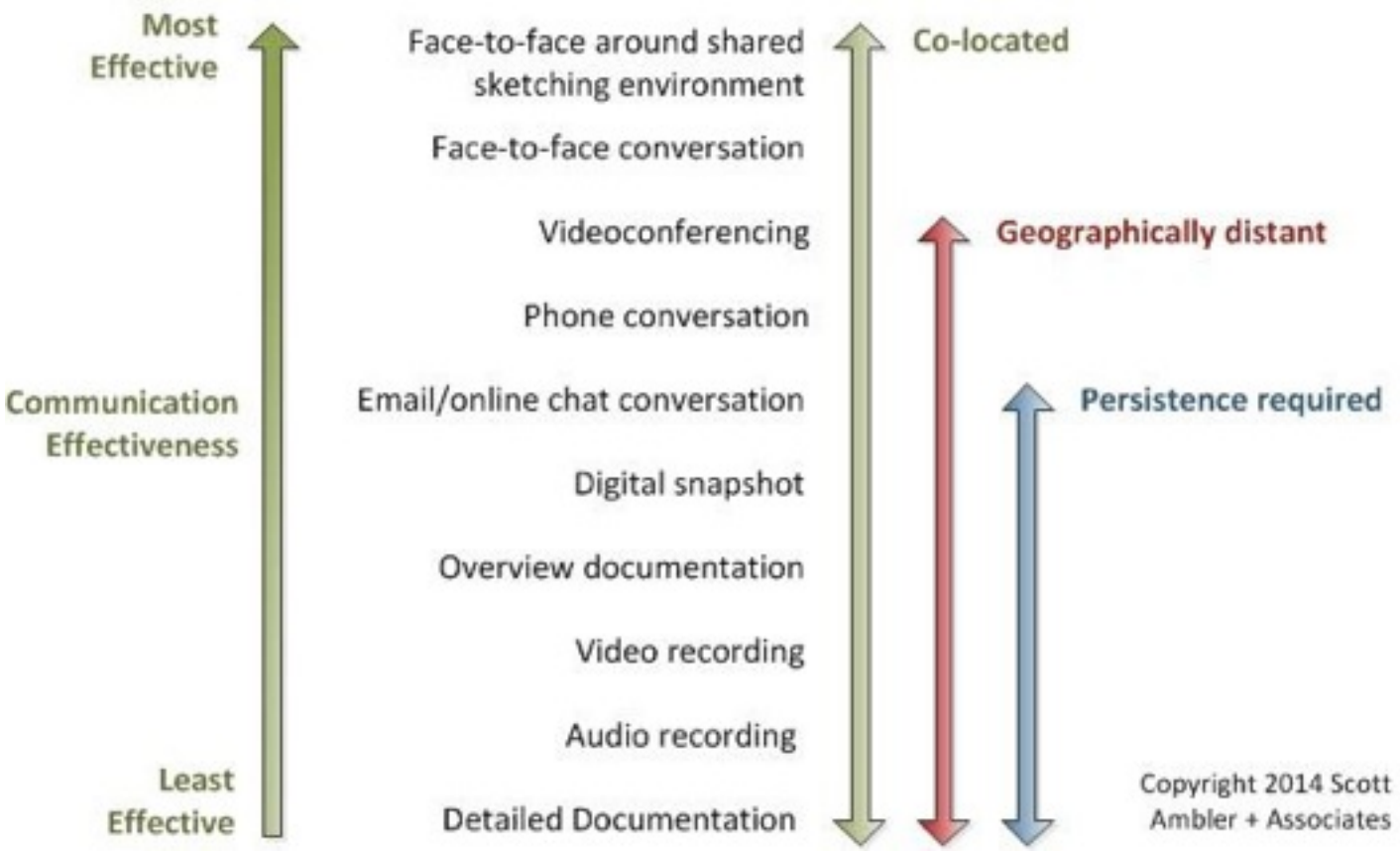


Diagram based on a graph created by Alistair Cockburn

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

The “Locked Room”

ENTER

Definition of Ready

1) Asdf asdf qwerty asdf.
2) Qwerty asdf hj klm.
3) Asdfasdf qwert jkl.
4) If you can read this you are way too close.
5) No, really, back up.
6) Why are you still reading this?
7) Must pass all performance tests
8) Graphics do not contain the color red.

ITERATION WORK

AGILE TEAM

EXIT

Definition of Done

1) Asdf asdf qwerty asdf.
2) Qwerty asdf hj klm.
3) Asdfasdf qwert jkl.
4) If you can read this you are way too close.
5) No, really, back up.
6) Why are you still reading this?
7) Must pass all performance tests
8) Graphics do not contain the color red.

Exercise: as a team, create a list of potential behavior changes

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Take-aways from the activity?

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services


“Agile processes promote sustainable development. The sponsors, developers, and users should be able to maintain a constant pace indefinitely.”
- The Agile Manifesto

Exercise: Sustainable Pace

5 min

- As a team, define “Sustainable Pace”
- Write your definition on an index card
- When finished, bring your definition to the front

Things to think about…

- 35 hours a week sounds good, but what if it is under incredible stress?
- What about the legitimate need to respond to a crisis?
- What about the different needs of different team members?

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Take-aways from the activity?

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Process Agreement

- Different people that say “Scrum” may mean different things
- Scrum has many individual components
- Some people like some things and not others
- Design your own process, it may or may not be “Scrum”

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

Exercise: Process Agreement

10 min

- As a team, define your “Process Agreement”
- Write your agreement on an index card
- When finished, bring your agreement to the front

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Raw Material for Process Agreement

- Iterations (of a given length)
- Daily standup
- Iteration planning
- Weekly backlog grooming
- Iteration review
- Retrospective
- All members of a team are on 1 and only 1 team
- Work for an iteration based on measured velocity
- All work for a team comes from a single backlog
- All work that the team does is in the backlog and part of the plan
- The backlog is managed by a single product owner
- Team pulls stories based on definition of ready
- Estimates involve whole team
- Relative story points
- Who is working on which stories is decided by…. ?
- Team decides how to do the work
- Changing the iteration requires product owner and team to agree
- Product owner accepts stories based on definition of done

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Team Norms / Working Agreement

Working agreement – a document created by an Agile team for the Agile team that describes a set of rules that the whole team agrees to abide by.

- Example Working Agreement
  - We will be on time and prepared for the standup
    - Violators will contribute $1 to the pizza party piggy bank
  - Everybody gets to have their say
  - We will be prepared for the iteration review
  - Managers, the product owner, and scrum master will wait until after the standup is completed to ask questions

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

Exercise: Create a Team Working Agreement

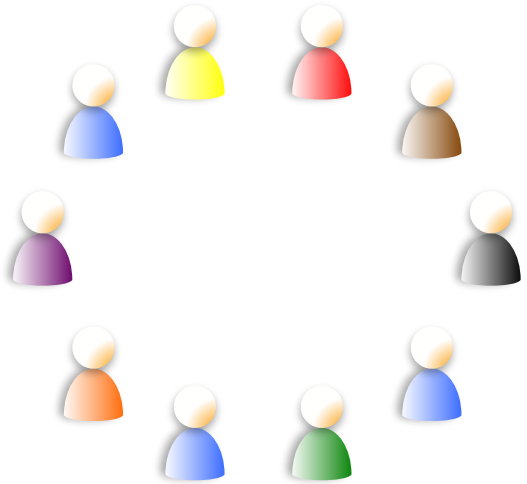
5 min

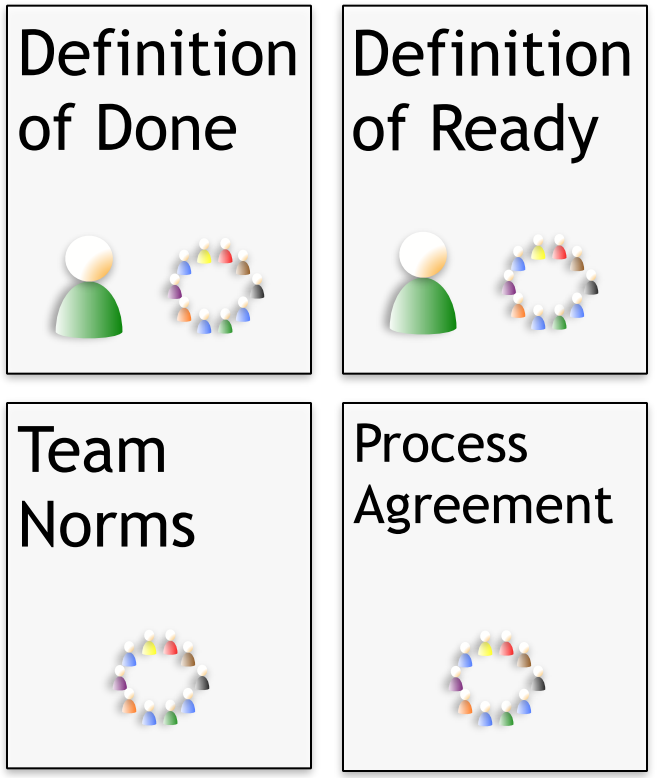
- As a team, come up with a team working agreement
- Write a bulleted list on a card
- What do you expect of:
  - Your team
  - Your team mates
  - Yourself!
- When you are done, bring your card(s) to the instructor

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Retrospective Revisited





- Nothing is set in concrete
- As the team and/or work changes, the needs of the team will change
- Update the definition of done, definition of ready, team norms and process as needed

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Exercise: Skills Inventory

5 min

- Using an index card, create a skills inventory:
  - At top of card: your current role at work today
  - List your core skills that everybody in that role has
  - Also list any other skills you have beyond your role
- Your actual role at work today, not your Agile role in class

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Exercise: What skills does a team need?

5 min

- Imagine you are going to start a new company to develop your team's class product using the people at your table
- From a product-development perspective, what ***skills*** will you need?
- Using a single piece of paper, as a team, list out those ***skills***
- Look at the skills you just created for your individual roles for ideas

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Knowledge Sharing Supports Self Organization

- Cross training
- Relative estimation & Planning Poker
- Collective ownership (code, tests, etc)
- Pairing (not just programming)
- Retrospectives
- Reviews

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

Review

- What is a self-organizing team?

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Agenda

- Overview of Agile
- Cross Functional Teams
- Product Vision, Epics, MVIs
- User stories
- Story splitting
- Agile Technical Practices
- Agile Planning
- Scrum
- Agile Flow
- Self-organization
- Distributed Agile
-  Going Agile
- Wrap-up

Distributed Agile Considerations

- Most Agile implementations are distributed
- Distributed / Offshoring may or may not be a problem area, but Agile will highlight whatever your real issues are
- Agile makes most things easier, including distributed development
- Use conferencing, video, wikis
- Regular synchronization

ELIASSEN GROUP
Agile Consulting Services

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

Distributed Agile Considerations

- Ideally, all team members are co-located but teams can be in different locations
- Strive for at least “virtual” co-location
- Many vendors now offer Agile teams

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

Distributed Agile Considerations

- Common time for standups
- Shift all members during iteration planning to have 2-3 hours of overlapping time
- Shift for review and retrospective as well
- Agile Project Management tool is a must-have
- Requires *strong* definition of ready and done that the *whole* team participated in creating. Same for team working agreement
- Iterations and stories as small as possible

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Agenda

- Overview of Agile
- Cross Functional Teams
- Product Vision, Epics, MVIs
- User stories
- Story splitting
- Agile Technical Practices
- Agile Planning
- Scrum
- Agile Flow
- Self-organization
- Distributed Agile
- Going Agile

Wrap-up

Examples of a Person who “Strongly Agrees”

- You speak up when you see a value or principle being violated
- You look for opportunities to explain the values and principles
- You do TDD and incremental architecture whether required to or not
- You volunteer to do what it takes to get stories done regardless of your role
- When you don’t have them you ask for real life examples of how the users use the software and ask to interact with real users
- You ask to be seated near team members
- You encourage face-to-face interaction
- If there is no daily standup you organize an unofficial one anyway
- If there is no retrospective, you organize an unofficial one anyway
- You ask questions of and show working software to the product owner multiple times per week
- You do everything you can to make it easy and safe to replace an unstarted story on the last day before deployment with a new story that has more value
- You behave as though you only get paid when end users receive new value
- You model the principles and values

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services


Strongly Agree
Agree
Disagree
Strongly Disagree
SA
A
D
SD
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16

1: While process and tools are important, individuals and interactions are more important.

2: You should build projects around motivated individuals, give them the environment and support they need, and trust them to get the job done.

3: The sponsors, development team, and users should work at a pace that they can sustainable indefinitely.

4: The best architectures, requirements, and designs emerge from self-organizing teams (working in conjunction with users).

5: While sufficient documentation is important, working software is more important.

6: Deliver working software frequently. Every couple of months is good, but every couple of weeks is better.

7: Working software is the primary measure of progress.

8: We should focus on the simplest way to fully meet the need and only do something more elaborate when it is clear that a more elaborate solution is needed.

9: Continuous attention to technical excellence and good design enhances agility.

10: Contract negotiation is important, but customer collaboration is more important.

11: Business people and developers must work together daily throughout the project.

12: The most efficient and effective method of conveying information to and within a development team is face-to-face conversation.

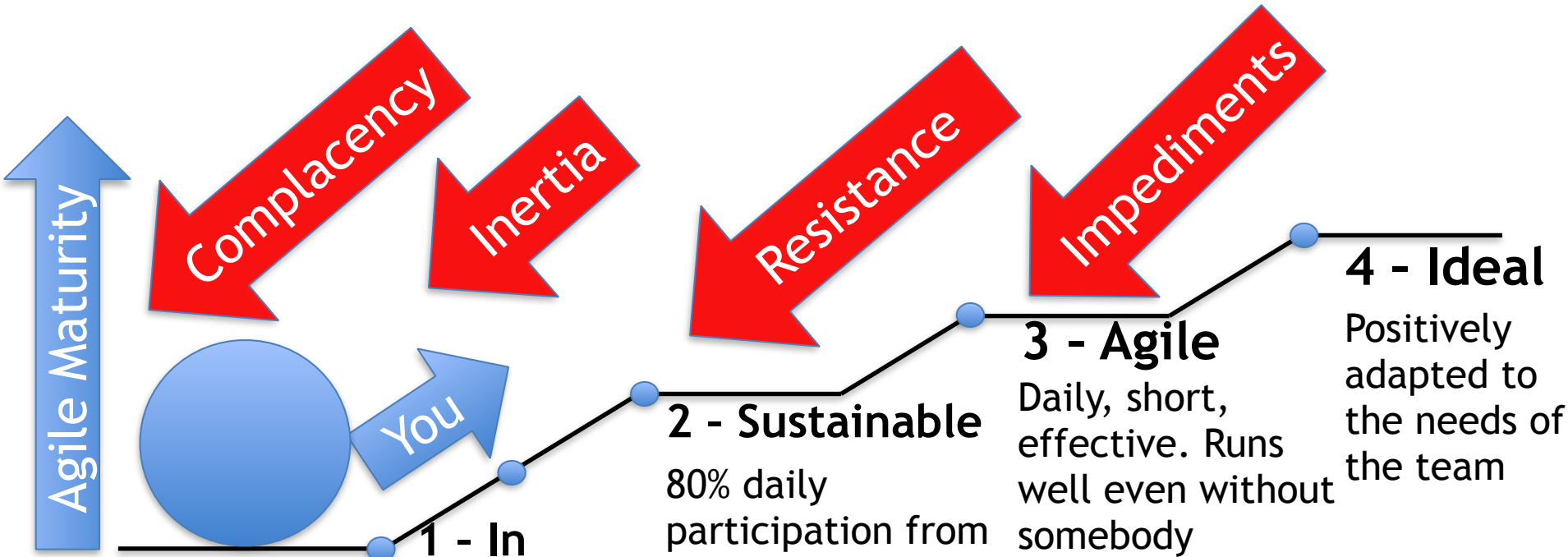
13: Our highest priority is to satisfy the customer through early and continuous delivery of valuable software.

14: Planning is important, but responding to change is more important.

15: At regular intervals, the team should reflect on how to become more effective, then tune and adjust its behavior accordingly.

16: It should be easy and safe to replace unstarted work on the day before release with new work of higher customer value.

Change Requires Sustained Effort Until New Level



0 - Impeded
Not being held.

1 - In transition
Being held regularly and on their way to stage 2.

2 - Sustainable
80% daily participation from the team, main meeting is less than 20 minutes, real impediments regularly raised, focus is on the team's stories, team wants to be there.

3 - Agile
Daily, short, effective. Runs well even without somebody officially responsible for the meeting. Team does an on-the-spot analysis of progress towards shippability and takes corrective action if needed.

4 - Ideal
Positively adapted to the needs of the team

© 2012-2014 Eliassen Group. All Rights Reserved

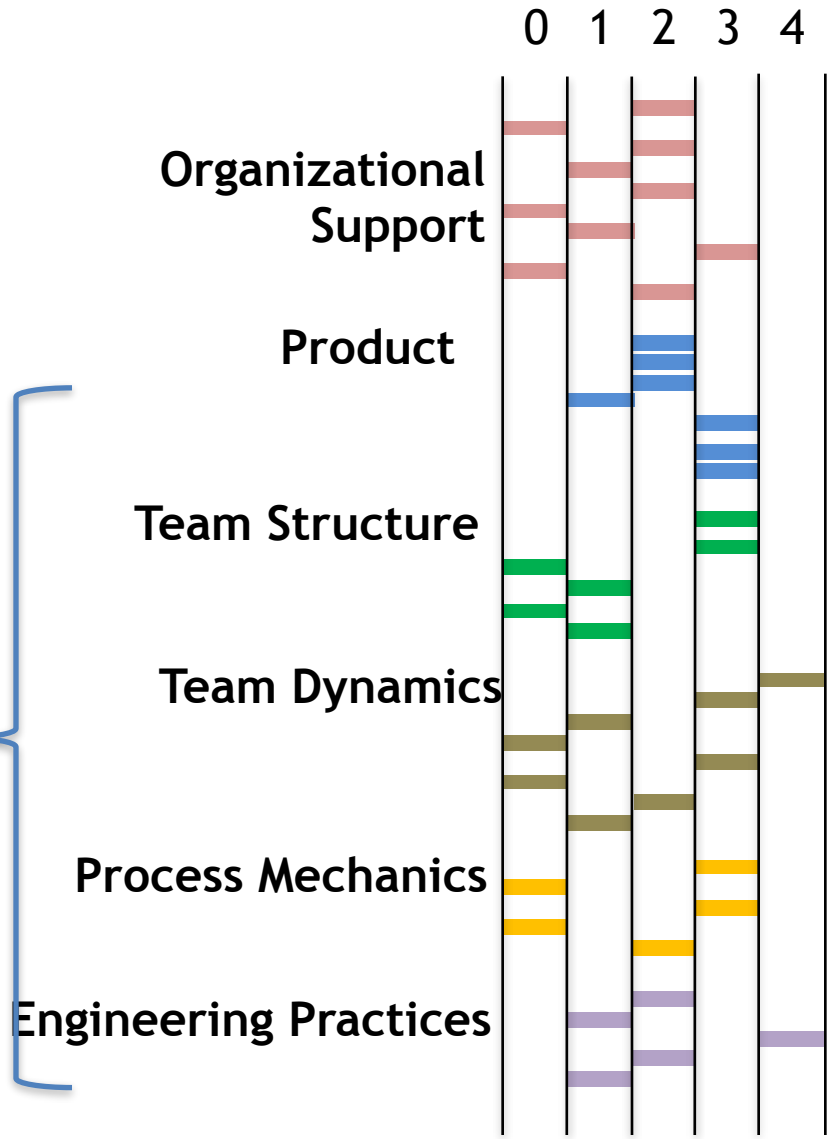
ELIASSEN GROUP

Inspect and Adapt

50 Indicators

Agile Maturity Matrix

Per Team/Product

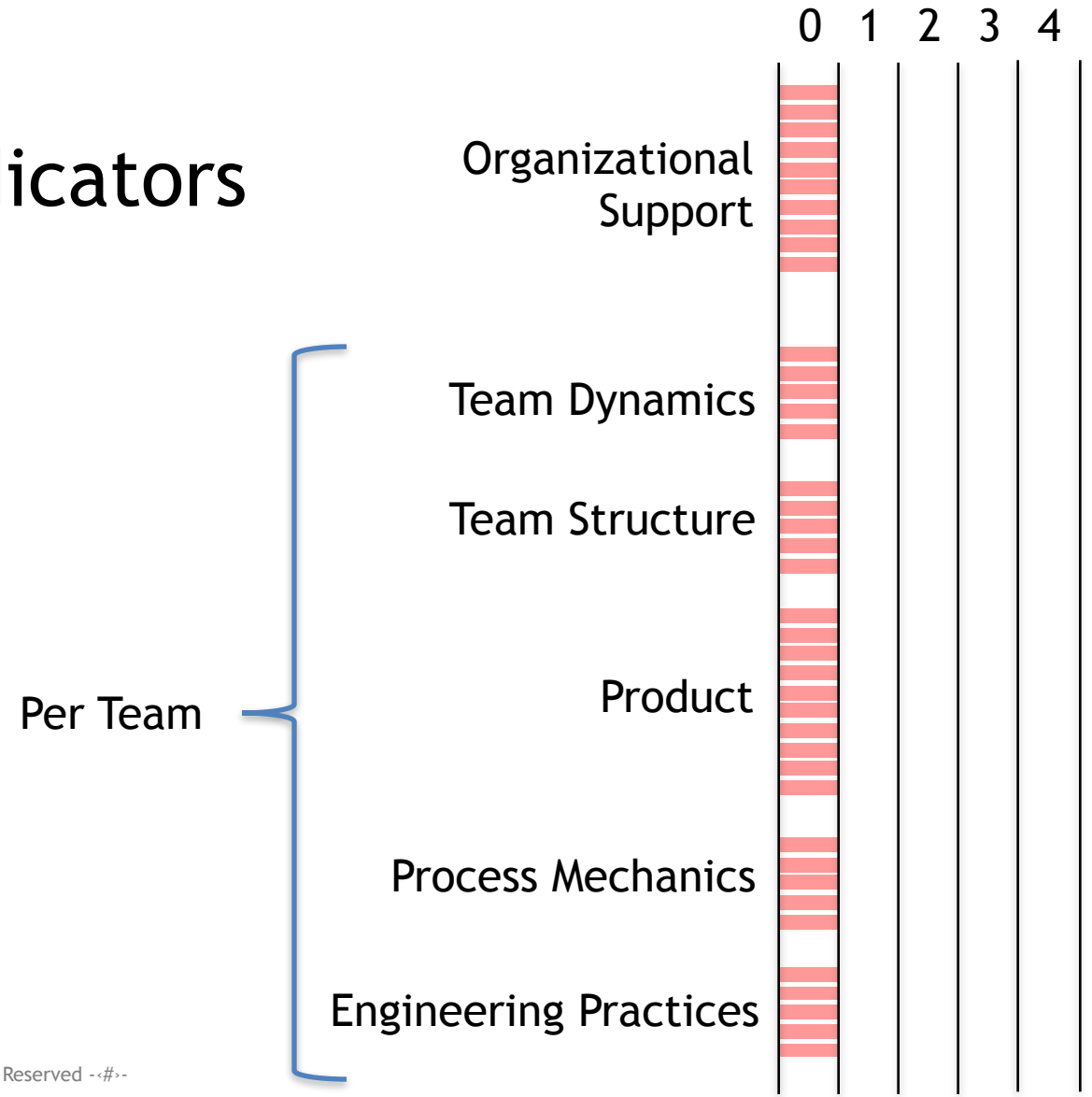


© 2012-2014 Eliassen Group. All Rights Reserved

ELIASSEN GROUP

The Path to Agility – Starting Point

50 Indicators

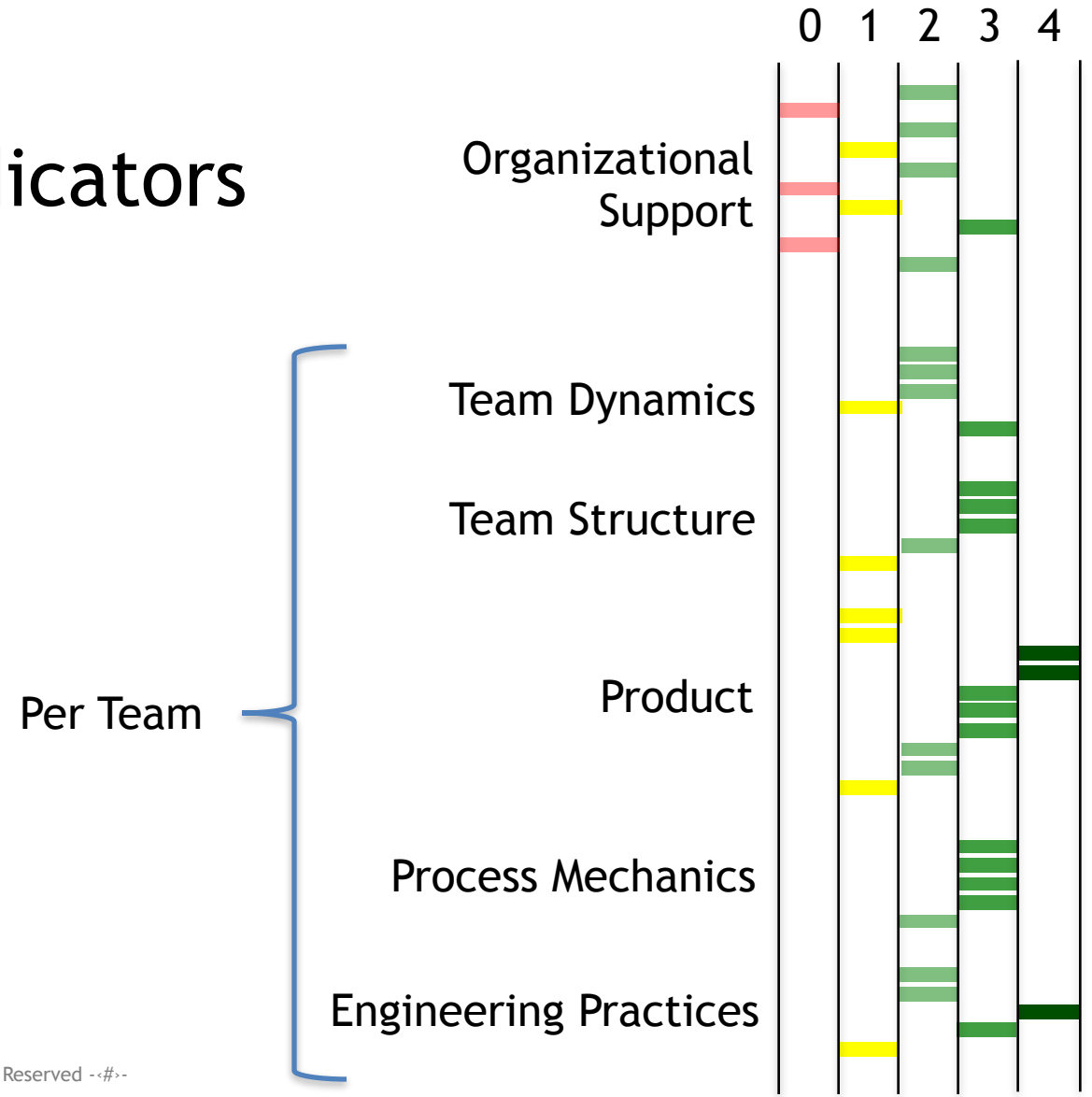


© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

The Path to Agility – Example Goal

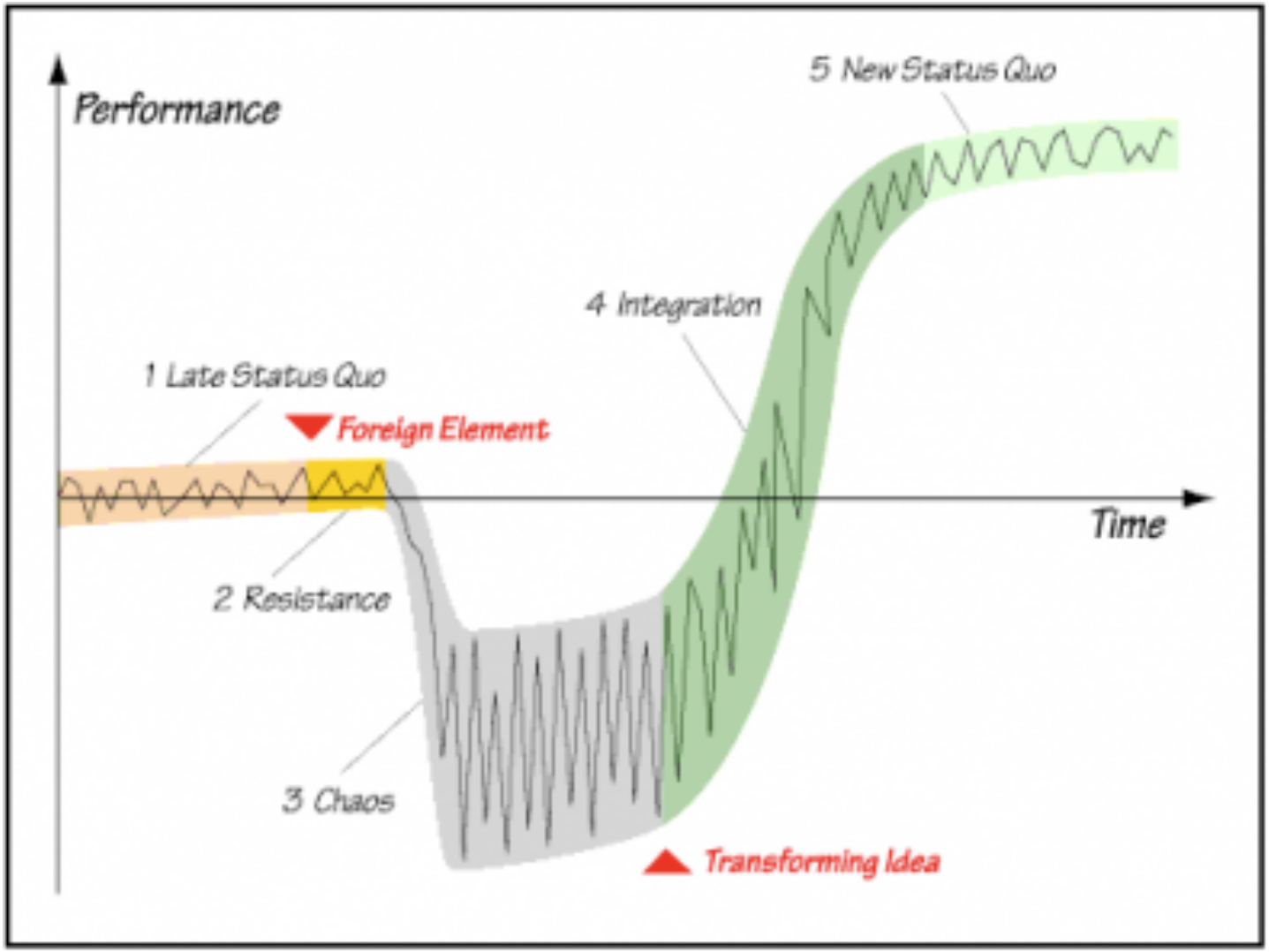
50 Indicators



© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Satir Change Model



© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Kickoff

- Determine team
  - As co-located and cross-functional as possible
  - Dedicated
  - Product Owner
  - Scrum Master
- Determine Agile experts to guide the team
  - Internal and/or external
- Do team startup activities (1-3 days)
  - Define Definition of Ready
  - Define Definition of Done
  - Create team norms
  - Product vision
  - Roadmap of epics
  - Create initial backlog
  - Determine initial velocity
  - Review Enterprise Agility Matrix, determine starting point and goals

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Kickoff

- Create team area
  - Stable meeting area for standups, planning, retro, etc.
  - Card Wall (physical, electronic, or both)
  - Post on walls: burn-up chart, team norms, definition of done, definition of ready
  - Audio/video equipment for remote participants
- Choose tools
  - Backlog and story management
  - For software teams
    - Unit testing
    - Test automation
    - Build automation
    - SCM
- Schedule meetings for at least 3 iterations
  - Daily standup (15min standup + 15min discussion)
  - Iteration planning (1-4 hours)
  - Review (1 hour)
  - Retrospective (at least 1 hour)
- Start!

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Things You Can do on Your Own

- Be an Agilist
  - Think and act in an Agile manner
  - Help to create more Agilists
  - Work on learning more about Agile
- Examples
  - Everything on the slide regarding “Strongly Agrees”
  - Create your own definition of Ready and post it
  - Translate everything you work on to user stories even if there aren’t any
  - Create your own definition of Done and post it
  - Create your own “working agreement” (what people can expect of you and what you expect of others)

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

Agenda

- Overview of Agile
- Cross Functional Teams
- Product Vision, Epics, MVIs
- User stories
- Story splitting
- Agile Technical Practices
- Agile Planning
- Scrum
- Agile Flow
- Self-organization
- Distributed Agile
- Going Agile
- Wrap-up

Q&A

Don’t forget the Retro!

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services

Session Retrospective

5 min

- One thought per card
- Went well, mark with **“W“**
- Could have been better, mark with **“B”**
- Ideas to try, mark with **“I”**
- Please use separate cards for each thought

© 2012-2014 Eliassen Group. All Rights Reserved -‹#›-

ELIASSEN GROUP
Agile Consulting Services