CitiusTech

accelerating
innovation
in healthcare

Smart Scrum Training – Session 1

August 2015

Team Introduction

- Name of the Participant

- Years of Experience

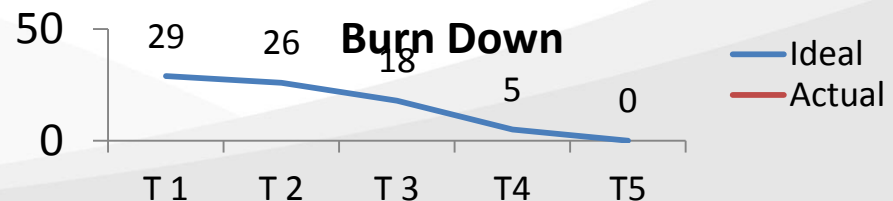- Current Project working on

- Prior experience with Scrum/Agile

CitiusTech

Agenda

- **Introduction**

- Understand Scrum

- Adaptation to Scrum

- Scrum Framework

CitiusTech

Scrum Master Training - Scrum Board

Sprint Backlog	To Do	In Progress	Done
Introduction (3)	Team Introduction Course Objectives Course Content		
Understand Scrum (8)	Introduction to Agile Scrum Objectives		
Adaptation to Scrum (13)	Scrum in Nutshell Scrum – How does it work? Key Differences: Scrum & Traditional Myths round Agile Development		
Scrum Framework (5)	Scrum Priniciples ScrumButs ScrumTerminology		

Total	Completed	Remaining
29	0	29

Burn Down

50

29   26   18   5   0

0

T 1   T 2   T 3   T4   T5

— Ideal
— Actual

CitiusTech

Course Objectives

- This 9 hours(4 Days) course is to lay a solid foundation for individuals or teams to begin effectively using Scrum immediately

- These sessions will provide information and practices that you can use to ensure that Scrum is understood and implemented effectively

- This course covers Scrum basics, including the framework, mechanics, and roles of Scrum.

- It helps in the following area:
  - How to be an effective Scrum Team Member
  - Improve teamwork
  - Understand how Agile helps deliver regular value to business
  - Improve engineering practices to deliver high-quality product

CitiusTech

Course Content

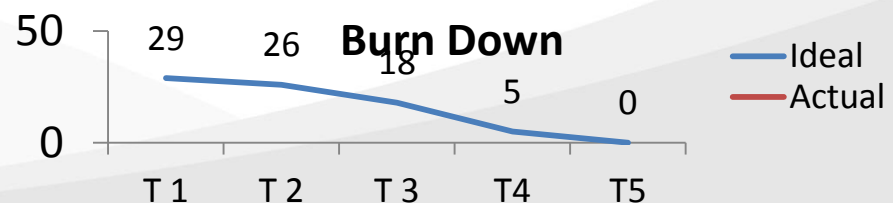| Session1	Session2	Session3	Session4
Introduction	Scrum Artefacts	Mind Reading (Game)	Lego Game + Actions For Retrospective (Games)
Understand Scrum	Roles And Activities during Sprint		
Adaptation to Scrum		Scrum Estimates	
Values Advocacy (Game)	Roles and Responsibilities (Game)		
Scrum Framework	Scrum Rituals	Estimation Ball (Game)	

CitiusTech

Agenda

- Introduction

- **Understand Scrum**

- Adaptation to Scrum

- Scrum Framework

CitiusTech

Scrum Master Training - Scrum Board

Sprint Backlog	To Do	In Progress	Done
Introduction (**3**)		Team Introduction Course Objectives Course Content	
Understand Scrum (**8**)	Introduction to Agile Scrum Objectives		
Adaptation to Scrum (**13**)	Scrum in Nutshell Scrum – How does it work? Key Differences: Scrum & Traditional Myths round Agile Development		
Scrum Framework (5)	Scrum Priniciples ScrumButs ScrumTerminology		

Total	Completed	Remaining
29	**3**	**26**

Burn Down

50

29   26   18

5   0

0

T 1   T 2   T 3   T4   T5

— Ideal
— Actual

Understand Scrum

- **Introduction to Agile**
- **Scrum Objective**

Introduction to Agile (1/7)

Why Agile?

- Current software development processes are too heavyweight or cumbersome
  - Too many things are done that are not directly related to software product being produced
- Current software development is too rigid
  - Difficulty with incomplete or changing requirements
  - Short development cycles (Internet applications)
- More active customer involvement needed
  - CMM focuses on process

Introduction to Agile (2/7)

Why Agile?

- Agile methods are considered
  - Lightweight
  - People-based rather than Plan-based
- Several agile methods
  - No single agile method
  - Scrum most popular
- No single definition
- Agile Manifesto closest to a definition
  - Set of principles
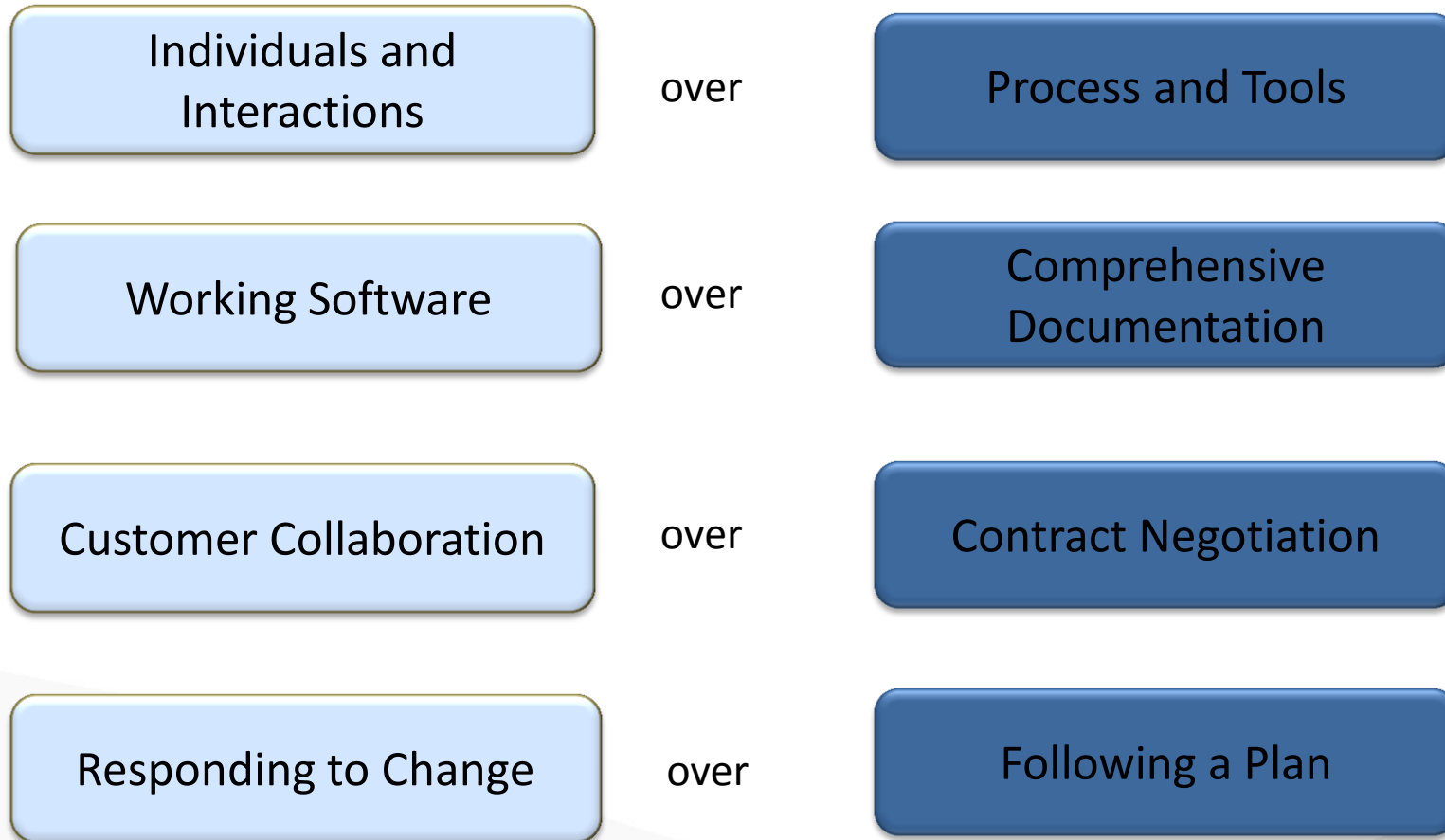 - Developed by Agile Alliance

CitiusTech

Introduction to Agile (3/7)

- **Key Principles**
  - **Focus on Customer Value -** Align project, product and team visions to deliver better product quality – faster and cheaper.

  - **Small Batches -** Create a flow of value to customers by "chunking" feature delivery into small increments.

  - **Small, Integrated Teams -** Intense collaboration via face-to-face communication, co-location, etc.; diversified roles on integrated, self-organizing, self-disciplined teams.

  - **Small, Continuous Improvements -** Teams reflect, learn and adapt to change.

CitiusTech

Introduction to Agile (4/7)

Agile Manifesto

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

In Scrum focus while there is value in the items on the right, we value the items on the left more .

CitiusTech

Introduction to Agile (5/7)

Principles behind the Agile Manifesto

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

- Welcome changing requirements, even late in development. Agile processes harness change for the customer' competitive advantage.

- 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.

- Build projects around motivated individuals. Give them the environment and support they need, and trust them to get the job done.

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

CitiusTech

Introduction to Agile (6/7)

- Working software is the primary measure of progress.

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

- Continuous attention to technical excellence and good design enhances agility.

- Simplicity–the art of maximizing the amount of work done–is essential.

- The best architectures, requirements, and designs emerge from self-organizing teams.

- At regular intervals, the team reflects on how to become more effective, then tunes and adjusts its behaviour accordingly.

CitiusTech

Introduction to Agile (7/7)

Agile Values Advocacy Game

Moto:

- Meaningful discussion about the values in the Agile manifesto.

- Emphasis the importance of both, the left and the right side of the value statements.

Scrum Objective

- **Quality work:** empowers everyone involved to feel good about their job.

- **Assume Simplicity:** Scrum is a way to detect and cause removal of anything that gets in the way of development.

- **Embracing Change:** Team based approach to development where requirements are rapidly changing.

- **Incremental changes:** Scrum makes this possible using sprints where a team is able to deliver a product feature (iteration) (10 – 20) working days.

Companies Using Scrum

Agenda

- Introduction

- Understand Scrum

- **Adaptation to Scrum**

- Scrum Framework

Scrum Master Training - Scrum Board

Sprint Backlog	To Do	In Progress	Done
Introduction (**3**)			Team Introduction Course Objectives Course Content
Understand Scrum (**8**)		Introduction to Agile Scrum Objectives	
Adaptation to Scrum (**13**)	Scrum in Nutshell Scrum – How does it work? Key Differences: Scrum & Traditional Myths round Agile Development		
Scrum Framework (5)	Scrum Priniciples ScrumButs ScrumTerminology		

Total	Completed	Remaining
29	11	18

CitiusTech

Adaptation to Scrum

- **Scrum in Nutshell**

- **How Scrum Works**

- **Key Differences**

- **Myths Around Agile Development**

CitiusTech

Scrum in Nutshell (1/2)

- Scrum is not an acronym

- Name taken from the sport of Rugby, where everyone in the team acts together to move the ball down the field

- Aanalogy to development is the team works together to successfully develop quality software
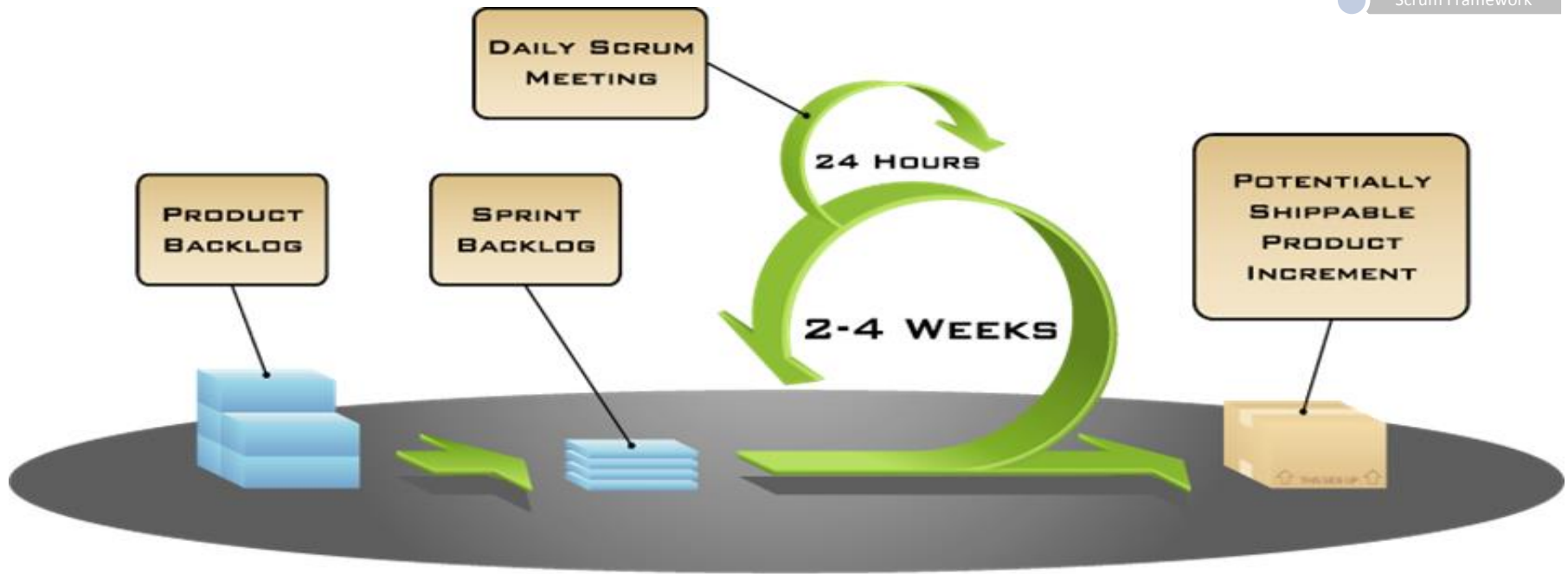
- Scrum is all about Common Sense

Video: Scrum

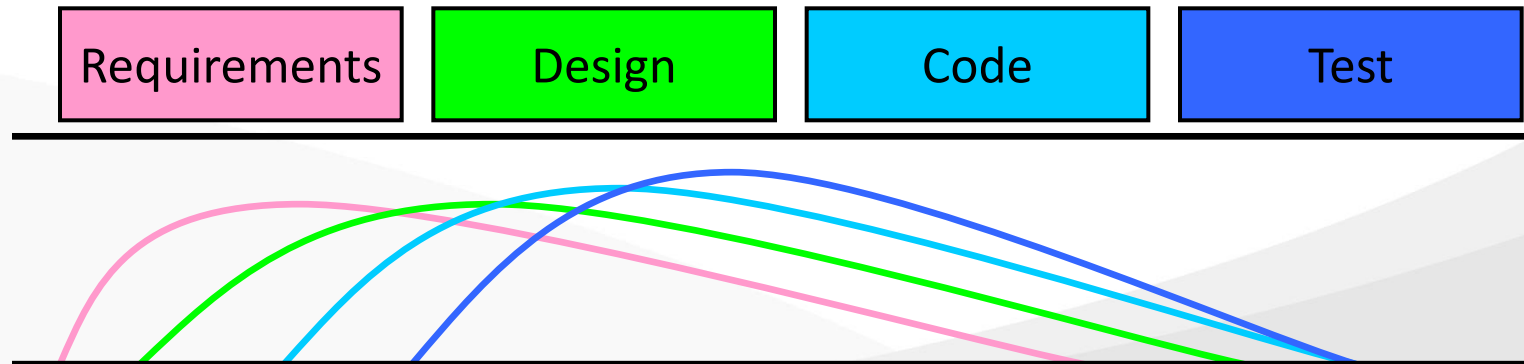**CitiusTech**

Scrum in Nutshell (2/2)

- Scrum is an Agile process

- Scrum is about being nimble, fast and effective

- Scrum allows us to focus on delivering the highest business value in the shortest time.

- It allows us to rapidly and repeatedly inspect actual working software

- The business sets the priorities

- Our teams self-manage to determine the best way to deliver the high priority features

- Within two weeks to a month we can see real working software

- No specific engineering practices prescribed

CitiusTech

Scrum – How Does It Work?

DAILY SCRUM MEETING

PRODUCT BACKLOG

SPRINT BACKLOG

24 HOURS

2-4 WEEKS

POTENTIALLY SHIPPABLE PRODUCT INCREMENT
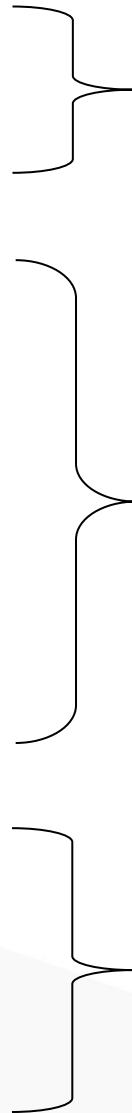
Sequential vs. Overlapping Dev.

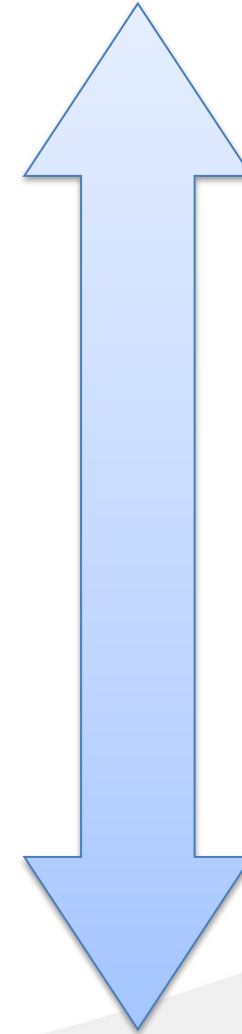| Requirements | Design | Code | Test |

Scrum Focus

- Collaborative working

- Iterative projects

- Visual Modelling

- Value based prioritisation

- Requirements Management

- Change Management

- Configuration Management

- Tools

- Traceability

Most Valued

Least Valued

### CitiusTech

Key Differences (1/2)

Classical Methods Constrain

- What is Not Scrum process?
  - Phase wise development where each phase is depended on the previous one to complete
    - Requirement analysis, design, code, integration, test , deployment
  - We have complete visibility of requirement in the beginning and have a plan driven approach
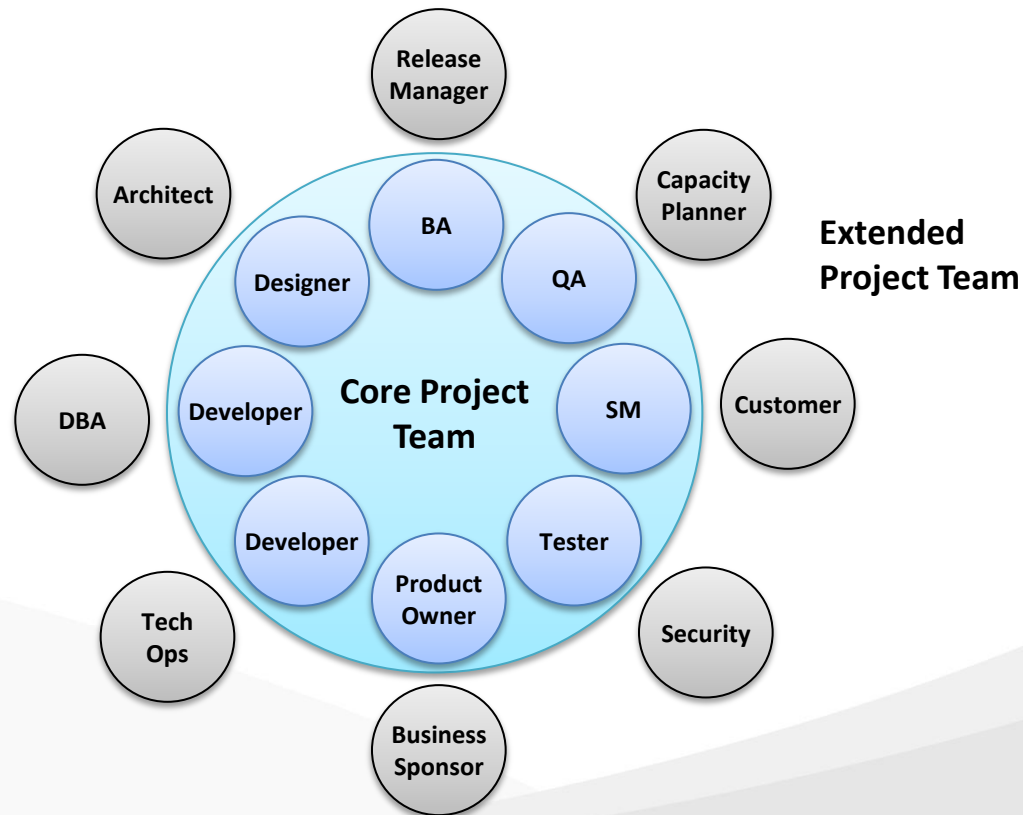
Video: <u>What is NOT Scrum</u>

CitiusTech

Key Differences (2/2)

Traditional structure

Product Owner → PM → BA → Designer → Developer → Tester →
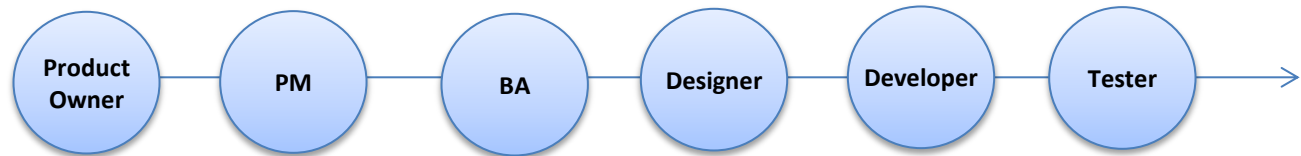
Integrated Agile Team

The Core Project Team ideally consists of **5-9 (7 plus or minus 2)** members.

Core Project Team: BA, Designer, QA, Developer, SM, Developer, Tester, Product Owner

Extended Project Team

Release Manager, Architect, Capacity Planner, DBA, Customer, Tech Ops, Security, Business Sponsor

CitiusTech

Where Scrum is 'Not Effective' and 'Effective' Scrum

Where Scrum is NOT effective

- Lack of Customer Involvement

- Big sized team (> 8-10)

- When the budget and schedule is fixed

Team

- Requirements should not drastically change during the sprint

- Team should be able to commit on the work decided during the calls and should stick to its commitments

- Working with client that enforces their very formal approach on vendors

- Although not impossible, its hard to implement Scrum when all team members are not in the same location

- Its is not effective for small projects

Where Scrum is effective

- Project where scope is changing rapidly (for whatever reason)

- Fast feedback and burning visibility

- Requirements are not clearly defined

- Work delivered is incremental

- Control and management is empirical

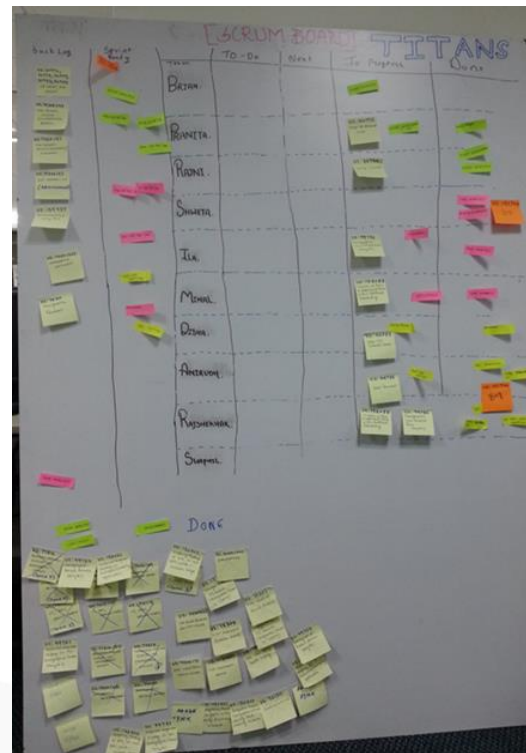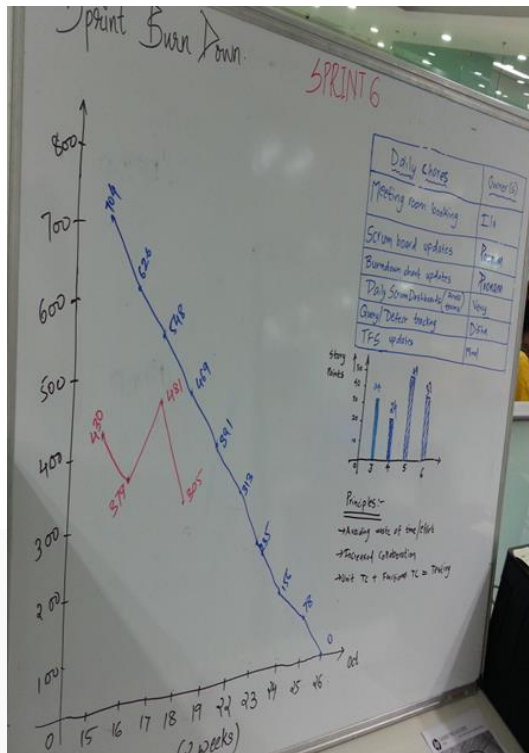**CitiusTech**

Myths around Agile Development

- Agile doesn't allow documentation

- Agile methods do not scale

- Agile means no plan

- Agile doesn't need up front design

- We're doing scrum so we don't need to do TDD, a Refactoring Pair Programming, etc.

- One can learn Agile from a book

- Agile is a silver bullet solution to software engineering problems (There is NO silver bullet solution)

CitiusTech

Encourage Information Radiators

"Two characteristics are key to a good information radiator.

- The first is that the information changes over time.
- Anyone can view project status at a glance without having a formal meeting.

The other characteristic is that it takes very little energy to view the display."
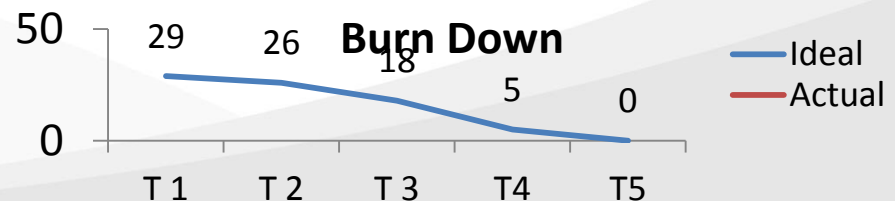
Agenda

- Introduction

- Understand Scrum

- Adaptation to Scrum

- **Scrum Framework**

Scrum Master Training - Scrum Board

Sprint Backlog	To Do	In Progress	Done
Introduction (**3**)			Team Introduction Course Objectives Course Content
Understand Scrum (**8**)			Introduction to Agile Scrum Objectives
Adaptation to Scrum (**13**)		Scrum in Nutshell Scrum – How does it work? Key Differences: Scrum & Traditional Myths round Agile Development	
Scrum Framework (5)	Scrum Priniciples ScrumButs ScrumTerminology		

Total	Completed	Remaining
29	**24**	**5**

Burn Down

- Ideal
- Actual

50

29   26   18   5   0

0

T 1   T 2   T 3   T4   T5

CitiusTech

Scrum Framework

- **Scrum Principles**
- **Scrum Buts**
- **Scrum Terminology**

Scrum Principles (1/2)

- **The 3 Basic Principles**
  - **Time boxing:** Everything is time boxed
  - **Self-managing Teams:** Teams operate in a self managing mode
  - **Shippable Code:** Every Sprint delivers shippable code

CitiusTech

Scrum Principles (2/2)

Summary
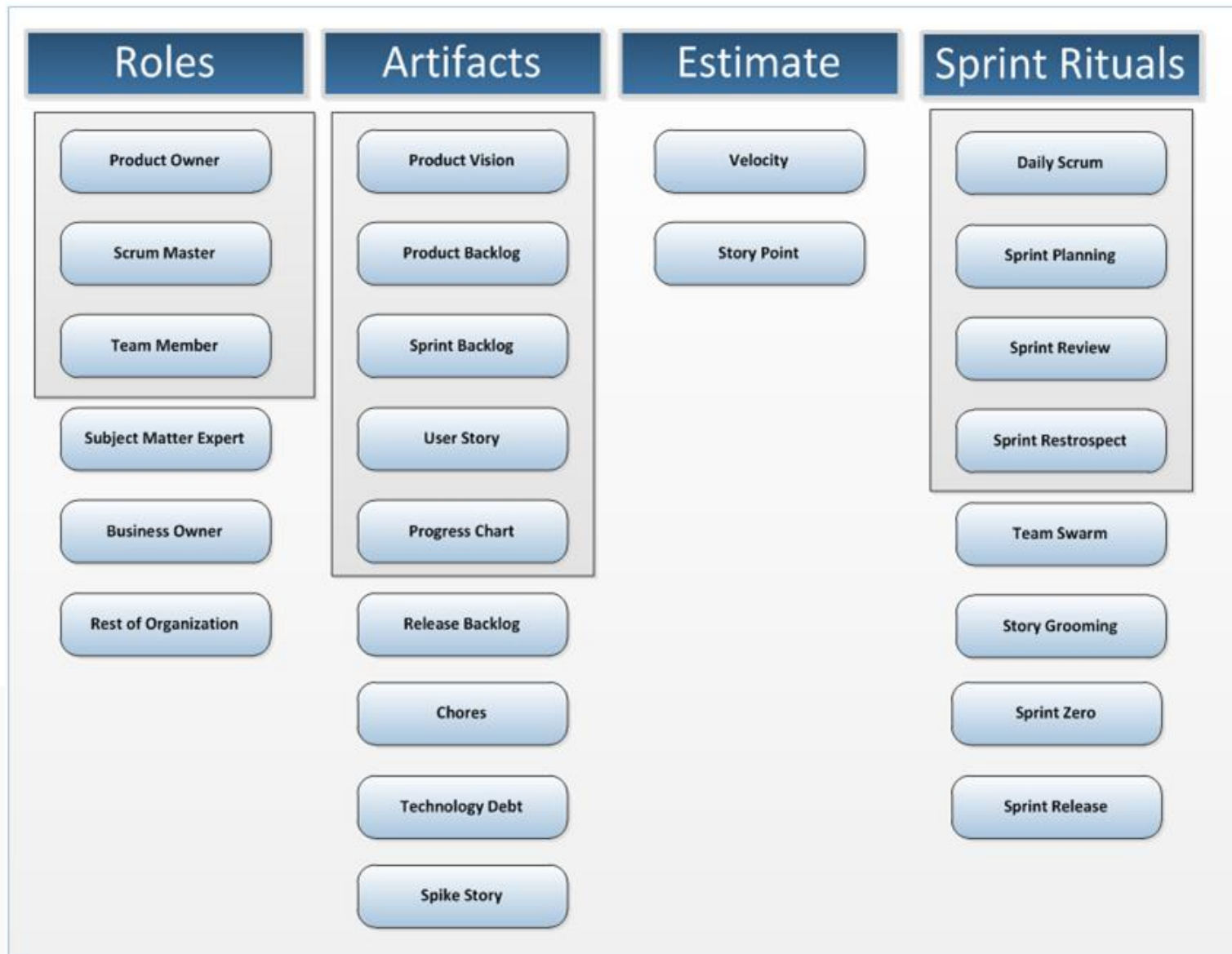
- **Customer Collaboration**
  - Customer Value/User focus
  - Collaboration and feedback
- **Responding to change**
  - Embrace change and adaptation
  - Agile environments
  - Continuous improvement
- **Working software**
  - Frequent delivery of working software
  - No surprises
- **Team work**
  - Motivated teams working at sustainable pace
  - Organizational discipline and accountability

Scrum But's

- There are many adaptations or modifications of Scrum by many organizations.

- These custom adaptations of "We use Scrum, but X so Y" pattern are called as **"Scrum but's."**

- **Scrum Master's** primary role is to ensure the Scrum principles are followed to ensure project's success

- Examples of **Scrum But's**:

  - If you ask a Team member whether they use Scrum and you get a respond, "Yes, we use Scrum – but our manager believes that we will fail if he doesn't tell us what to do, so we are told what to do and how to do it, so feel safe"

  - "We use Scrum, but Retrospectives are a waste of time, so we don't do them."

  - "We use Scrum, but we can't build a piece of functionality in a month, so our Sprints are 6 weeks long."

CitiusTech

Scrum Terminology

Roles

- Product Owner
- Scrum Master
- Team Member
- Subject Matter Expert
- Business Owner
- Rest of Organization

Artifacts

- Product Vision
- Product Backlog
- Sprint Backlog
- User Story
- Progress Chart
- Release Backlog
- Chores
- Technology Debt
- Spike Story

Estimate

- Velocity
- Story Point

Sprint Rituals

- Daily Scrum
- Sprint Planning
- Sprint Review
- Sprint Restrospect
- Team Swarm
- Story Grooming
- Sprint Zero
- Sprint Release

CitiusTech

Scrum Master Training - Scrum Board

Sprint Backlog	To Do	In Progress	Done
Introduction (**3**)			Team Introduction
			Course Objectives
			Course Content
Understand Scrum (**8**)			Introduction to Agile
			Scrum Objectives
Adaptation to Scrum (**13**)			Scrum in Nutshell
			Scrum – How does it work?
			Key Differences: Scrum & Traditional
			Myths round Agile Development
Scrum Framework (5)		Scrum Priniciples	
		ScrumButs	
		ScrumTerminology	

Total	Completed	Remaining
29	**29**	**0**

Burn Down

- Ideal
- Actual

50

29 26 18 5 0

0

T 1 T 2 T 3 T4 T5

Resources

- **Online Discussion Groups**
  - [Agile Project Management](#)
  - [Scrum Development](#)
  - [Agile Manifesto](#)

- **User Groups**
  - [Italian Agile Movement](#)
  - [Agile Alliance User Group List](#)

- **Articles**
  - [Introduction to Agile Methods](#)
  - [The New Methodology](#)
  - [Getting Started with Agile Delivery](#)
  - [So, How's that Agile Initiative Doing?](#)
  - [Agile Project Management: Emergent Order through Visionary Leadership](#)
  - [The Lean-Agile PMO: Using Lean-Thinking to Accelerate Agile Delivery](#)

CitiusTech

CurioCT - CitiusTech's Technology Q & A Forum

http://interct/SitePages/CurioCT.aspx

CitiusTech

THANK YOU

CitiusTech