



Agile V2.0 Overview

Agenda

- **Purpose**
 - **Introduction to Sabre & Travelocity Agile principles and concepts**
- **Agenda**
 - **Agile Manifesto**
 - **Why Agile?**
 - **Agile Version 1.0**
 - **Agile Version 2.0**
 - **Agile V2.0 Core Practices**
 - **Agile v2.0 Artifacts**
 - **Future of Sabre & Travelocity Agile**

Manifesto for Agile Software Development

- **In February, 2001 came The Agile Manifesto:**

We are uncovering better ways of developing software by doing it and helping others do it. Through this work we have come to value:

- **Individuals and interactions**.....over processes and tools
- **Working software**.....over comprehensive documentation
- **Customer collaboration**..... over contract negotiation
- **Responding to change**.....over following a plan

That is, while there is value in the items on the right, we value the items on the left more

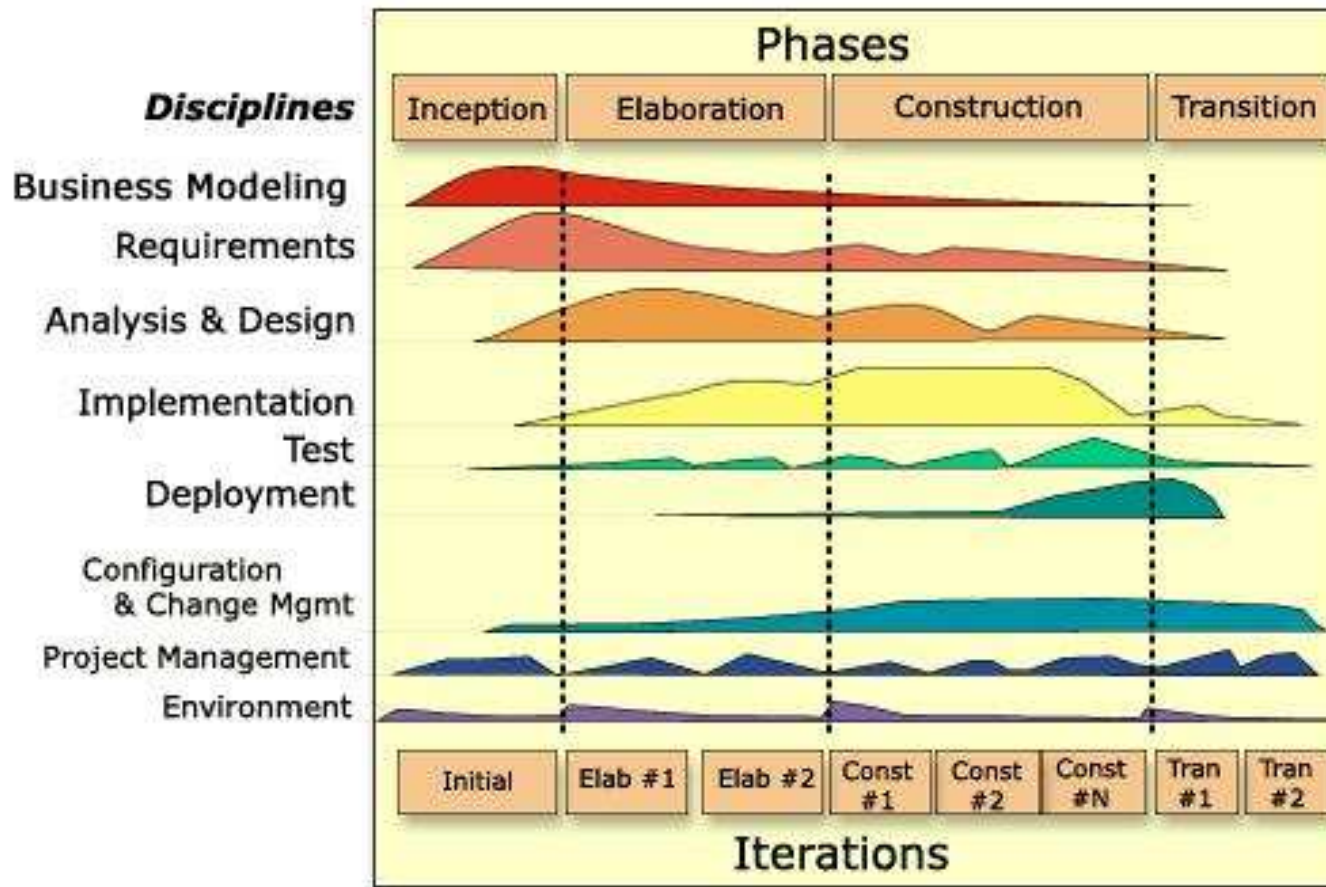
Agile is an iterative and incremental (evolutionary) approach to software development which is performed in a highly collaborative manner with "just enough" ceremony that produces high quality software which meets the changing needs of its stakeholders.

Why Agile at Sabre & Travelocity?



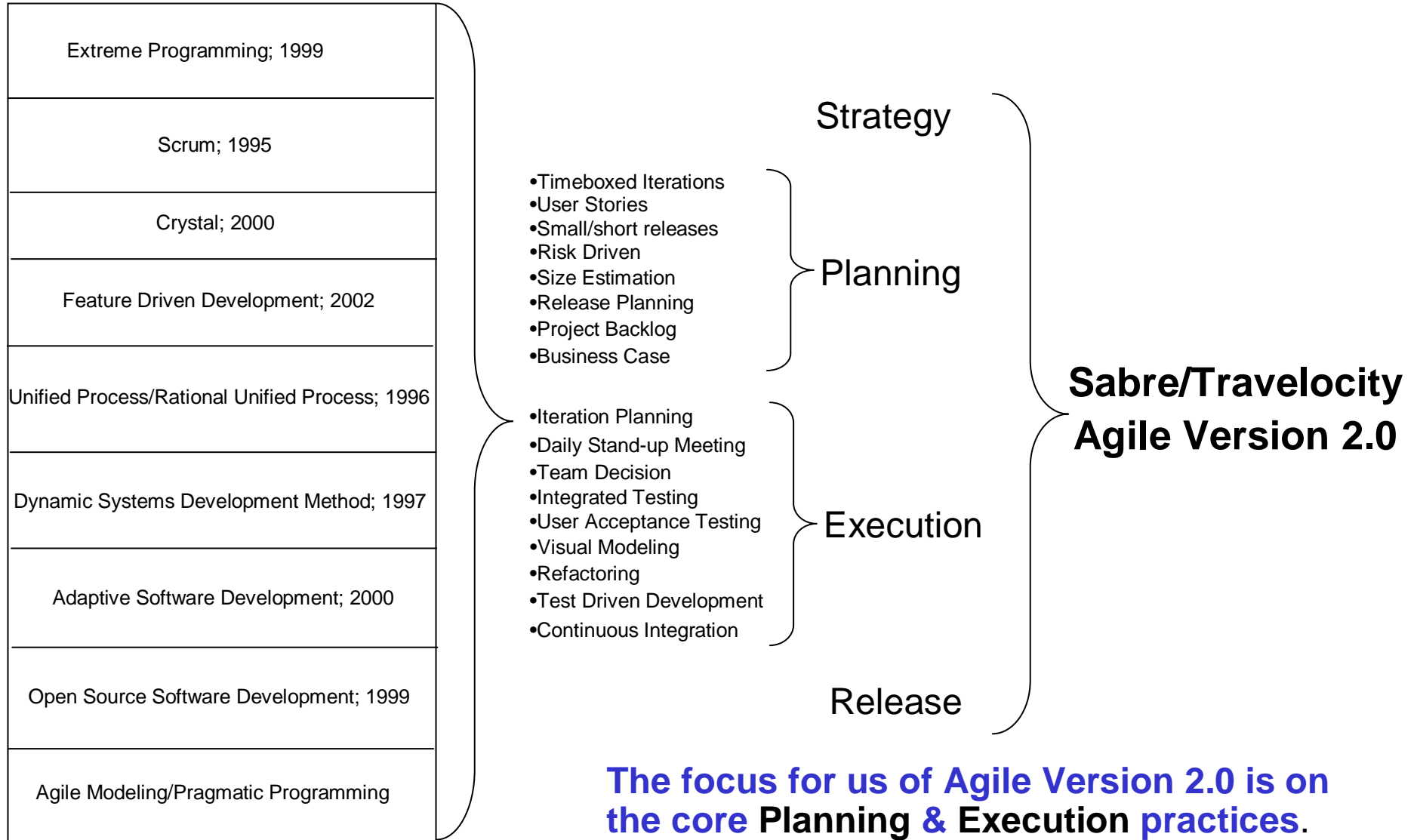
Agile Version 1.0

In 2003, a consultant company was contracted to bring an initial Agile practice to Sabre & Travelocity. This model was based on Agile Unified Process.



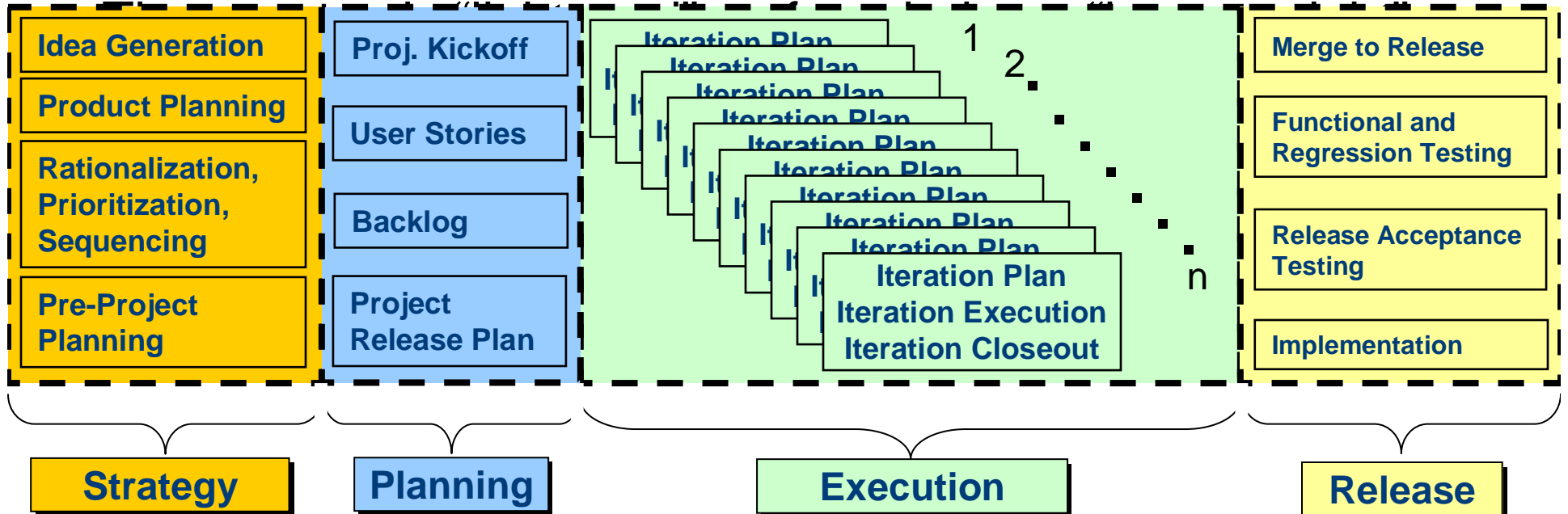
Iterative Development Methodology Version 1.0

Evolution of Sabre & Travelocity Agile



Sabre & Travelocity Agile Version 2.0

Agile Version 2.0 is less focused on “Unified Process” phases and more focused on “core” Agile practices.



Sabre/Travelocity Agile Version 2.0

Agile V2.0 Core Practices - Planning

The Agile V2.0 Planning core practices include:

- **Project Kickoff**
 - Create a project datasheet – **Project Datasheet*** ⁽¹⁾
 - Continuous Risk Management which involves creating Risk Management Plan and reviewing at every iteration start – **Risk Management Plan***
 - Planning for Testing within the iteration and during the release cycle – **Test Plan***
- **Define User Stories**
- **Backlog Activities**
 - Create a backlog of User Stories – **Project Backlog***
 - Estimate size of the User Stories
- **Project Release Planning**
 - Project a velocity estimate for the team
 - Derive duration from size and projected velocity – **Release Plan***

(1) Jim Highsmith, Cutter Business Technology Council

* Represents an artifact resulting from a Agile core practice

Agile V2.0 Core Practices - Execution

The Agile V2.0 Execution core practices include:

- **Iteration Planning**

- Prioritize the backlog based on Business Value & Technical Risk – **Iteration Plan** *

- **Iteration Execution**

- Develop a product, produce test cases (unit / functional / regression)
 - Analysis
 - Design
 - Write Acceptance Tests
 - Write Unit Tests
 - Implement in dev environment
 - Run and pass Unit Tests
 - Continuous Integration and deploy on staging
 - Run and pass Acceptance Tests
 - Review architecture implementation
 - Refactor for simple and better design
 - Run the regression tests against existing product
 - Ready for testing in certification
- Conduct daily stand-up meetings
- Managing and Tracking Iterations – Measure ideal hours and generate an iteration burndown

- **Iteration Closeout**

- Conduct the iteration demonstration on a staging environment
- Retrospective – Record lessons learned in the iteration, measure velocity – **Lessons** *
- Inspect and adapt release plan, risk management plan and test plan



Leadership Opportunities

Changing Attitudes Is A Prerequisite To Sustainable Behavioral Change

- While organizational understanding and knowledge of Agile processes and practices has achieved a critical mass, continued resistance to organizational change has prevented a sustainable behavioral change
 - The greatest barrier to adopting agile development practices is knowledge and experience in two areas: ⁽¹⁾
 - » **Agile Practices**
 - » **Organizational Change**
 - Adopting agile is not just a process of understanding and applying different technical practices. It is a mindset shift that must take place within the executive, business and IT communities of that organization ⁽¹⁾
 - Digital Focus' experiences is that IT professionals often underestimate the difficulty in making lasting change within an organization ⁽¹⁾
- Active leadership is required at all levels to encourage the changes in attitude required to reach the “tipping point” and maximum value realization

(1) In 2005 Digital Focus conducted a survey to assess several aspects of agile adoption in software development that highlighted the following findings

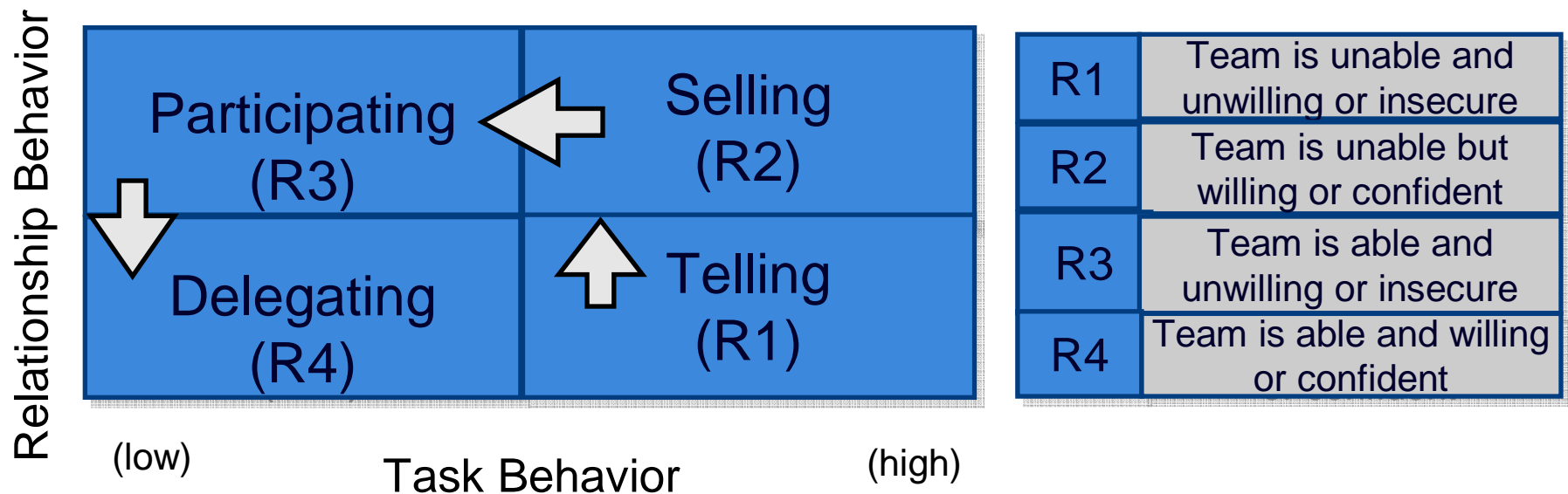
Active Leadership Requires Visible And Persistent Commitment To The Transformation

- **What is our role as leaders?**
 - Understand Agile – Get a mentor yourself (consultant/buddy) and for your teams
 - Establishing a Sense of Urgency
 - Creating a Guiding Coalition
 - Communicating the Change and Vision
 - Empowering a Broad-Based Action
 - Generating Short-Term Wins
 - Anchoring New Approaches in the Culture

- **Actively emphasize quality as a priority at all levels by giving “permission” to do quality work**
 - Code Reviews
 - Iteration Testing
 - Unit Testing
 - Refactoring
 - reduce technical debt
 - Knowledge sharing
 - Learning Sessions
 - Define team accountability
 - Push decision making to all levels
 - Share all information: Why not?

Different Leadership for Different Teams

Situational Leadership for Agile Software Development ⁽¹⁾



Think about each team in terms of - Willingness to change/Ability
Different teams need different styles of leadership

It can take up to 18 months for persistent teams to progress from R1 to R4

⁽¹⁾ Mike Cohn, Mountain Goat Software

Summary: How you can help

- Much of the executive's job in a agile adoption is to get out of the command-and-control mindset and get comfortable with ambiguity and uncertainty. The iterative, incremental nature of agile methodologies provides continuous opportunities to practice and build collaborative skills in the course of a project. ⁽¹⁾
- Communicate your passion and support for Agile by:
 - Leading by example
 - Continuing to ask yourself if you are driving the right behaviors
 - Reward champions



Each iteration provides new information and takes us closer to the product vision. Uncertainty remains, and the shape of the cone is proportional. ⁽²⁾

(1) Jim Highsmith, Cutter Business Technology Council

(2) Todd Little, Sr. Development Manager, Landmark Graphics Corp

Questions?



Gnome was not built in a day
..... but in iterations. 😊



Contact Details

Lisa Shoop

Lisa.Shoop@Sabre.com

Julie Chickering

Julie.Chickering@Valtech.com