SEAC
Insurance Modernization Agile

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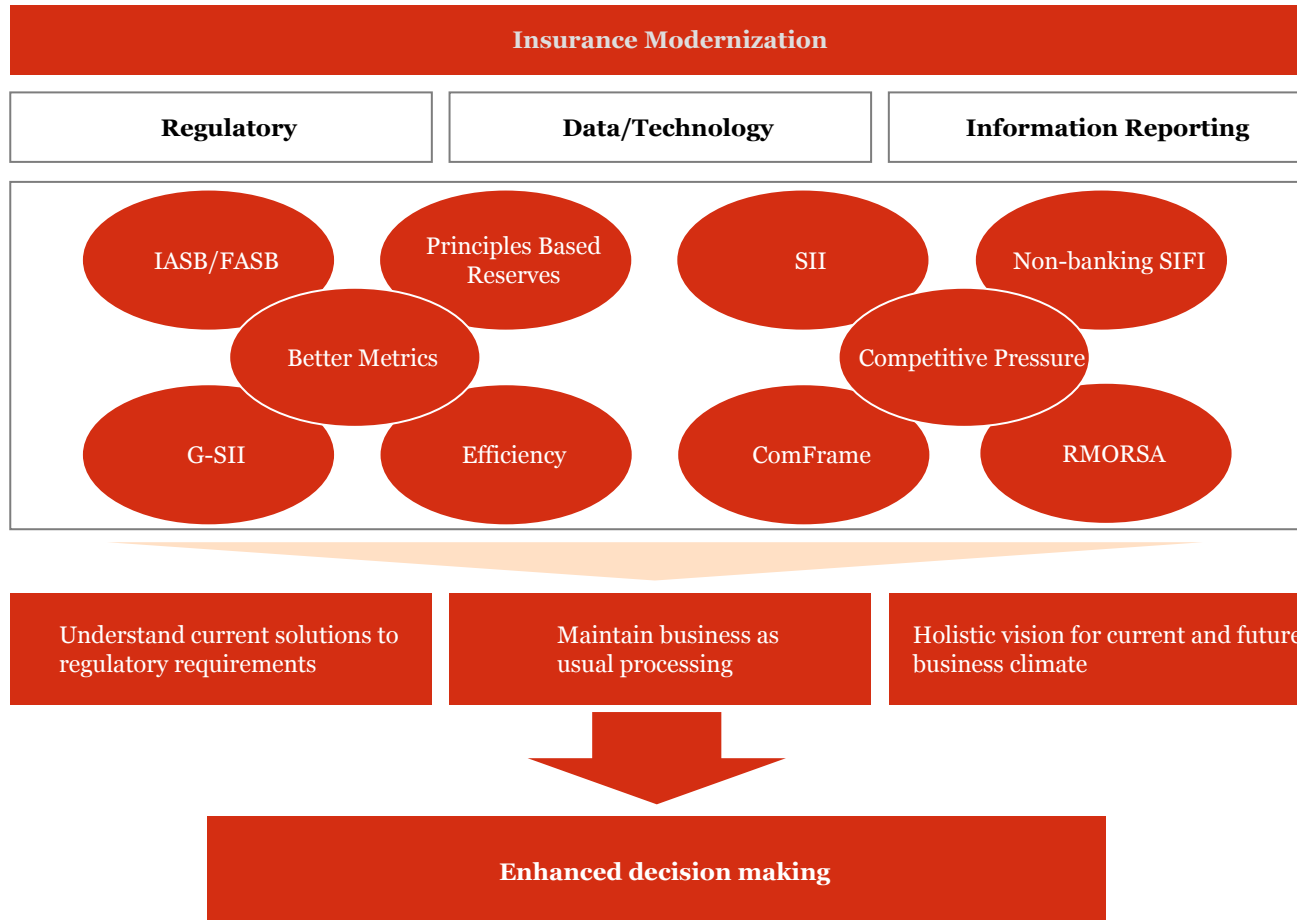
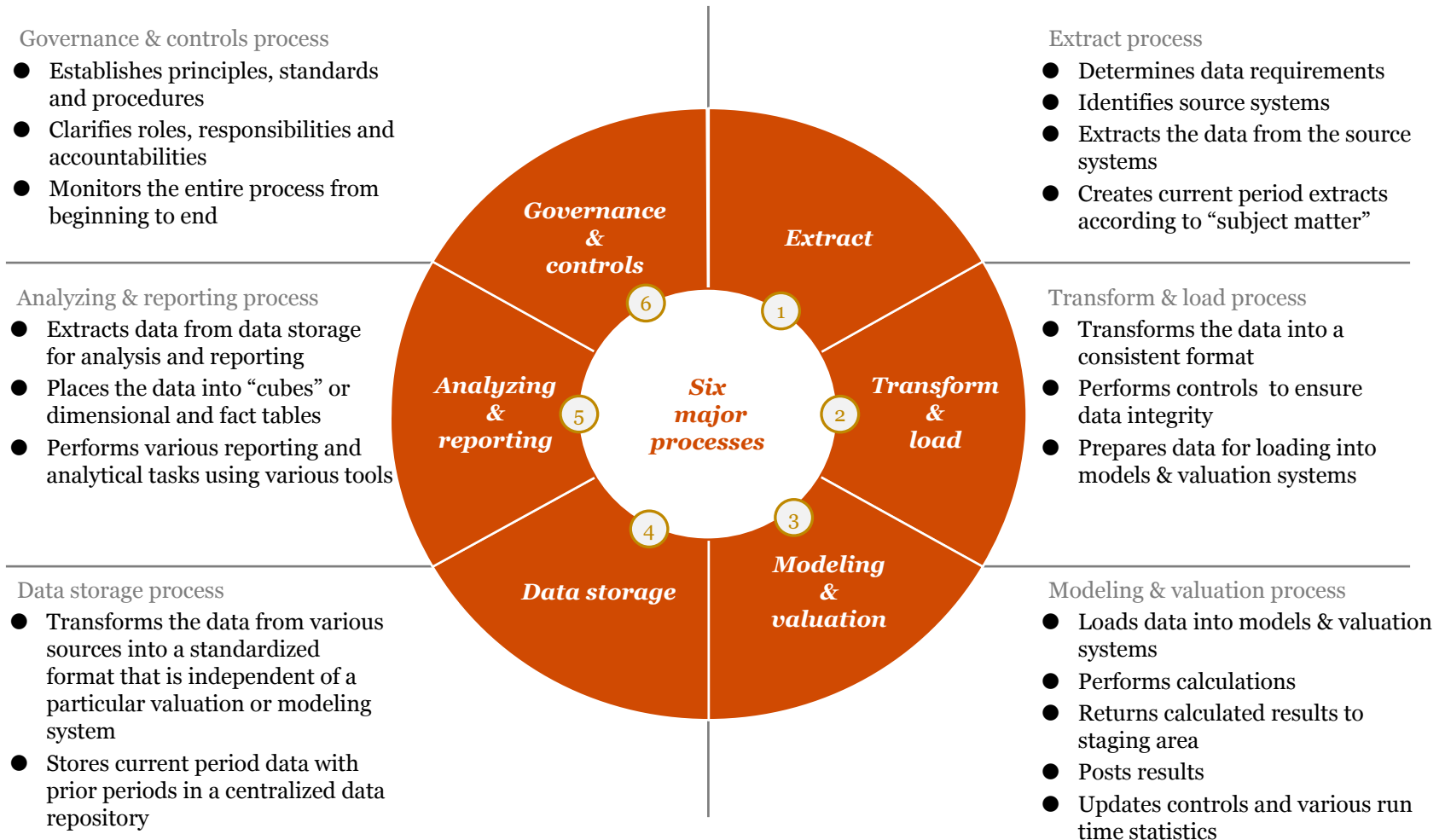# The Rationale for Insurance Modernization

Optimizing value through enhanced decision making

Leading insurers are *separating themselves* by their ability to *access timely, relevant, and reliable management information* to *measure results* and *drive management action*.

Insurance Modernization

Regulatory	Data/Technology	Information Reporting

IASB/FASB	Principles Based Reserves	SII	Non-banking SIFI
Better Metrics		Competitive Pressure	
G-SII	Efficiency	ComFrame	RMORSA

Understand current solutions to regulatory requirements	Maintain business as usual processing	Holistic vision for current and future business climate

Enhanced decision making

Modernization: Future state focusing on processes and technology

At the heart of most actuarial modernization programs is a data management, modeling and reporting strategy founded on sound governance and control principles.

Governance & controls process
- Establishes principles, standards and procedures
- Clarifies roles, responsibilities and accountabilities
- Monitors the entire process from beginning to end

Extract process
- Determines data requirements
- Identifies source systems
- Extracts the data from the source systems
- Creates current period extracts according to "subject matter"

Analyzing & reporting process
- Extracts data from data storage for analysis and reporting
- Places the data into "cubes" or dimensional and fact tables
- Performs various reporting and analytical tasks using various tools

Transform & load process
- Transforms the data into a consistent format
- Performs controls to ensure data integrity
- Prepares data for loading into models & valuation systems

Data storage process
- Transforms the data from various sources into a standardized format that is independent of a particular valuation or modeling system
- Stores current period data with prior periods in a centralized data repository

Modeling & valuation process
- Loads data into models & valuation systems
- Performs calculations
- Returns calculated results to staging area
- Posts results
- Updates controls and various run time statistics

Six major processes:
1. Extract
2. Transform & load
3. Modeling & valuation
4. Data storage
5. Analyzing & reporting
6. Governance & controls

Why Agile?

Minimized risk of disruption to 'business as usual' activities
Taking a 'fail fast' approach and frequently evaluating results (e.g. working software) that deliver real products to meet real needs enables learnings to be retained and applied to subsequent iterations

Ability to foster buy-in with Stakeholders at all levels of the organization
Highly visible and successful agile initiatives instill and reinforce a greater organizational commitment to agile values and practices

Increased mutual sense of trust and team morale
Frequent delivery of working software, better communication, clear expectation setting through cross-functional collaboration, and regular alignment on goals/KPIs empower teams and increase team morale

Establishing an increased focus on strategic and innovative initiatives
By enabling effective, self-organizing teams, leadership can refocus their efforts on removing impediments to progress, facilitating faster delivery of business value, and increasing their focus on strategic goals

Greater alignment, transparency, and consistent goal-setting
In shifting from a project-oriented to a value-oriented organization and aligning to strategic goals, agile teams yield increased productivity and bring the most valuable features to market faster, increasing customer satisfaction

Why Agile?

Our CEOs weigh in

Agile is a form of delivery which real utility is giving people a common foundation for making decisions about the best way to develop software and adapt our approach as the market needs. Some reasons why CEOs would use agile and apply to other areas of business includes

- CEOs know that the current environment is volatile, and unpredictable; a single event could trigger the need for **large-scale strategic changes**

- CEOs realize they need to **become more agile** and enhance their ability to respond to change to achieve immediate and long-term success

Reasons for Adopting Agile	1. Accelerate project delivery	0% ◄———————————————► 100%
	2. Manage changing priorities	
	3. Increase productivity	
	4. Better business/IT alignment	
	5. Increased deliverables quality	
Benefits of Adopting Agile	1. Manage changing priorities	
	2. Project visibility	
	3. Business/IT alignment	
	4. Delivery speed/time to market	
	5. Team productivity	
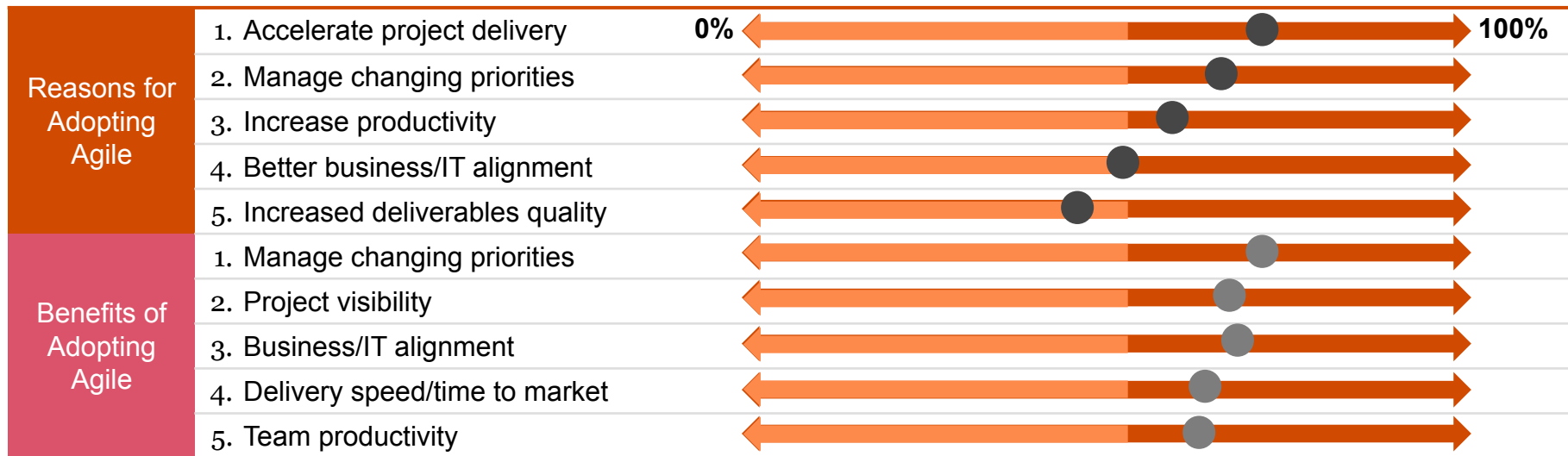
Source: VersionOne 12th Annual State of Agile Report, 2018

Why Agile?

Agile vs Traditional Project Management

"Waterfall" approach	Agile
● Traditional waterfall approach is distinct phases	● Agile separates the project development lifecycle into sprints
● Traditional waterfall approach is a sequential design process	● Agile follows an incremental approach
● It is a structured development methodology so most times it can be quite rigid	● Agile known for its flexibility
● It will be completed as one single project	● Agile can be considered as a collection of many different projects
● Test Plan is rarely discussed during the test phase	● Agile Test Plan is reviewed after each sprint

Agile Basics - Scaled Agile Framework (SAFe)

SAFe is a knowledge base of proven, integrated patterns for implementing lean-agile development.
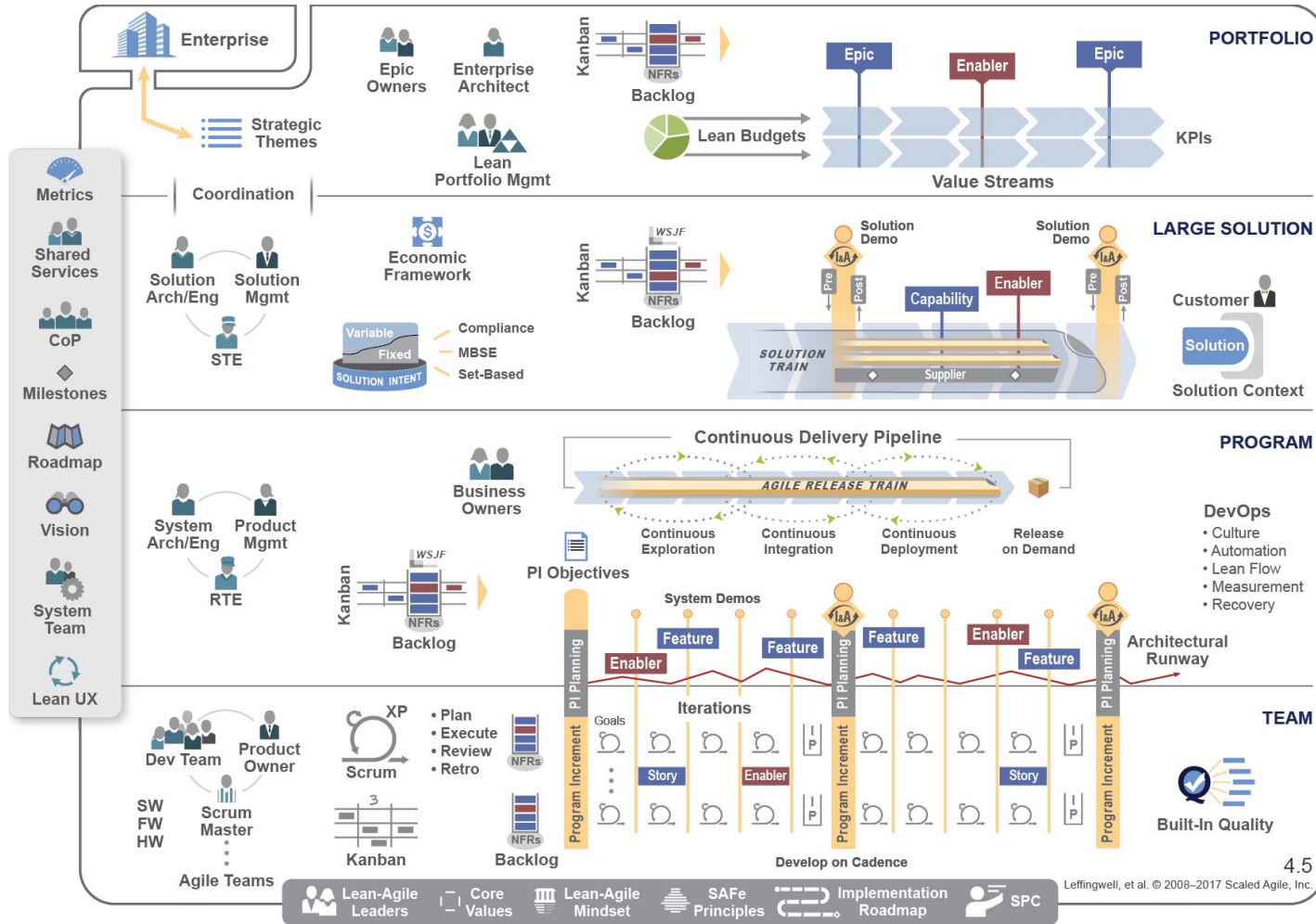
Agile Basics - Team Level Agile Framework

Scrum is a team-level framework for developing and sustaining complex projects; the key ceremonies that comprise the scrum practice are outlined below
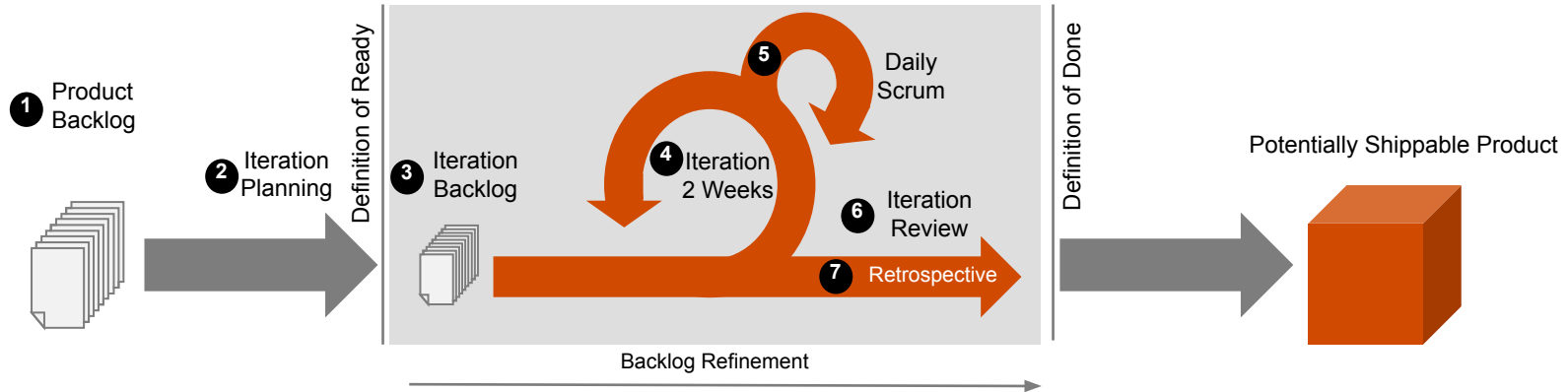
Scrum framework

1	**Product Backlog**	• Ordered list, prioritized by business value – single source of requirements for product
2	**Iteration Planning**	• The work to be performed in the iteration is planned at the iteration planning event
3	**Iteration Backlog**	• Set of product backlog items selected to be completed during the iteration
4	**Iteration**	• Time boxed iteration of 2 weeks during which a "done" product increment is created
5	**Daily Scrum**	• Daily, time boxed (15 min) event for the development team to synchronize activities
6	**Iteration Review**	• Event to review product increment and adapt product backlog if needed
7	**Retrospective**	• Opportunity for the team to inspect itself and create an actionable plan for improvement

Agile Basics - Roles by Level

Every role regardless of level has a critical impact to the Agile Release Trains (ARTs) and the value being delivered
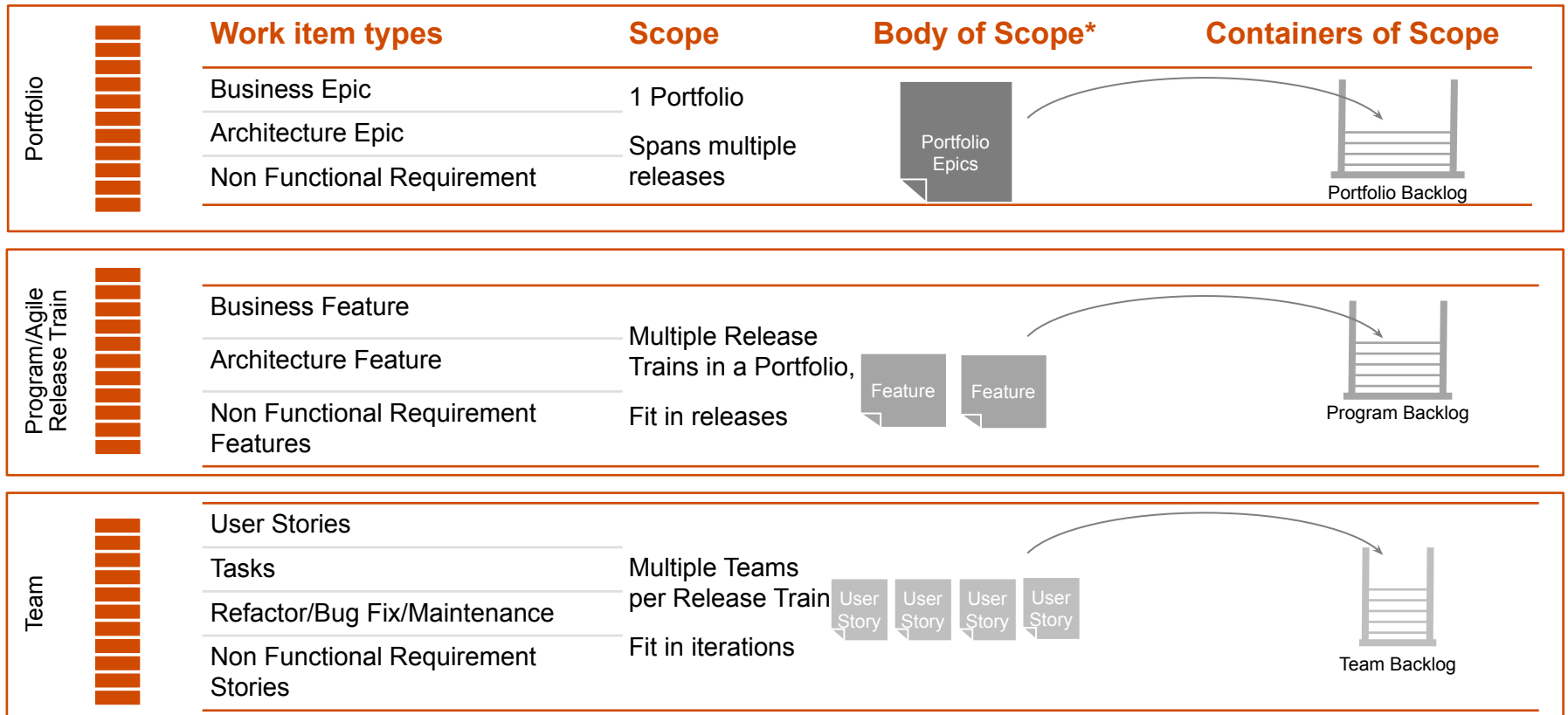
Program

Business Owner

Release Train Engineer

Operational Readiness Lead

Systems Architect

Business Architect

Product Manager

Team

Scrum Master

Product Owner

Team members

Shared Services

IT Security

Infrastructure

Agile Coach

HR
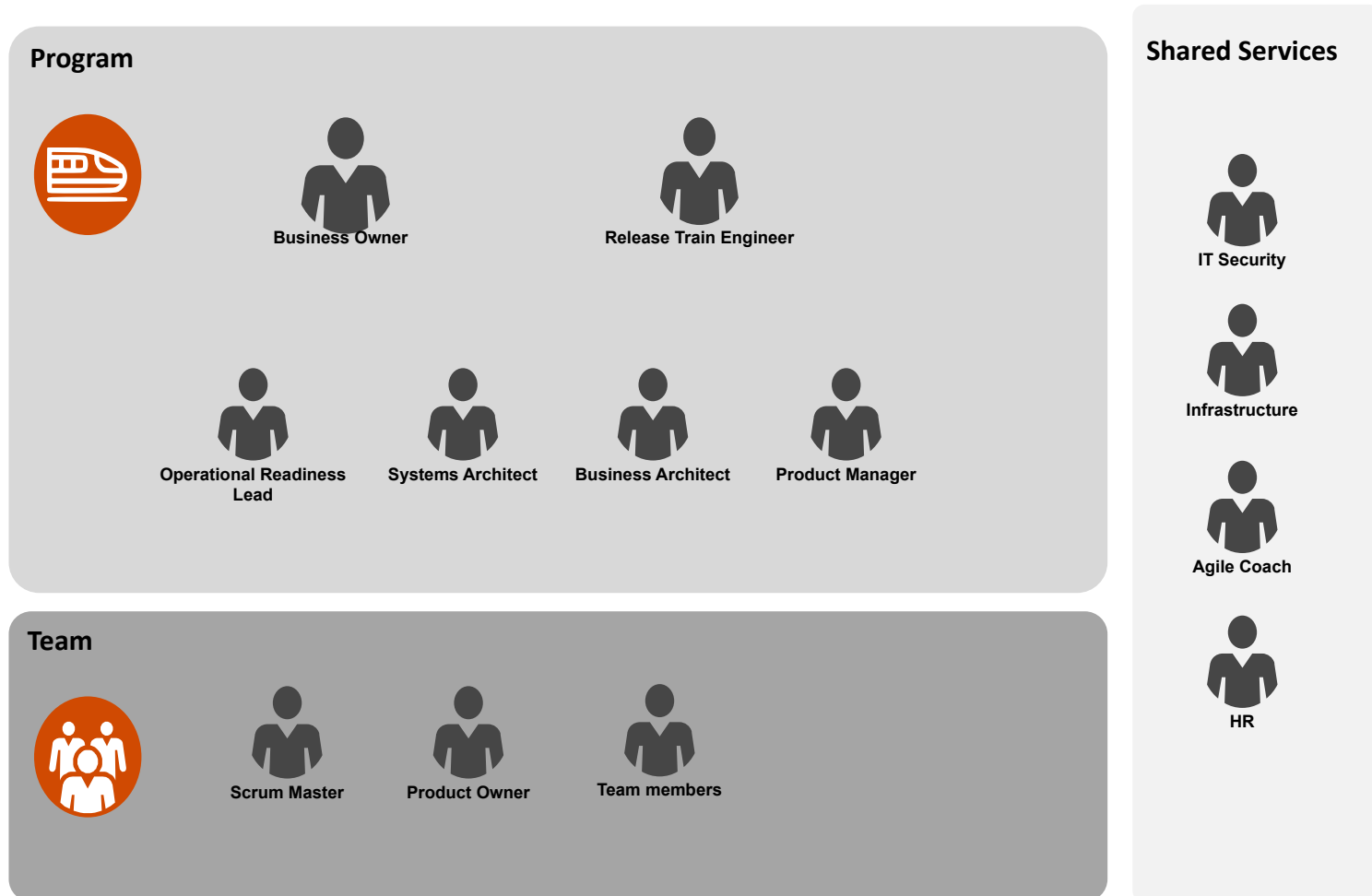
Agile Basics - Backlog Taxonomy

Under Agile, the backlog is used to include all ideas, features, and tasks related to a particular project.

The hierarchy of a backlog is breakdown into epics, features, and user stories. The user story is the smallest unit of scope that is fully defined from a user's requirements perspective, can be developed, tested, and released. Three types of backlogs support at each level:

- **Epics** at the portfolio level
- **Features** at the program level
- **User Stories** at the team level

	Work item types	Scope	Body of Scope*	Containers of Scope
Portfolio	Business Epic Architecture Epic Non Functional Requirement	1 Portfolio Spans multiple releases	Portfolio Epics	Portfolio Backlog
Program/Agile Release Train	Business Feature Architecture Feature Non Functional Requirement Features	Multiple Release Trains in a Portfolio, Fit in releases	Feature Feature	Program Backlog
Team	User Stories Tasks Refactor/Bug Fix/Maintenance Non Functional Requirement Stories	Multiple Teams per Release Train Fit in iterations	User Story User Story User Story User Story	Team Backlog

Agile Challenges in Industry

Interchangeability of Resources

- Agile assumes all resources within a team have the same set of skills
- It creates a challenge when certain areas move more quickly than others

External/Part Time Resources

- Agile will need to be adjusted when resources are not full time on the project

Segmenting work that adds value

- Not all pieces of work can demonstrate the same value on its own
- Stakeholders need to look at the Agile framework holistically

Rigorous Framework

- Too much focus on speed for minimum viable product ("MVP") delivery
- Compromises on potential growth

Thank you

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