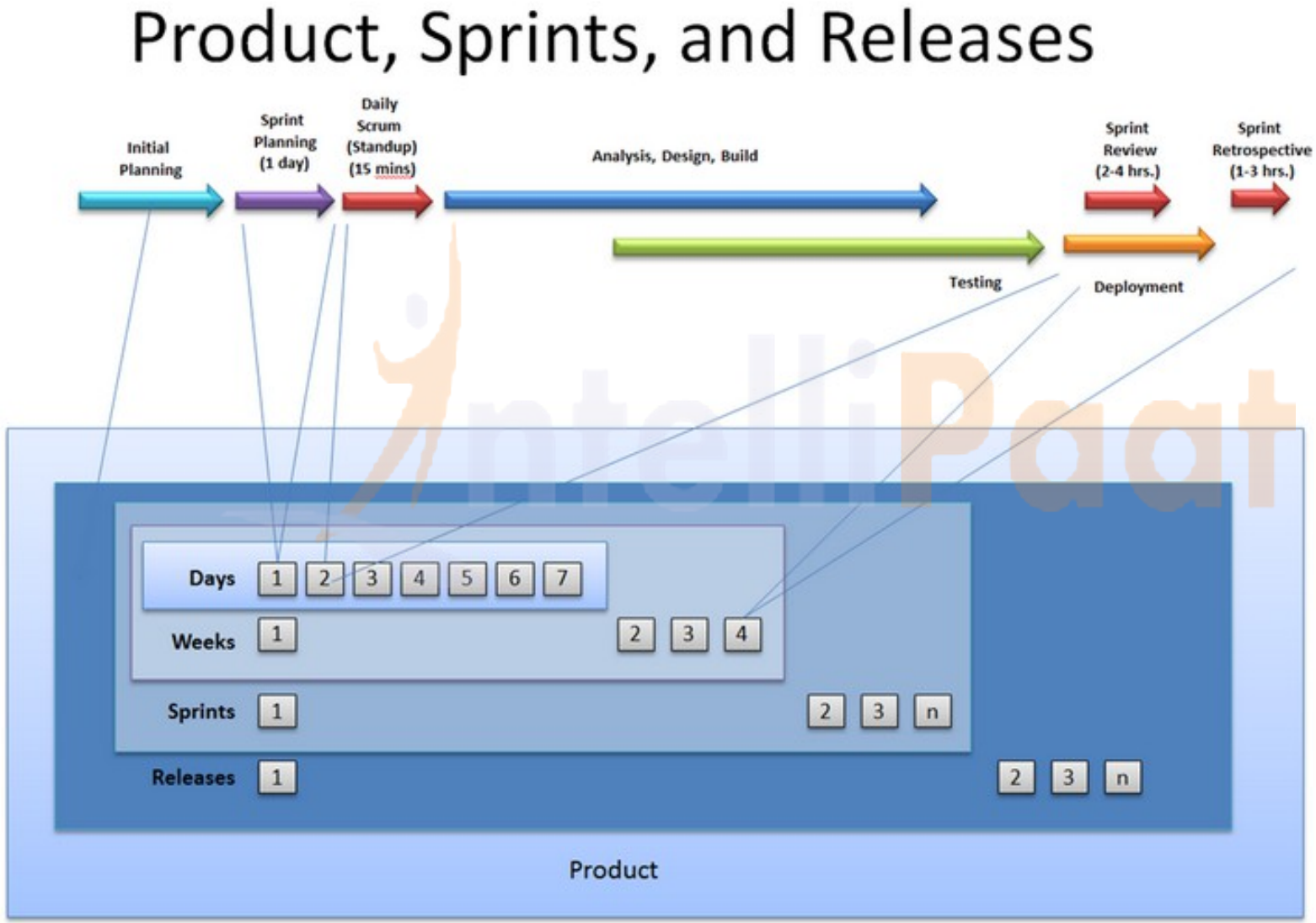
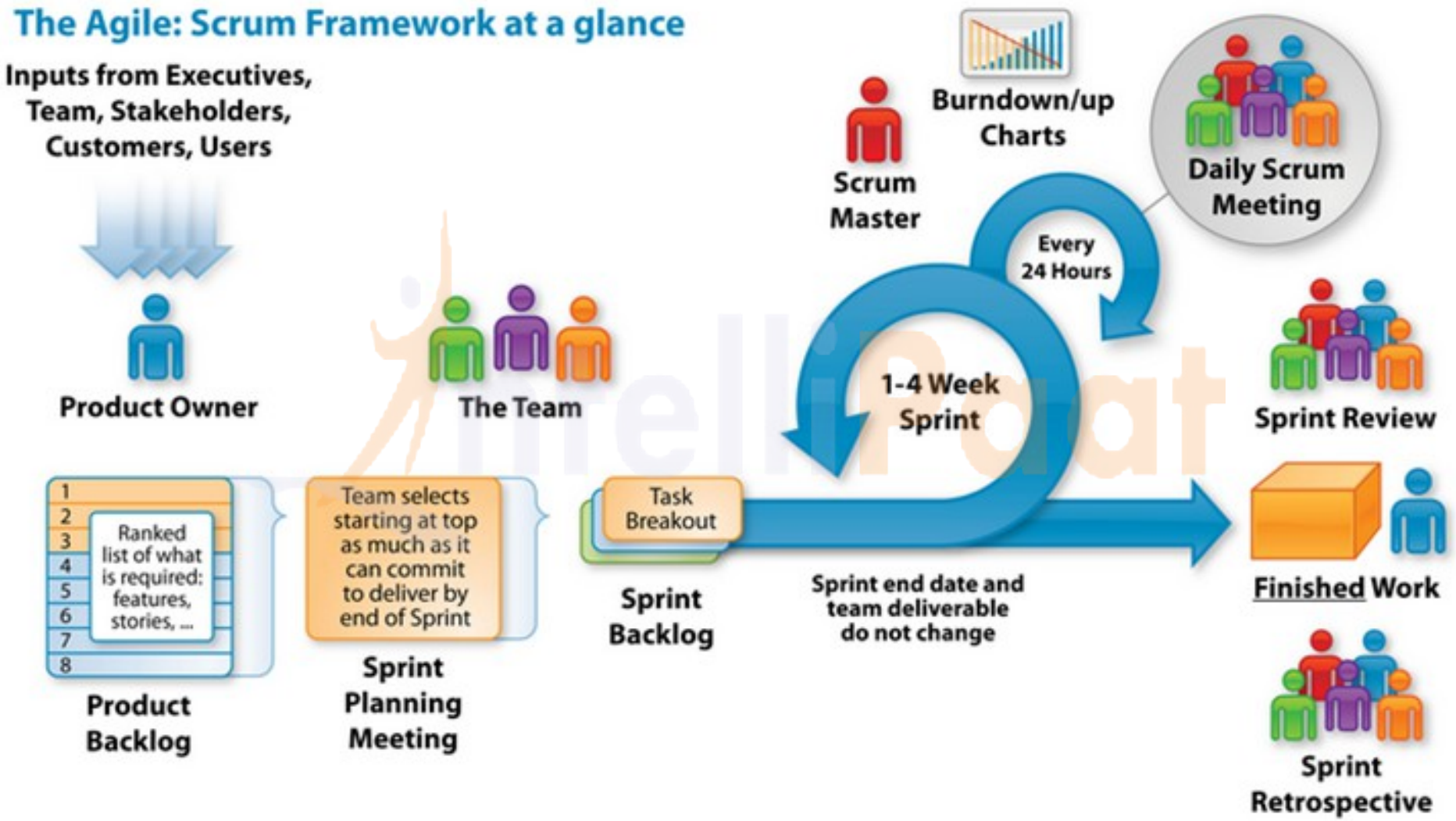
Inspect and Adept at various levels



SCRUM Framework



Sprint Review

Purpose

- PO Approval or Rejection for each committed feature, story, or bug fix
- PO feedback for completed work

Output

- The Product Owner must base his approval or rejection on the agreed-upon acceptance criteria for each commitment.
- The Team gives the demonstration, not the Scrum Master.
- The Team is held collectively accountable for failed commitments, not the Scrum Master

Rules

- The Product Owner must base his approval or rejection on the agreed-upon acceptance criteria for each commitment.
- The Team gives the demonstration, not the Scrum Master.
- The Team is held collectively accountable for failed commitments, not the Scrum Master

Sprint Retrospective

Purpose

- To reflect on what went well & what did not in the last sprint

Output

- List of steps to be taken for making the next sprint more enjoyable and productive

Rules

- No blame game or finger pointing
- Everybody must contribute enthusiastically for the continuous improvement
- Attended only by —pigs

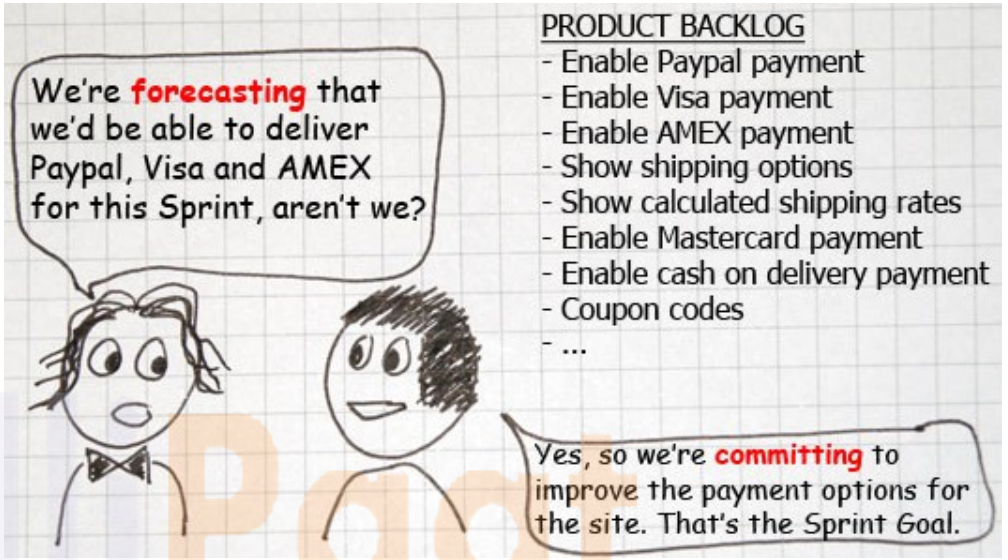
Different Definitions at Different Levels

Ultimately, the decision rests on the answer to the following three questions:

1. Can we do this activity for each feature? If not, then
2. Can we do this activity for each sprint? If not, then
1. We have to do this activity for our release!

Sprint Backlog

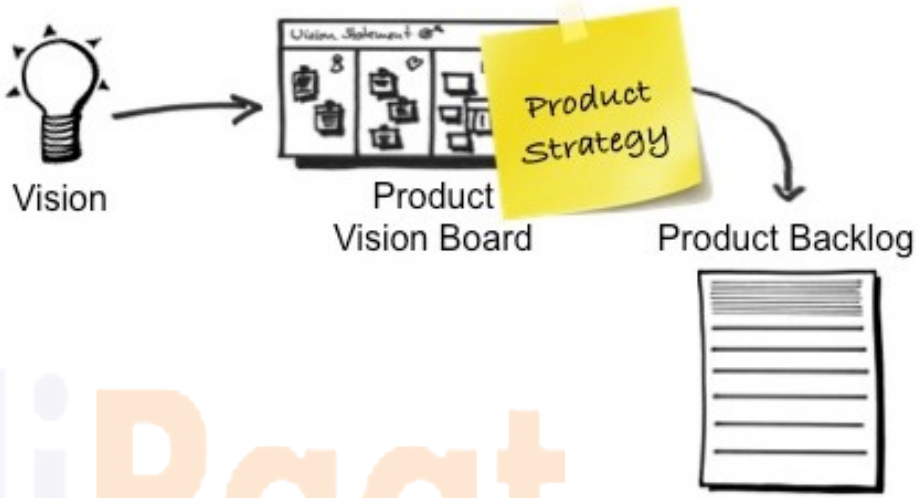
- Set of Product Backlog items selected for the Sprint
- A plan for delivering the product Increment and realizing the **Sprint Goal**.
- A forecast by the Development Team about what functionality will be in the next Increment



- The work needed to deliver above mentioned functionality into a “Done” Increment.
- The Development Team modifies the Sprint Backlog throughout the Sprint

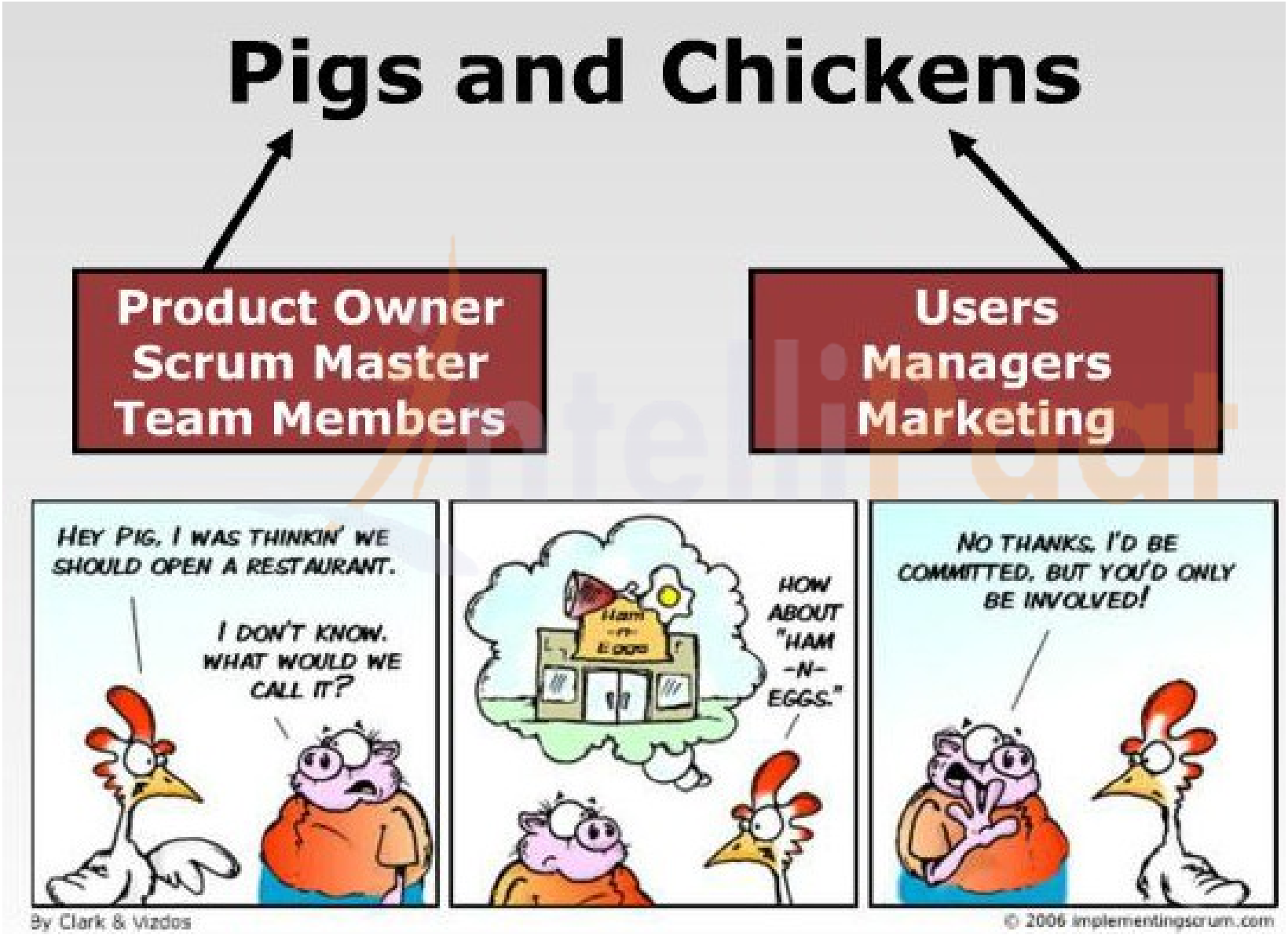
Product Vision

The product vision paints a picture of the future that draws people in for your Product. It describes who the customers are, what customers need, and how these needs will be met. It captures the essence of the product – the critical information we must know to develop and launch a winning product. Developing an effective product vision entails carefully answering the following questions:



- Who is going to buy the product? Who is the target customer?
- Which customer needs will the product address?
- Which product attributes are critical to satisfy the needs selected, and therefore for the success of the product?
- How does the product compare against existing products, both from competitors and the same company? What are the product's unique selling points?
- What is the target timeframe and budget to develop and launch the product?
- PO is responsible for creating Product Vision.

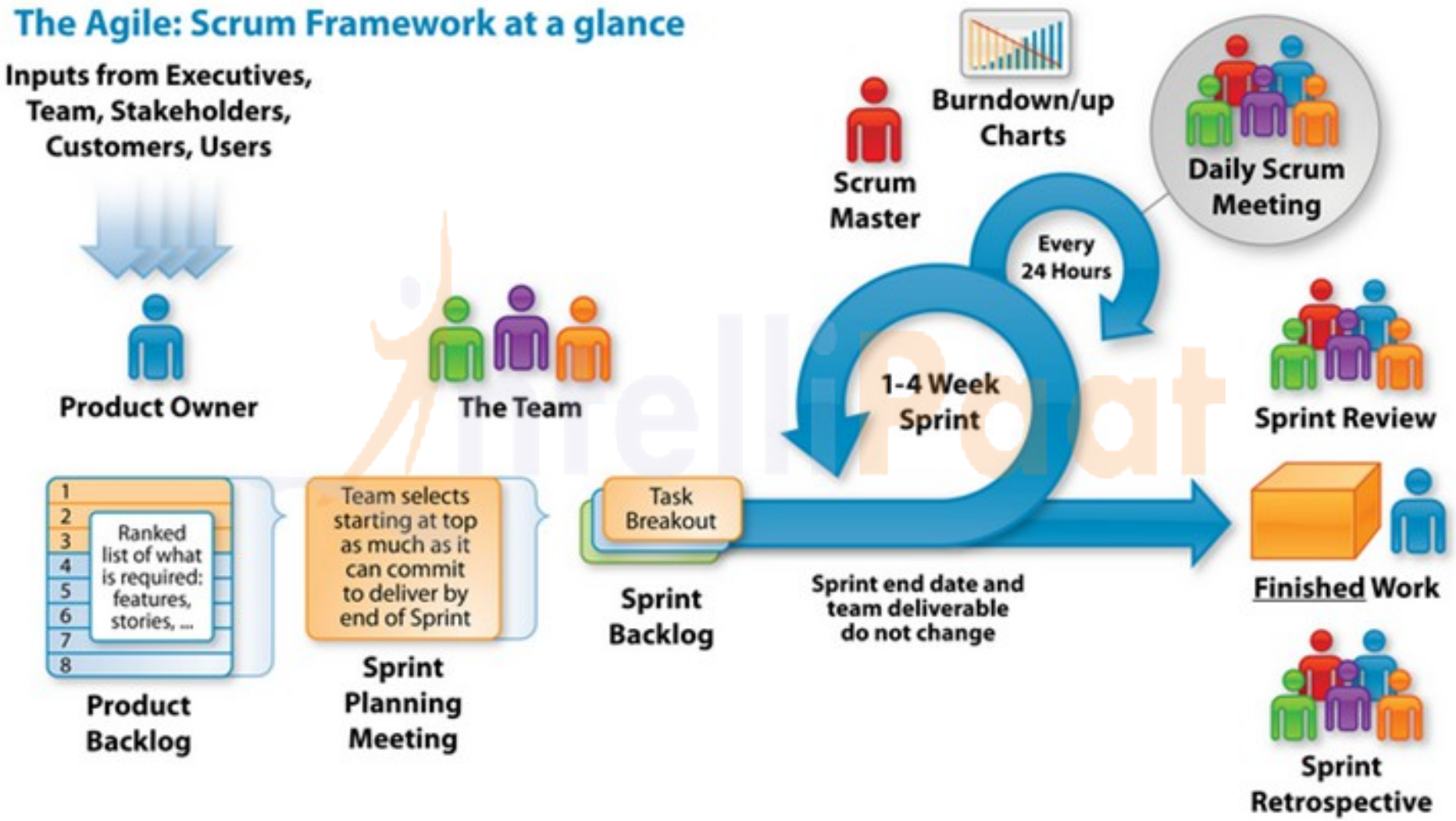
Pigs and Chickens



Product Owner

- Define the features of the product
- Decide on release date and content
- Be responsible for the profitability of the product (ROI)
- Prioritize features according to market value
- Adjust features and priority every iteration, as needed
- Accept or reject work results.

SCRUM Framework



SCRUM: An empirical process

Scrum is based on **Empiricism or the Empirical process control theory**. Empiricism asserts that knowledge comes from experience *and* making decisions based on what is known. Scrum employs an iterative, incremental approach to optimize predictability and control risk.

3 Pillars of Empirical Process Control:

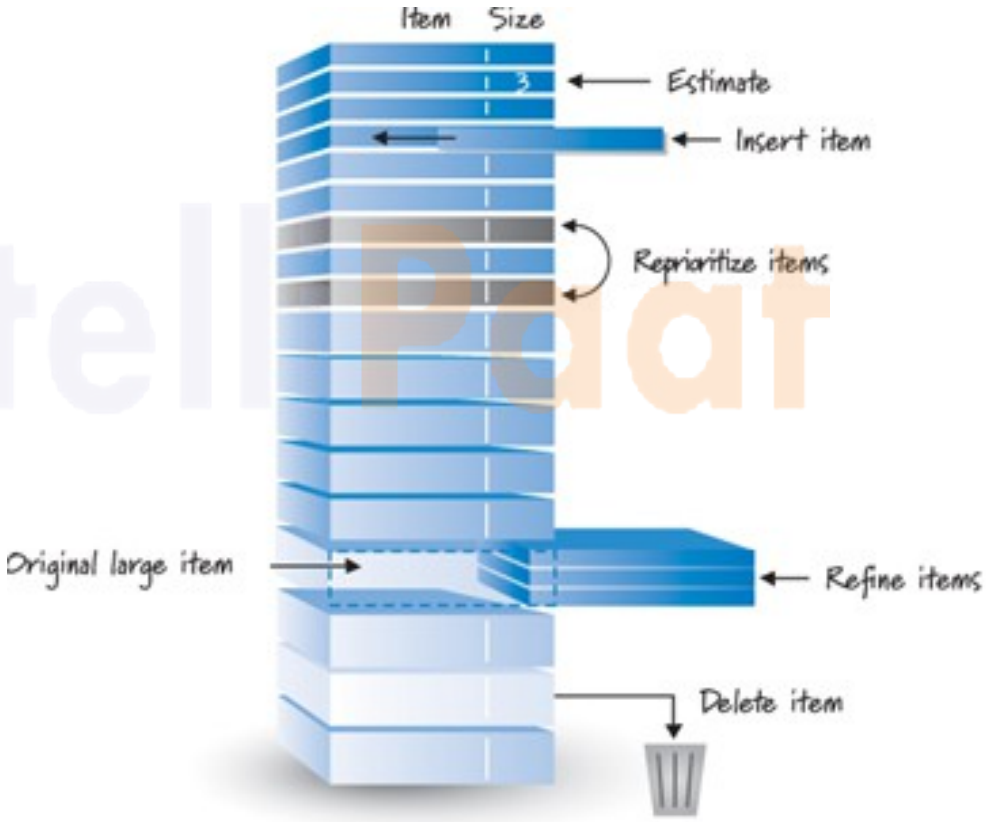
- ✓ Transparency -outcome must be visible to those controlling
- ✓ Inspection -various aspects must be inspected frequently
- ✓ Adaptation -must be adjusted if one or more aspects of the process are outside acceptable limits

Product Backlog Items (PBIs) Characteristics

Each of PBIs should follow I.N.V.E.S.T criteria:

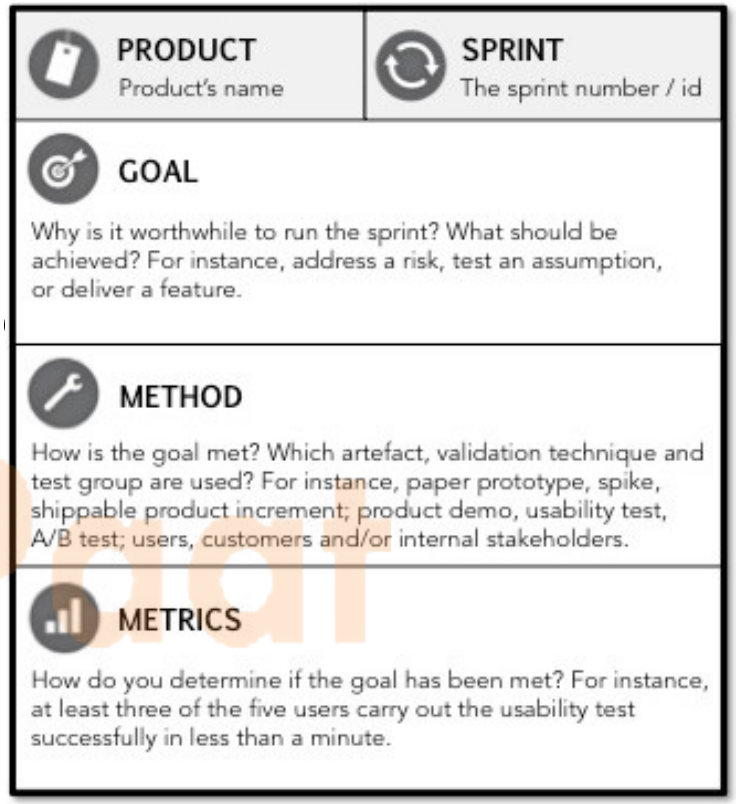
- Independent
- Negotiable
- Valuable
- Estimable
- Small
- Testable

** Team does collaborative grooming



Sprint Goal

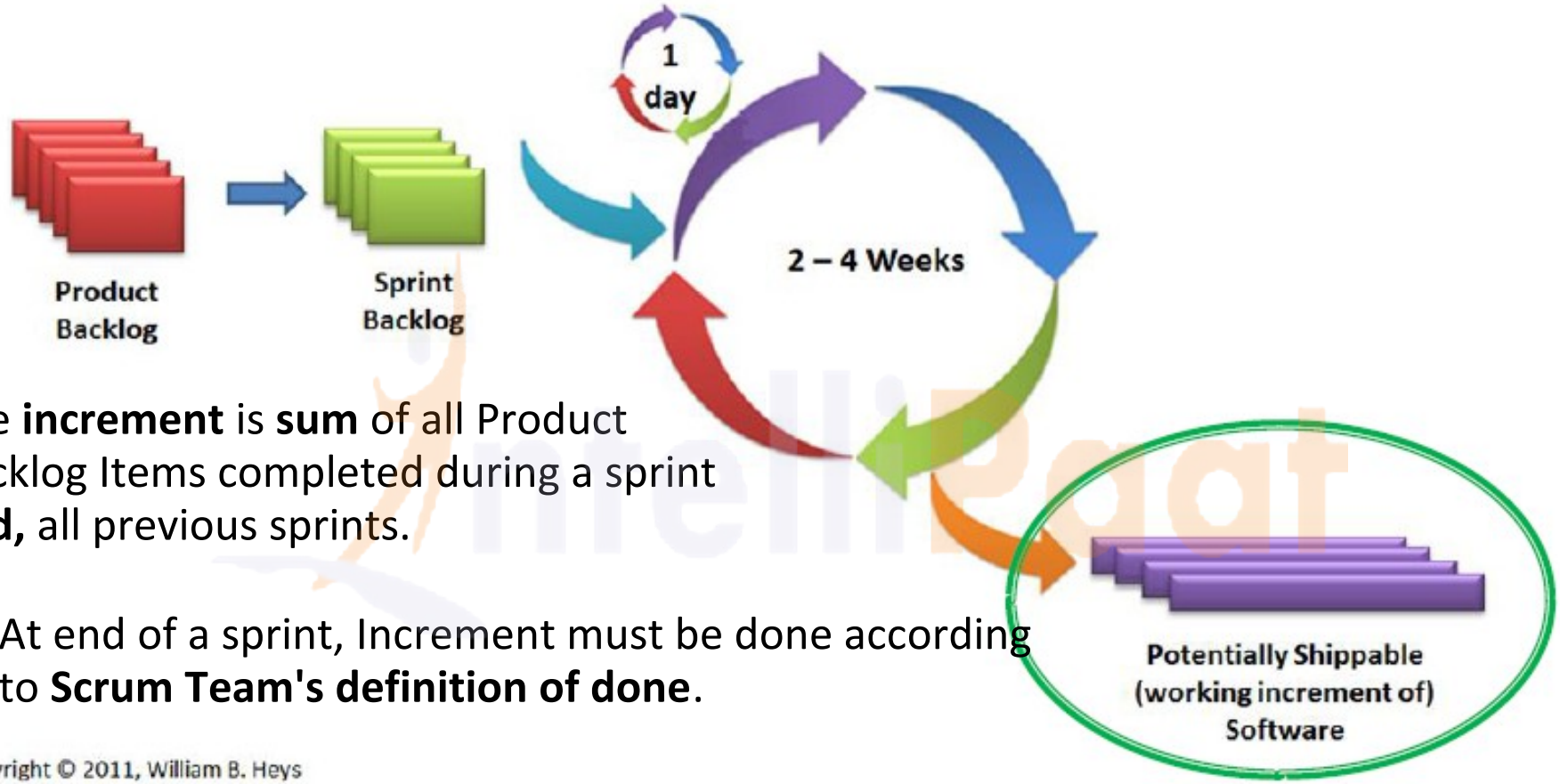
- The Sprint Goal is a ‘short statement’ of WHAT WORK will be FOCUSED on during the Sprint.
- It contains set of selected Product Backlog items which deliver one coherent function.
- The Sprint Goal is that coherence which causes th Development Team to work together.
- Development Team’s, and not individual’s, focus stays on Sprint Goal.



- Sprint Goal gives Development team that flexibility as per which they change Sprint backlog and tasks.

NOTE: If the work turns out to be different than the Development Team expected, they collaborate with the Product Owner to negotiate the scope of Sprint Backlog within the Sprint.

Increment



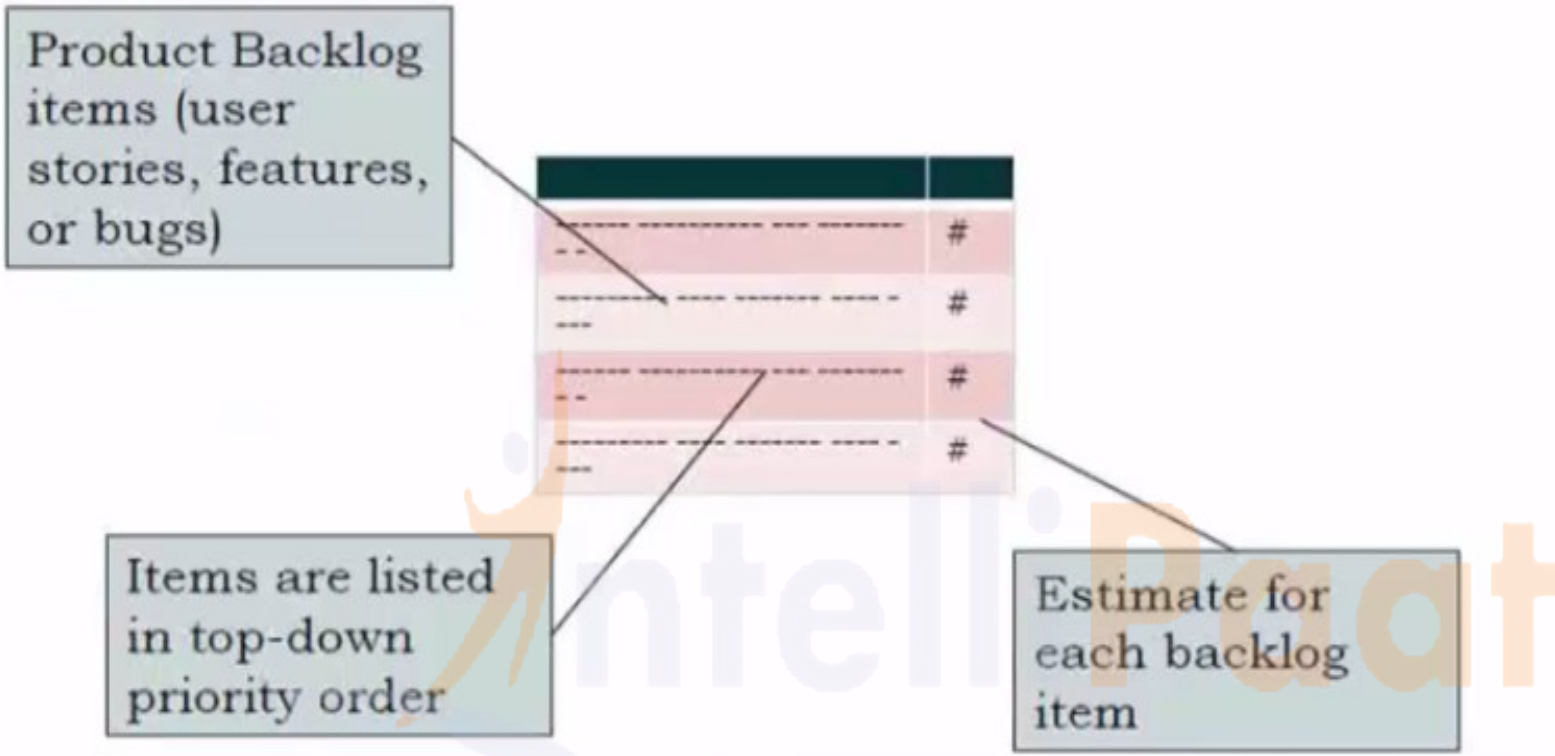
- The **increment** is **sum** of all Product Backlog Items completed during a sprint **and,** all previous sprints.
  - At end of a sprint, Increment must be done according to **Scrum Team's definition of done**.

  - The increment must be in **usable condition** regardless of whether the Product Owner decides to actually release it.

SCRUM Development Team

- Size: 6 ± 3
- Cross-functional
  - QA, Tester, Programmer, UI Designers, etc.
- Members should be full-time
  - May be exceptions (e.g., System Admin, etc.)
- Teams are self-organizing
  - What to do if a team self-organizes someone off the team??
  - Ideally, no titles but rarely a possibility
- Membership can change only between sprints

Product Backlog



Description	Priority	Estimation
Feature F	1	4 Story Pts.
Feature A	5	5 Story Pts.
Feature C	4	3 Story Pts.
Feature B	2	5 Story Pts.

Daily Standup (Daily SCRUM)

Goal

- Enable to team to share progress with each other
- Make visible blocks (impediments) daily for whole team to see

Everyone stands in a circle and reports 3 things

- What did I do since the last Daily Scrum Meeting?
- What will I try to do by the next Daily Scrum meeting?
- What are my blockades?

15 minutes maximum

No discussion or debate: listening only

- After meeting ends, discuss and problem-solving can start

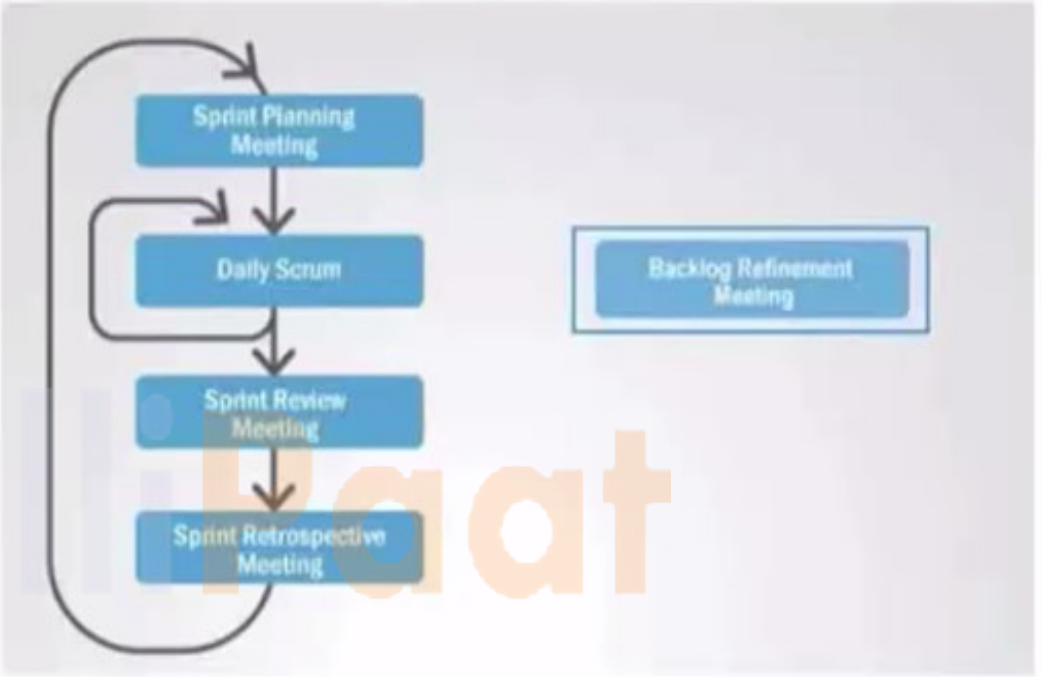
Team and Scrum Master only

- Team can invite PO or others if they wish, but it's up to the team

After the meeting, Scrum Master leads the removal of blocks

Backlog Refinement Meeting

- Backlog refinement falls outside the officially named meetings.
- To get a better understanding of upcoming work
- Split work to form smaller PBIs
- Done a couple workdays before the next Sprint Planning Meeting
- PO, along with team re-priorities PBIs
- No commitments are made in the Backlog Refinement Meeting
- Commitments are made only in Sprint planning meeting



Release Planning

"When will you deliver the product?"

“We can’t answer this question, we are Agile!"

“But you must have some idea. At least give me a high-level plan. When should I expect the release?"

“Well, you know, In the future. That’s the best I can guess at this point"

Release Planning

- A high-level roadmap that forecasts —when we will do what.
- Owned by PO
- Only PO can prioritize Backlog
- Dependencies are offered by the team, must be considered
- Velocity (average output per sprint) is required to know how much to forecast for future sprints
- It should be as realistic as possible –Explain delivery dates as best case, worst case, most likely scenarios
- It should be Fresh –Updated after each sprint

Release Planning Samples

Sample Release Plan (features grouped by sprints; notice few features span multiple sprints)

Major Feature	Sprint 1	Sprint 2	Sprint 3	Sprint 4	Sprint 5	Sprint 6
	<Time line>	<Time line>	<Time line>	<Time line>	<Time line>	<Time line>
Authenti-cation	Login Screen					
	SSL Encryption					
Master	Product Master		Address Master			
	Rate Master					
Order Entry		Product Selection				
		Product Preview	Product Comparison		Order Track	
				Product Review		
Checkout		Checkout		Shipping Choices	Coupons	
				PayPal Integration		

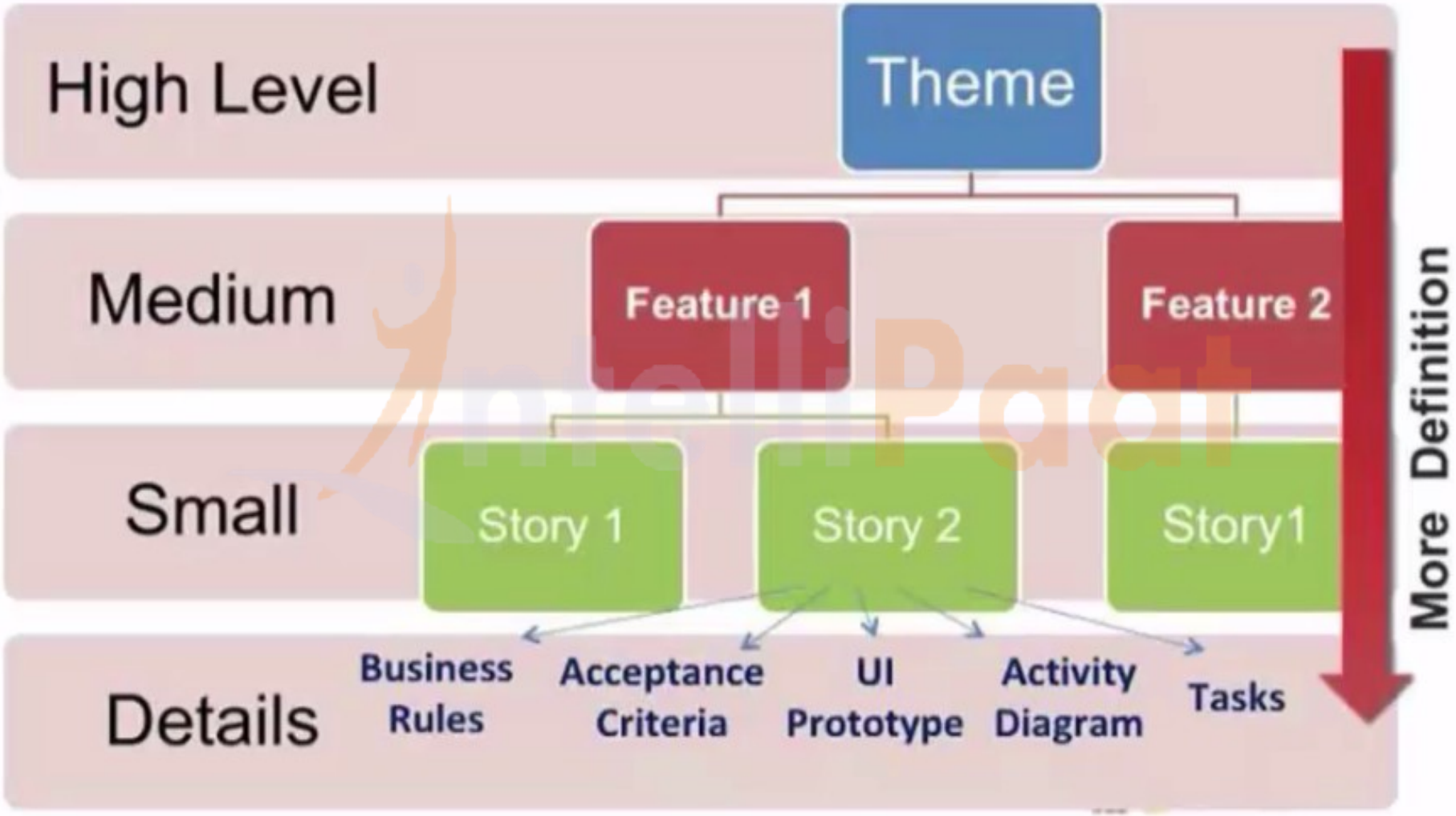
Sample Release Plan (with ordered features)

Major Feature	Sprint 1	Sprint 2	Sprint 3	Sprint 4	Sprint 5	Sprint 6
	<Time line>	<Time line>	<Time line>	<Time line>	<Time line>	<Time line>
Authenti-cation	1. Login Screen					
	4. SSL Encryption					
Master	2. Product Master		9. Address Master			
	3. Rate Master					
Order Entry		5. Product Selection				
		7. Product Preview	8. Product Comparison			14. Order Track
				12. Product Review		
Checkout		6. Checkout		10. Shipping Choices	13. Coupons	
				11. PayPal Integration		

Acceptance criteria

- Set of statements, each with a clear pass/fail result, that specify both functional and non-functional requirements.
- These criteria define the boundaries and parameters of a User Story.
- Express what is acceptable and what is not acceptable
- They must be Actionable

Requirements Management in Scrum



Sprint Planning

Definition of Done (DoD)

When a Product Backlog item or an Increment is described as "Done", everyone must understand what "Done" means

Purpose:

- **Enable time estimations.** If you don't know what people mean by *done* asking them for an estimate is pointless.
- **Avoid misunderstandings.** When having conversations about progress, work being done, and so on, shared definitions help avoid misunderstandings and disagreements.
- **Assure quality.** The DoD ensures quality and helps avoid technical debt by including test cases, refactoring, code documentation, and so on.

Properties:

- The DoD is dynamic. Evolve with team's learning. Shared with all to ensure transparency.
- If not entirely, a lowest common denominator of the DoD can be the same across teams, in a multi level Scrum implementation.
- The level of sharing also depends on at what level the DoD is used.