# SNS COLLEGE OF TECHNOLOGY

**(An Autonomous Institution)**

Re-accredited by NAAC with A+ grade, Accredited by NBA(CSE, IT, ECE, EEE & Mechanical)

Approvedy by AICTE, New Delhi, Recognized by UGC, Affiliated to Anna University, Chennai

## Department of MCA

Topic: **NEED OF AGILE SOFTWARE DEVELOPMENT**

**Course**

**23CAE718**
**AGILE SOFTWARE DEVELOPMENT**

**Unit I**

**NEED OF AGILE SOFTWARE DEVELOPMENT**

**Elective**

**II Semester / I MCA**

# Need of **AGILE SOFTWARE DEVELOPMENT**

## Need of Agile Software Development

1. **Flexibility and Adaptability**



1. **Customer-Centric**


# Need of **AGILE SOFTWARE DEVELOPMENT**

### 3. Faster Time-to-Market



### 4. Improved Quality



# Need of **AGILE SOFTWARE DEVELOPMENT**

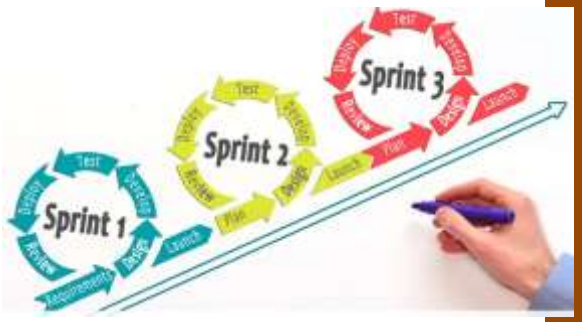
## 5. Risk Management


## 5. Enhanced Team Collaboration

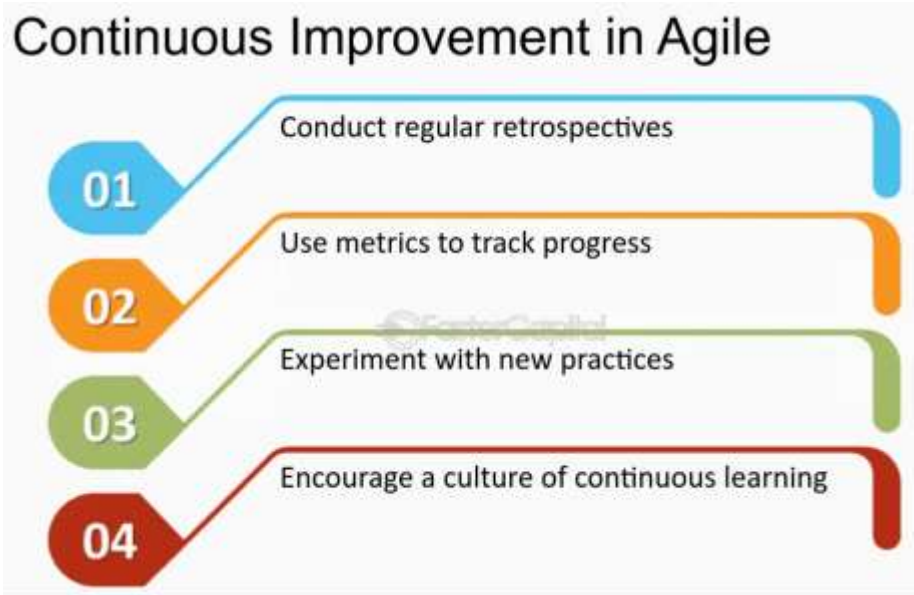
# Need of **AGILE SOFTWARE DEVELOPMENT**

### 7. Transparency and Visibility






### 8. Continuous Improvement

# Need of **AGILE SOFTWARE DEVELOPMENT**

## 9. Focus on Value Delivery



## 10. Improved Stakeholder Engagement

# Need of **AGILE SOFTWARE DEVELOPMENT**

## Food Order Delivery APP

# Need of **AGILE SOFTWARE DEVELOPMENT**

**Food Order Delivery APP**

1. User registration & login
2. Browse restaurants & menus
3. Order food and track delivery
4. Payment gateway integration
5. Ratings and reviews

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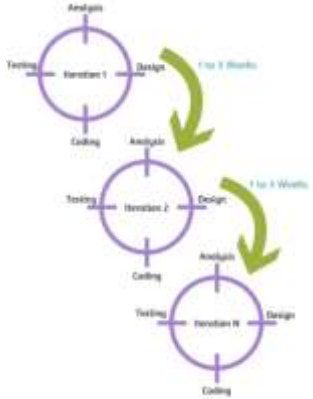
# Need of **AGILE SOFTWARE DEVELOPMENT**

**Need of Agile Software Development**

✓Agile is an iterative approach of software development methodology

short iterations of 1 to 4 weeks.



✓The software is distributed with fastest and fewer changes

✓Customer satisfaction by rapid, continuous development

software.

# Need of **AGILE SOFTWARE DEVELOPMENT**

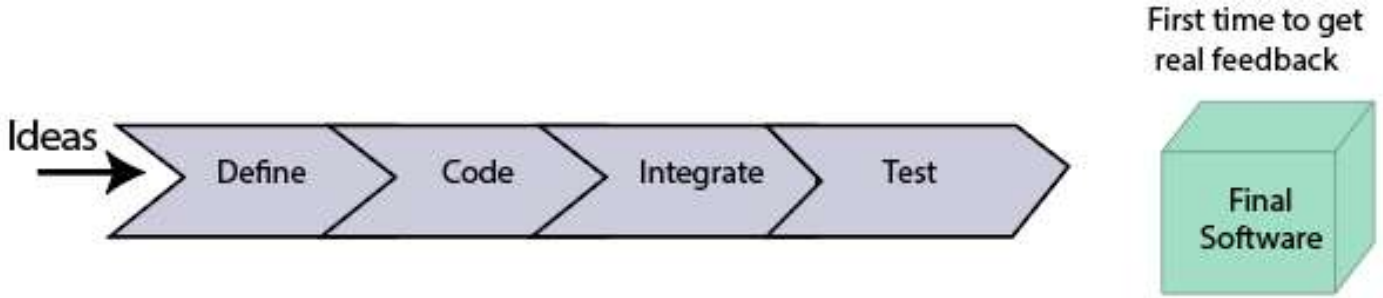
## Agile

An agile methodology is an iterative approach to software development. Each iteration of agile methodology takes a short time interval of 1 to 4 weeks. The agile development process is aligned to deliver the changing business requirement. It distributes the software with faster and fewer changes.

The single-phase software development takes 6 to 18 months. In single-phase development, all the requirement gathering and risks management factors are predicted initially.

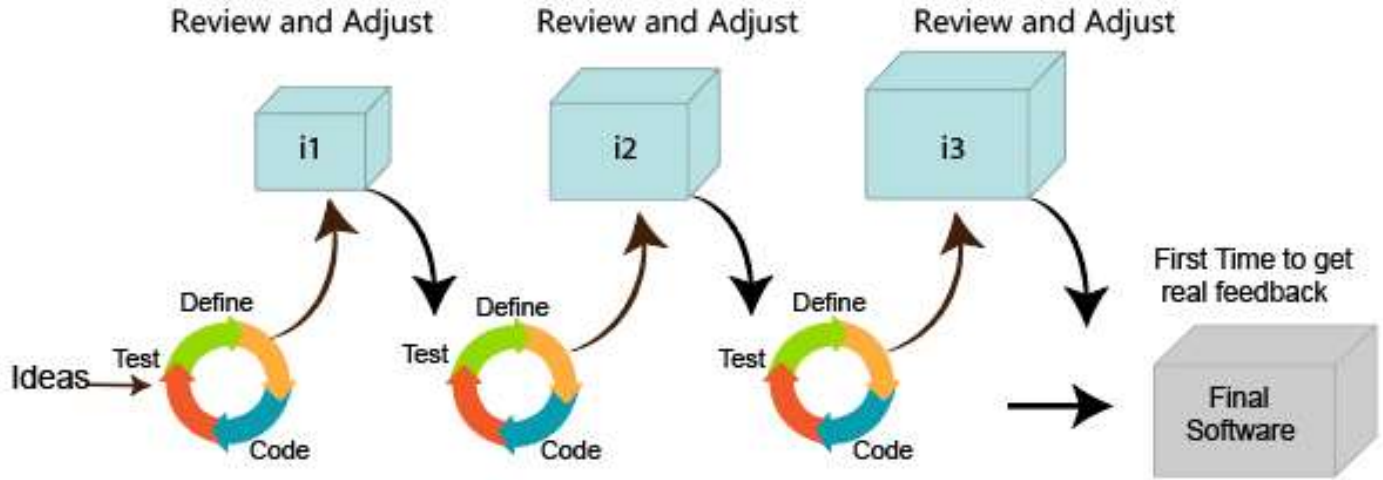
The agile software development process frequently takes the feedback of workable product.

# Need of **AGILE SOFTWARE DEVELOPMENT**




Traditional Method

**Agile**




Agile Method

# Need of **AGILE SOFTWARE DEVELOPMENT**

**Benefits of the Agile Model**

✓ AGILE, the delivery of the software is persistent.

✓After every Sprint, working feature(s) is/are delivered to the customer. This increases the level of satisfaction in them.

✓Customers can have a look at the developed features and check if they meet their expectations.

✓If the customers have any feedback or they want any changes in the features, then it can be accommodated in the current or maybe the next release of the product.

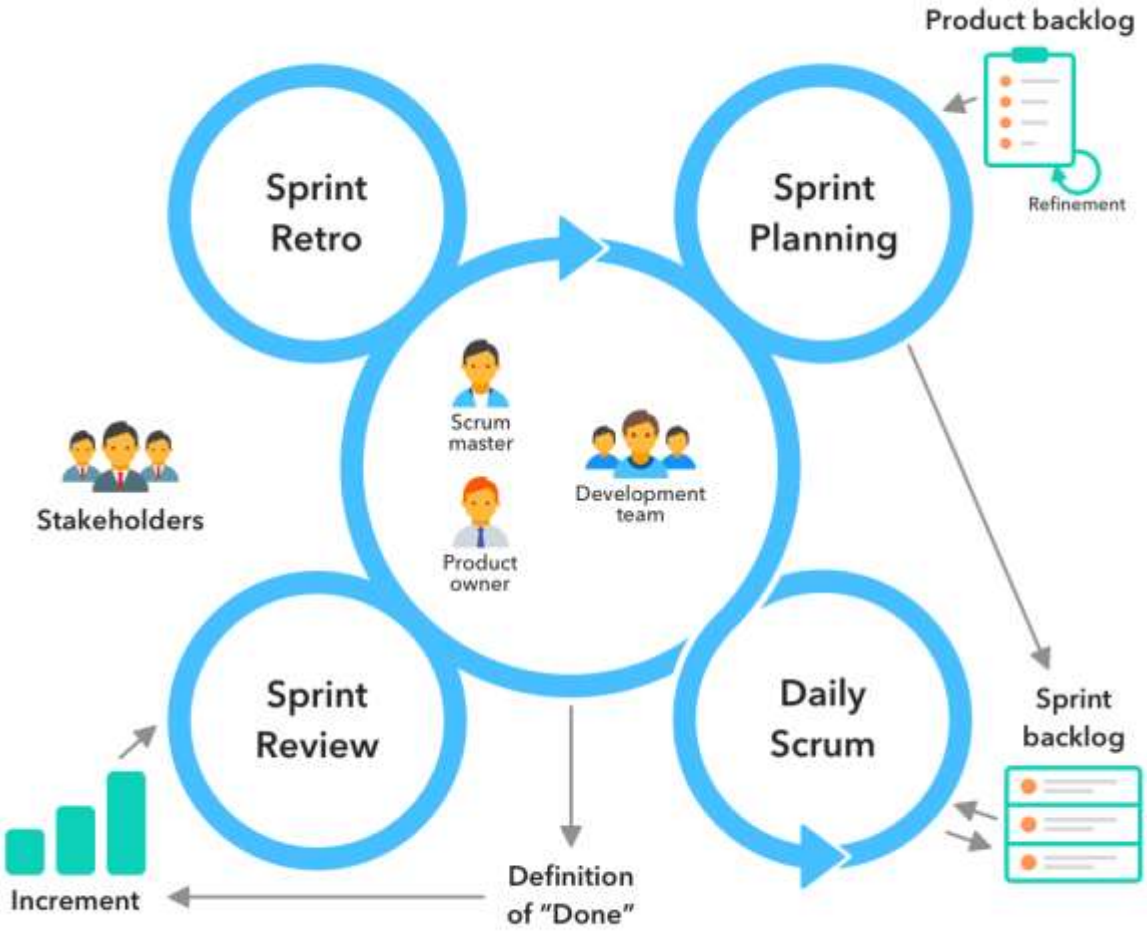
✓Changes can be made even in the later stages of the development of the product.

✓In AGILE, the business people and the developers of the product interact daily.

✓A significant amount of attention is paid to the design of the product.

# Need of **AGILE SOFTWARE DEVELOPMENT**

**What is Agile?**



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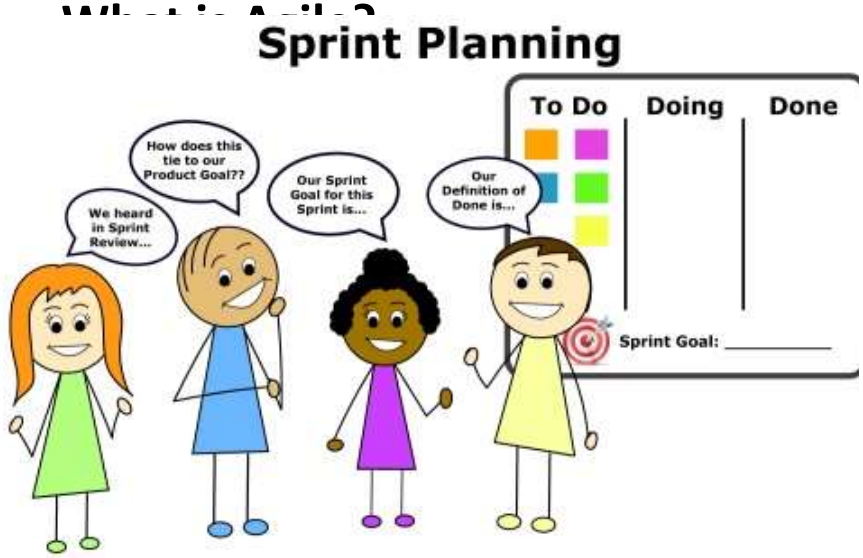
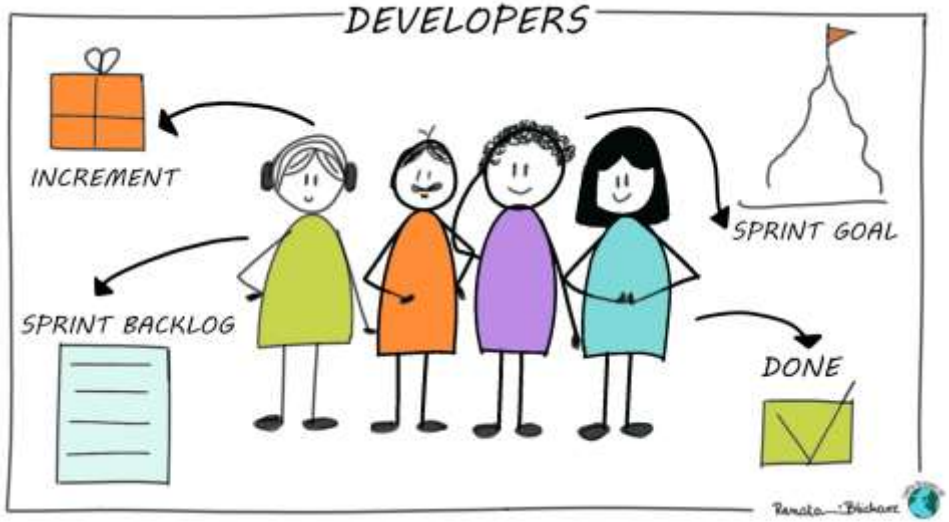
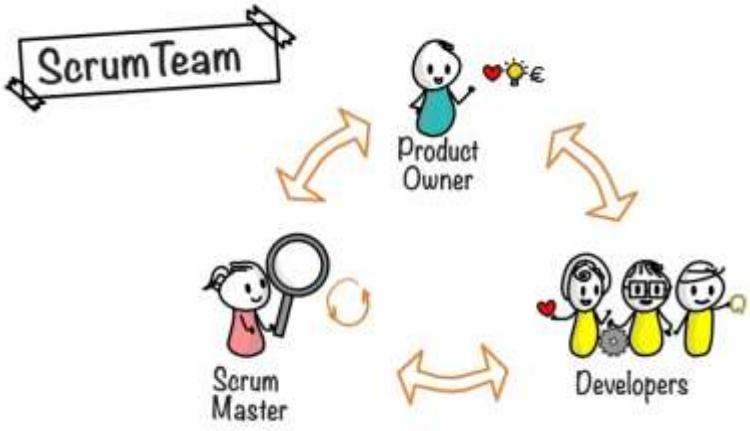
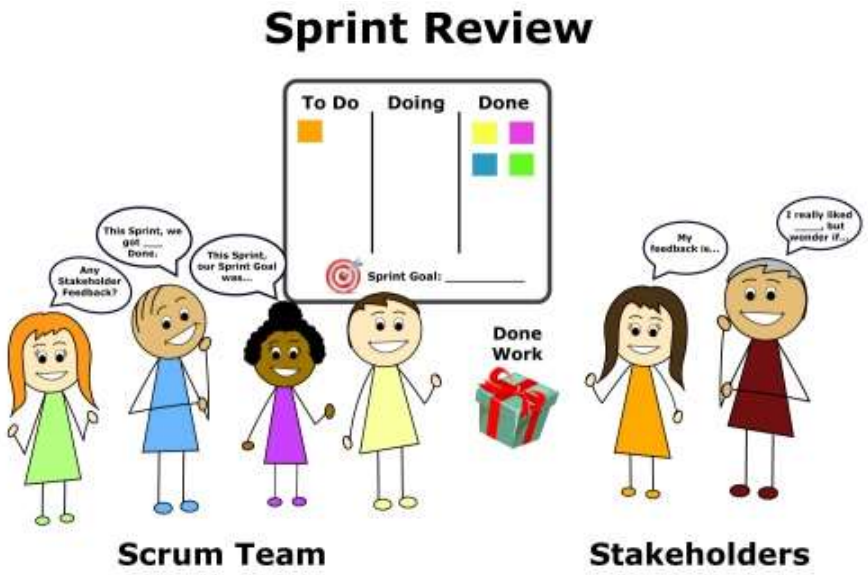


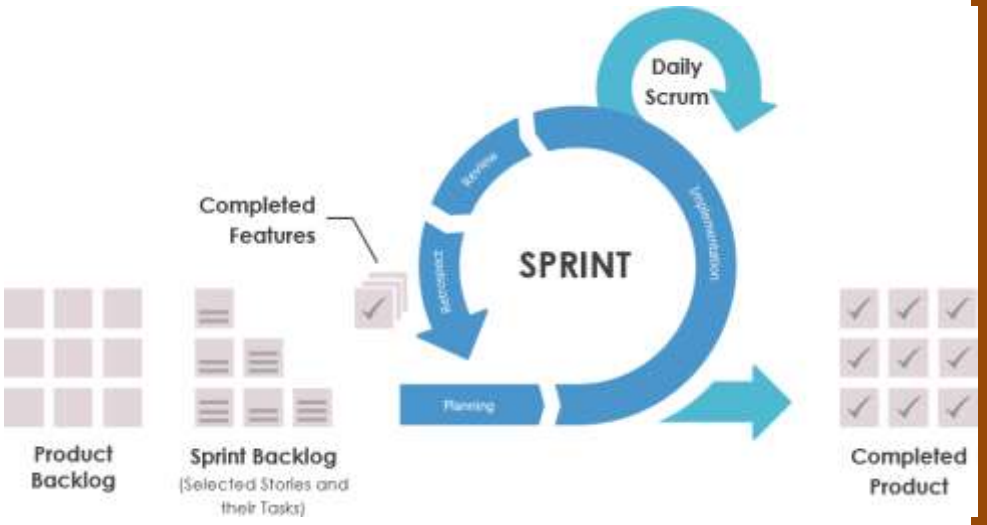



# Need of **AGILE SOFTWARE DEVELOPMENT**

## What is Agile?

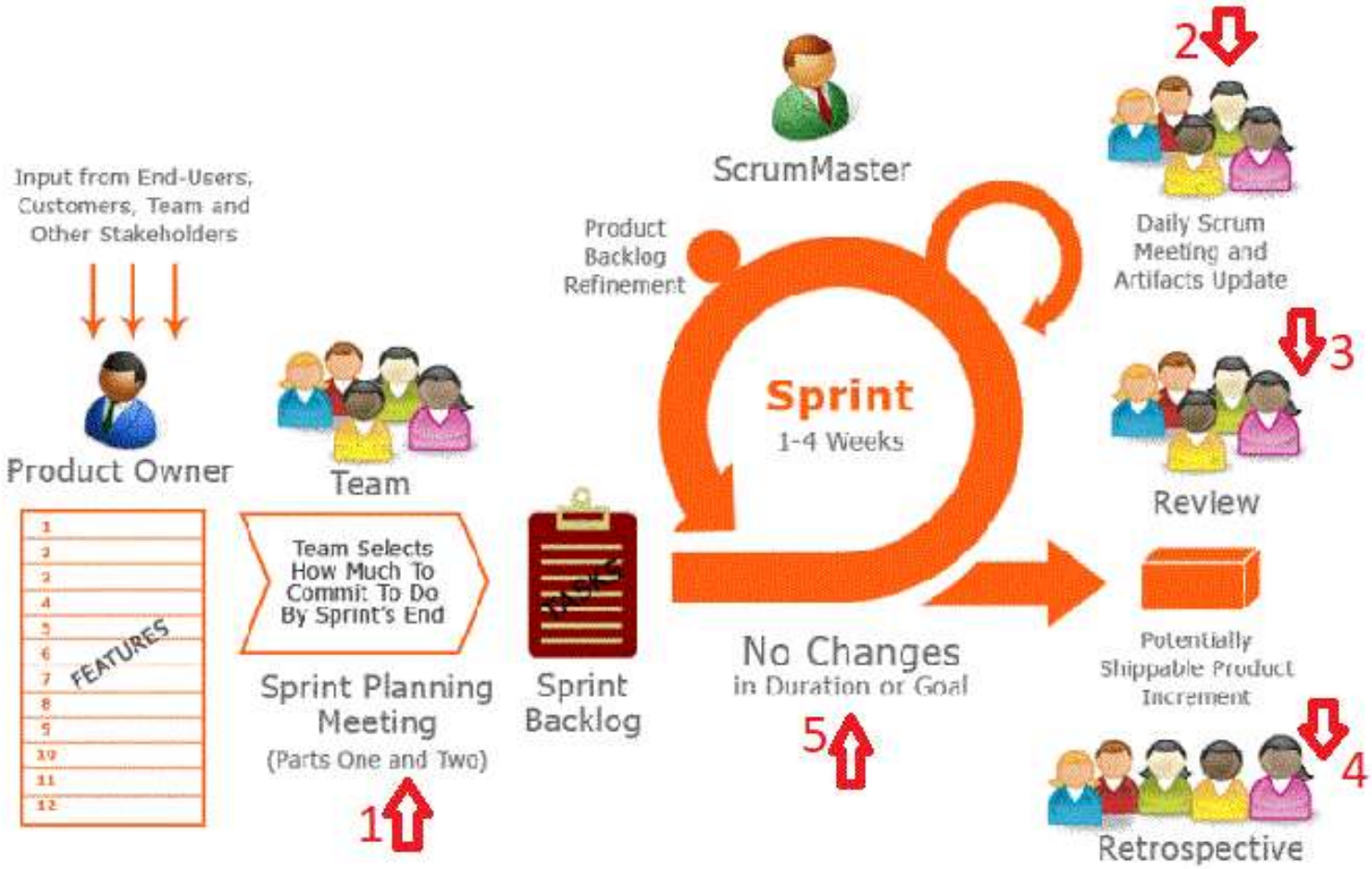




# Need of **AGILE SOFTWARE DEVELOPMENT**

**Sprint**

# Need of **AGILE SOFTWARE DEVELOPMENT**

**Sprint**



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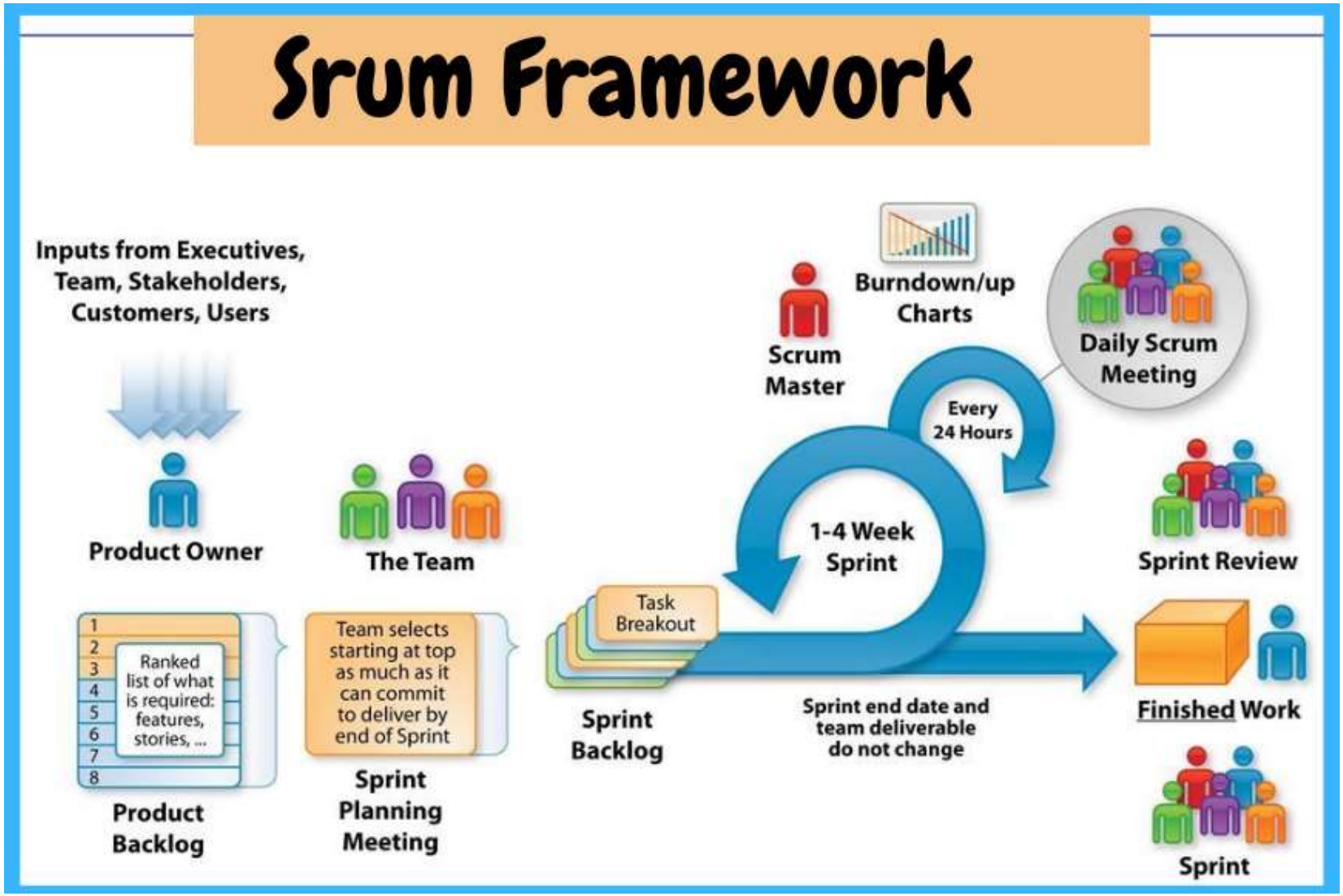


# Need of **AGILE SOFTWARE DEVELOPMENT**

**What's the scrum model?**

**3 pillars and 5 values**

The scrum model remind 3 pillars of the framework:

- transparency
- inspection
- Adaptation

And the teams that do a project in scrum have to have 5 very important values:

- commitment
- courage
- focus
- openness
- respect

# Need of **AGILE SOFTWARE DEVELOPMENT**

**3 key roles**

The scrum model purpose 3 very different key roles. There are:

**scrum master**: facilitator of the team who try to offer the best environment for the developer

**product owner**: the functional responsible who write and prioritize the backlog

**development team**: the technical responsible who develop the application with the best practices to deliver a quality application

# Need of **AGILE SOFTWARE DEVELOPMENT**

**sprint planning**: the product owner give the objectives to the team and the items (requests) that he wants the team develop if it have the capacity to do.

**daily sprint**: the development team align with the sprint progress.

**product backlog refinement**: the product owner purpose the items of the next sprints to refine them with the team

**sprint review**: the team see together the finished items and check the product progress. it can invite customer and stakeholder to do a demo and take feedbacks.

**sprint retrospective**: the team will work together to find the axis of improvement.

# Need of **AGILE SOFTWARE DEVELOPMENT**

**Backlog concept (scrum model)**

The backlog is a set of items that represent a set of needs collected to create the desired product. In scrum, we talk about 3 kind of backlog:

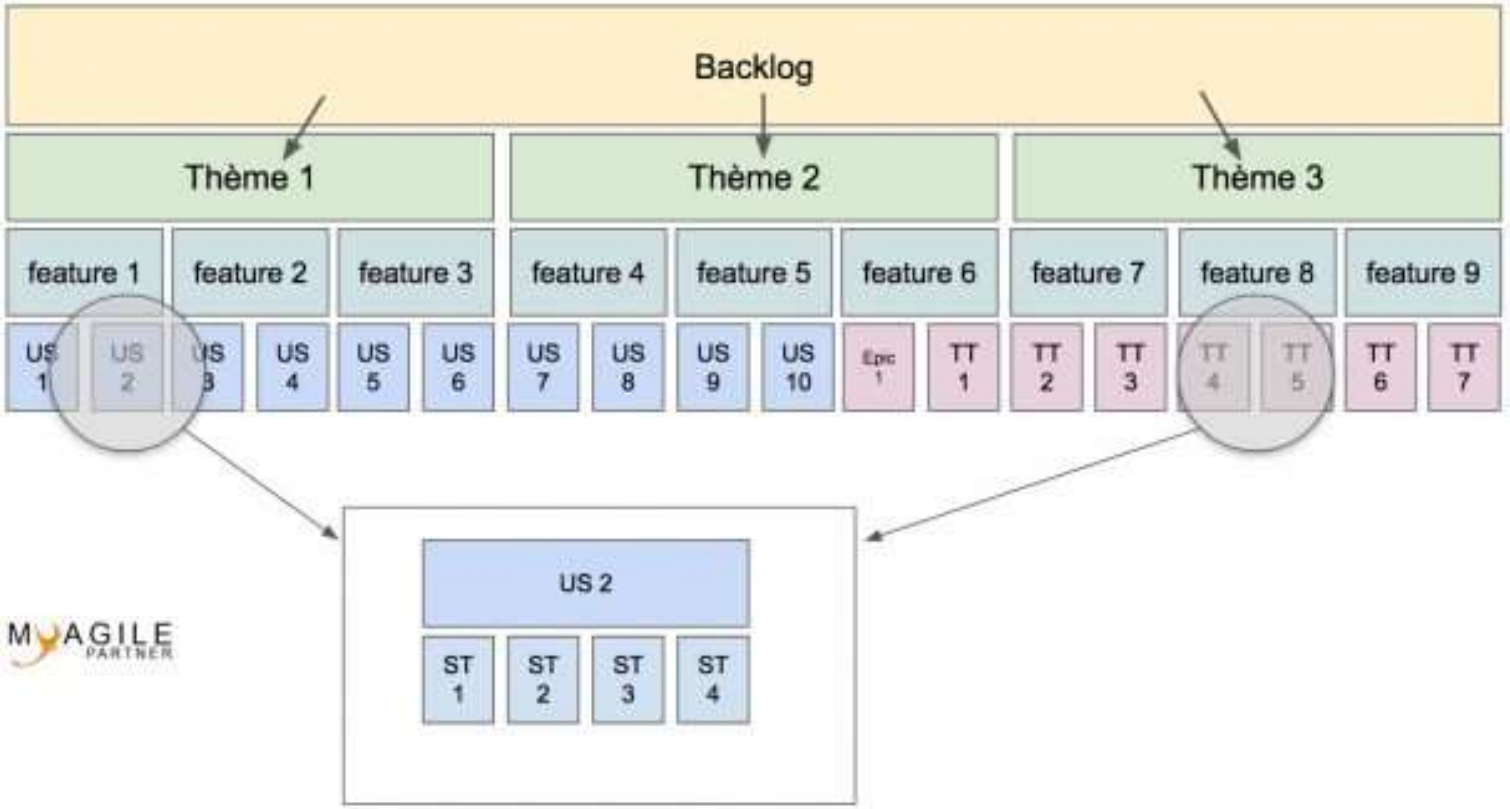
**product backlog**: set of items to develop in the future

**sprint backlog**: set of items that the team have to develop in the current sprint

**increment backlog**: set of items achieved

# Need of **AGILE SOFTWARE DEVELOPMENT**

Scrum is a lightweight framework that can help the team to develop a product in agile.



# References

## Text Books

1. Ken Schawber, Mike Beedle, “Agile Software Development with Scrum”, International Edition, Pearson.

2. Robert C. Martin, “Agile Software Development, Principles, Patterns and Practices”, First International Edition, Prentice Hall.

## Web Resources

- https://www.myagilepartner.com/blog/index.php/2019/04/10/scrum-model/
- https://www.edureka.co/blog/what-is-agile-methodology/
- https://intellipaat.com/blog/what-is-agile/


Thank
you