

# Agile Development

Module - 3



How the Customer explained it



How the Project Leader understood it



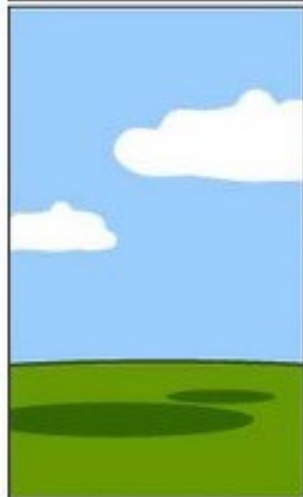
How the Analysts designed it



How the Programmer wrote it



How the Sales Rep described it



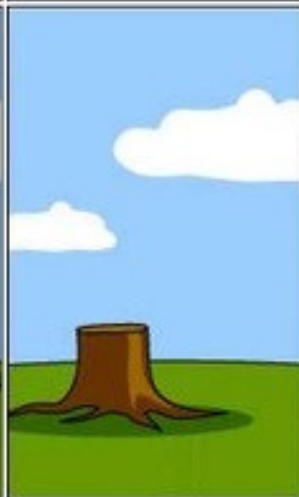
How the product was documented



How the product was tested



How the customer was billed



How the product was supported



What the customer really needed

# Introduction

- Agile is a process that allows a team to more efficiently manage a project by breaking it down into several stages, each of which allows for consistent collaboration with stakeholders to promote steady improvements at every stage.



# Real life examples of agile model

## ■ Restaurant orders:

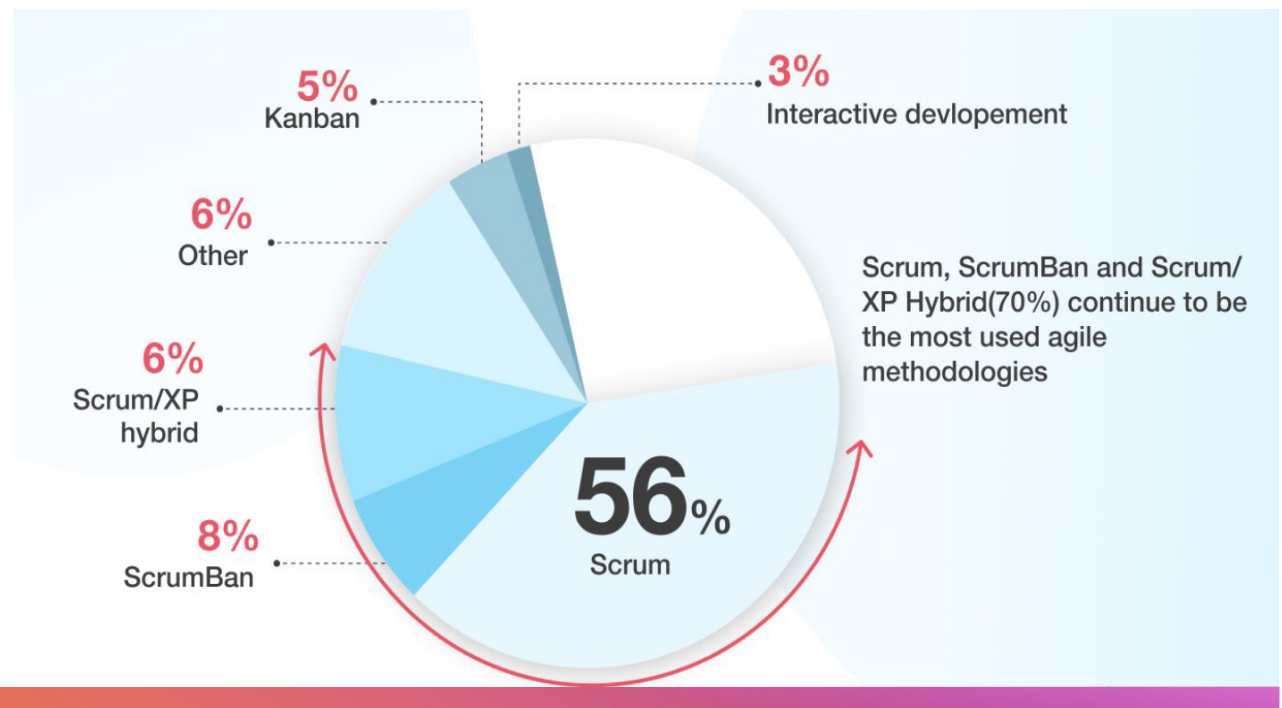
- Preparation of some of the food before opening the shop (sprint planning)
- continuous delivery of orders (adhoc stories)
- number of successful orders (velocity)

## ■ Cricket team:

- Run rate (velocity)
- team (scrum team self sufficient)
- over (sprint length)
- captain/ coach (scrum master)

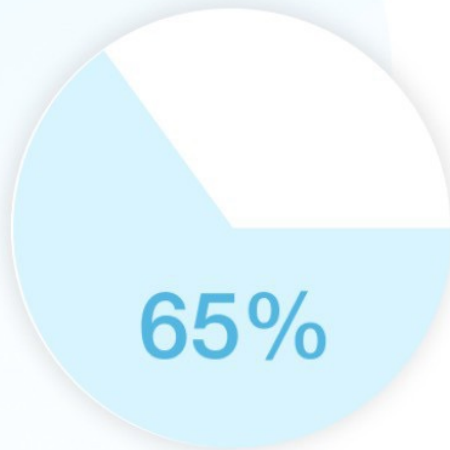
# Agile Methodology

- Agile methodology is a type of project management process, mainly used for software development, where demands and solutions evolve through the collaborative effort of self-organizing and cross-functional teams and their customers.

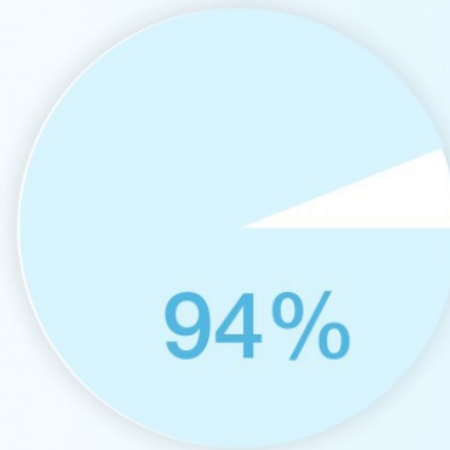


# 1. 94% of companies practice agile

## State of agile practice among organizations



of companies has significant  
experience with agile



of companies report  
practicing agile

## 2. 52% of companies use agile for more than 1/2 of their projects

### State of agile usage among organizations

**27%**

0-25%  
of projects

**21%**

26-50%  
of projects

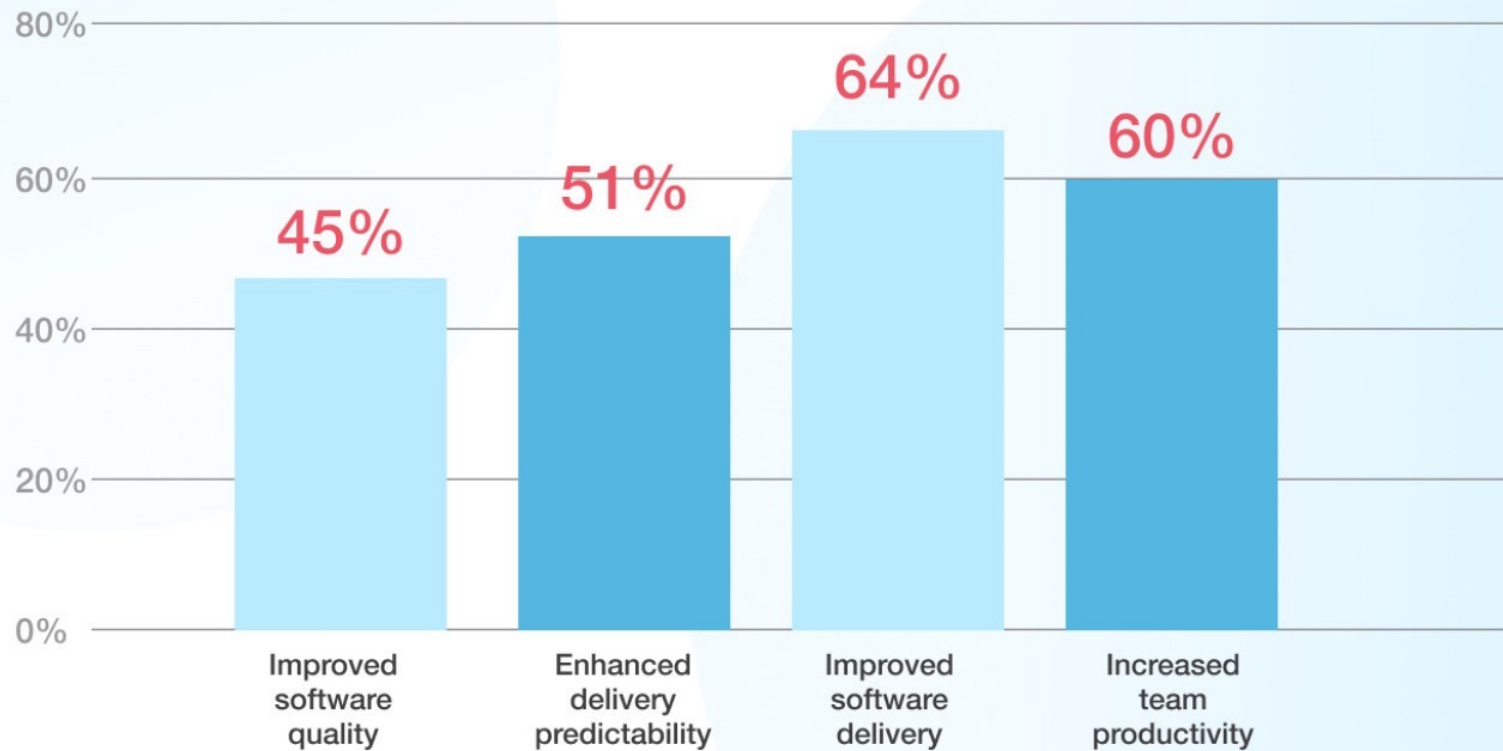
**14%**

51-75%  
of projects

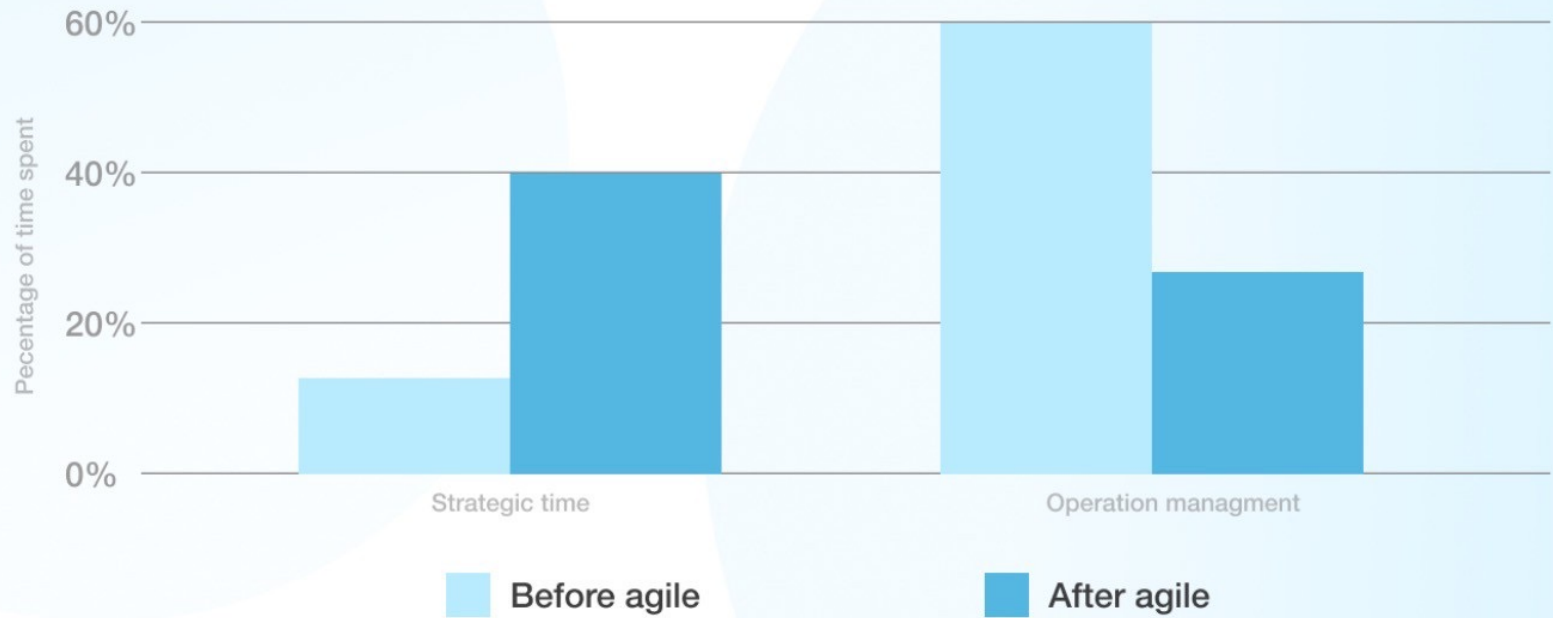
**38%**

76-100%  
of projects

## Benefits of agile adoption



## ROI of agile transition



## Reasons to choose agile for software development

Enhanced collaboration  
between teams

54%

Increases level of  
software quality

52%

Results in increased  
customer satisfaction

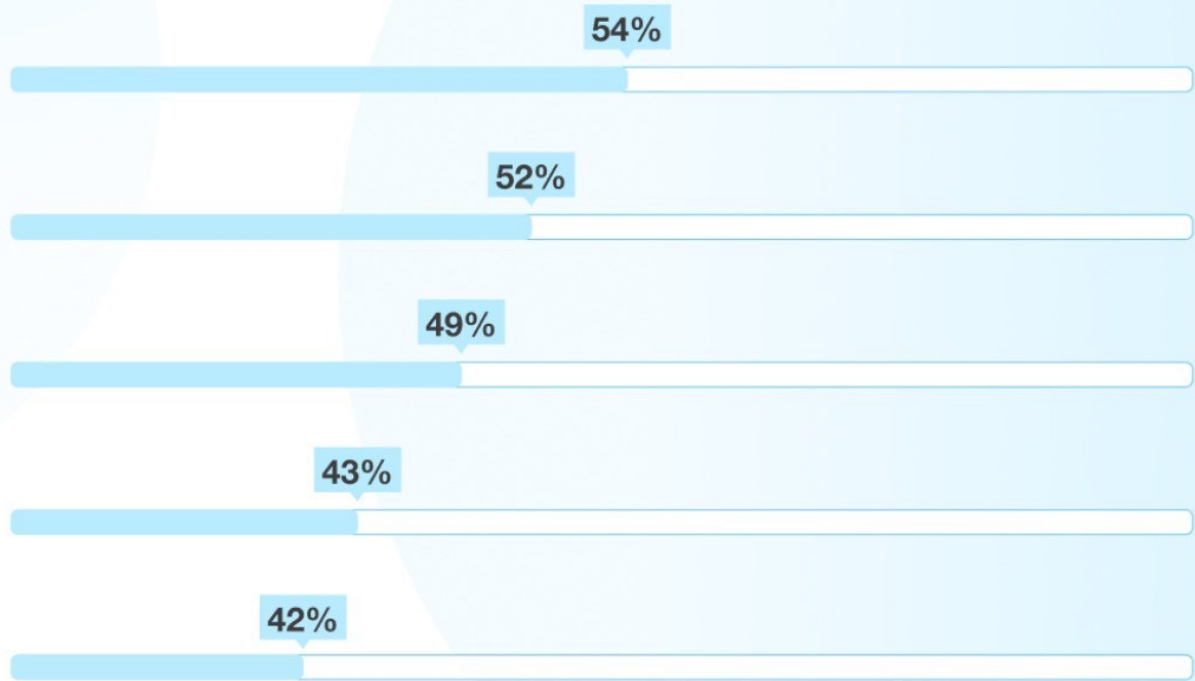
49%

Shortens time  
to market

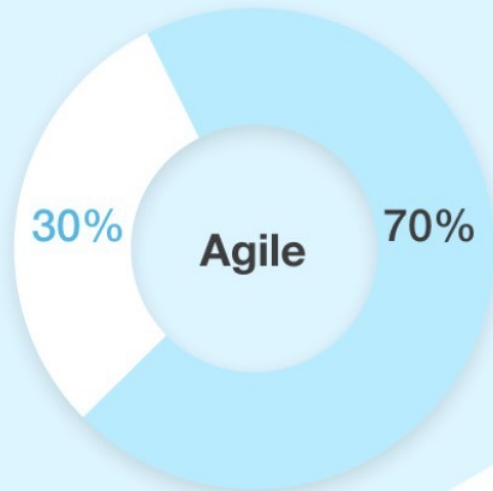
43%

Reduces  
development costs

42%

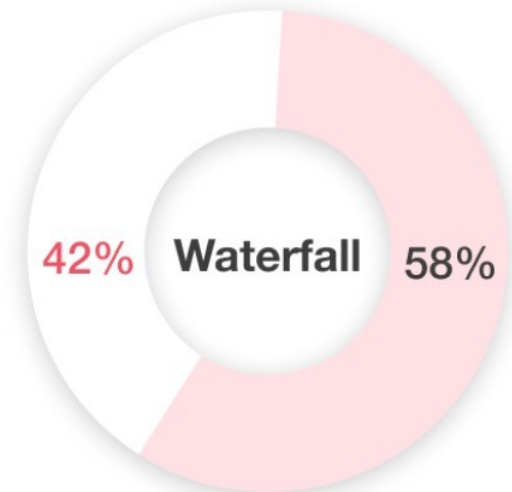


## Agile vs. Waterfall: Project success rate



Successful projects

Failed/Challenged



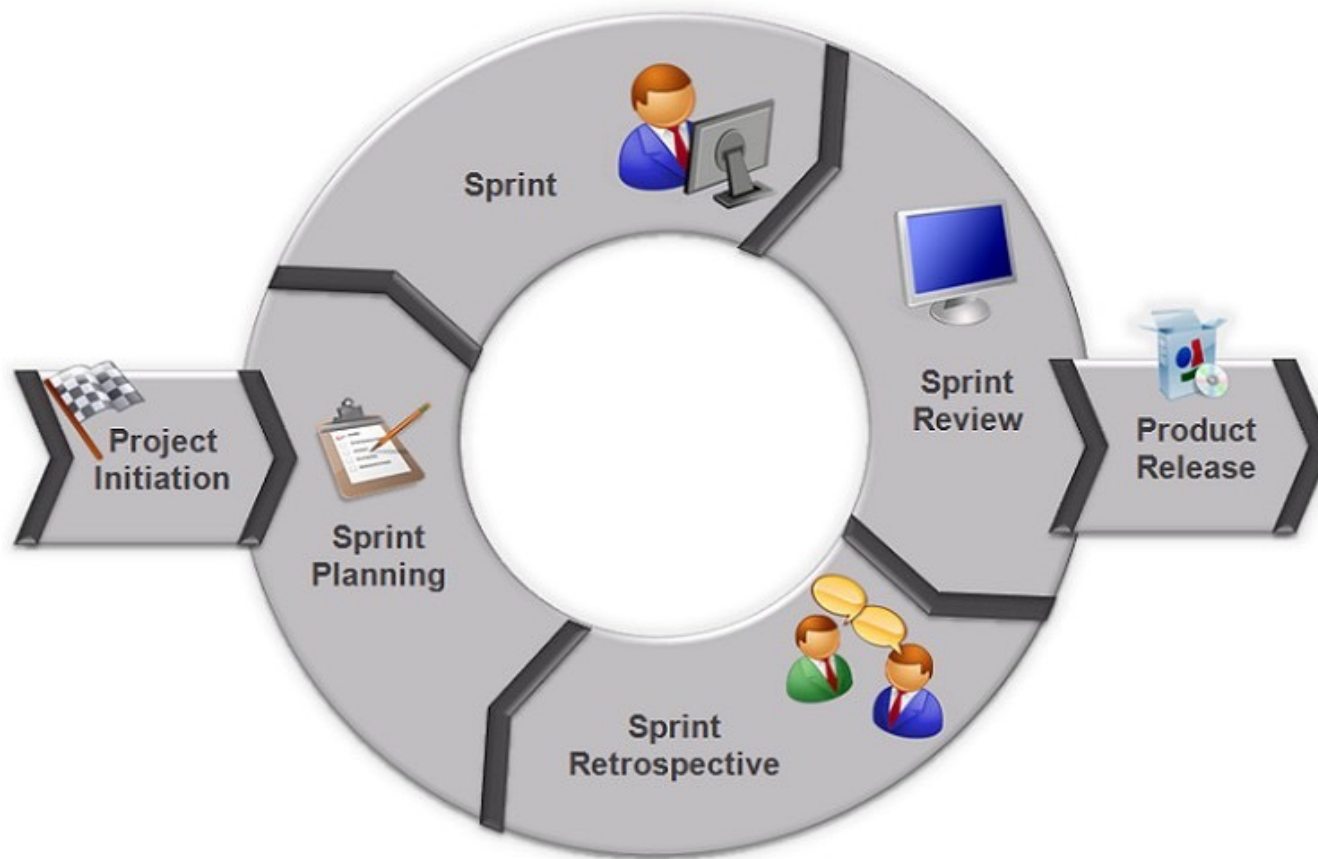
Successful projects

Failed/Challenged

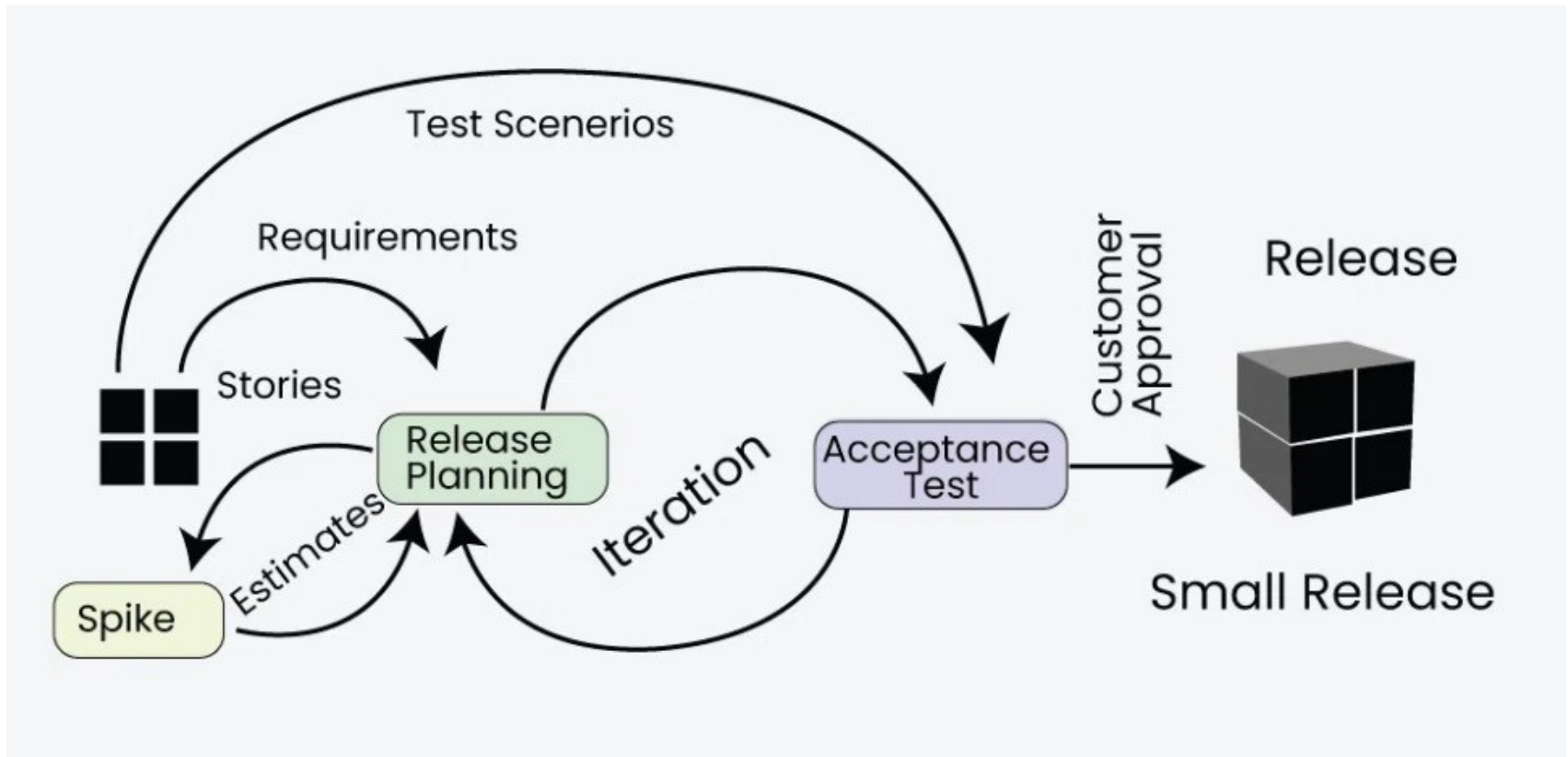
# Agility – Cost of change

- **Lower Costs:** Since changes are made in small, incremental steps, they are less expensive.
- **Early Detection:** Issues and new requirements are identified early, reducing the risk of costly changes later.
- **Continuous Feedback:** Regular feedback ensures the app evolves according to user needs, preventing expensive surprises at the end.

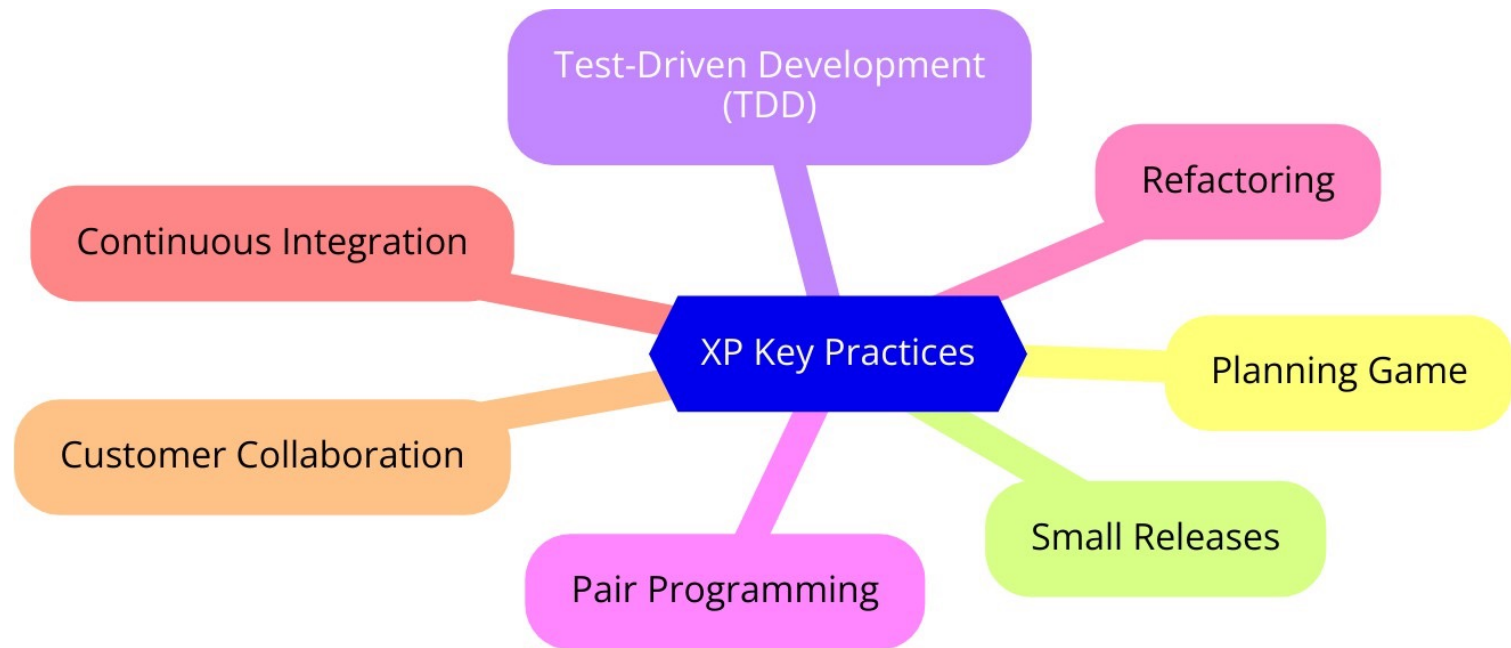
# Agile Process



# Extreme Programming



# XP – Key Practices



# Tool Set for Agile

1. User Stories
2. Sprint Planning
3. Kanban Board
4. Daily Stand-ups
5. Burndown Chart
6. Sprint Review
7. Sprint Retrospective

