AGILE METHODOLOGY AND BANKING DOMAIN

In first two days we learnt about agile methodology and did a practical implementation of agile methodology in designing a brochure for a bank.

Introduction

Agile methodology is a project management framework that breaks projects into several phases called sprints. The Agile framework is an iterative methodology. After every sprint, teams will look back to see if there was anything that can be improved in next sprint.
There are four values of Agile project Management. They are:

- Individuals and interactions over processes and tools:
  It focuses on interaction with the people in development process.
- Working software over comprehensive documentation:
  It tells that working software would have greater impact and values to the customers rather than documentation of the process.
- Customer collaboration over contract negotiation:
  Agile mainly focuses on customer collaboration in the early stages of development. Instead of completely relying on fixed contract its better to involve customer in the early stage to provide the product that satisfies user.
- Responding to change over following a plan:
  It focuses on responding to the changes in the plan based on customer feedback rather than following the plan.

Agile methodology is now being widely used to banking sector to transform traditional banking sector to digitalized one. Market requirements are changing constantly, and it is more important to adapt new changes. Instead of using traditional waterfall method implementing Agile increases flexibility. By adapting its principles banking sectors can achieve greater innovation and can be customer centric.

Scrum:

Scrum is a framework for agile development. Scrum is divided into Roles, Artifacts and Events.

Roles and Responsibilities in Scrum:

Scrum Master: Scrum Master is responsible for making process run smoothly. Makes sure that the needs of the team members are met. Also keeps information about team's progress.

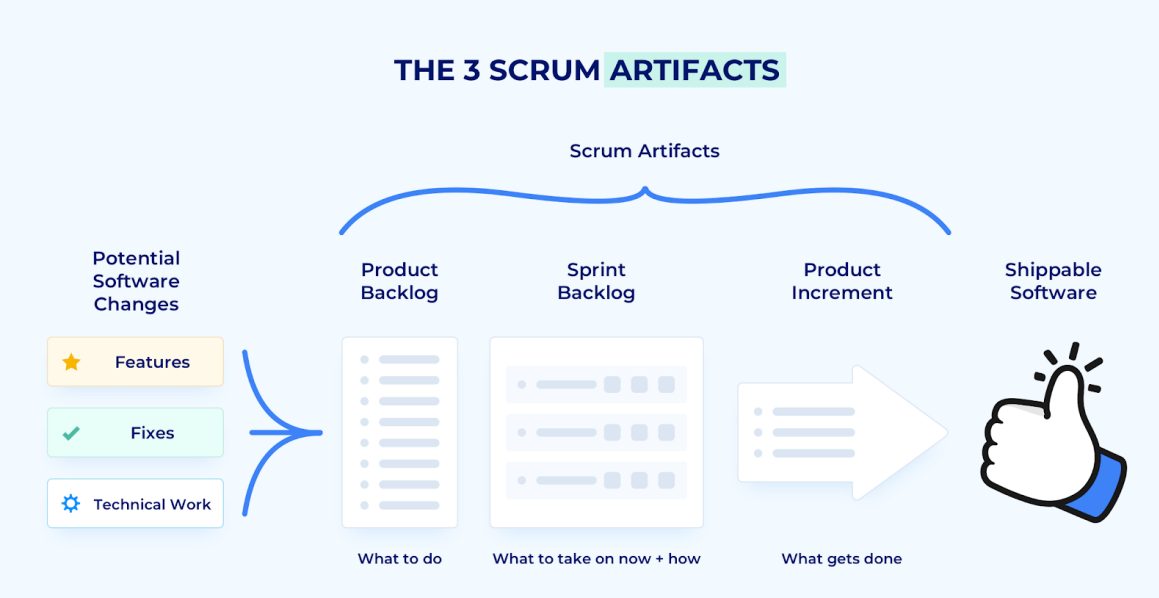
Scrum Team: It is self-managed group of people who develop and test the product. It has authority to decide who will do which work. Its self-managed, means team members will decide how to break the work and will allocate the work among themselves. It consists of Developer, Quality Analyst, UX Designer, Architect

Product Owner: One who provides refined product backlogs. Responsible for prioritizing product backlog. Product owner works with the team and provides requirements and determines order of implementation.

Artifacts in Scrum:

Product backlog: It consists of a list of all new features, tasks and requirements that are required to build a project.

Sprint backlog: It is set tasks from product backlog that need to be developed during next increment.



Events in Scrum:

Events allow team to plan and execute. Scrum events are time-boxed, means maximum time is set to various scrum events.

Sprints: It is short period where scrum team works together to complete a set of work. It usually lasts for 2 to 4 weeks. In each sprint the tasks are being assigned to team, if the task is large and cannot be implemented in one sprint than it will be implemented in future sprint.

Sprint planning: In sprint planning, scrum team collaborates and discusses regarding tasks and defines sprint goal. Team discusses with Product owner regarding requirements need to be satisfied in the sprint. It is usually 1 hour meeting per week.

Daily Standup: It is 15 minutes daily meeting regarding progress of the work.During standup following will be discussed:

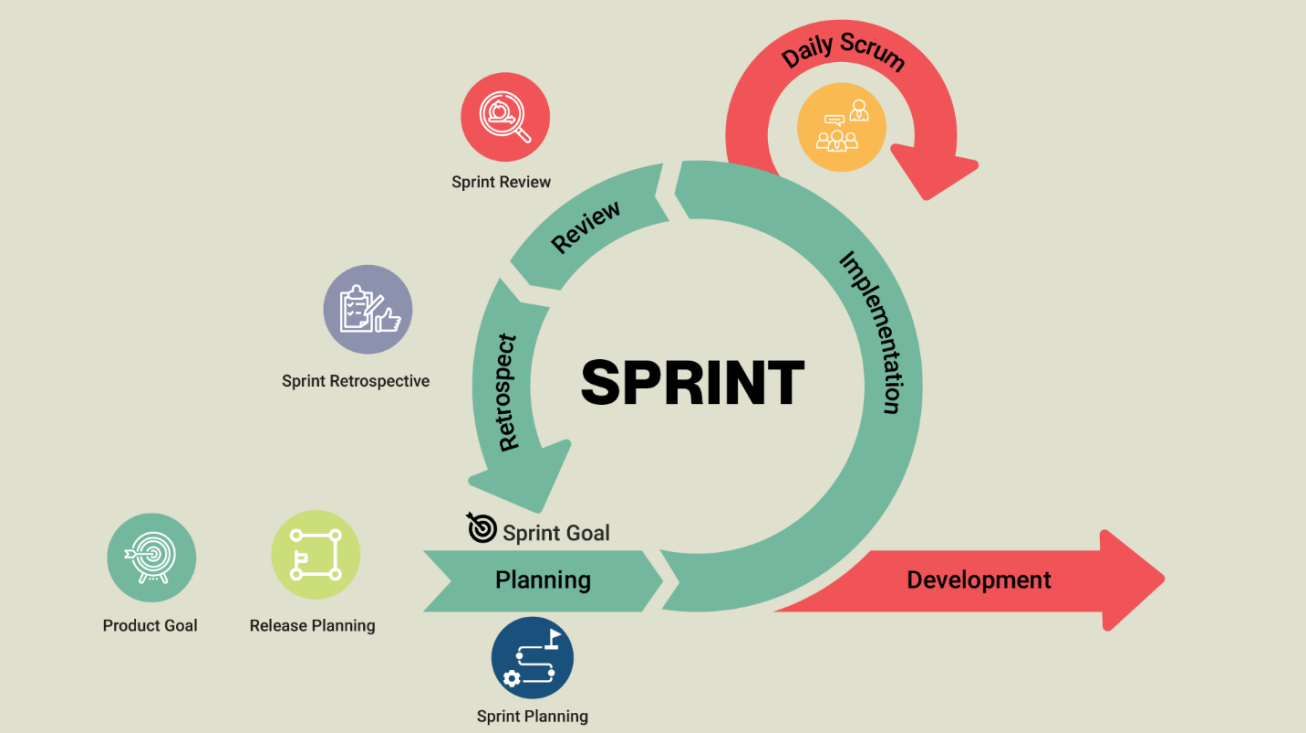
What was done yesterday?

What will be done today?

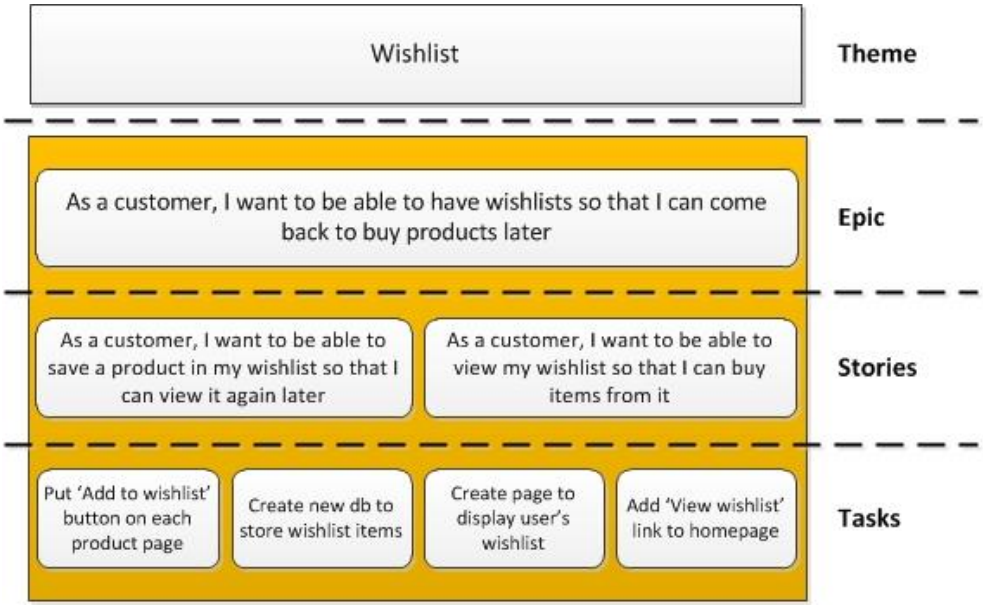
What were the blockers involved. If there are blockers than that must discussed separately with the concerned person.

Sprint review: In this phase stakeholders will be invited to discuss regarding what was done in the current sprint. Team will proceed with the development based on feedback received from the stakeholders.

Retrospective: In this what went well, what went wrong and how to improve it will be discussed.



Requirements of Scrum:



Features: Collection of epics

Epics: These are larger works that can be broken down into smaller stories. Breakdown of features into epics is done by Product owner.

Example of epics in Banking sector can be Account

Stories: Also called as user stories are short requirements that are written from end-user perspective. It is usually written by Product Owner. Stories are structured as:

As a <user>

I want to <perform Action>

So that I can <see result>

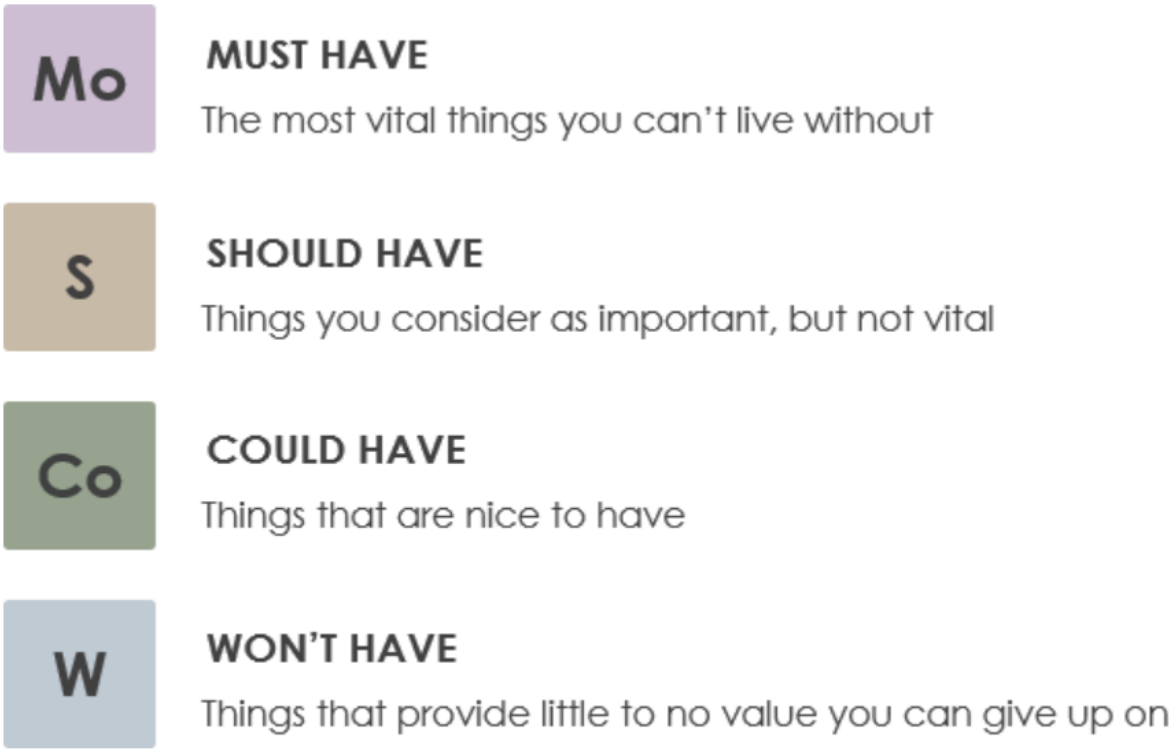
Example of user stories in banking can be:

As a customer

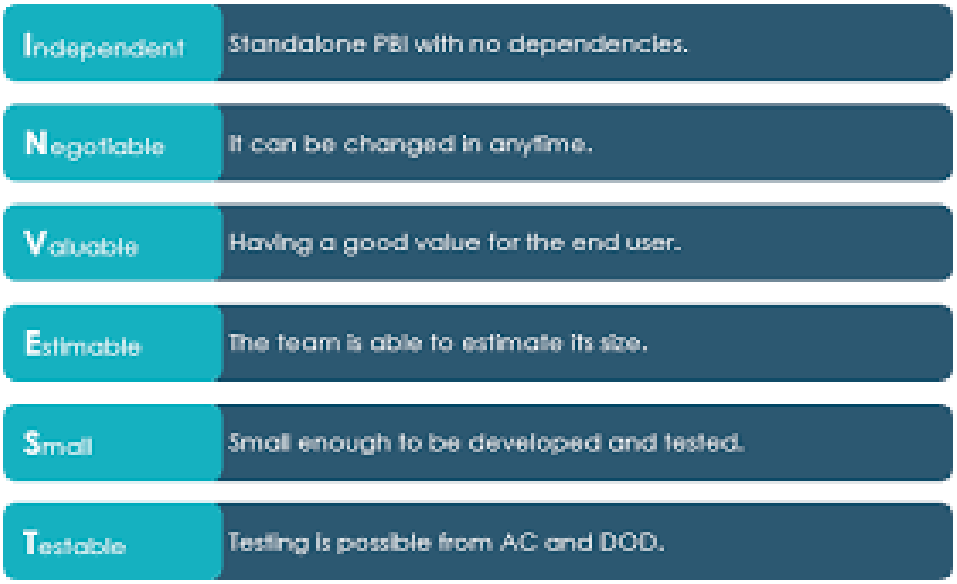
I want to create a new account digitally

So that I can save my time by not waiting in a queue

MoSCoW technique is used to prioritize the user stories. Acronym MoSCoW represents "must-have", "should-have"," could-have" and "won't-have".



To review the quality of user story INVEST acronym is used. It stands for:
Independent, Negotiable, Valuable, Estimable, Small, and Testable



Tasks: These are smallest unit of work. Taks need to be completed to accomplish user stories. Breakdown of stories to tasks are done by Scrum team.

Release plan:

A release plan is a tactical document designed to capture and track the features planned for an upcoming release. A release plan usually spans only a few months and is typically an

internal working document for product and development teams.

Definition of Ready (DoR) AND Definition of Done (DoD):

A definition of ready (DoR) is used to determine whether work on a task is ready to be started. Before teams assign a task or user story in a sprint, it must be sufficiently well described and understood by team members.

A "ready" backlog item needs to be clear, feasible and testable:

- A user story is **clear** if all Scrum team members have a shared understanding of what it means.
- An item is **testable** if there is an effective way to determine if the functionality works as expected. Acceptance criteria ensure that each story can be tested.
- A user story is **feasible** if it can be completed in one sprint, according to the Definition of Done. If this is not achievable, it needs be broken down further.

The definition of done (DoD) is a set of criteria for determining if a product increment is complete.

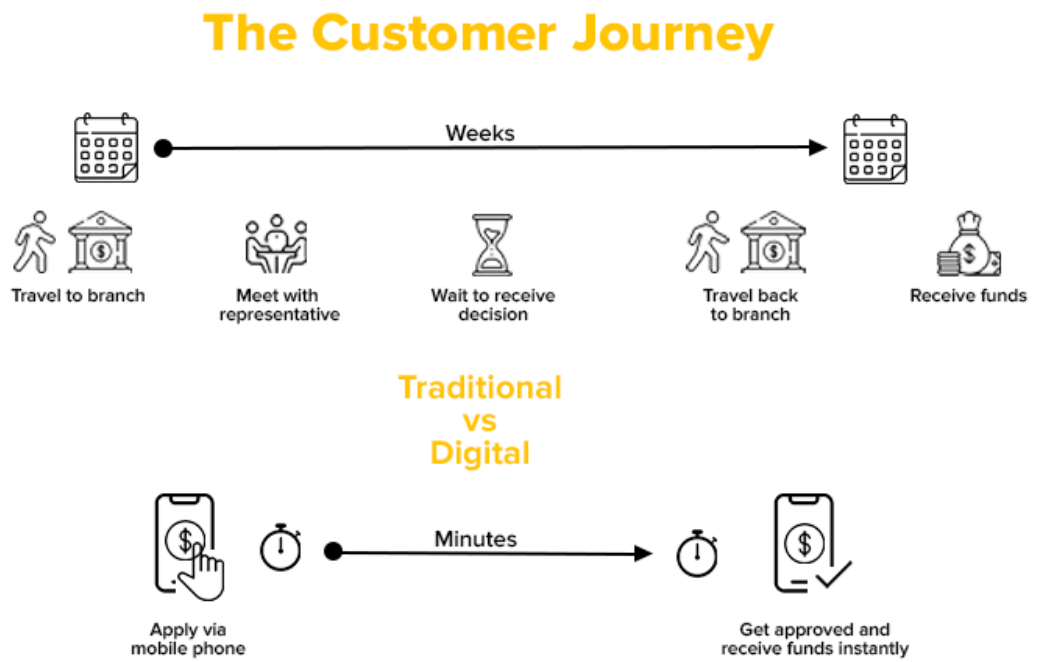
A typical Definition of Done includes answers to the following questions:

- How do we ensure that we meet the business requirements?
- How do we ensure that we have a consistent quality?

Agile in banking:

Most of the banking sectors have transformed from traditional into digital ones. The trend started when banking sectors realized that most of the users are on digital channels. The basic approach of digitization in banking and fintech begins with understanding customer behavior, preferences, and demands. As a result, the banking sector has transformed from product-centric to customer-centric. Agile methodologies used in this transformation provides flexible and customer centric approach to development. Traditional process like waterfall and spiral methods has long development cycles which takes more time to implement digital solution. Agile provides iterative development which allows banks to breakdown complex tasks to simpler ones, enables quicker releases to customer. Product owner, Scrum team and Scrum master will collaborate to decide which features need to be released in which sprint. This feature will enhance customer experience and provides successful transition from traditional to digital banking.

Some examples of digital banking transformation are online banking applications, data encryption software, virtual assistants, KYC system software, website optimization, etc.



Practical Implementation of Agile in designing a brochure:

We were first explained all the terms involved in Agile and then team was formed to design and build a brochure. In the team each of them given different roles. One of them became Product Owner, one as Scrum Master and other as Scrum team. Product owner provided refined product backlog. Before starting with the building the brochure sprint planning was done to decide the sprint goal. Scrum team which is self-managed will allocate the work among themselves. While designing daily standup was being done to keep track of progress and to check if there were any blockers. After each sprint, sprint review was done to take feedback from stakeholders. If the stakeholders were satisfied with the design, then proceed with current design or else need to make changes as per the requirements of the stakeholders. After our sprint review, we received feedback that the design was not handy and we made the changes in design in the next sprint. After that retrospective was done to discuss where improvements were required.

Conclusion:

Agile methodologies in digital banking have proven to enhance adaptability and collaboration. This also addresses customer demands and technological advancements. Its continuous integration drives innovation and sustain competitive in ever changing market.