Report on Agile Methodology in the Banking Domain

Company Name: **- Tietoevry Fintech pvt ltd**

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Introduction

The agile methodology is a project management approach that involves breaking the project into phases and emphasizes continuous collaboration and improvement. Teams follow a cycle of planning, designing, executing, evaluating and deployment. The agile contains some of the core principles and values mentioned further. The main aim of agile methodology is to deliver high quality software products efficiency while embracing change and promoting collaboration.

Agile methodology Overview

The overview of Agile methodology is an iterative approach to software development that emphasizes flexibility, collaboration, and customer satisfaction. It delivers the working software for early continuous feedback from stakeholders. Agile is based on the Agile Manifesto which has four important values and twelve important principles. We also discussed about some of the important keywords like product owner, scrum master, scrum team, Moscow principle etc. We made a small team and built a bank brochure as a product.

Day 1 -14th February

First topic our sir discussed with us is about the MoSCOW principle.

MoSCoW Principle:- The MoSCoW principle is a prioritization technique used in the Agile projects to categorize the requirements into four priority levels:

M - **Must Have -** The essential requirements that is mandatory or critical for the project success. The key features that we must include for our project.

S – **Should have -** The features that are less important than the must have, they are important but not critical for initial release.

C – **Could have** – They are Desirable and optional requirements that we can include in our project. They provide additional value or improve the user experience but are not required for product's core functionality.

W – **Won't have** – These requirements are explicitly decided by the stakeholders not to include in the current release. They are basically used for the future releases. They may be included or excluded depends upon the scope of the project.

After the MoSCoW principle he discussed about customer value how much it is important for the product. Also, about the customer feedback and Stakeholders who uses the product.

Customer value tells the prioritization features that directly benefits the customers and Customer feedback tells us about continuous feedback for refinement and improvement of the product.

Stakeholders are the one who uses the product and engage throughout during development process. They also Communicate regularly to ensure alignment and collaboration.

After that he mainly discussed about important keywords like Product Owner, Scrum Master, Scrum team, Time Box and many others.

Product Owner – Product owner are the ones who give the requirements specification for the Scrum master and scrum team, and team later assigns the tasks to themselves. He Represents the stakeholders and customers, defines the product vision, and prioritize features for development.

Scrum Master – Scrum Master is the one who facilitates the scrum process, remove the impediments and ensures the team adheres to Agile principles and practices. He discusses about team's infrastructure and requirements needed for the team.

Scrum Team – They mainly work on the development such as Dev, QA, UX Designer, Architect. They are cross – functional group. They deliver product increment iteratively.

Timebox – It is a fixed duration of time which also specifies the length of the time.

These above all terminologies it mainly comes under the Roles and Responsibilities.

Roles and Responsibilities – It mainly specifies the roles and responsibilities that is to be performed by the product owner, Scrum master, Scrum team.

Time scale – It refers to duration within which task is panned to be completed.

Some of the other keywords like staging for the stable environment.

Acceptance criteria – The function requirement for functional testing.

Planning poker – Here the multiple teammates estimate the size of user stories upon the scaling.

Sprint – The is a time-boxed duration that is to be completed by the development team.

Sprint Backlog – It contains the lists of items to be selected by the development team to be worked during specific sprints.

After that very important steps comes into the picture that is given below: -

Features => Epics => Story => Tasks

As of my understanding he discussed these steps deeply because in corporate this is how we are going to describe the tasks or the features we will be working in.

Features or Epics – It is a high level of features, known as Epics. These features they are done in different sprints.

Story – Epics that are break down into smaller and manageable chunks called stories. In order to solve it easily and fast. Each story will be in form given below.

"As a <user> I want to <perform action> so that I can <see results>".

If I want to give example for this Features or Epics we considered as a login page within that the username or password is the story and processing happens will be the tasks. For further knowledge we took example of account and epics, and it contains account details which will be story and displaying the details will be tasks.

We basically learned and understood what and when to build a product. In our case we took a bank brochure as a product. We had our teams to perform some of the tasks like finding five epics and twenty-five stories each story for the epics. We performed it and it was a wonderful session for Day 1.

Day 2 – 15th February

At the beginning we had the recap of the previous day session about the product owner, scrum master, scrum team, Epics, story. He began the session by explaining some of the important terminologies mentioned below.

Release Plan – A release plan is a high-level road map that identifies the features or functionalities to be included in each release of the products. It mainly contains the Product Backlog which is specified by the product owner.

Product Backlog – Instead of telling requirements specified by the product owner we can tell product backlogs specified by the product owner. Product backlogs are the group of products given by the product owner to the scrum team and later they divide their tasks.

Sprint backlogs – The products in product backlogs they are assigned and developed in this backlog. It contains sprints, Daily standup, sprint planning and sprint review along with retrospective which are the key for building any of the products.

Before explaining the above terms there are another two of them which are: -

Definition of Ready (DOR) – It provides the prerequisites that my story is ready to be worked and we can work on the code.

Definition of Done (DOD) – It specifies us that the product is ready for the production.

He also given us some books like getting things done and about story for the better understanding for ourselves.

Sprint Planning – The name only specifies the planning of the collaborative meeting to start a new sprint. The sprint meeting will be about 1 hour per week for work. The entire scrum team, scrum master, product owner involves in this process.

Daily standups – It is noting but discussing about what we had done for the past few days, what we are doing now and what should we do for the future purposes. If we have any doubt or clarification for any problem, it can software or hardware problems we can discuss about it.

Sprint review – It is basically demonstration to the business user of what we have done during the development phases, and they gather the feedback of the user. Here they discuss about what has done, what should not be done, and changes required for the product building.

Retrospective - Here we basically think about

- What went well?
- What went wrong?
- How to improve?

The products for the release and for the futures purpose also.

We also discussed about the testing like **User Acceptance testing (UAT)** – It is nothing, but the software meets the requirements and expectation of the end users and stake holders. Here the users test for the use cases of our project.

There were some other testings like load case testing, edge testing and integration testing. Load testing deals with peak load conditions for a particular website. Edge testing for some abnormal conditions which can cause unexpected errors. Integrated testing is the technique that interacts between different modules of the software. And he later discussed about CICD.

Continuous Integration and Continuous Deployment (CICD) – In this process the features will be developed in different phases of the sprints and integrated or added one by one by connecting each of the features. This is basically Continuous Integration. After the product is ready for the deployment, we can release the product when we are convenient the product here it goes under TO/DO => IN progress => Done these steps in each sprint. The deployment is specified by the stakeholders when they wanted to deploy their product the best example is amazon great Indian festival, Flipkart Big billion days.

Before our lunch break, he discussed about the four important Agile values given below.

- Individual and interaction over process and tools.
- Working software over comprehensive documents.
- Customer Collaboration over contract negation.
- Responding to change over following plan.

He also told us to go through the agile principles and discussed about the INVEST Principle

I – Independent

N - Negotiable

V – Valuable

E – Estimable

S – Small

T – Testable

After the lunch we started to build the bank brochure we made some mistakes during the sprint 1 like we missed the daily standups. In the first sprint we mainly designed the about page of our brochure and we got good feedback and later we designed for sprint 2 and sprint 3. Additionally, we designed the swim lane for understanding purpose and discussed about it we had very good feedback from all. In the final presentation we had our manager and tech lead too.

Conclusion

In the first two days our session I mainly learned and understood more about the agile methodology and use of agile in corporate. The agile methods like sprints, Daily standups, sprint review and retrospective where to good because I was basically a shy person who had stage fear. Before attending this internship, I was not able to talk or convey what I wanted. But due to this standup meetings and sprint review I had confidence that I will overcome my fear and I think I will improve more by the end of this internship. So basically, we had very good and interactive session.