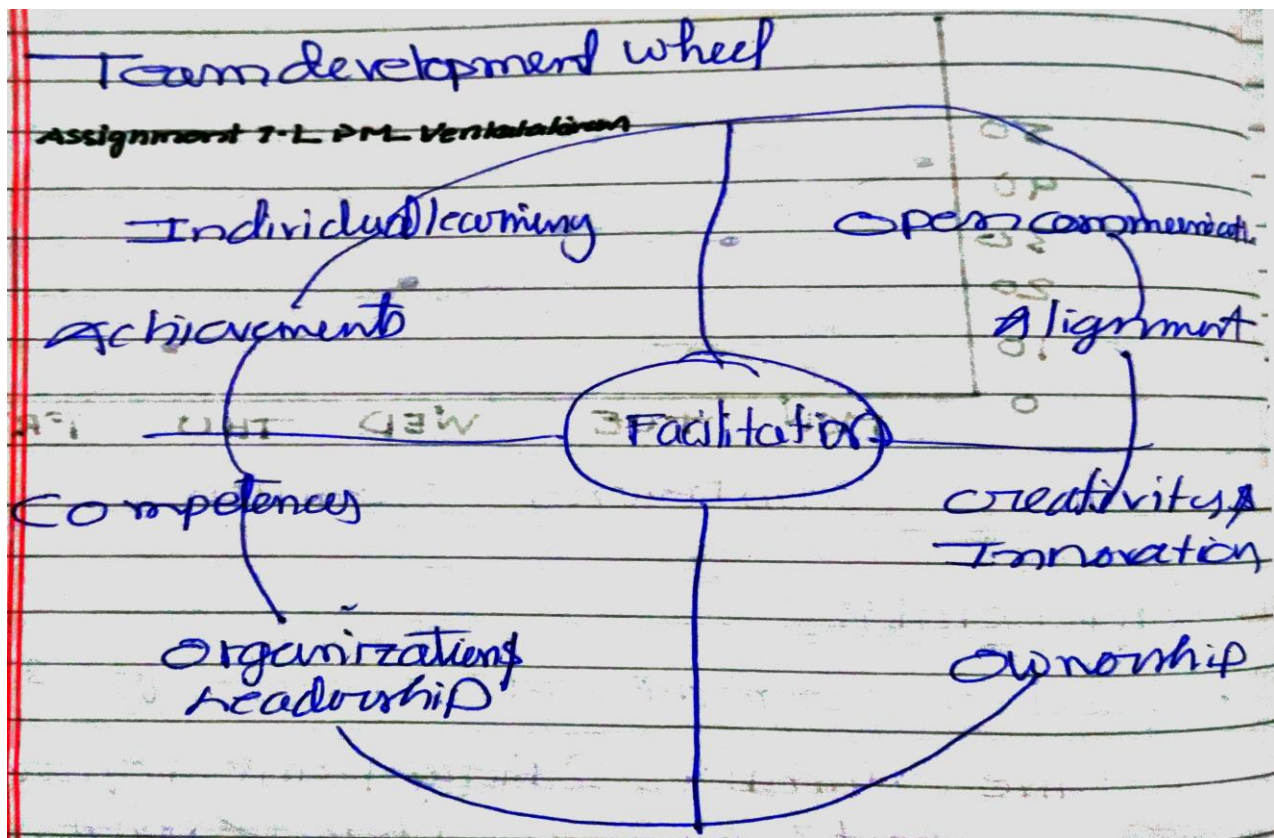## 2. What are the advanced Scrum Master skills?

- An advanced scrum master is skilled enough to handle multiple scrum projects
- He is the facilitates the scrum projects and helps to build self organizing teams
- He will have coaching and mentoring skills
- He is the facilitator to develop the team :A scrum master facilitates these factors :
    o Individual learning
    o Open communication
    o Achievements
    o Alignment
    o Competences
    o Creativity &Innovation
    o Organization & Leadership
    o Ownership

1. Consider the user story: "As a customer I want to use ATM". What would be my acceptance criteria ("so that......)"? List all possible acceptance criteria.

Possible acceptance criteria:

- I should get an ATM(debit card) to access the ATM
- ATM should validate my card and show my account balance
- ATM should have enough cash stored in it
- ATM should read my card information and my bank account details linked to the card should be encrypted
- The user interface should be in English so that I can understand
- I should be allowed to change my password
- I should be able to with draw cash from the ATM
- I should be able to check my statements and transfer funds
- I should get my ATM card back once the transaction is complete

4. What are the Possible options for tracking project performance in Agile?

We evaluate the performance of a project in agile using some performance metrics.

The commonly used agile-performance metrics are:

* Velocity

* Hit Rate

* Work Remaining on Tasks

* Project Measures

Velocity:

o V=(Units of efforts completed)/(sprint)

o Time taken fort each task is defined by velocity.

o Velocity is used to manage the release planning velocity is measured at the end of each time box

Hit Rate:

This measures the actual work allocated to a time box.If the development team allocates 50 tasks to a time box and completes only 40 tasks then the hit rate is (40/50)x100=80%

<u>Work Remaining on Tasks:</u>

Development team creates burndown charts and estimates work remaining to adjust the workflow to complete the pending tasks

<u>Project Measures:</u>

These three are used to measure the agile project:

o Cost Performance Index (CPI):The Cost Performance Index (CPI) gives a measure of efficiency. It is calculated by dividing Earned Value by the Actual Cost.

o Schedule Performance Index (SPI):The Schedule Performance Index gives the information about the schedule performance of the project. It is the efficiency of the time utilized on the project.

o Earned Business Value (EBV):It defines how many story points actually created the business value

The projects can be tracked in each sprint too in meetings;

- Sprint Review
- Sprint Retrospective

3. How do you think you can use Agile practices in large projects? (Given that the team can have no more than 9 people, do you think large projects with large teams can be involved in agile practices?)

Large teams can be involved in agile projects if the project is large enough.

- Large teams can be split into teams teams of 9 people and handled in scaled agile projects
- o Eg: There are 20 people in the resource pool and we have a large project to do.The Solution is to do Split the team into teams 9, 6 and 5people respectively
- o Three scrum masters facilitate these three teams and scrum of scrum master and leadership board will be responsible for the delivery(Scrum is an agile technique)
- o Scaling in agile is possible which facilitates more than 9 people to work for a project by splitting into separate agile teams

5. In Agile, the team always picks up business value user stories in every sprint. Do we still need to know earned value?

Earned value is need to be known in agile even though we have business value

Key Reasons for why we need Earned value management (EVM) though EBV is there in agile:

- EVM integrates the areas of technical performance, schedule and cost

- EVM calculation allows to maintain and achieve the cost efficiency

- EVM provides early warning of performance problems while there is time for corrective action

- EVM allows to optimize mainly cost then indirectly time and recourses so that release planning and delivery can be optimized