



PES UNIVERSITY, BANGALORE

Department of Computer Science and Engineering

## **Software Engineering Assignment - I**

### **Team member details:**

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**1) Answer the following questions based on your understanding in not more than 10 sentences.**

**a) Identify from the observations, where all would you think Service Inc. did not meet the intent of the Agile Manifesto.**

- i) Product owners in the scrum teams have worked on the products ever since the centers have been set up but have never worked with a customer directly
- ii) The team focused on targets that were too ambitious instead of ensuring that their product line met the basic requirements
- iii) Daily standups were too long, becoming a process in itself
- iv) Had skilled managers that build extensive documentations with super elaborate processes while the agile manifesto clearly states the importance of less documentation and more of working software
- v) Service Inc. was simply not agile enough for an agile product where uncertainty and constant change are the only truth and relying on volumes of documentation

**b) Identify from the observations where you would think Service Inc. deviated from what is expected from a SCRUM implementation.**

- i) The management of Service Inc. followed a bureaucratic approach which hindered its product engineering to be agile. Due to this, Service Inc. is not reliable for a strong product line despite highly qualified employees.
- ii) Daily meetings were required to be short but the meetings were found to be extremely detailed and long rather than just having simple updates
- iii) Spring planning meetings finalized task lists one week into the sprint when it

should be done before the sprint starts

**c) Discuss each of the findings in the table and indicate whether the finding contributed positively or negatively in go/no go recommendation and indicate with ~5 sentences why it is so.**

i) *From the experience and records it is clear that all daily scrum meetings, sprint review meetings happened without fail. Each of the team members took 10 minutes to update and for an 8-member sprint, daily stand-up meeting takes 60-90 minutes Including all the discussions. Each sprint team has 1 scrum master, 1 product owner, 2 test engineers and 5 developers. Scrum Master and Product owners are rotated across sprints.*

(1) This contributed Negatively as The daily standup is supposed to be a quick meeting to ensure timely completion of tasks and processes. However, having it for 1.5 hours made it a process in itself, whereas Agile prefers people and interactions

ii) *In the 4-week sprints, quality engineers joined after 2 weeks as they are rotated among projects and there was nothing ready for testing till the end of the 3rd week. The test engineers wrote test cases in the 3rd week and tested them in the 4th week. This was the usual pattern*

- This contributed negatively as the engineers knew about them coming to Service Inc., and they did not show readiness, which resulted in a slowing down of work in the initial phases.

iii) *The project manager has been trained into the new role of Scrum Master.*

- This contributes negatively as the scrum master's work is to take charge and ensure the smooth functioning of the Scrum meetings while giving equal importance to each department, but this cannot be done simultaneously by the Project Manager and needs to have a dedicated post

iv) *Team members are also responsible for emergency product issues and that tends to majorly upset the sprint deliverables. The sprint backlog underwent changes till 3rd weeks*

Positively. This is in line with Agile.

v) *In sprint review meetings, two things were routinely done:*

(1) Positively. This is in line with expected Agile

vi) *After the Sprint planning meeting, task list was only a draft. The product owner discussed the draft with the centre manager and based on his feedback, there were few online discussions with the scrum master and team members following which task list is finalized by end of 1st week of the sprint*

(1) Negatively. Sprint planning should involve everyone, and the task list should be finalized before the sprint starts.

vii) *In terms of metrics, the backlog at the beginning of the scrum is more ambitious than the average velocity of the scrum teams recorded so far as the teams prefer to take ambitious targets. They were encouraged to do so.*

(1) Negatively. Agile encourages a consistent pace of development, having high ambitions will exhaust the

consistency.

- viii) *Product owners in the scrum teams have worked with the products ever since the centers have been set up but have never met a customer*

(1) Negative. Agile places high importance on customer interaction, without which, business development is not possible

## **2) How can Service Inc. achieve 40% growth in margin while achieving only a 25% growth in revenue?**

Solution:

The company can consult the following points in order to achieve their target

1. *Reshape your brand identity and reputation:*
  - a. Implementing prestige pricing and benefiting from creating more value in collaboration and partnerships with companies of assets working and generating value for both.
2. *Financial Diagnosis:*
  - a. The Audit team should thoroughly look into the company's financial statements to know about the major expenses and means to reduce them and also ensure that the company has a healthy cash flow.
3. *Include Automation*

*Service Inc. can streamline operating expenses with strategic cuts and automation:* Seek out software that can take the manual legwork out of them and free up your employees' time and build on other aspects.
4. *Focus on customer retention:*

Working with the previous point in mind they can bolster their profit margin and customer loyalty. Ensuring good customer service infrastructure is active and effective.
5. *Bringing in new products:*

Innovate and bring new products to market with inputs from engineers and customers to increase the variety of products and attract new customers due to unique offerings of products.

## **3) What are the cultural differences between Service Inc. and Product Inc. that you think is a challenge for successful scrum implementation that would satisfy Product Inc.?**

1. The main challenge for Service Inc. in implementing an Agile and Scrum model would be the strict hierarchy followed, which is evident as a manager's seniority could be known from the size of their desk. On the contrary, Product Inc. worked with open offices, where employees of different seniority worked together, and had a dedicated conference room which ensured no compromise in their communication.
2. Sr. Program Director Stan of Product Inc. had the habit of talking directly to engineers and junior managers, unlike Service Inc. where the general managers with their elaborate cabins were less approachable to the product engineers