

Project Planning Phase 5

Project Planning Template (Product Backlog, Sprint Planning, Stories, Story points)

Date	1-11-23
Team ID	592499
Project Name	Machine learning model for occupancy rates and demand in hospitality industries

Team Members :

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Product Backlog, Sprint Schedule, and Estimation

Use the below template to create product backlog and sprint schedule

Sprint	Functional Requirement (Epic)	User Story Number	User Story / Task	Story Points	Priority	Team Members
Sprint-1	Registration	USN-1	As a hotel revenue manager, I want to use a machine learning model to forecast occupancy rates and demand for the next month so that I can set optimal prices and room inventory levels.	2	High	Sujan
Sprint-1		USN-2	As a hotel staffing manager, I want to use a machine learning model to forecast demand for staff, such as front desk clerks, housekeepers, and restaurant servers, for the next week so that I can schedule staff appropriately.	1	High	Nitin
Sprint-2		USN-3	As a hotel marketing manager, I want to use a machine learning model to identify trends in demand and to target marketing and advertising campaigns accordingly.	2	Low	Nitin

Sprint-3		USN-4	As a hotel inventory manager, I want to use a machine learning model to forecast demand for different types of rooms and amenities, such as suites, king-size beds, and poolside rooms, for the next quarter so that I can manage inventory levels and ensure that the hotel has the right mix of rooms and amenities to meet the needs of its guests.	2	Medium	Sujan
Sprint-4	Login	USN-5	As a hotel customer service manager, I want to use a machine learning model to identify guests who are most likely to cancel their reservations or to check out early so that I can reach out to these guests and offer them incentives to stay.	1	High	Nitin
	Dashboard					

What do we do when we have missing expertise in our Scrum Team?



Project Tracker, Velocity & Burndown Chart:

Sprint	Total Story Points	Duration	Sprint Start Date	Sprint End Date (Planned)	Story Points Completed (as on Planned End Date)	Sprint Release Date (Actual)
Sprint-1	20	3 Days	21 Oct 2023	24 Oct 2023	20	29 Oct 2022
Sprint-2	20	2 Days	25 Oct 2023	27 Nov 2023	10	27 Oct 2023
Sprint-3	20	6 Days	28 Nov 2023	03 Nov 2023	10	28 Nov 2023
Sprint-4	20	9 Days	04 Nov 2023	13 Nov 2023	20	13 Nov 2023

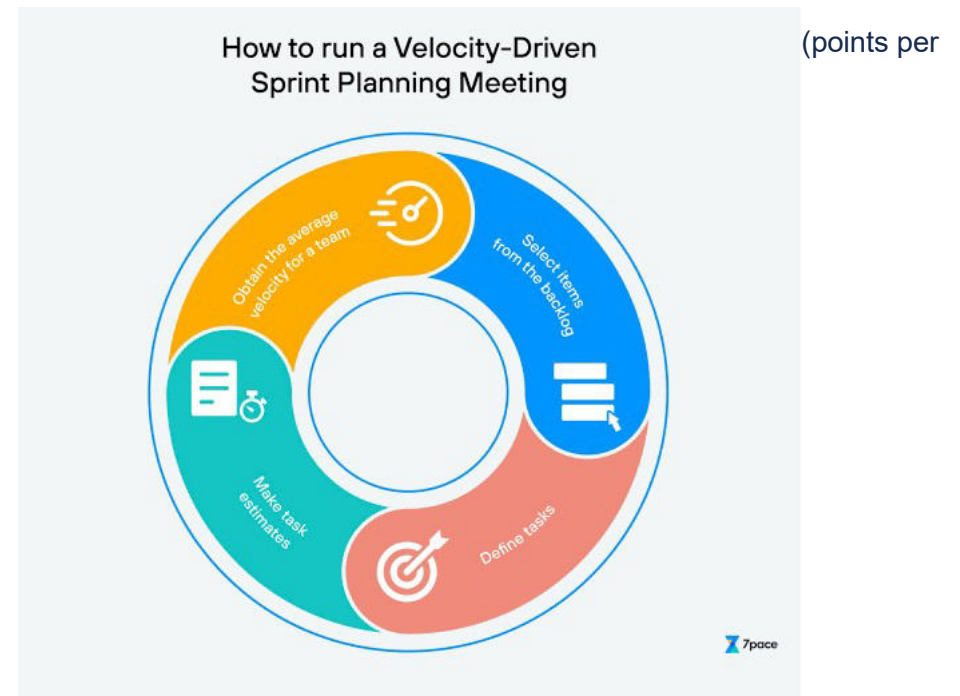
Velocity:

We have a 21-day sprint duration, and the velocity of the team is 20 (points per sprint). Let's calculate the team's average velocity (AV) per iteration unit (story points per day)

$$AV = \text{sprint duration} / \text{Velocity} = 60 / 21 = 1.1$$

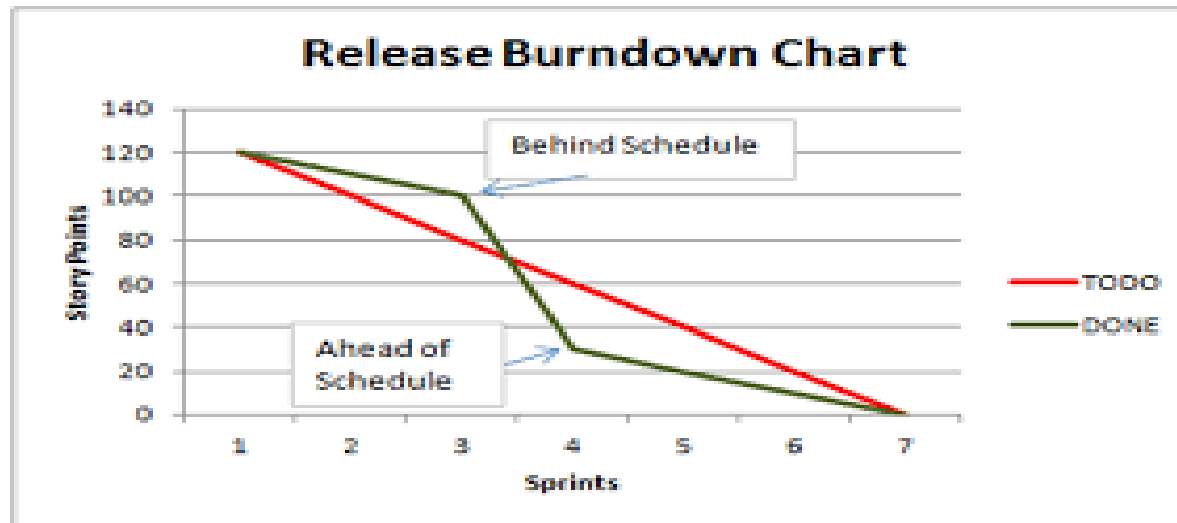
Velocity is influenced by many factors, including:

- Lack of engagement by team members and stakeholders
- System outages
- Team member absences
- To stabilize velocity, teams can:
 - Keep team membership and size as consistent as possible
 - Use sprint retrospectives to explore ways to stabilize velocity
 - Find ways to improve communication
 - Coordinate the work to complete tasks on time
 - Eliminate dependencies that can delay work



Burndown Chart:

A burn down chart is a graphical representation of work left to do versus time. It is often used in agile software development methodologies such as Scrum. However, burn down charts can be applied to any project containing measurable progress over time.



Sample Burndown Chart

