**Project Planning Phase**

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| --- | --- |
| **Date** | 19-06-2025 |
| **Team ID** | LTVIP2025TMID48265 |
| **Project Name** | Strategic Product Placement Analysis: Unveiling Sales Impact with Tableau Visualization |
| **Maximum Marks** | 5 marks |

**Overview: Key Concepts**

|  |  |
| --- | --- |
| **Term** | **Description** |
| Sprint | A fixed time-boxed iteration (typically 5 days) during which a set of prioritized analytics tasks are completed. |
| Epic | A large feature or analytics deliverable that is too extensive to complete in a single sprint. |
| User Story | A user-focused task or analytic feature that delivers value. It breaks down an Epic into manageable parts. |
| Story Points | An estimation unit to measure the complexity and effort of a task, usually using the Fibonacci sequence (1, 2, 3, 5, 8...). This reflects task complexity, not time duration. |

**Sprint Planning Table – 5 Days Per Sprint**

**Sprint 1 – Data Collection & Preparation**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Day** | **Task** | **Story Points** | **Type** | **Notes** |
| 1 | Gather sales, inventory, and promotion data | 3 | Data Sourcing | Data sourced from retail databases and spreadsheets |
| 2 | Clean and preprocess data | 4 | Data Cleaning | Handle missing values, correct inconsistencies |
| 3 | Design data schema for Tableau | 2 | Data Modeling | Structure data for efficient Tableau usage |
| 4 | Build initial data extracts and joins | 3 | ETL Development | Use Tableau Prep or SQL for data blending |
| 5 | Sprint review + bug fixes | - | QA | Review data quality and fix issues |
|  | **Total Story Points (Sprint 1)** | **12** |  |  |

**Sprint 2 – Dashboard Development & Automation**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Day** | **Task** | **Story Points** | **Type** | **Notes** |
| 1 | Create sales performance dashboard | 4 | Dashboard Design | Visualize sales by category, time, and location |
| 2 | Build interactive filters and drill-downs | 3 | UX Enhancement | Allow slicing data by region, product, and time |
| 3 | Develop promotional impact visualizations | 3 | Data Visualization | Overlay promotions on sales timelines |
| 4 | Implement automated report scheduling | 2 | Automation | Configure Tableau Server for scheduled report emails |
| 5 | Sprint review and user testing | - | QA | Validate dashboard accuracy and user experience |
|  | **Total Story Points (Sprint 2)** | **12** |  |  |

**Velocity Calculation**

|  |  |
| --- | --- |
| **Metric** | **Value** |
| Story Points in Sprint 1 | 12 |
| Story Points in Sprint 2 | 12 |
| **Total Points** | **24** |
| Number of Sprints | 2 |
| **Velocity** | **12 Points/Sprint** |

*The team’s average velocity is 12 Story Points per Sprint, indicating consistent progress.*

**Sprint Status Summary**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Sprint** | **Duration (Days)** | **Points Planned** | **Points Completed** | **Completion %** | **Remarks** |
| Sprint 1 | 5 | 12 | 12 | 100% | Data collection and preprocessing complete |
| Sprint 2 | 5 | 12 | 12 | 100% | Dashboards built and validated |

**Visual Timeline View (2-Week Sprint Schedule)**

*The project followed a two-sprint, 10-working-day schedule with well-defined tasks. Progress was monitored daily, and continuous feedback was incorporated.*

**Planning Insights & Best Practices Followed**

* **Fibonacci-based Story Points:** Estimations used the Fibonacci sequence to accurately reflect task complexity rather than linear time estimates. This helped the team allocate appropriate effort and avoid overcommitment.
* **Balanced Workload:** Tasks were divided evenly across sprints to ensure steady progress without burnout or resource contention.
* **Granular User Stories:** Each Epic was broken down into clear, manageable user stories to facilitate tracking and reduce ambiguity.
* **Iterative Testing:** Internal testing was incorporated within each sprint, enabling quick identification and resolution of issues, which improved the quality of deliverables.
* **Velocity-Driven Planning:** Past sprint velocities were considered to keep future sprint workloads realistic and achievable.

**Agile Planning Overview**

Agile methodology promotes incremental delivery through iterative cycles called **Sprints**. Each sprint involves:

* **Product Backlog:** A prioritized list of all desired analytics features, represented as Epics and User Stories.
* **Sprint Backlog:** Selected stories committed for completion during the sprint.
* **Story Points:** Complexity estimates to measure workload.
* **Velocity:** Average number of story points completed per sprint, used for future sprint planning.
* **Burndown Chart:** A visual tool showing remaining work versus time, tracking sprint progress.

**Product Backlog, Sprint Schedule, and Estimation**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sprint** | **Functional Requirement (Epic)** | **User Story Number** | **User Story / Task** | **Story Points** | **Priority** | **Team Member** |
| Sprint 1 | Data Collection | USN-1 | Gather sales, inventory, and promotion data | 3 | High | Member 1 |
| Sprint 1 | Data Cleaning | USN-2 | Clean and preprocess data | 4 | High | Member 2 |
| Sprint 1 | Data Modeling | USN-3 | Design data schema and ETL workflows | 3 | Medium | Member 3 |
| Sprint 2 | Dashboard Development | USN-4 | Create interactive sales performance dashboard | 4 | High | Member 1 |
| Sprint 2 | User Experience Enhancements | USN-5 | Add filters and drill-down capabilities | 3 | High | Member 2 |
| Sprint 2 | Promotional Analysis | USN-6 | Develop promotional impact visualizations | 3 | Medium | Member 3 |
| Sprint 2 | Automation | USN-7 | Schedule automated report emails | 2 | Medium | Member 4 |

**Project Tracker, Velocity & Burndown Chart**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Sprint** | **Total Story Points** | **Duration** | **Sprint Start Date** | **Sprint End Date (Planned)** | **Story Points Completed (Planned End)** | **Sprint Release Date (Actual)** |
| Sprint 1 | 10 | 5 Days | 1 June 2025 | 5 June 2025 | 10 | 5 June 2025 |
| Sprint 2 | 13 | 5 Days | 8 June 2025 | 12 June 2025 | 13 | 12 June 2025 |

**Velocity Calculation**

* **Total Story Points:** 10 (Sprint 1) + 13 (Sprint 2) = 23
* **Total Sprints:** 2
* **Velocity (Story Points per Sprint):** 23 / 2 = 11.5 ≈ 12

**Burndown Chart (Conceptual Overview)**

|  |  |  |
| --- | --- | --- |
| **Day** | **Remaining Story Points (Ideal)** | **Remaining Story Points (Actual)** |
| Day 0 | 23 | 23 |
| Day 1 | 19 | 20 |
| Day 2 | 15 | 17 |
| Day 3 | 11 | 11 |
| Day 4 | 7 | 7 |
| Day 5 | 3 | 3 |
| Day 6 | 0 | 0 |

* The actual progress closely follows the ideal, indicating a healthy sprint velocity and well-managed workload.
* Tools used for burndown visualization include **Excel**, **Jira Agile Board**, and **Visual Paradigm**.

**Summary**

|  |  |
| --- | --- |
| **Metric** | **Value** |
| Total Story Points Completed | 23 |
| Average Velocity | 12 Story Points/Sprint |
| Planning Strategy | User stories broken into small, manageable tasks with Fibonacci-based effort estimates |
| Tools Used | Tableau Prep, Tableau Desktop/Server, Excel, Jira Agile Board |

The project demonstrates disciplined agile planning and execution, ensuring a robust and insightful Tableau analytics solution for strategic product placement analysis.