**AGILE REPORT**

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**People Analytics at Seagate: A Strategic Approach**

**to Predict Voluntary Churn and Optimize the Hiring Process**

**Master of Science in Business Analytics**

**Course: Experiential Projects**

**S24 – 004 – Group 4 – Project 2**

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# **Description of Agile Stages**

**Inception Phase**

The inception phase of Seagate's HR analytics project was a crucial starting point. During this stage, the Product Owner precisely analysed the HR team's needs and set clear goals for the project, focusing on predictive analytics to tackle voluntary churn and hiring forecasts. The Scrum Master established agile processes and tools, ensuring that the project's framework was well-organized and ready for execution. The team also included a Data Analyst and Machine Learning Engineer who began the preliminary assessment of available HR data to identify integration and analytic challenges, setting the stage for a focused and effective project kick-off.

**Sprint 1: Planning and Data Preparation**

The project's trajectory was significantly influenced by the first sprint. The Product Owner strategically streamlined the project backlog and prioritized tasks to ensure alignment with key business objectives. Utilizing JIRA to maintain project coherence, the Scrum Master conducted effective sprint planning meetings. Concurrently, the data analyst took the initiative to evaluate and refine the data, creating a unified, clean dataset that would serve as the foundation for predictive modeling. The machine learning engineer began with basic model designs, setting the stage for more complex analytics in subsequent sprints.

**Sprint 2: Model Development and Initial Testing**

The main focus of the second sprint was predictive model development and testing. Employing advanced machine learning techniques, the machine learning engineer developed models to forecast employment needs and predict voluntary attrition. Simultaneously, the data analyst identified critical variables impacting employee turnover and created data visualizations to support the models' conclusions, providing essential insights. The intense collaboration among team members throughout this sprint was facilitated by the Scrum Master's use of agile methodologies and the Product Owner's strategic guidance.

**Sprint 3: Optimization, Testing, and Finalization**

During the final sprint, the team concentrated on refining and optimizing the models. Based on testing outcomes, the machine learning engineer enhanced the models' accuracy and reliability. The data analyst continued to support the project by integrating model outputs with HR systems and developing the final reports and visualizations. Together, the Product Owner and Scrum Master ensured that the project was completed on time and met all its objectives. This resulted in robust, actionable outputs that significantly enhanced HR's decision-making capabilities.

This disciplined Agile approach not only addressed the initial challenges but also paved the way for strategic HR decision-making, fundamentally transforming how Seagate's HR team forecasts and plans its workforce needs. Through each stage, the project not only adhered to its objectives but also adapted to emerging insights, ultimately enhancing the strategic contribution of HR to Seagate's overall business leadership.

# **Product Backlog**



# **Sprint Backlog via JIRA Work Management**

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**Sprint 1 Backlog**

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**Sprint 3 Backlog**

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# **Burndown Chart**





The project burndown chart visually depicts the progress of work against the project's timeline, spanning from March 5 to April 28. The X-axis enumerates the days of the project, while the dual-scaled Y-axis measures the story points on the left and another metric which is the total story points on the right.

Several critical components are highlighted in the chart: The orange line represents the total remaining story points, indicating the expected decrease in workload over time, starting from approximately 145 story points. The ideal burndown, indicated by the blue line, when measured against the total remaining story points, reflects the team's progress in accordance with the planned trajectory. The actual story points completed each day are illustrated by the yellow bars, fluctuating to reflect the varying pace of task completion. The green bars represent the planned story points, setting a benchmark for the expected progress on any given day. These bars give insight into the projected volume of work against which actual performance can be measured. The black dotted line denotes the current date, providing a straightforward comparison for stakeholders to check the status. Observing the trends on either side of the dotted line is instrumental in understanding the project's dynamics and managing expectations for its conclusion. As the project progresses, continual monitoring of these elements will be vital for deriving insights that inform any necessary strategic adjustments.

# **Velocity Chart**

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The Project Velocity Chart provides a comprehensive view of the work undertaken across several iterations, known as sprints in terms of story points, a unit of measure indicating the effort required to complete a task or project. The chart categorizes the work into committed story points (yellow bars) and completed story points (green bars) over the course of four sprints.

In Sprint 0, the team showed commendable alignment between the story points they committed to and those they completed, indicating a strong start. Sprint 1 witnessed a substantial increase in both committed and completed story points, suggesting an enhancement in the team's capacity for work delivery. Despite committing to more story points in Sprint 1, the team still accomplished a significant volume of work hinting at potentially optimistic commitments. Similarly, In Sprint 2, the team maintained this consistency thereby ensuring a sustained level of performance. Currently, In Sprint 3, the chart indicates that the team has not yet completed few story points, implying that the tasks are in progress.

This velocity chart serves as a crucial tool for evaluating team performance over time and for strategizing upcoming sprints. It reflects the team's proficiency in estimating and executing tasks, and the presence of uncompleted story points in Sprint 3 are expected given the project's timeline. The insights gained here are vital for the team to fine-tune their future commitments and approach, ensuring realistic objectives and a steady workflow.

# **Other Tools**

**JIRA**

In our Agile methodology, sprint backlog management was efficiently handled using JIRA software. This application allowed us to assign and monitor sprint work effectively, providing every team member with visibility into their responsibilities. It facilitated tracking progress and offering real-time updates, which was essential for maintaining sprint momentum. Using JIRA, we executed each sprint effectively, and the Agile principles of iteration and continuous improvement were upheld through a detailed record of completed tasks and any challenges encountered.

**Excel**

Our product backlog, encompassing all user stories and related elements, was flawlessly managed using Excel. This tool enabled us to efficiently classify and prioritize these user stories, providing a well-organized overview that facilitated cross-sprint strategic planning. Excel was crucial in visualizing our project's progress with detailed burndown charts that illustrated daily advancements throughout each sprint, in addition to managing the product backlog. We also utilized Excel to create velocity charts, which displayed the total number of story points committed to and completed in each sprint. By integrating both burndown and velocity charts, Excel became an indispensable tool in our project management toolkit, allowing for comprehensive analysis of sprint-specific outcomes and overall project momentum.