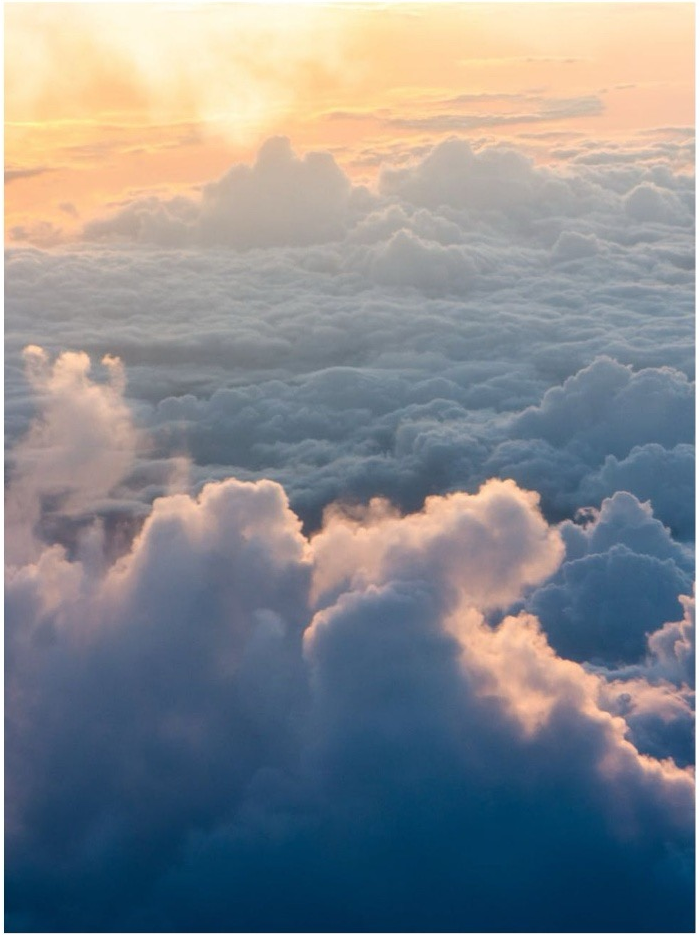
Reducing Customer Churn at BigNorth Airlines

BigNorth Airlines is a top-tier airline that provides customers with reliable service and a wide range of destinations. The data science team is dedicated to using data-driven insights to improve customer satisfaction and reduce customer churn.



Managing Data Science Projects with Data Driven Scrum (DDS)

Data Driven Scrum (DDS)

Agile coordination framework to manage data science projects at BigNorth

Roles

Define roles and responsibilities for each team member

Data Driven Scrum (DDS) is an effective agile coordination framework to manage data science projects at BigNorth, with clearly defined roles and responsibilities for each team member.

Key Roles in DDS

Product Owner

Communicates vision, prioritizes work, accepts or rejects results

Development Team

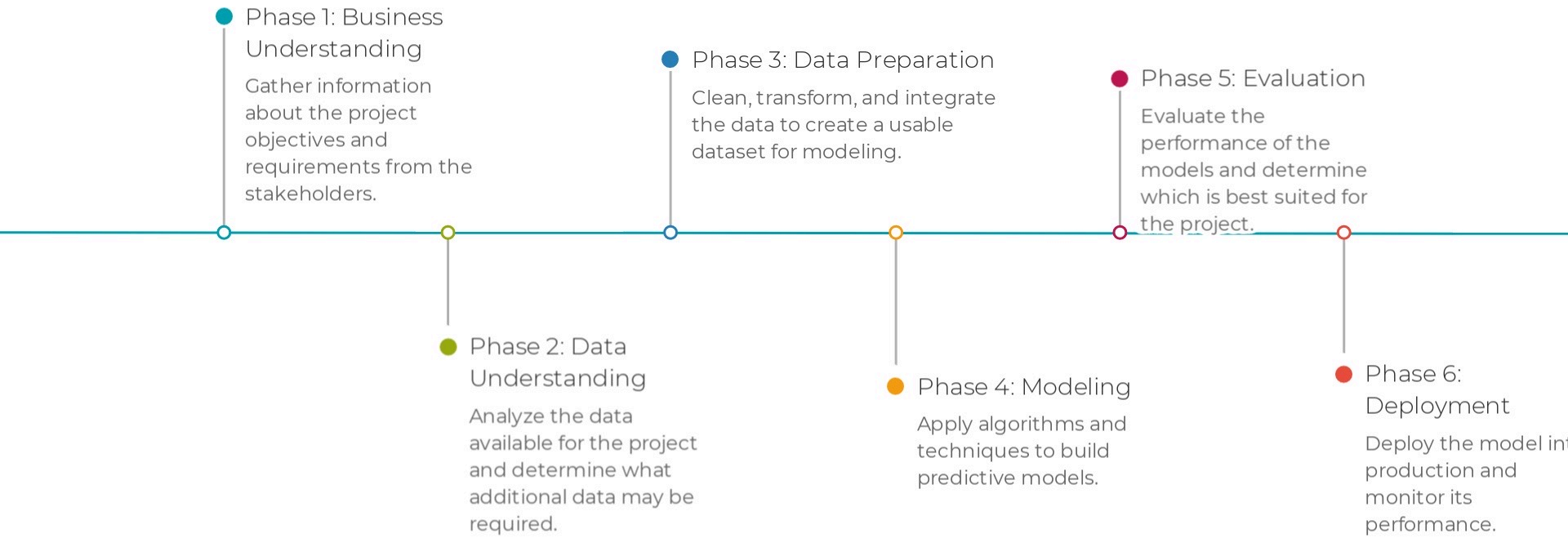
Data scientists and analysts delivering work increments

Scrum Master

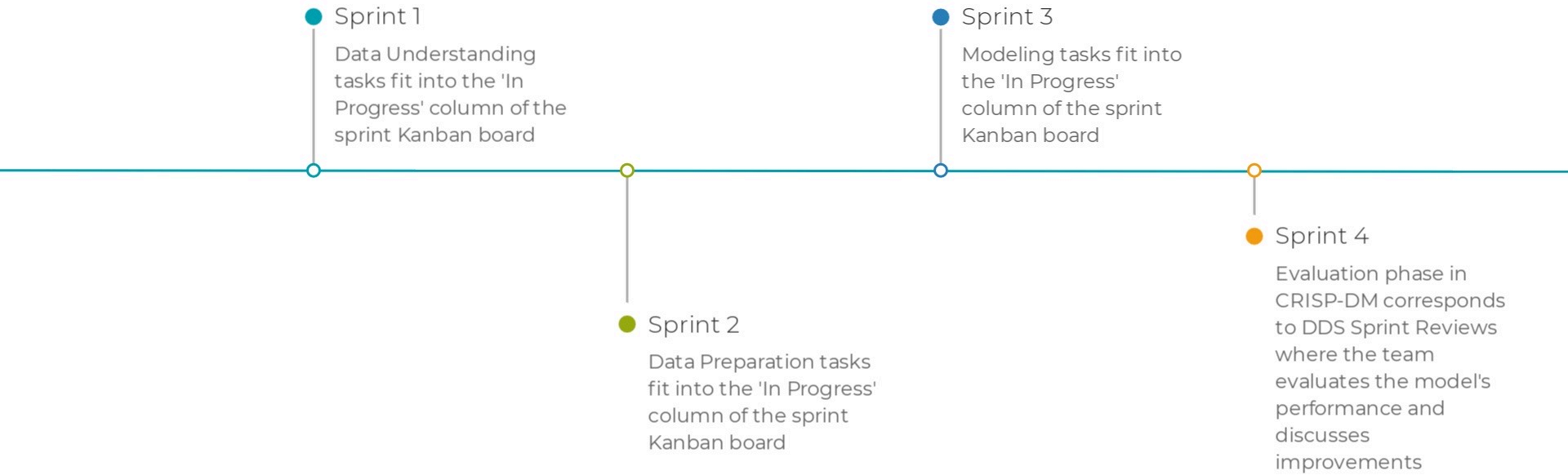
Facilitates progress and adherence to Scrum process

The roles of Product Owner, Development Team, and Scrum Master are essential for successful delivery of data science projects using the Scrum framework.

Exploring the CRISP-DM Workflow Framework



Aligning the CRISP-DM and DDS Processes



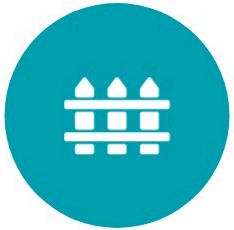
Preparing for the First Iteration

Creating an Item Backlog

Identifying business objectives and metrics, acquiring and cleaning data, exploratory data analysis, developing models, evaluating and refining models

Prioritizing items based on value and dependencies

Defining the Kanban Board (Backlog, In Progress, Testing, Done)



Setting WIP limits

Based on team capacity, to be adjusted as necessary

In order to ensure a successful first iteration, it is important to properly prepare by creating an Item Backlog, prioritizing items based on value and dependencies, and setting WIP limits.

Achieving Business Objectives in the First Iteration

Identify and understand business objectives and metrics

Meet with stakeholders, gather and document information

Discuss findings with the team

Ensure team understands objectives and success metrics

Document and share information

Ensure information is documented and shared

By understanding the business objectives and success metrics, the team can effectively communicate their objectives and metrics to stakeholders.

Data Acquisition & Preparation Iteration 2

Identify data sources

Research and locate available data sources

Clean and prepare data

Remove any unnecessary or irrelevant data, format data for analysis

Document the process

Create a record of the steps taken to acquire and prepare the data

Share and discuss data and documentation with the team

Collaborate with team members to ensure accuracy and understanding of the data

By completing these tasks, a clean, well-structured dataset will be ready for analysis, with a documented process and shared data and documentation.

Continuous Improvement and Iterative Development

Conduct Exploratory Data Analysis

Analyze data to identify patterns and trends

Develop Predictive Models

Create models to predict future outcomes

Evaluate and Refine Models

Test and refine models for accuracy and reliability

Future iterations will focus on the remaining backlog items to ensure accuracy and reliability of predictive models.

Communication & Review Strategies

Communication Tool

The team would use a communication tool like Slack or Microsoft Teams for ongoing discussions.

Regular Meetings

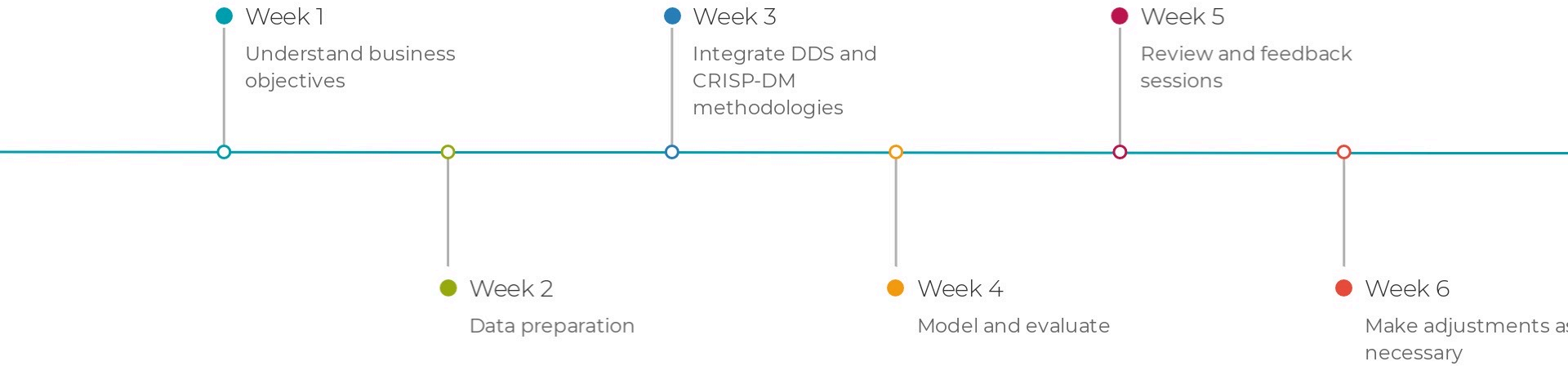
Regular meetings would be held to discuss progress and any issues encountered.

Team Review

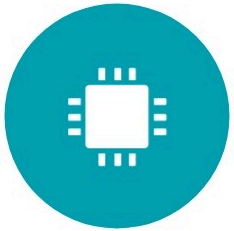
A team meeting would be held to review results after each iteration, with feedback and suggestions encouraged.

By utilizing a communication tool, regular meetings, and team reviews, the team can ensure effective communication and successful project outcomes.

Navigating the Path to a New Process with DDS & CRISP-DM

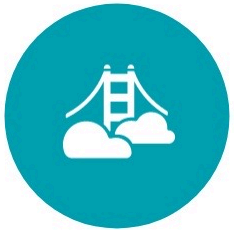


The Benefits of the New Process



Combines strengths of DDS and CRISP-DM

Ensures a structured and iterative approach to data science projects



Reduces customer churn

Provides data-driven insights and models to enhance operational performance and customer satisfaction

Framework for future projects

Provides a framework that can be applied to future data science projects

The new process provides a comprehensive approach to data science projects that can reduce customer churn and provide a framework for future projects.

Factors for Successful Process Implementation

Stakeholder Understanding

Stakeholders must have a clear understanding of their objectives and metrics

Data Accessibility

Necessary data must be accessible and prepared for analysis

Team Capacity

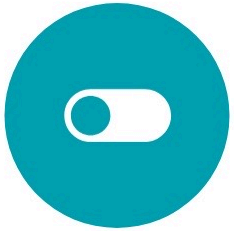
The team must have sufficient capacity to carry out the planned tasks

In order for this process to be successful, it is essential that these assumptions are met.

Overcoming Challenges Through Solutions

Insufficient data quality or access

Partner with IT and business units to ensure necessary data is available and of high quality



Resistance to change in the organization

Clear communication about the benefits of the new process and training sessions to ease the transition

Unrealistic expectations or timeframes

Regular communication with stakeholders to manage expectations and provide realistic project updates

By addressing these challenges with the suggested solutions, organizations can ensure successful implementation of new processes and technologies.

BigNorth Airlines: Our Commitment to Innovation and Continuous Improvement

BigNorth Airlines has worked hard to reduce customer churn and improve customer satisfaction through data-driven insights. Our commitment to innovation and continuous improvement has enabled us to make great strides in this area.