**Project Management**

**OneReporting**

**Project Analysis**

|  |  |
| --- | --- |
| **Name of the Students with the student IDs** | **KushKumar Patel (100951716)**  **Maisha Khatoon (100899259)**  **Mansi Daxeshbhai, Patel (100948140)**  **Sandhya, Mavadhiya (100949690)** |

**Table of Contents**

[**1.0** **Overview** 3](#_Toc134315214)

[**2.0** **Business Request** 4](#_Toc134315215)

[**3.0** **Project Solution Diagram** 4](#_Toc134315216)

[**4.0** **Project Analysis** 5](#_Toc134315217)

[**4.1** **Project Approach** 5](#_Toc134315218)

[**4.2** **Project Size and Complexity** 6](#_Toc134315219)

[**5.0** **Summary** 8](#_Toc134315220)

# 1.0 Overview

**Overview of the Organization**

39 locations are run by the family-run private grocery company Cello Fine Foods in Ontario, Canada. Two brothers, Gus and Luke Cello, started the business in 1980, and it has since expanded to become a market leader in online grocery delivery sales through its e-commerce site and third-party grocery delivery partners, FoodCart and ShopPro. With almost 6000 employees, Cello Fine Foods brings in $1.4 billion a year, of which $25 million comes from online grocery delivery. The organization is dedicated to giving its employees great hands-on training, sincere support, and a sense of community. They take great pleasure in upholding family values and providing their patrons with the highest caliber of cuisine and service.

**Project Overview**

The Cello Fine Foods team responsible for business development and partnerships is funding the Shopper Dashboard initiative. To monitor and control the operational metrics of the online grocery delivery channel for sales via Cello's online store and through their collaborations with FoodCart and ShopPro, the project intends to create a new set of performance indicators. A project manager designated to oversee the project by the Project Management Department will oversee it internally. Both internal full-time employees and contractors with variable project duration commitments will make up the main project team. The project will take 12 months to complete and has a 250K budget. Planning, procurement, requirements, solution design, back-office build and test, API integration and testing, front-office build and test, dashboard build and test, user acceptance testing, transition to operations, and project closeout are among the ten work packages that make up the project.

**Project Purpose**

The goal of the Shopper Dashboard project is to improve the grocer's online business and strengthen the business development team's relationships with outside service providers. The executive leadership team and strategy department can access the new dashboards, which will aid in organizational strategy planning. The new performance measures will help all users of the Executive Dashboard Portal, even if the project primarily affects the Business Development Team. The project will be planned and executed using iterative sprint cycles, with predetermined requirements and design. Due to the integrative cycle, tasks can operate in parallel, allowing for requirements to change. Every component that is built and tested moves the project closer to the final result, even though no element of it can be deployed independently because the entire data set is required for the dashboard.

The project's scope is established by assessing the work scope; large projects necessitate greater time and resources, whereas smaller projects involve fewer team members and tasks. Comprehending the extent facilitates the process of allocating and scheduling resources. Evaluating the project's complexity also entails determining the degree of risk, stakeholder participation, and technical knowledge required. While complex projects demand sophisticated abilities and involve various stakeholders with varying interests, simple initiatives only require basic skills and involve a small number of stakeholders. Comprehending complexity facilitates the distribution of expertise and the control of risk.

# 2.0 Background

**Issue**

Based in Ontario, Canada, Cello's Fine Foods is a privately held grocery company run by a family. Since its establishment in 1980, the firm has expanded greatly, and as of right now, it runs 39 locations and provides grocery delivery services via both its website and outside delivery services like FoodCart and ShopPro. The business does not, however, have a thorough system in place to monitor and control the effectiveness of its online grocery delivery channel. Because of this, it is challenging for the business development team to assess the advantages of managing personal shopping internally vs using third-party delivery services and to make well-informed strategic decisions regarding the expansion and improvement of the channel.

**Solution**

Cello's Fine Foods launched the Shopper Dashboard project to address this issue. The project's objective is to create a new dashboard with a set of performance indicators for monitoring important data about the online delivery channel. This will contain information from the third-party marketplaces as well as Cello's online store. The business development team and other pertinent stakeholders will have access to the dashboard, which will give them a comprehensive picture of the channel's performance.

**Benefits**

The advantage of this solution is that it will give Cello's Fine Foods the information and understanding it needs to enhance its online distribution system. Stronger alliances, improved e-commerce success, and eventually more business for the corporation will result from this. Additionally, the business development team will be able to make better strategic decisions thanks to the dashboard, which will improve Cello's Fine Foods' overall performance.  
Furthermore, the Shopper Dashboard will give the business development team the information and understanding they require to assess how well managing personal shopping in-house compares to using third-party delivery services. This will assist the team in maximizing the channel's effectiveness and guarantee that it is fulfilling the aims and objectives of the business.

# 3.0 Project Solution Description

The goal of the Shopper Dashboard project is to develop an extensive performance dashboard for the executive dashboard portal of Cello Fine Foods Inc. Three main workstreams for personal shopping will have their performance data integrated into this dashboard: FoodCart, ShopPro, and Cello's in-house personal shoppers. To improve operational effectiveness and strategic decision-making, the goal is to centralize data and offer comprehensive metrics on the performance of personal shopping operations.

**Components of the Solution**

Integration of Data: Data Sources: FoodCart, ShopPro, and Cello's online store will all have their data integrated into the project.

Data Warehouse: To store and handle the integrated data, a centralized data warehouse will be built.

ETL Processes: To guarantee accurate and timely data transfer from the various sources to the data warehouse, robust Extract, Transform, and Load (ETL) processes will be developed.

Development of a Dashboard: User Interface: The executive dashboard portal will have an easy-to-use interface emphasizing clear data visualization and simple navigation. Real-time Data: The Business Development team will always have access to the most recent information thanks to the dashboard's support for real-time data updates.

Personalization: The dashboard's customizable views and reports let users adapt the data to their demands.

Here is a visual representation of the project diagram about the data gathered from the shopper's dashboard:

A diagram of a database

Description automatically generated

The data pipeline diagram shows how data is transferred and changed from source systems to a database so it may be analyzed. Three primary phases comprise the pipeline:

**Consumption**

Through an API, information from two source systems—"Shopper DATA" and "Foodcourt DATA"—is absorbed into a "Staging DB."

The "Staging DB" receives data from a "Cello DB" through an ETL (Extract, Transform, Load) procedure.

**Modification**

An ETL method is used to transform the data in the "Staging DB". The data may be cleaned, merged, and enhanced as part of the transformation.

**Display and Import**

A database is filled with the converted data.Users can use a visualization tool to see the data in the database.

Many organizations utilize this standard architecture for their data pipelines. Organizations that must analyze data from several sources and first modify the data before analysis may find this process to be beneficial.

**Advantages**

Improved Decision-Making With the help of the new dashboard, executives will be able to make data-driven strategic decisions by gaining thorough insights into personal shopping operations.

The optimization of operations- Cell phones Fine Foods can pinpoint inefficiencies and opportunities for enhancement, resulting in enhanced operations, by consolidating data and providing comprehensive metrics.

Better Collaborations- Partnerships will be strengthened, and better terms will be negotiated with the ability to evaluate and contrast the performance of internal operations with that of third-party delivery platforms.

Planning Strategically- Precise and up-to-date data insights will help long-term strategic planning, enabling Cello Fine Foods to improve its online store and maintain its position as a market leader.   
Cello Fine Foods Inc. hopes to improve efficiency, obtain a better understanding of its shopping operations, and make well-informed strategic decisions by creating and deploying the Shopper Dashboard.

# 4.0 Project Analysis

## 4.1 Project Approach

A hybrid project methodology, including both predictive and adaptive approaches, will be used for the Shopper Dashboard project. This strategy was chosen because it combines the best features of both approaches, guaranteeing a well-organized plan and schedule for important assignments and providing flexibility to adapt to changing needs and user feedback.

The elicitation of requirements, thorough project planning, initial data integration and API setup, and resource acquisition are all examples of the predictive components of the project strategy. Because these components are well-defined and amenable to predictive approaches, it is possible to develop an organized strategy and schedule for them. By doing this, you can make sure that the project stays on course and that important activities are finished on schedule.

The project methodology would incorporate adaptive features such as iterative dashboard development, constant improvement and modifications, and continuing testing and user input incorporation. Because of their greater adaptability and capacity for an adaptive approach, these components enable modifications in response to user needs and feedback. This will make it easier to make sure the dashboard is updated and modified over time to better suit the demands of the Business Development Team and other stakeholders.

Because it allows for flexibility to accommodate changes based on user feedback and growing requirements and an organized strategy and timeframe for important tasks, the hybrid method is well-suited for the Shopper Dashboard project. By doing this, you can make sure the project is completed on schedule, within budget, and in a way that satisfies the requirements of the Business Development Team and other relevant parties.

To summarize, the Shopper Dashboard project's hybrid methodology involves anticipatory components such as resource acquisition, initial data integration and API setup, thorough project planning, and requirement elicitation. Iterative dashboard development, continuous testing, and user feedback integration, as well as continual enhancements and modifications, are examples of the adaptive components. This method keeps the project moving forward while being adaptable enough to consider fresh information and evolving specifications.

## 4.2 Project Size and Complexity

**Project Dimensions and Intricacy**

The Shopper Dashboard project was evaluated based on several aspects, including its moderate size and complexity.

**Project Scope:**

**In-Scope**  
Integration of New Data Sets: This process entails locating, obtaining, and ingesting data into the corporate data warehouse from Cello's online store as well as third-party APIs offered by ShopPro and FoodCart. This guarantees thorough coverage of every online grocery delivery platform.

API Development and Testing: Real-time performance monitoring requires the development of APIs that retrieve and combine data from outside parties.

Design and Testing of Dashboards: To integrate PowerBI visualizations and performance indicators into the Executive Dashboard Portal. To improve the metrics shown, iterative development and user feedback are needed.

**Outside of Scope**

Updates on Data Governance: To keep the project focused on dashboard development, updating the data dictionary or catalog is not included.

User Training: Instruction for end users on how to utilize and interpret the new dashboards is not included in this package and will require independent management.

Drill-down functionality and mobile app configuration are planned for later project stages, which will simplify the current project's complexity.

**Team Membership**

Workers from within and outside contractors: The project team consists of both outside contractors and internal employees. This makes it possible to allocate resources more freely and acquire specialized skills as needed. Internal Team is in charge of requirements collection, continuous support, and core project management. To cover gaps in capabilities, external contractors are brought in, especially for specialized technical activities like API development and Data Integration.

**Technical Difficulty**

Data Ingestion & Cleansing: By leveraging Azure Synapse's sophisticated data processing capabilities, data from multiple sources is ensured to be clean and ready for analysis.

API Integration: To guarantee smooth data flow, connecting to FoodCart and ShopPro's APIs calls for thorough development and testing.

Data Modelling and Visualisation: Complex data modeling abilities and a grasp of business analytics are needed to generate and present performance indicators using Analysis Services and PowerBI.

**Schedule and Task Packages**

Duration: 12 months, divided into distinct stages:

Three months of planning and procurement: first phases to lay the groundwork for the project. The 3.5-month requirements gatherings and solution design phase are essential to comprehend the goals of the dashboard and the construction process.

Front-office and back-office Build and Test (3 months): This includes building data integration pipelines from the ground up and testing them. During the 2.5 months of dashboard build and test and user acceptance testing, the finished product must function smoothly and meet business requirements. Closeout and Transition (1.5 months): Completing the project, transferring to operations, and recording the lessons discovered.

**Risk and Participation of Stakeholders**

Moderate Danger Integration Risk: Reliance on external APIs increases risk since data flow may be impacted by modifications or outages in partner systems.

Data Quality Risk: The effectiveness of the dashboard depends on the accuracy and dependability of the data gathered from various sources.

**High Involvement of Stakeholders**

Business Development Team: Important participants and funders who set the project's parameters and supply money.

Executive Leadership: Stakeholder management and frequent updates are required due to the project's high visibility and strategic interest in its results. The Data Management Team oversees providing continuous support and upkeep for the data solution, making sure it continues to be applicable and functioning after implementation.

# 5.0 Summary

The goal of Cello Fine Foods' Shopper Dashboard project is to provide an extensive dashboard for tracking the effectiveness of its online grocery delivery services. The business development team needs to complete this project to compare the efficiency of their internal delivery services with their relationships with FoodCart and ShopPro. The dashboard will improve operational effectiveness and assist in making strategic decisions. The project uses a hybrid approach to project management to strike a balance between rigid planning and the ability to change course in response to user input and evolving requirements. This methodology guarantees that the project remains on track and within budget, all the while providing a solution that satisfies the changing requirements of the stakeholders, including the business development team.

All things considered, the Shopper Dashboard project is a big undertaking that will help Cello Fine Foods' online grocery delivery operations by giving vital information and strengthening relationships with other service providers.