

DATAFORGE CONSULTING

A PROJECT PROPOSAL TO CANADIAN WILLS INCORPORATED

ON UNDERSTANDING SALES DRIVERS, CUSTOMER BEHAVIOR, DELIVERY EFFICIENCY, INVENTORY OPTIMIZATION, AND RETURN TRENDS FOR BUSINESS GROWTH

June 2025

1. UNDERSTANDING THE BUSINESS (STRATEGY)

Canadian Wills is a Canadian retail company offering a wide range of office supplies, furniture, and technology products through physical stores and an online platform. The company serves diverse segments — from individuals to corporate clients — and has achieved stable growth by adapting to customer needs and market trends.

Despite generating a wealth of data across orders, products, customers, and shipping activity, Canadian Wills has not yet implemented a fully integrated data strategy. This lack of data utilization limits the company's ability to identify operational inefficiencies, predict trends, and drive targeted strategies.

By adopting a data-driven approach, Canadian Wills can improve strategic decision-making, product and customer targeting, operational efficiency, and profitability. DataForge Consulting aims to bridge this gap by building an end-to-end business intelligence solution using SQL Server and Power BI (or Microsoft Fabric), leveraging the newly enhanced dataset.

2. UNDERSTANDING THE DECISIONS CANADIAN WILLS NEEDS TO MAKE

This project will support Canadian Wills in making strategic, tactical, and operational decisions, including:

- Product Strategy: Which product categories and sub-categories are the most profitable or underperforming?
- Customer Segmentation: Which segments (Corporate, Consumer, Home Office) and regions contribute most to revenue and profit?
- Delivery Performance: Are orders being delivered on time? Which shipping modes or carriers lead to delays?
- Inventory Health: Which products are at risk of stockouts or excess inventory? Are reorder points being triggered effectively?
- Returns Management: What is the return rate? What reasons are most common? How do returns impact revenue?
- Campaign Planning: What are customers' preferred shipping methods and seasonal buying behaviors? How can we use these to optimize marketing and operations?

3. KEY DECISIONS THIS PROJECT WILL SUPPORT THROUGH DATA

- Identify high-margin, high-volume product categories
- Track customer lifetime value and behavior by segment
- Optimize delivery operations
- Reduce lost revenue from stockouts
- Understand and reduce returns
- Improve forecasting and seasonal strategy

4. DECISIONS, PROCESSES AND KPIS FOR CANADIAN WILLS

Decision: Identify High-Performing Products & Segments

Process Steps:

- Group by Category, Sub-Category, Customer Segment
- Aggregate: SUM(Sales), SUM(Profit)
- Calculate Profit Margin % = $(\text{Profit} / \text{Sales}) \times 100$
- Visualize top performers with high profitability and sales volume

Decision: Understand Customer Segments and Behavior

Process Steps:

- Group by Customer ID, Segment, and Region
- Analyze order frequency, quantity, and spend
- Visualize buying patterns across demographics

Decision: Improve Shipping & Delivery Efficiency

Process Steps:

- Calculate Shipping Delay = Ship Date - Order Date
- Compare Estimated Delivery Date vs. Actual Delivery Date
- Evaluate delays by Carrier, Ship Mode 2, Region

Decision: Optimize Inventory & Reordering

Process Steps:

- Monitor Inventory Level vs. Reorder Level
- Flag Reorder Status = 'Reorder Needed'
- Calculate Inventory Value = Inventory Level \times Unit Cost

Decision: Analyze Returns & Reduce Losses

Process Steps:

- Link Returns Dimension to Sales data via Order ID + Product ID
- Group by Return Reason, Product, Region
- Calculate refund impact on revenue

Decision: Analyze Monthly & Seasonal Sales

Process Steps:

- Group Order Date by month
- Calculate Total Sales, Total Orders
- Identify high/low seasons, spikes, and sales trends

Summary of Expanded KPIs and Calculations

KPI	Formula
Profit Margin %	$(\text{Profit} / \text{Sales}) \times 100$
Total Quantity Sold	$\text{SUM}(\text{Quantity})$
On-Time Delivery Rate	$\# \text{ Orders On Time} / \text{Total Orders}$
Avg Shipping Delay (Days)	$\text{AVG}(\text{Ship Date} - \text{Order Date})$
Inventory Value	$\text{Inventory Level} \times \text{Unit Cost}$
% of Low Stock Items	$\text{COUNTIF}(\text{Inventory Level} \leq \text{Reorder Level}) / \text{Total SKUs}$
Return Rate	$\text{Returned Orders} / \text{Total Orders}$
Refund Value	$\text{SUM}(\text{Refund Amount})$
Customer Tenure (Days)	$\text{Last Order Date} - \text{First Order Date}$
Monthly Sales	$\text{SUM}(\text{Sales}) \text{ grouped by Month}$