

Introduction of Adventure Works Sales Report

Portfolio Project | Power BI

Created by: Ninh Phuong Hong

Contact: ninhphuonghong@gmail.com

LinkedIn: linkedin.com/in/hong-ninh

Raw data: <https://www.kaggle.com/datasets/abdallahprogrammer/adventure-works-microsoft-dataset>

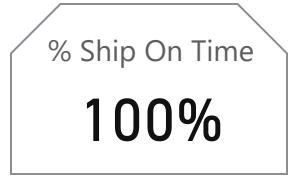
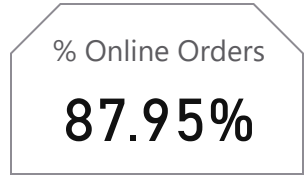
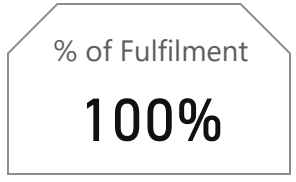
About this report:

This Power BI report analyzes historical Adventure Works sales data (Q3/2011 - Q2/2014) to evaluate sales performance, identify high-performing categories, and analyze sales trend.

- Data Transformation using Power Query: selected necessary columns for the report, renamed and filtered columns;
- Data Modelling: table relationships were configured to develop data model. A calendar table was generated using DAX and marked as Date Table;
- DAX calculations: DAX code was used to calculate total orders & sales measures;
- Conditional formatting was used to adjust colors of bar chart, column chart and data bars in table;
- Visuals used as tooltip: a column named "ColorHexCode" was created to apply the correct colors to 2 visuals "Sales by Color" and "Order by Color", which were then used as tooltip for 2 bar charts;
- Bookmark: bookmarks were created for 2 states: the original state (the All bookmark), and for Europe countries within 2012 (the Europe 2012 bookmark), in order to quickly navigate to a specific stage of the report.

Tools used: Power BI | Data Modelling | DAX | Visualization Best Practices

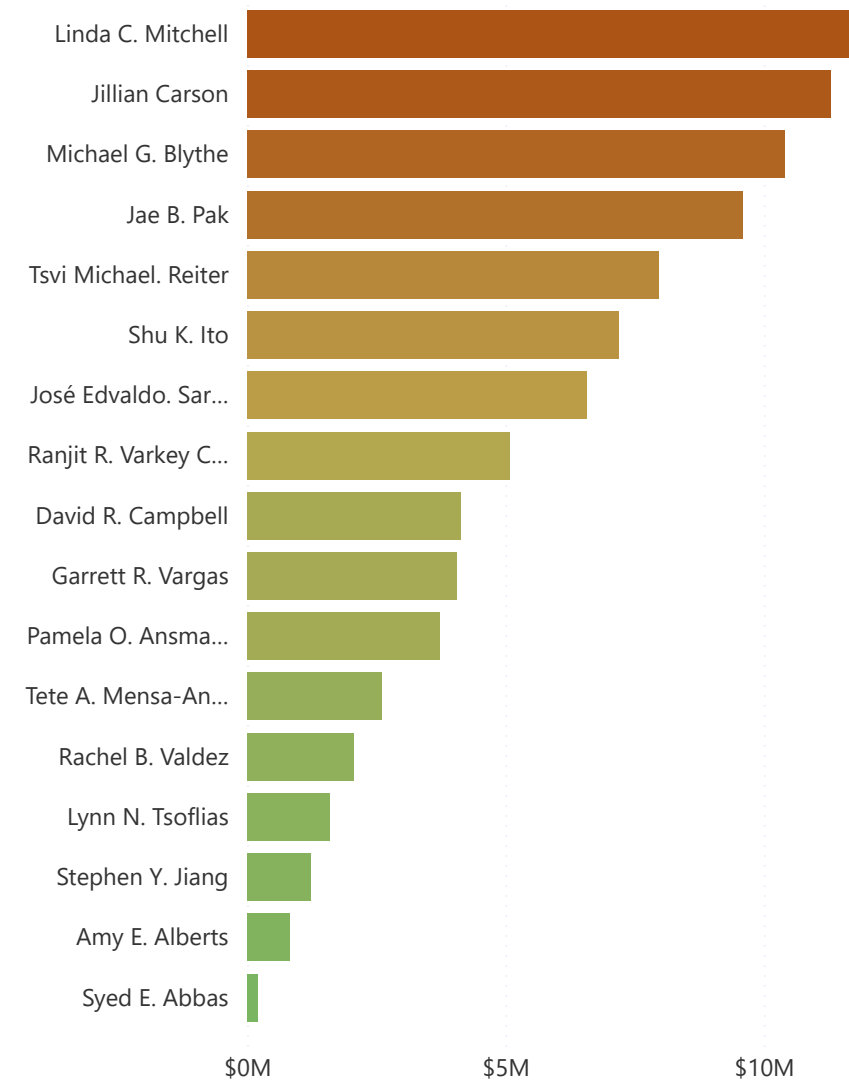
Adventure Works Sales Report



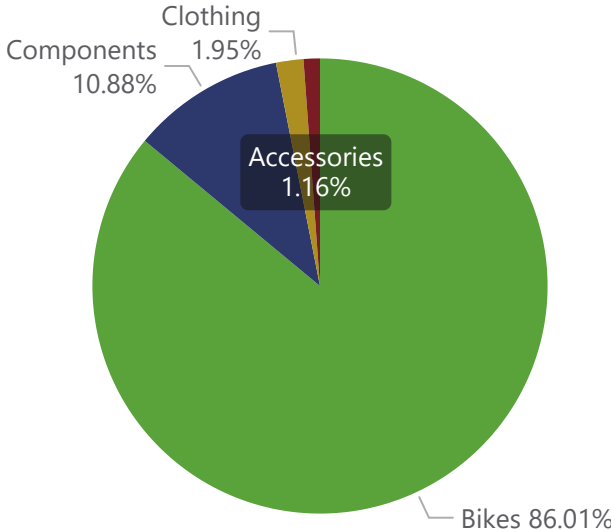
Europe 2012

All

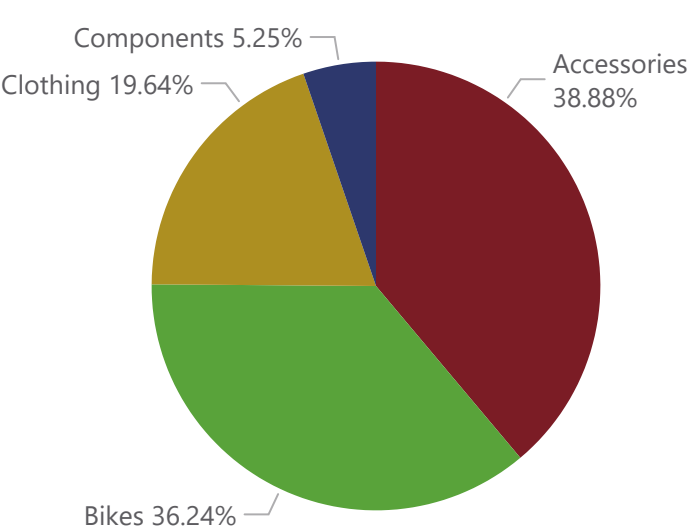
Sales by Salesperson



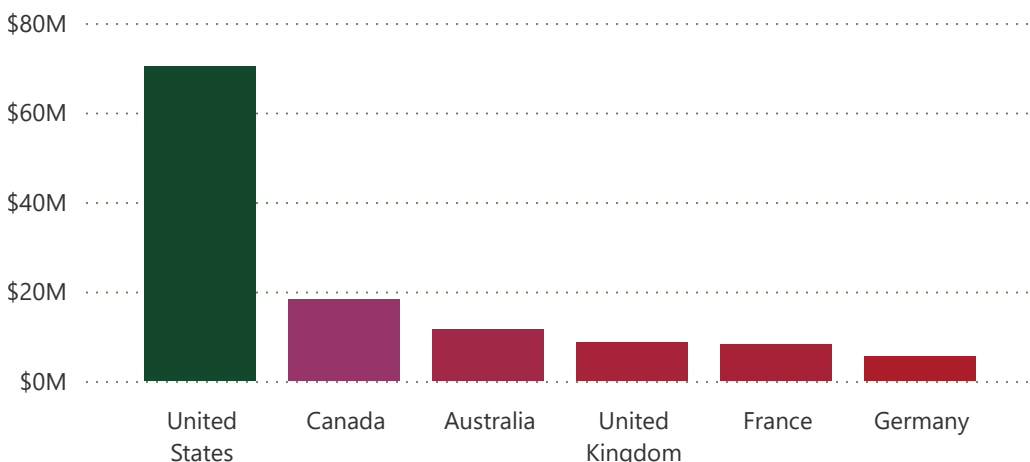
Sales by Category



Orders by Category



Sales by Country



Filter by Date

7/1/2011

6/30/2014

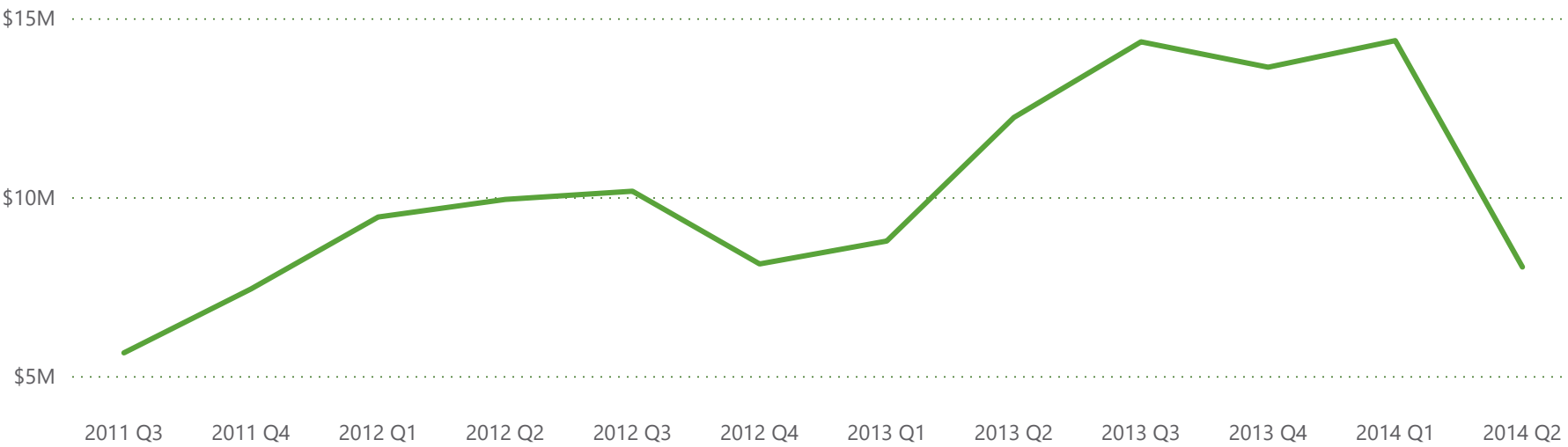
Filter by Region

Europe

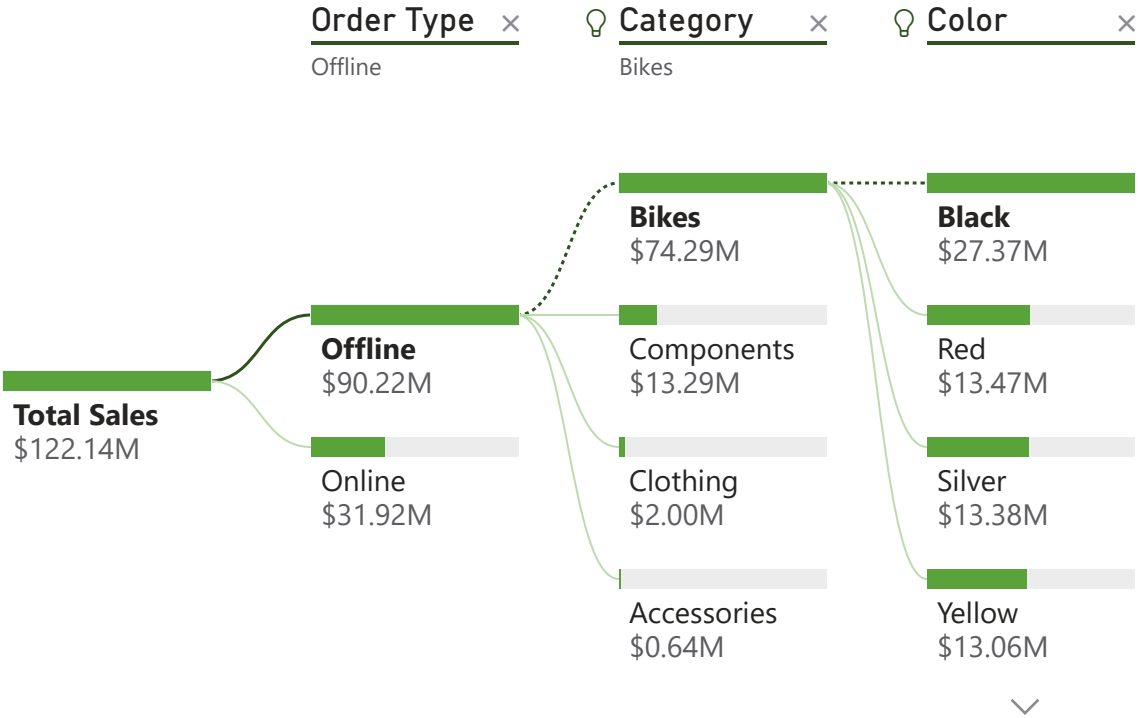
North America

Pacific

Sales over time



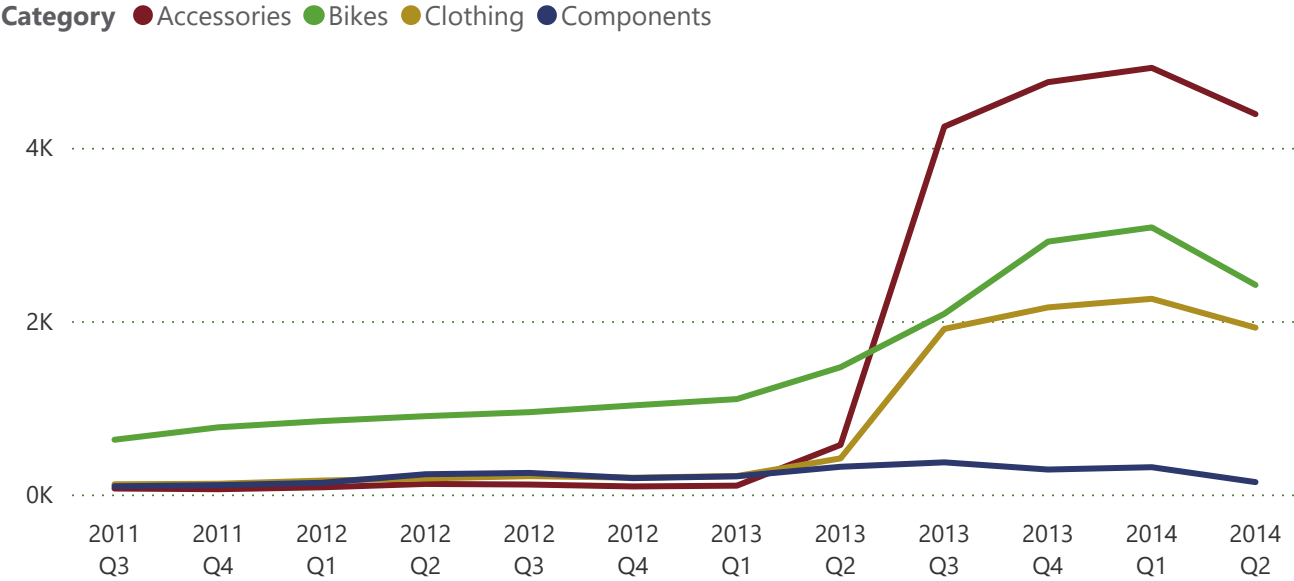
Quarter Name	Total Sales	% Sales Change
2011 Q3	\$5,647,550.6626	
2011 Q4	\$7,434,031.4424	31.63%
2012 Q1	\$9,443,736.8111	27.03%
2012 Q2	\$9,935,495.1744	5.21%
2012 Q3	\$10,164,406.8279	2.30%
2012 Q4	\$8,132,061.4904	-19.99%
2013 Q1	\$8,771,886.3535	7.87%
2013 Q2	\$12,225,061.4003	39.37%
2013 Q3	\$14,339,319.3577	17.29%
2013 Q4	\$13,629,621.2316	-4.95%
2014 Q1	\$14,373,277.6754	5.46%
2014 Q2	\$8,046,221.0271	-44.02%
Total	\$122,142,669.4544	



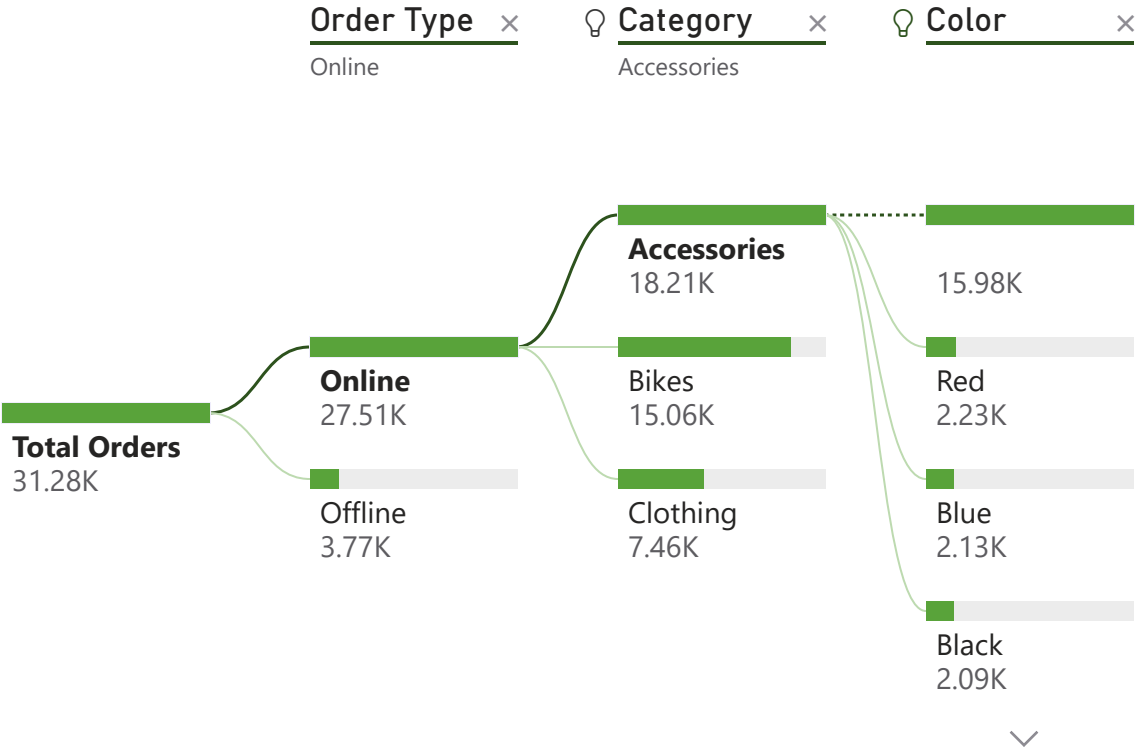
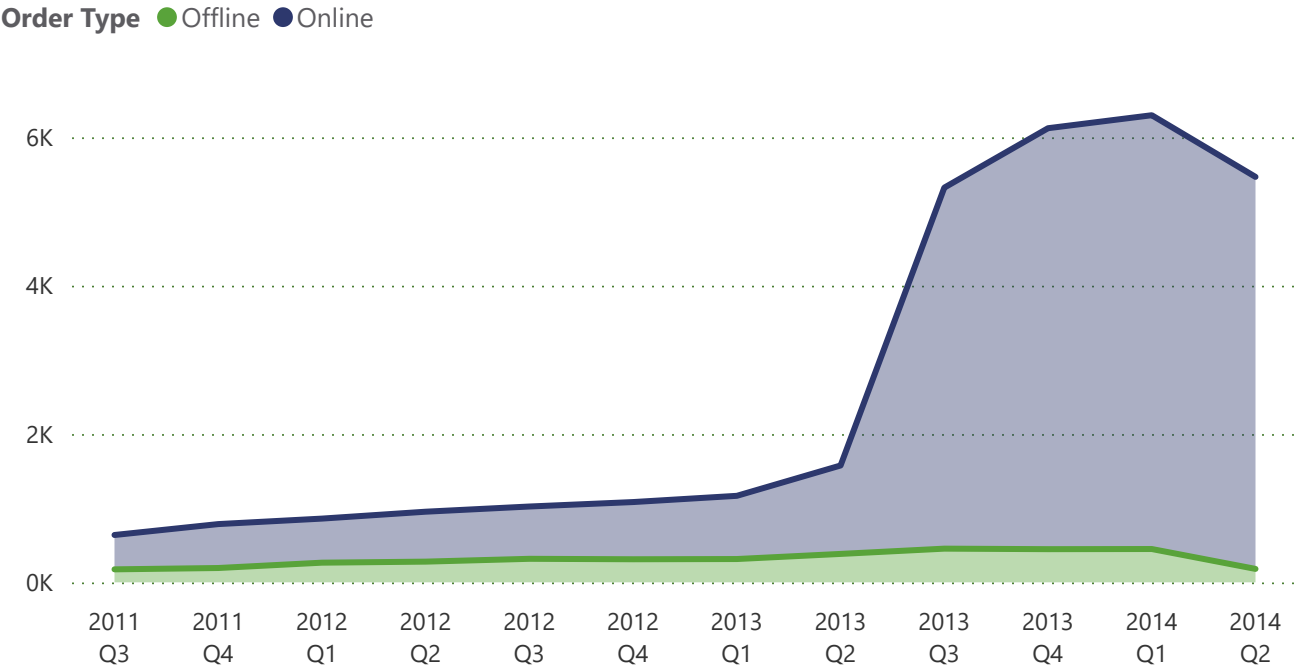
Summary from Sales Overview and Sales Trend over time:

- Sales measures: most of sales came from online orders (~88%), 100% of orders were fulfilled and shipped on time;
- Accessories accounted for the largest % of orders, however due to low price, it was the lowest category to contribute into sales revenue;
- Offline orders, despite their low portion, brought the majority of sales due to high-value bikes orders, and black was the most favorite among all colors;
- Sales declined remarkably on Q2/2014, due to fewer orders from all categories, especially bikes, showing the needs to boost sales for this type of products.

Orders over time by Category



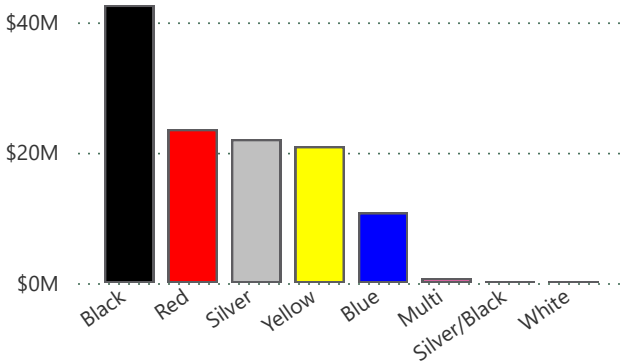
Orders over time by Order Type



Summary from Order Trend over time:

- Most orders came from online platform, which increased incredibly high from Q3-2013, where accessories accounted for the largest part;
- Offline orders did not show recognizable changes over time;
- The company could continue to focus on online platform to boost sales, especially for high-value and space-consuming products like bikes, thus decrease the number of offline stores and save rental fee.

Sales by Color



Order by Color

