

Profit Analysis

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Problem Overview

Adventure Works Cycles, a large wholesaler of bicycles in the US and Europe, has noticed that their total profits have been declining over the last few months.

The company's IT department has provided you with the company's sales data over the last few years.

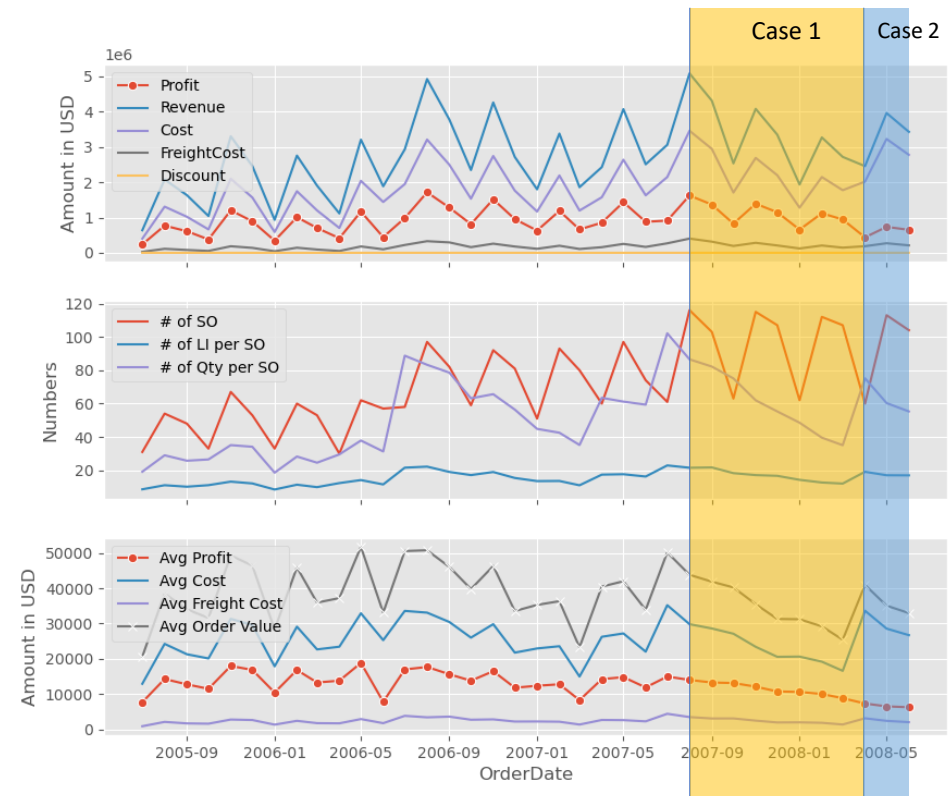
Assumptions:

1. The sales amount is in **USD**
2. The company bears the cost of transport. Thus, `Unit_Freight_Cost` adds into the overall cost of the product from company's perspective.
3. As all rows in `OrderDate` have data only to 01 of Month, `OrderDate` has monthly granularity i.e., it represents month and year on which the order was placed

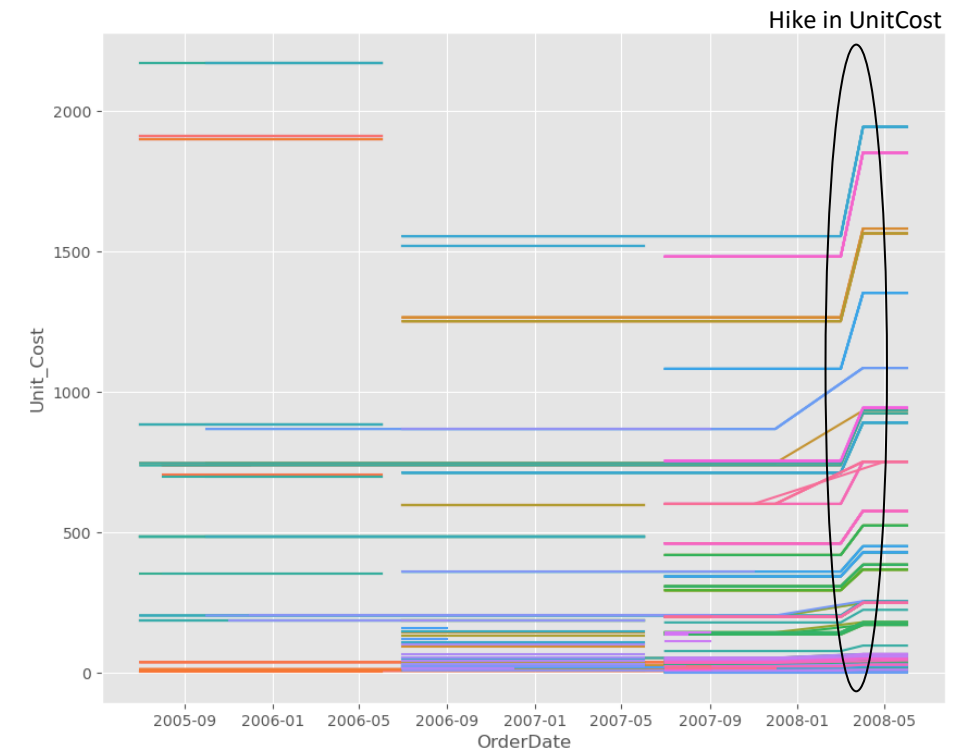
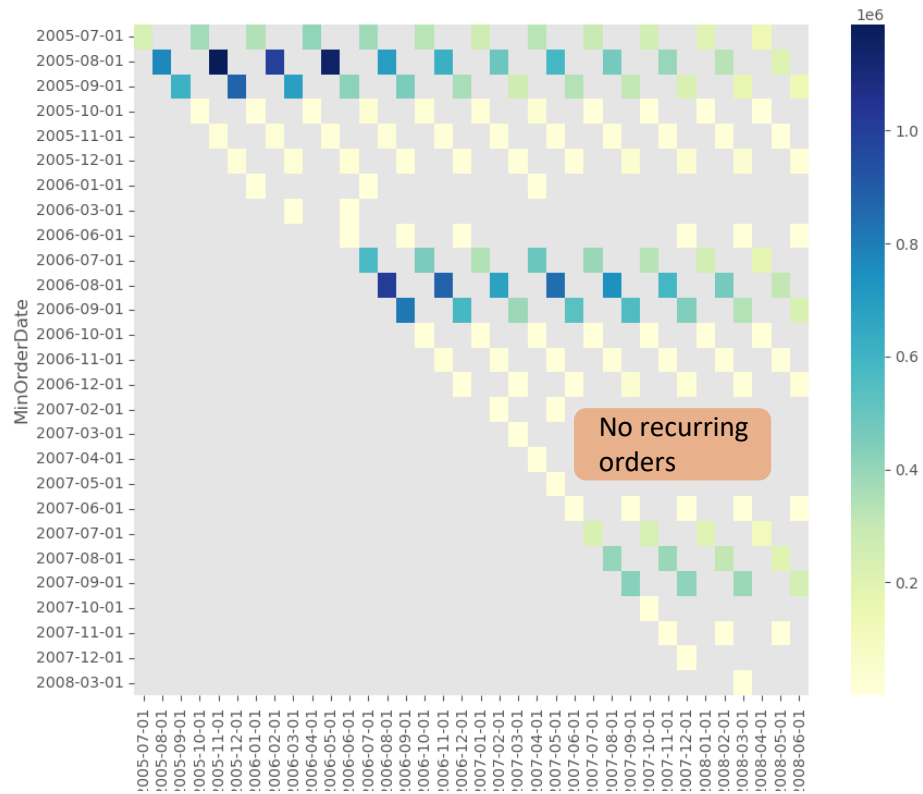


Cases of Profit Drop

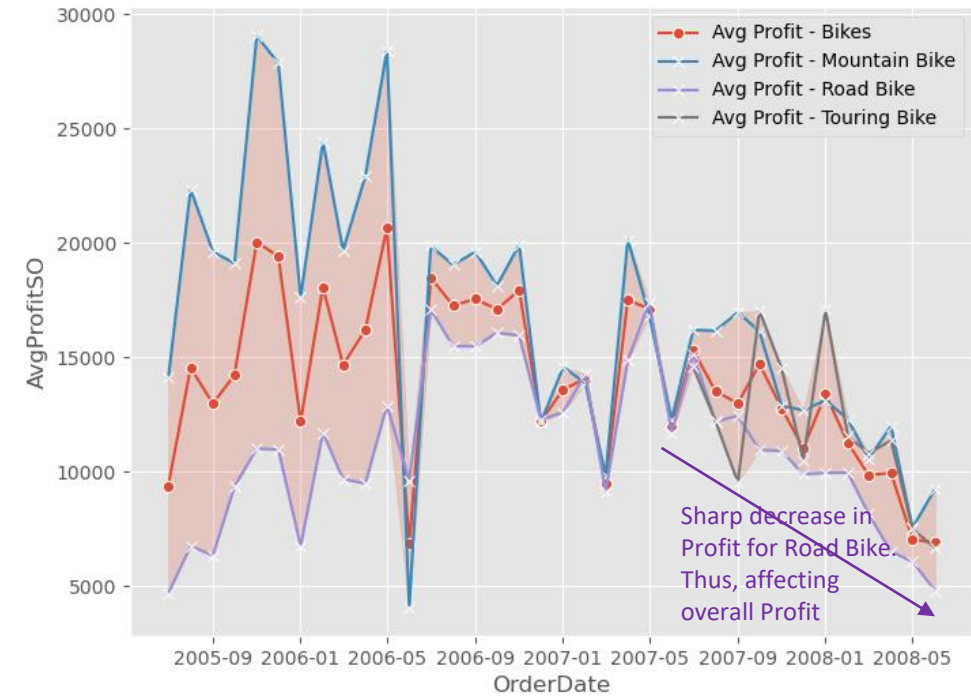
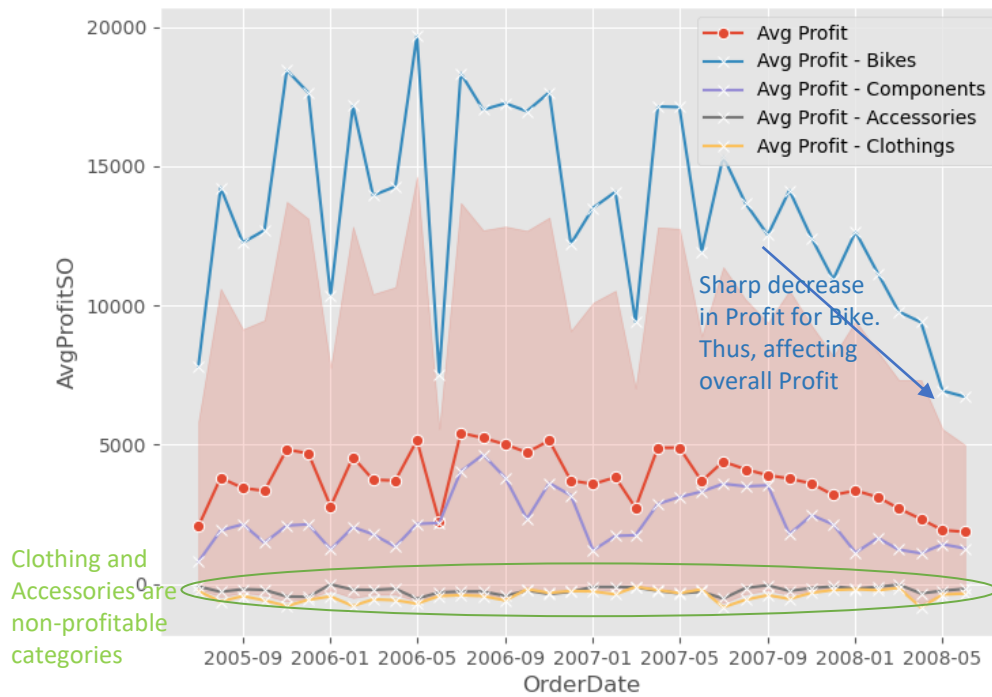
1. Profit drops following a Revenue decrease
 - From Aug 2007 until Apr 2008
 - Customers from Feb till May 2007 did not place recurring orders
2. Profit drops while Revenue increase
 - From Apr 2008 until Jun 2008
 - Increase in UnitCost in Apr 2008 for all the products



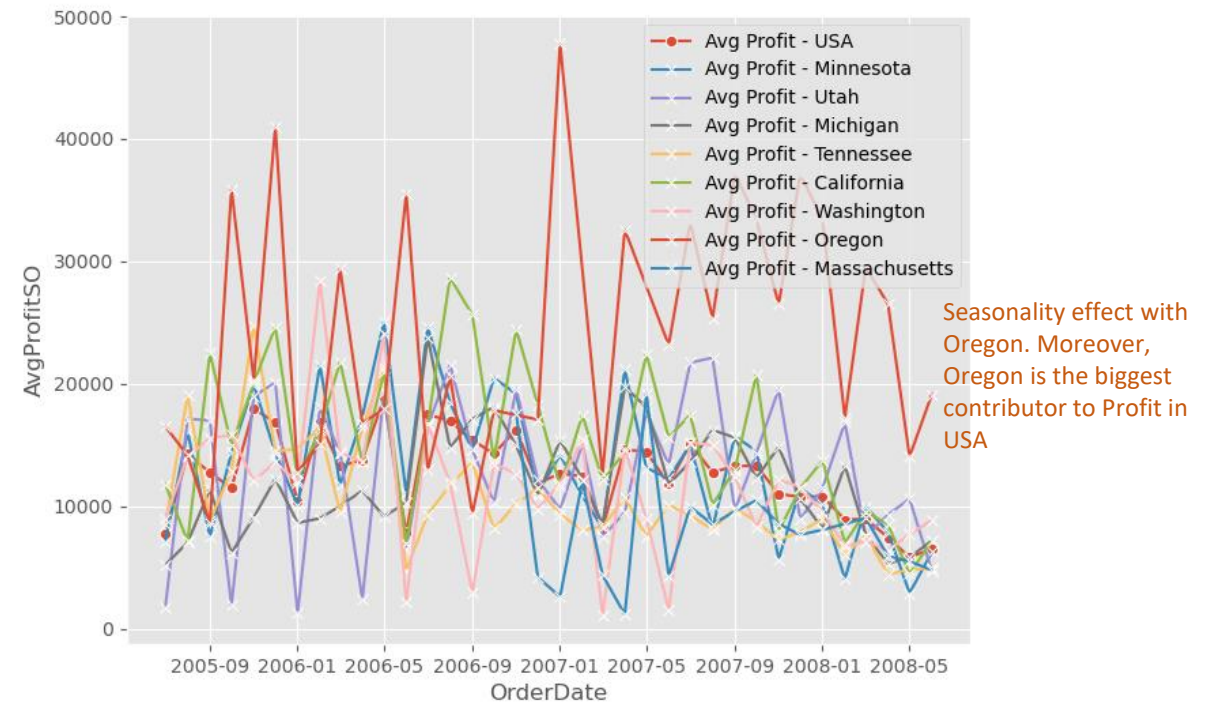
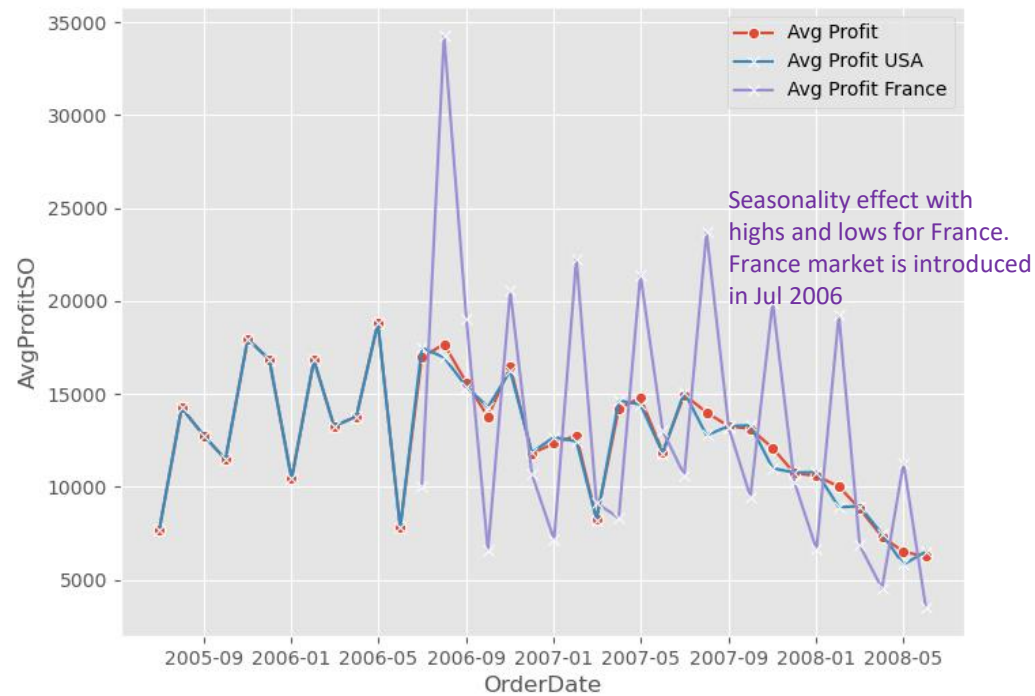
Cases of Profit Drop (cont.)



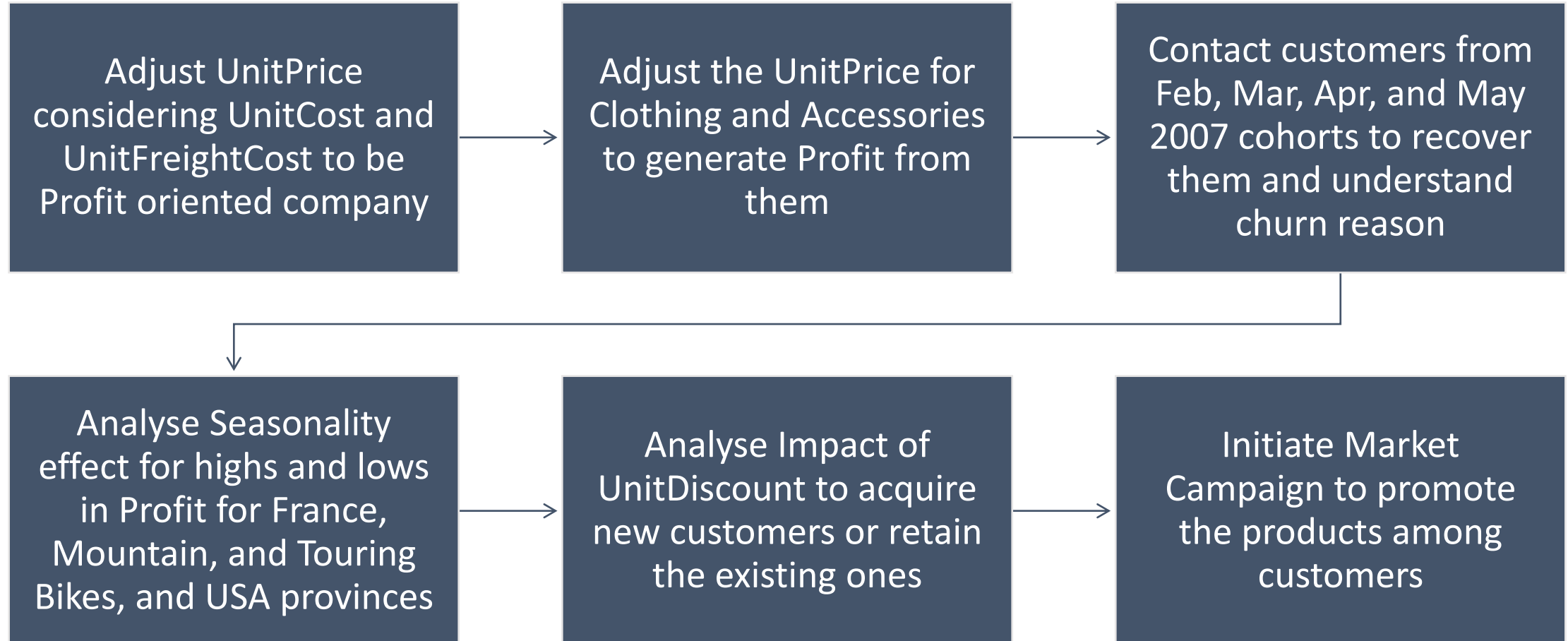
Profit Across Product Categories



Profit Across Sales Regions



Recommendations





Thank You