

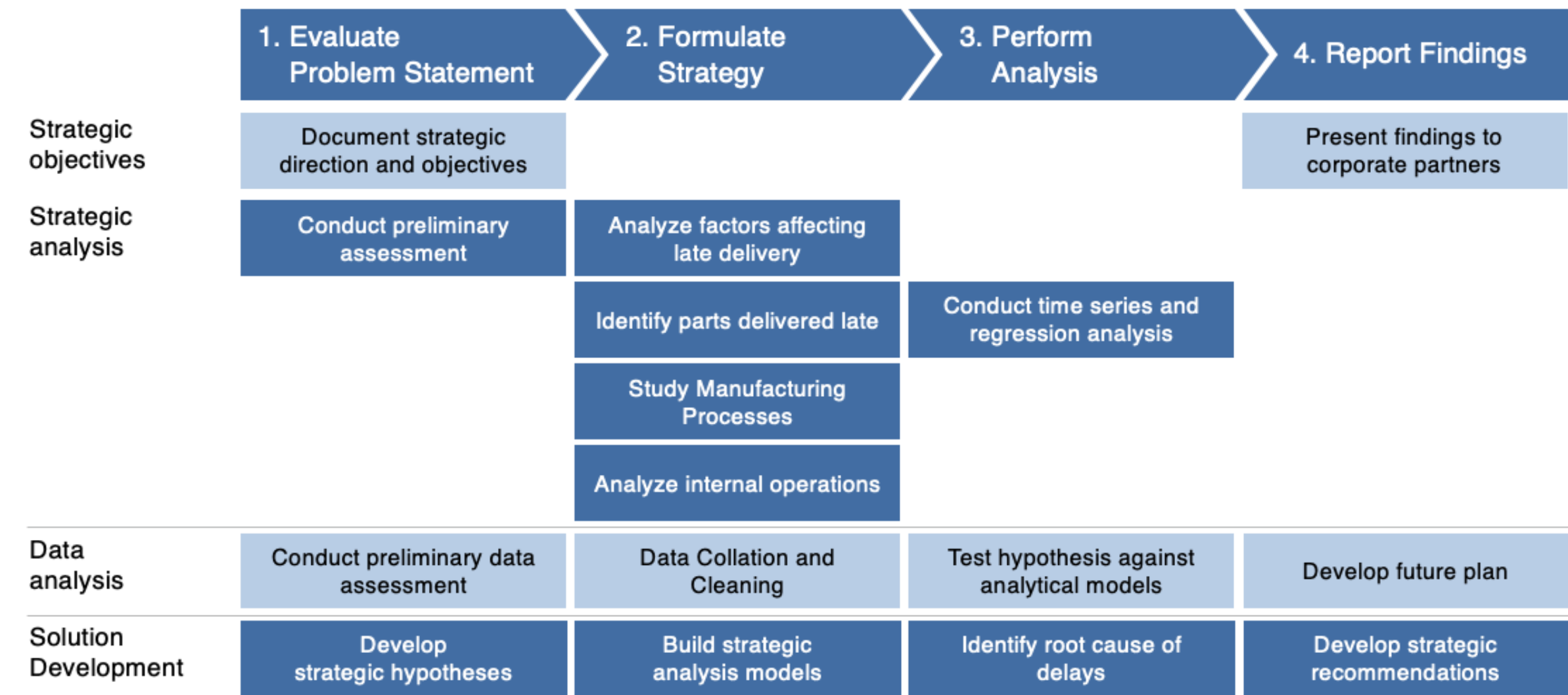
Introduction

Mursix, an Indiana based technology-driven stamping & manufacturing company with a global supply chain, has a Customer On-Time Delivery to Promise Goal of 92%. However, they have averaged 85.67% from the past two quarters in 2021.

Through cooperating with the Data Mine Corporate Partners, Mursix would like to know how they can achieve a 92% on-time delivery goal through descriptive analytics by the students in the project.

Our objective was to analyze the related products, workstations, and delivery performance reports, sort sample products and companies to assist Mursix in identifying the potential causes of the delayed performances and eventually give constructive advice for Mursix to achieve their goal.

Methodology



Tools Used



Data Driven Analysis

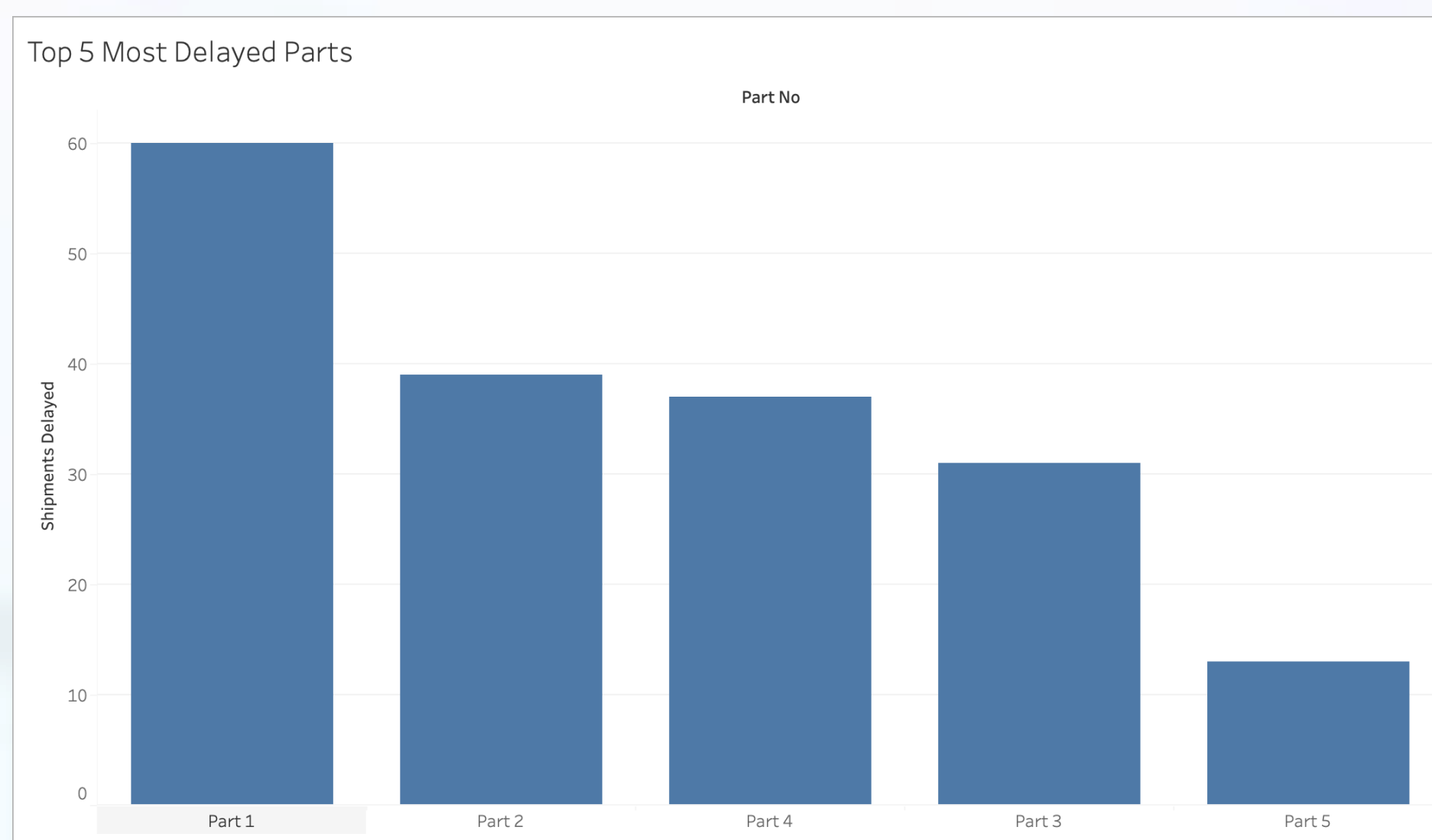


In conducting our analysis, we used two methodologies to eliminate seasonal trends that might have been underlying factor for delays.

First, through a time series analysis, we discovered that the period of 2017-2021, the spike of late delivery has shifted from 3rd and 4th quarters to 1st and 2nd quarters.

Second, through regression analysis we found the factors affecting delay are rework, tear down and idle time. In 2019, 169 hours were spent on rework while idle time was logged in for 1500 hours.

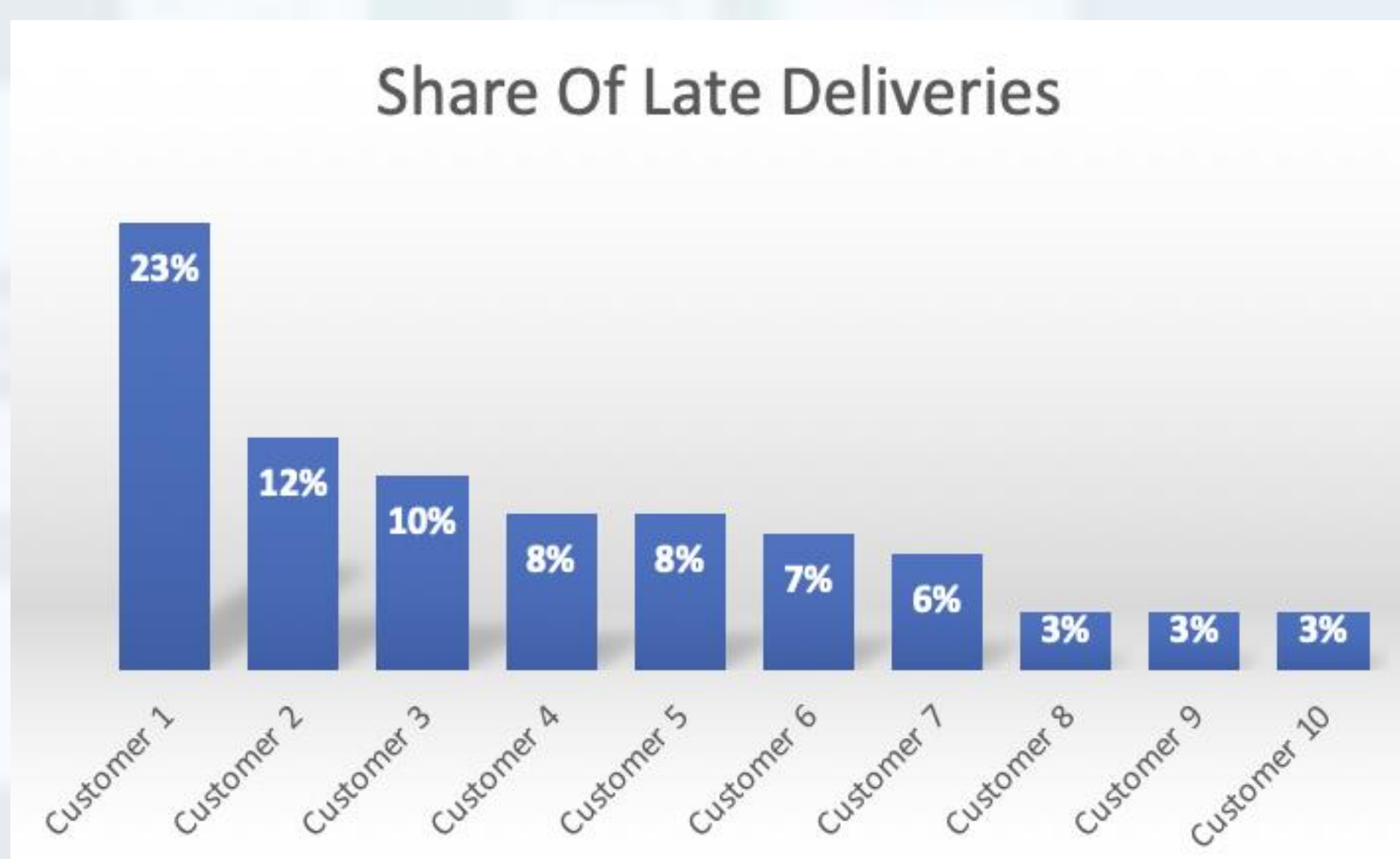
Late Delivery Analysis – Top 5 Parts



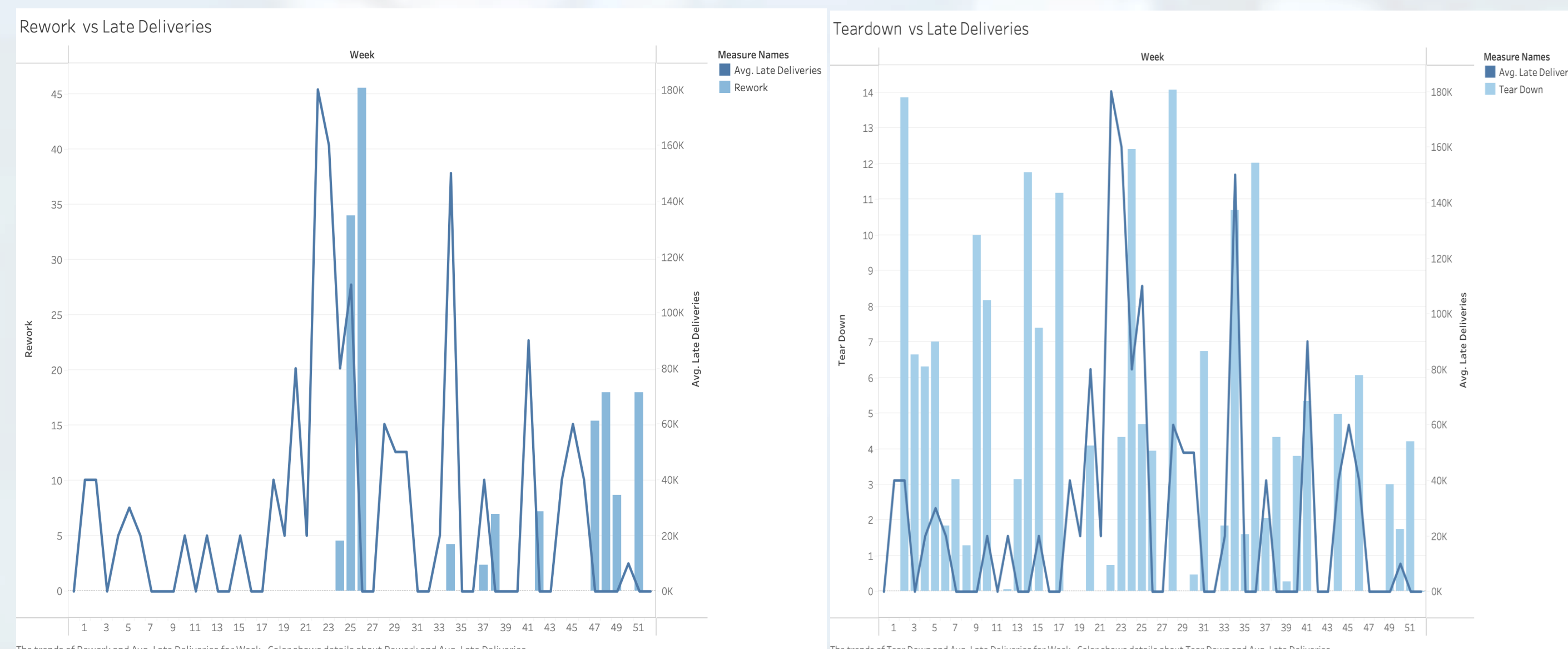
Late delivery – Monthly Chart



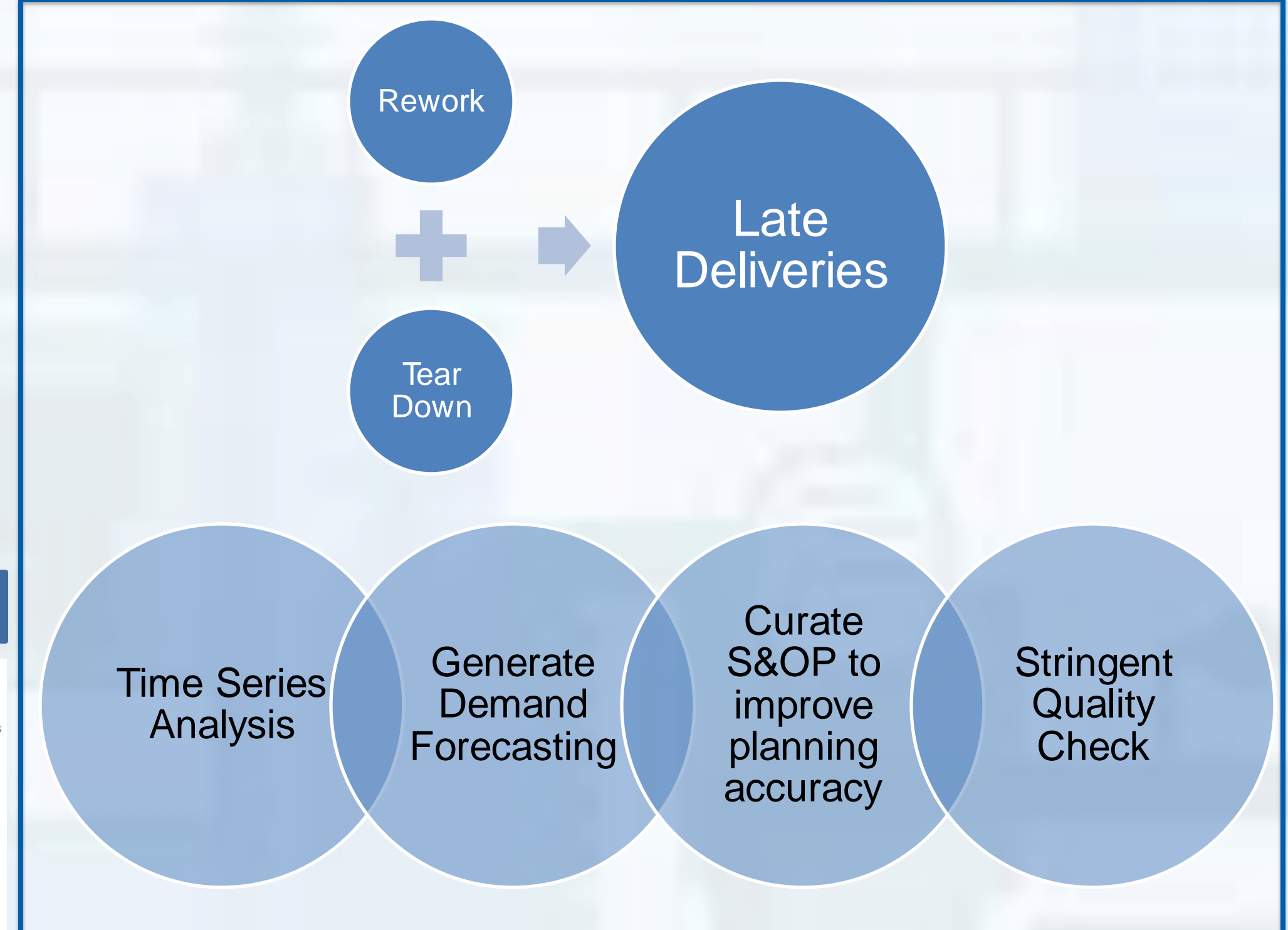
Late Delivery Analysis – Top 10 Customers



Average Late Delivery vs Rework & Tear Down



Conclusions and Way forward



The Team

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