

Project Proposal  
Time Series Analysis  
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For my final capstone project I decided to perform a time series analysis of the retail market.

During the course of history man has always been able to go to a store and purchase items, however over time there has been a drastic need of comfort and security and there has been a rise in demand for non-store retail. Establishments in this sub sector include mail-order houses, vending machine operators, home delivery sales, door-to-door sales, party plan sales, electronic shopping, and sales through portable stalls. As the world around us evolves we have seen many different events cause major pitfalls in sales and decline in retail, many of the recent events have caused a polar opposite effect on such non retail sectors. There is a need to study the potential exponential growth of this sector and take a look at the seasonality between this.

We need to perform this forecast and provide an outlook of this subsector no later than 4-15-2022

Our scope of solution space is to adopt these potential forecasts in growth in the nonretail sector and potential give us an outlook of how these growths can affect other markets.

Some of the constraints that we may run into are not understanding and incorporating outdoor events into the model of the forecast. We will not be able to project unforeseen events or include other potential inputs into this data stream.

Some stakeholders will be Federal Reserve Economic Data stakeholders as well as ministers who are interested in the economic well being of the country as well as many large stakeholders in the non retail sector.

This is a dataset from the U.S. Census Bureau hosted by the Federal Reserve Economic Database (FRED). FRED has a data platform found [here](https://fred.stlouisfed.org/) and they update their information according the amount of data that is brought in. This data is updated on a daily basis.