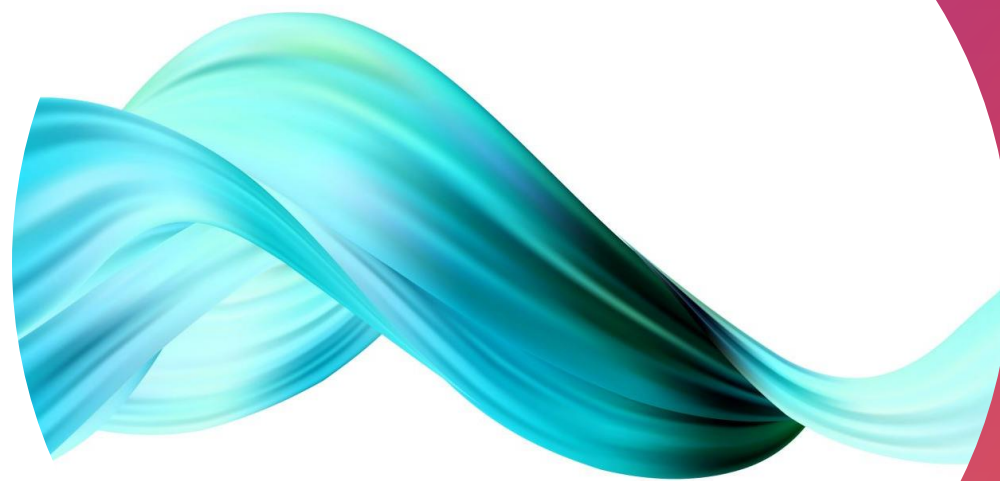


# **YAHOO FINANCE PROJECT PYTHON**

**ROXANE SMADJA**



# GOALS AND CHALLENGES

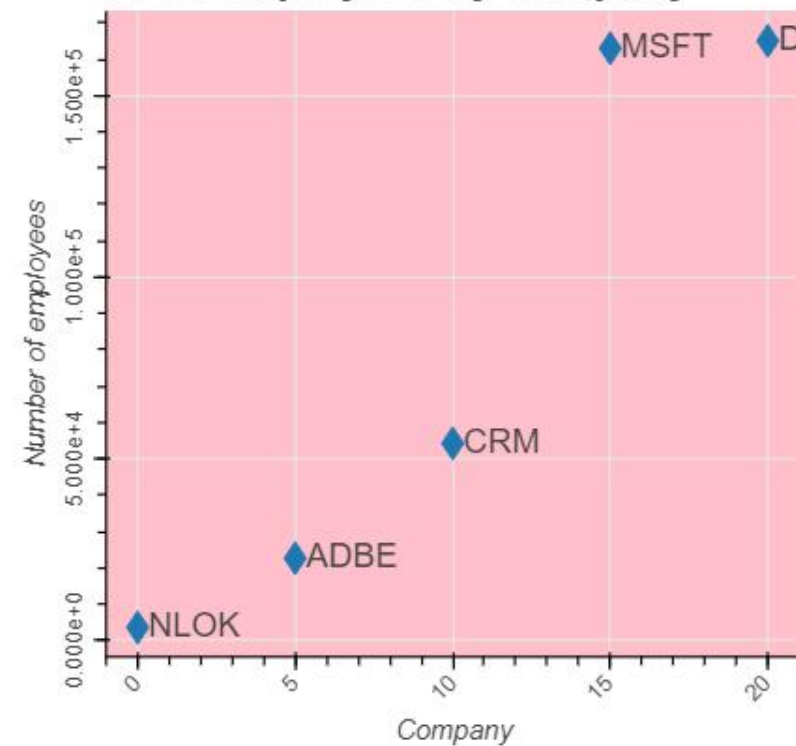
- Download data from Yahoo Finance of 5 companies in Technology sector
- Chose a period of time : beginning of Covid - 15th February 2020 to 15th of April 2020
- Organize in data frames
- Add some sales forecasting for 2021 and financial ratio
- Capture the best of data
- Visualize with Bokeh library



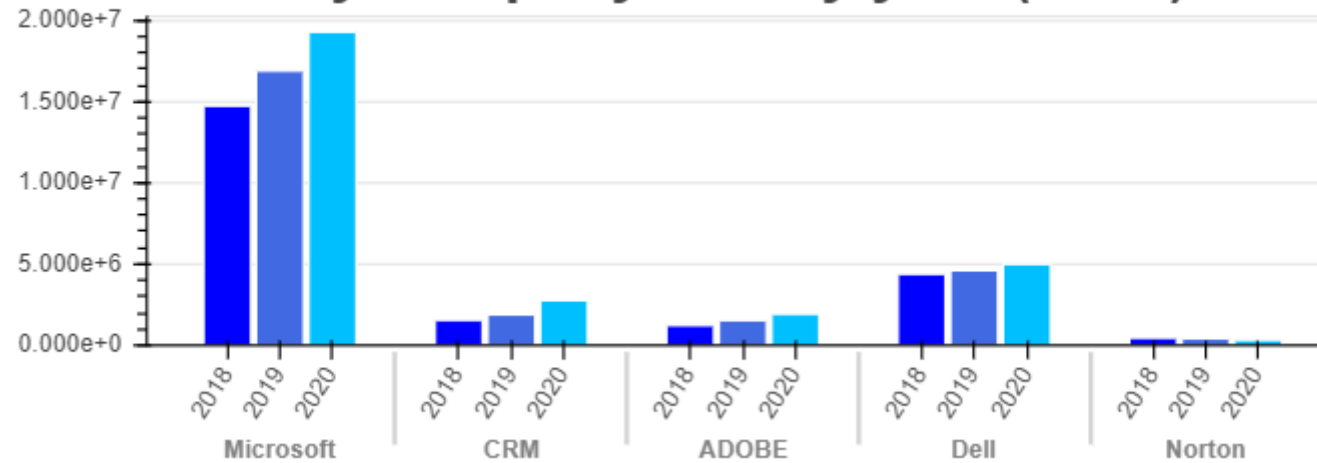
## Location of the companies



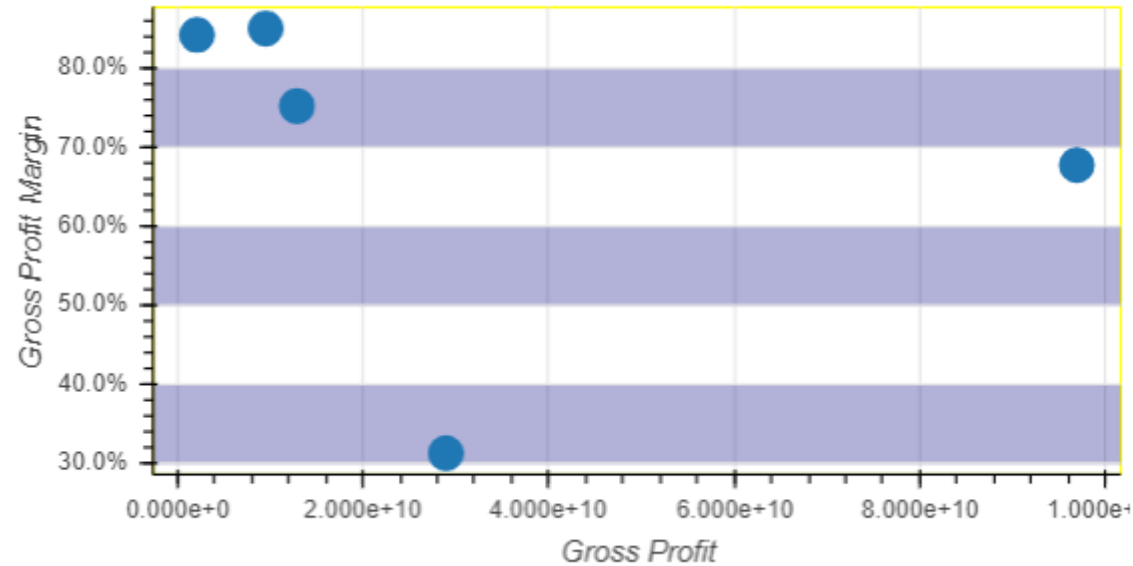
## Nr of employees by company



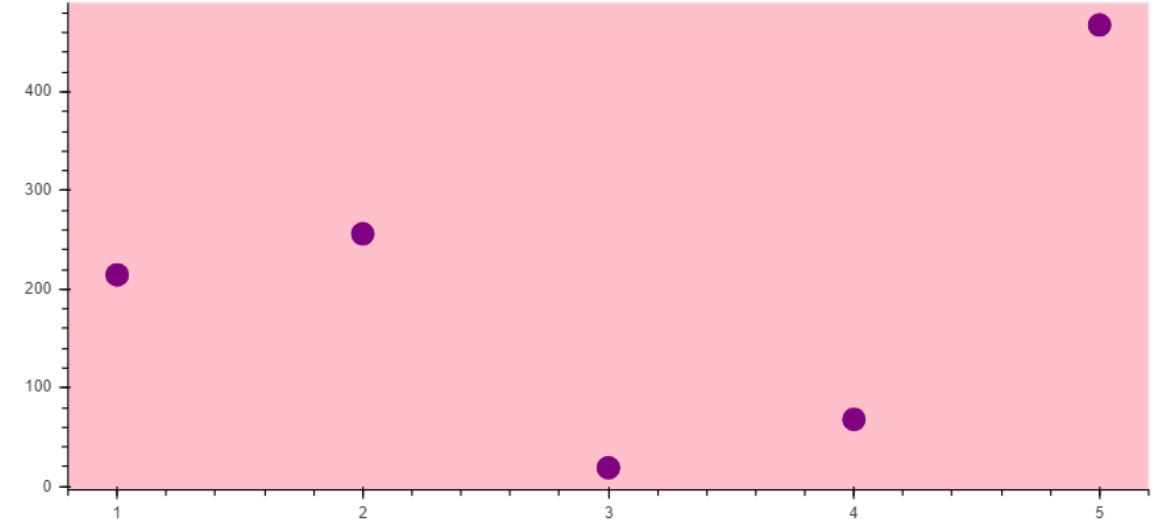
## R&D by company and by year (in k€)



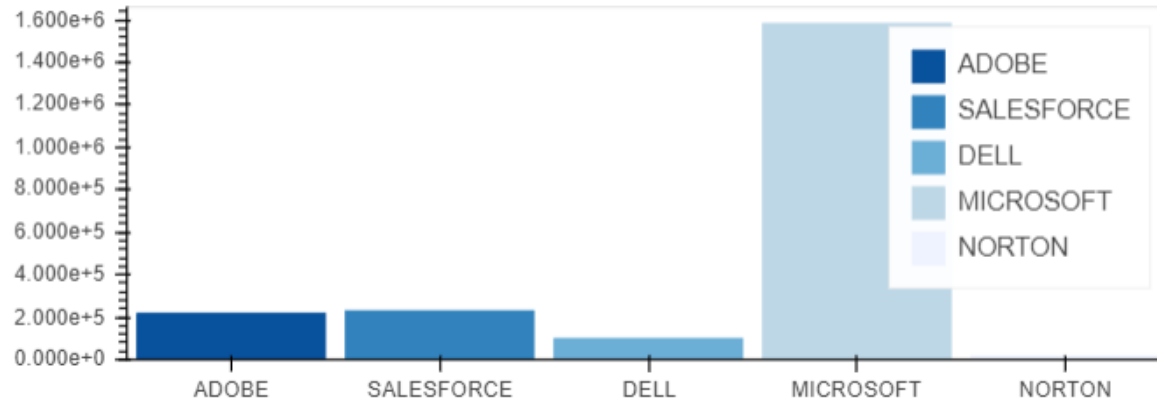
## Gross profit margin of the companies



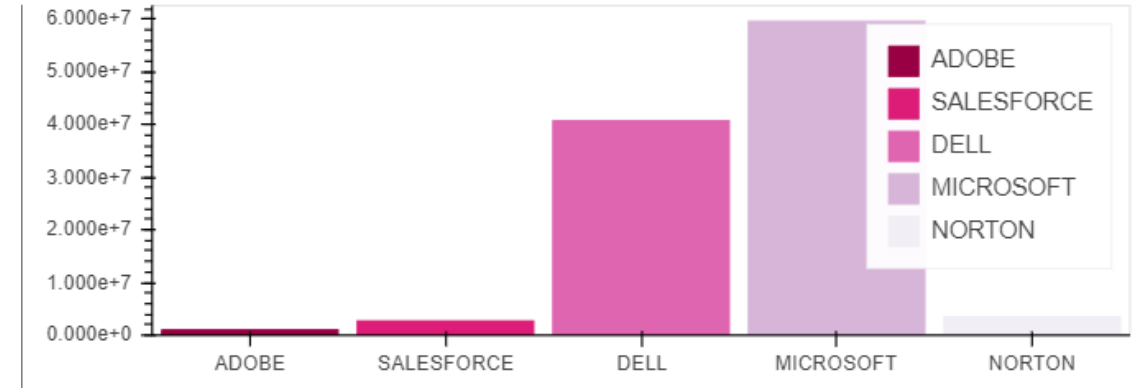
## Live prices (in \$)- click on the dots to see the source



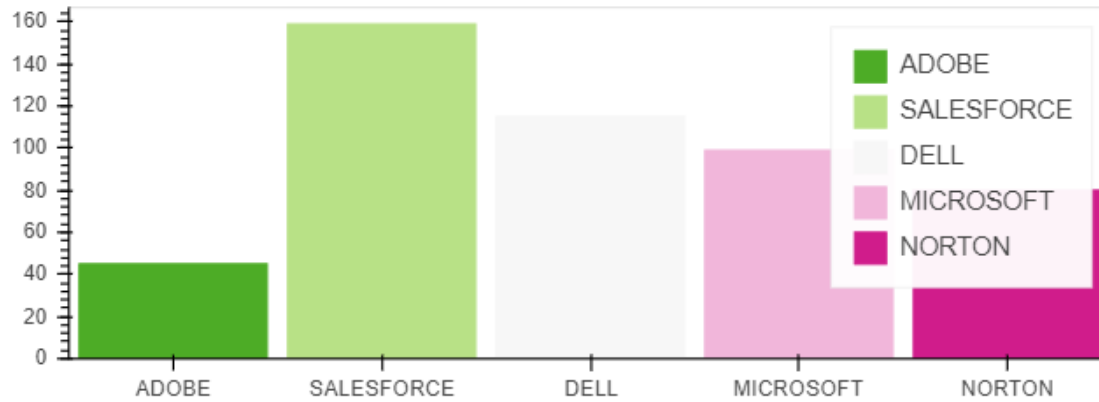
### Entreprise value in M\$



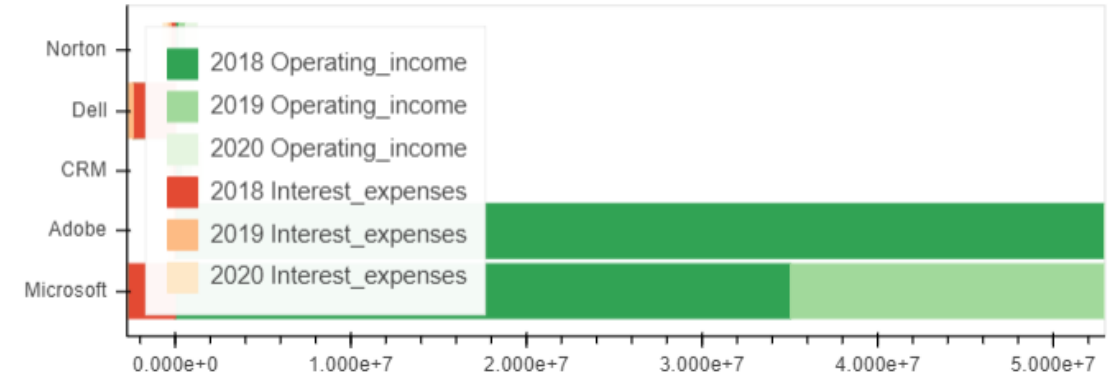
### Total Debt in k\$



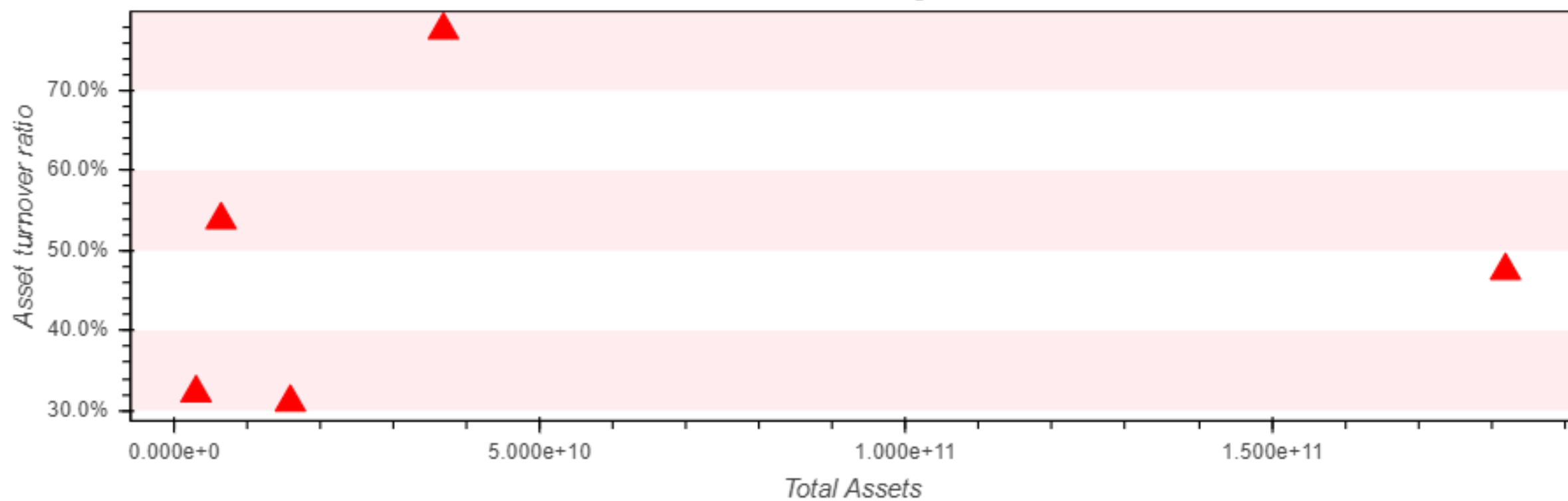
### Days payable outstanding



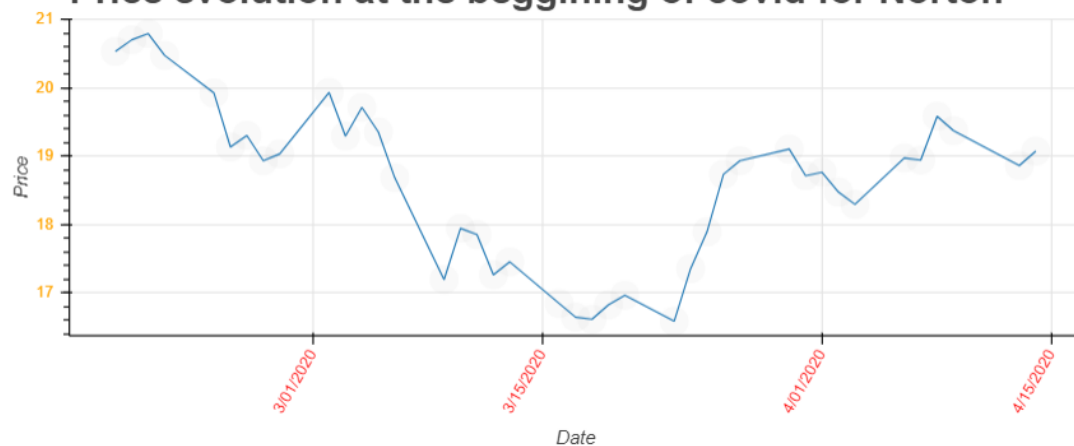
### Operating income / Interest expenses these 3 past years



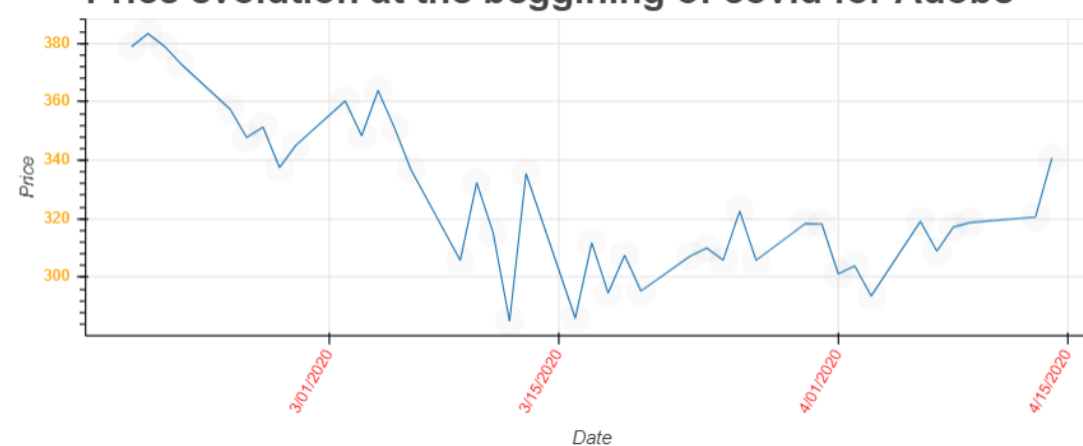
## Asset turnover ratio of the companies



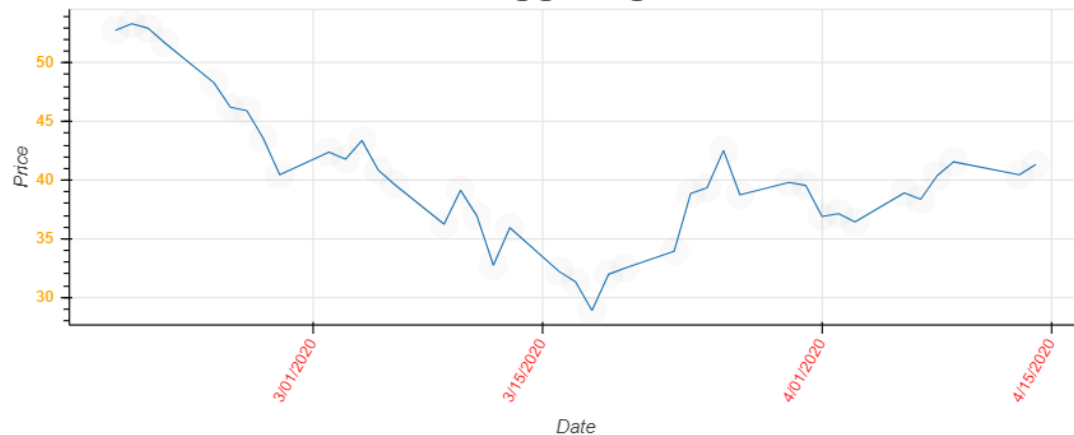
Price evolution at the beggining of covid for Norton



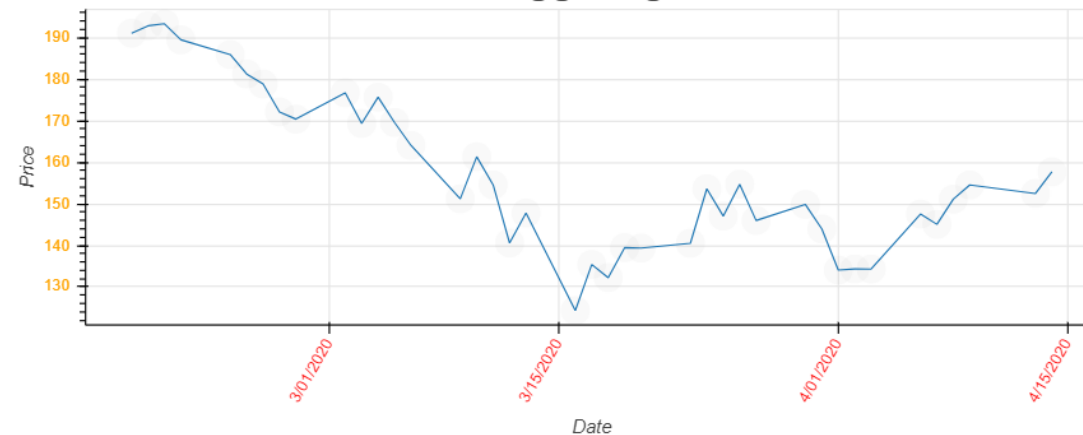
Price evolution at the beggining of covid for Adobe



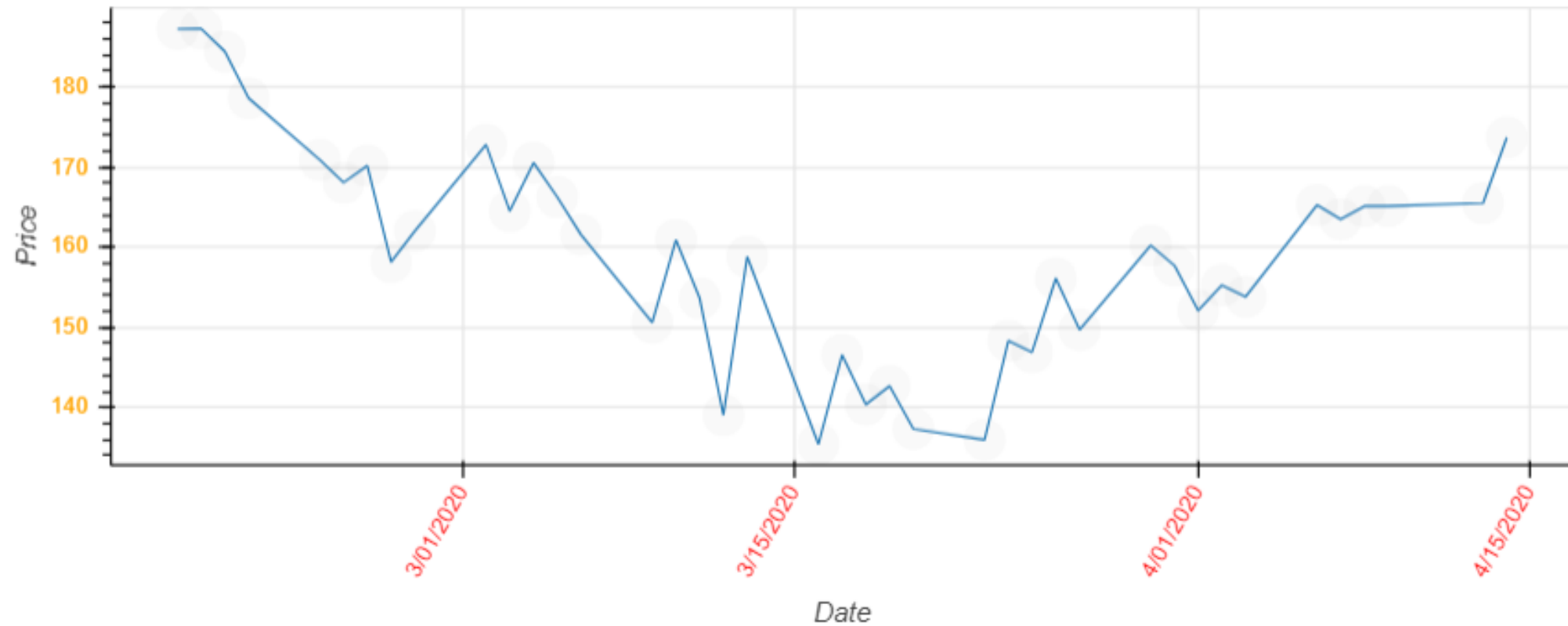
Price evolution at the beggining of covid for Dell



Price evolution at the beggining of covid for Salesforce

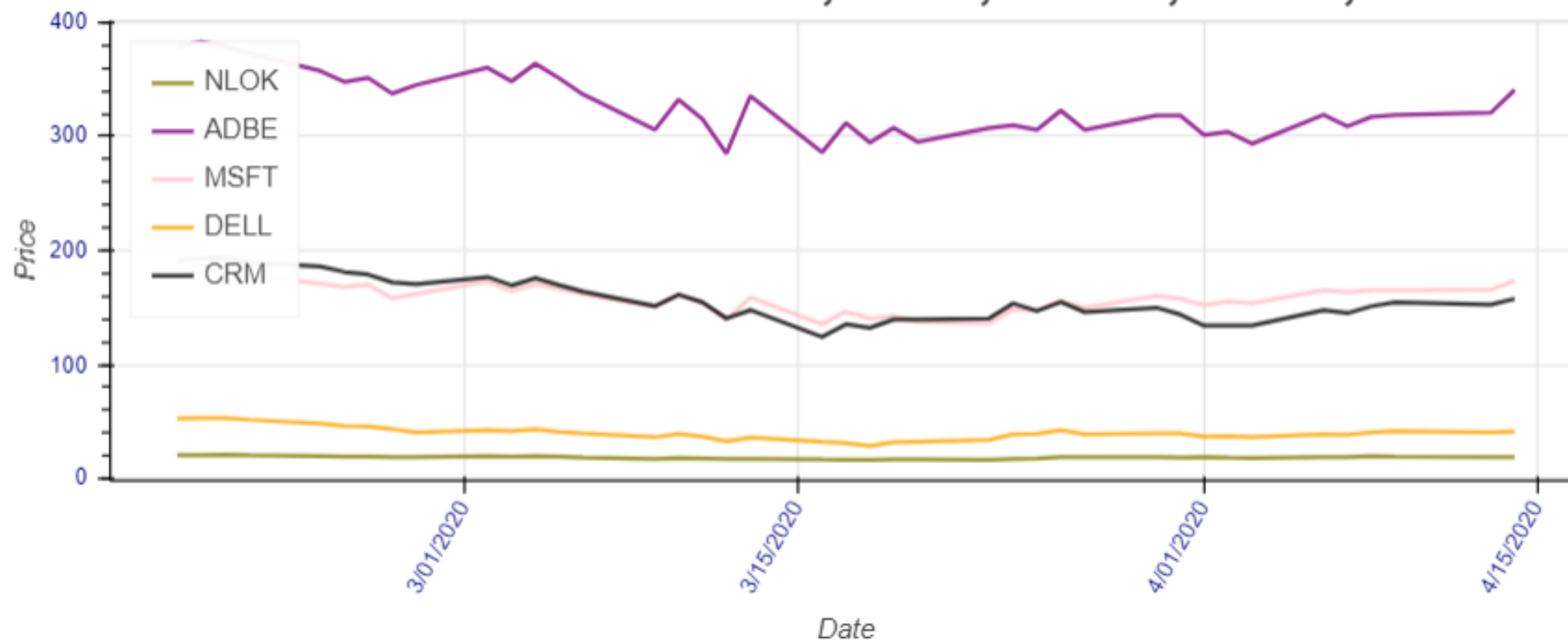


## Price evolution at the beggining of covid for Microsoft

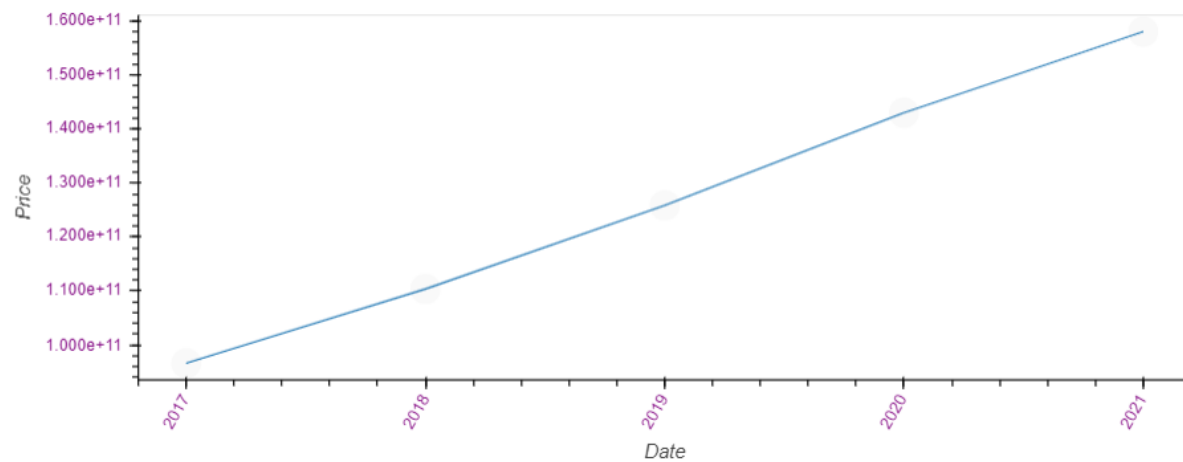




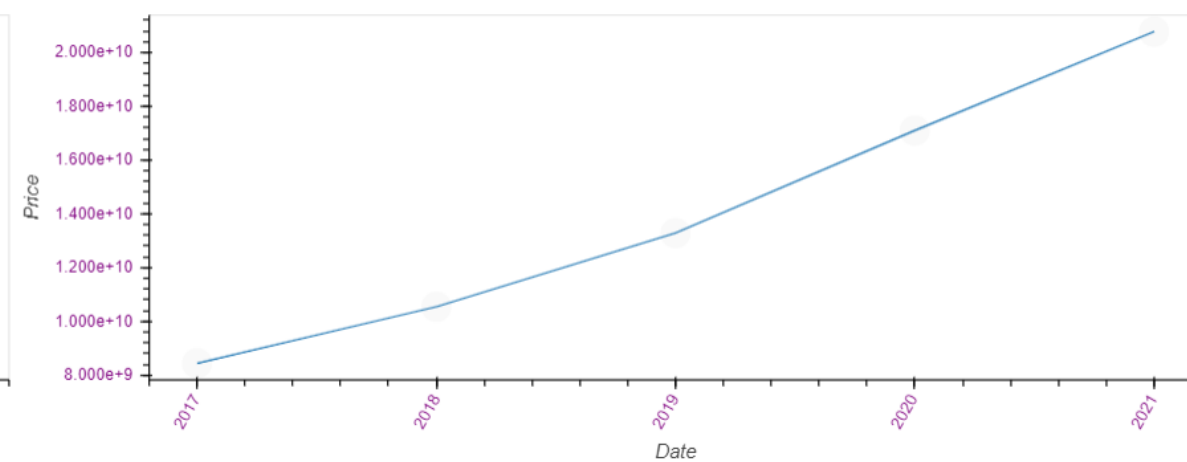
## Prices evolutions for MSFT, CRM, NLOK, DELL, ADBE



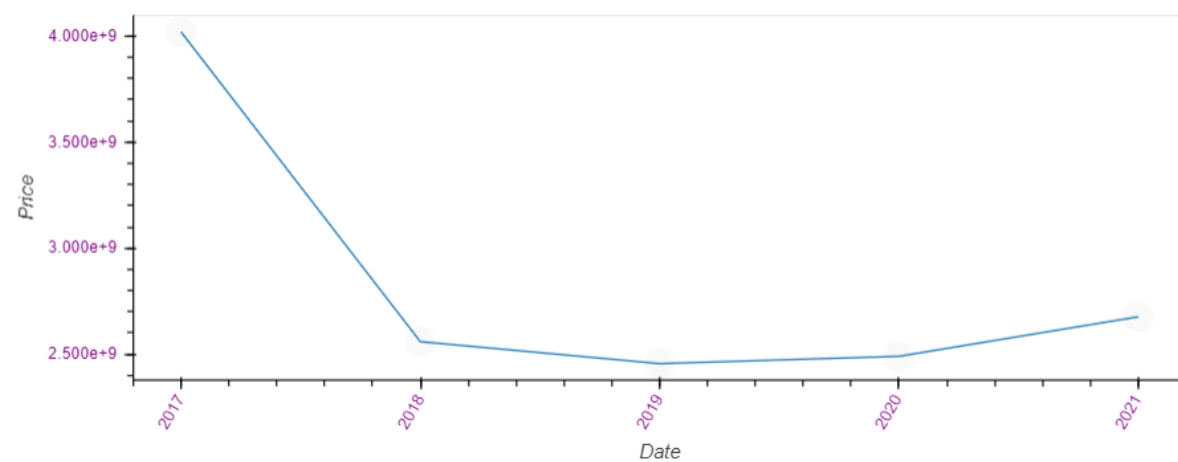
### REVENUES MICROSOFT SINCE 2017 AND FORECAST 2



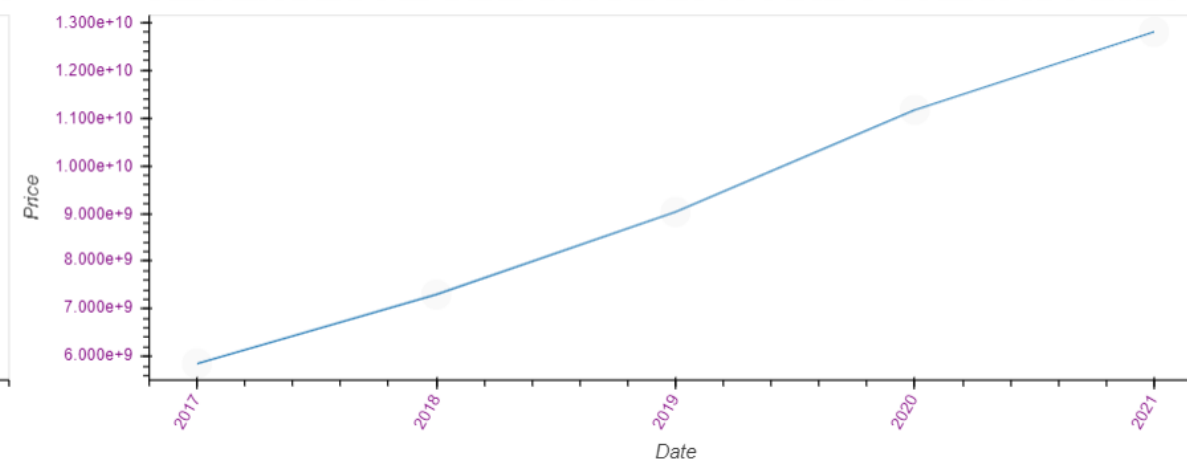
### REVENUES SALESFORCE SINCE 2017 AND FORECAST



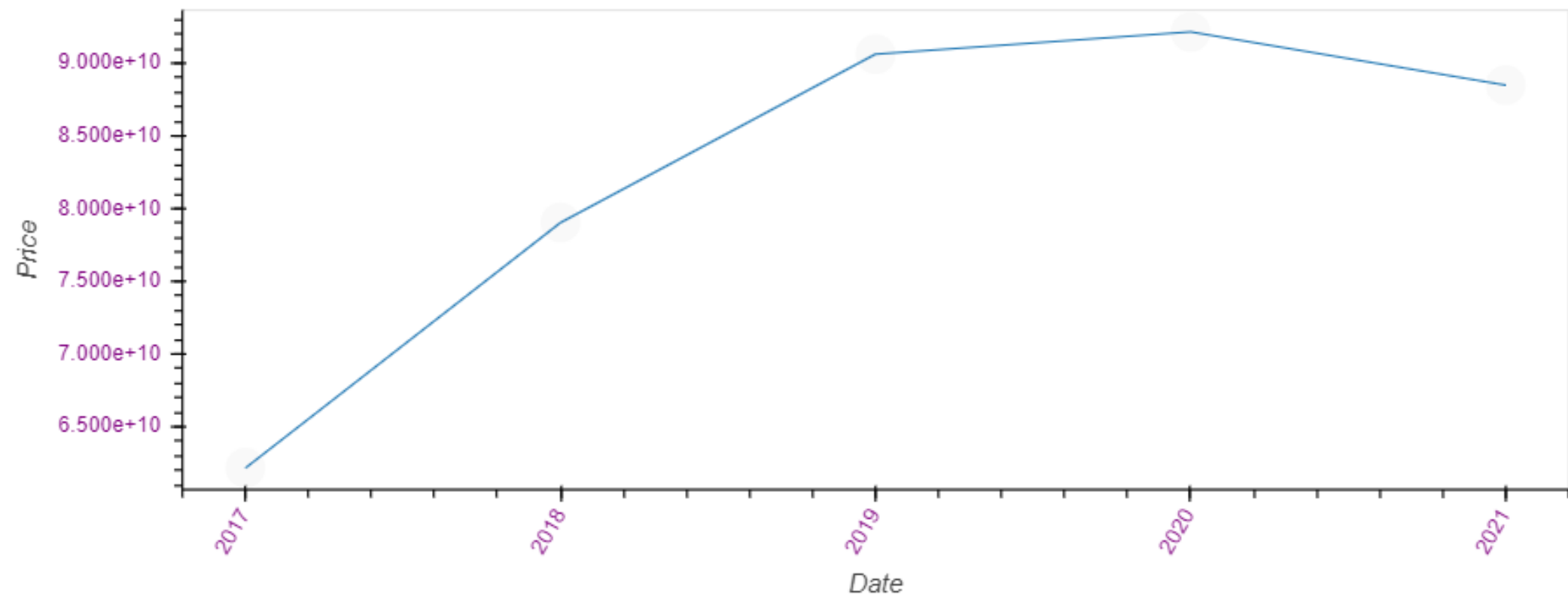
### REVENUES NORTON SINCE 2017 AND FORECAST 2021



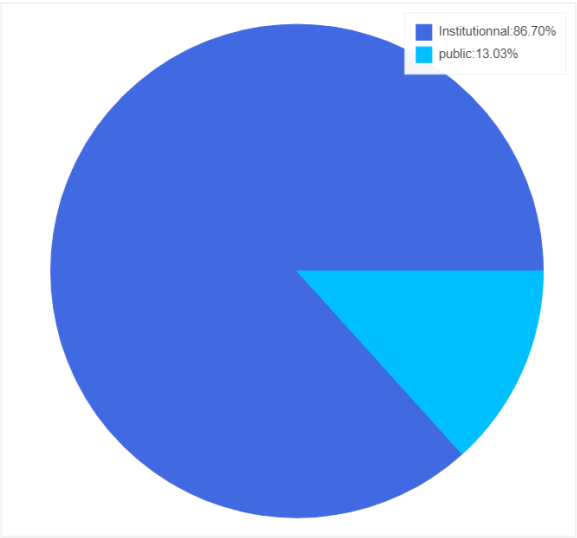
### REVENUES ADOBE SINCE 2017 AND FORECAST 2021



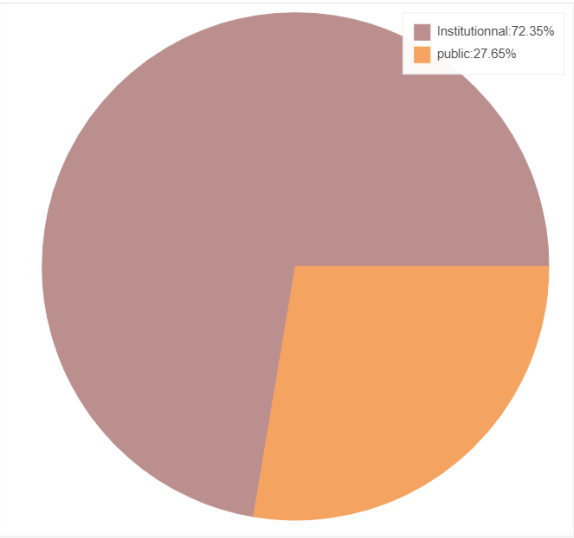
## REVENUES DELL SINCE 2017 AND FORECAST 2021



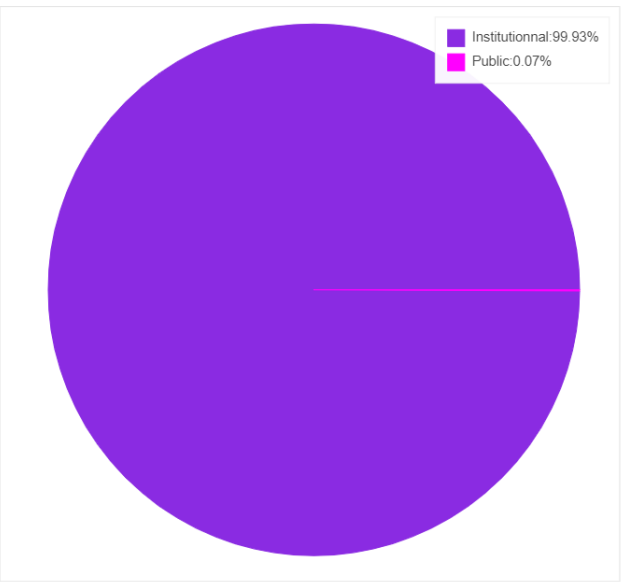
Holders of Adobe



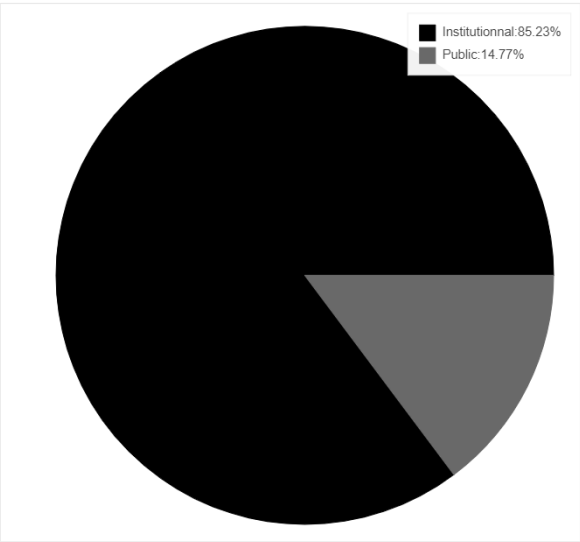
Holders of Microsoft



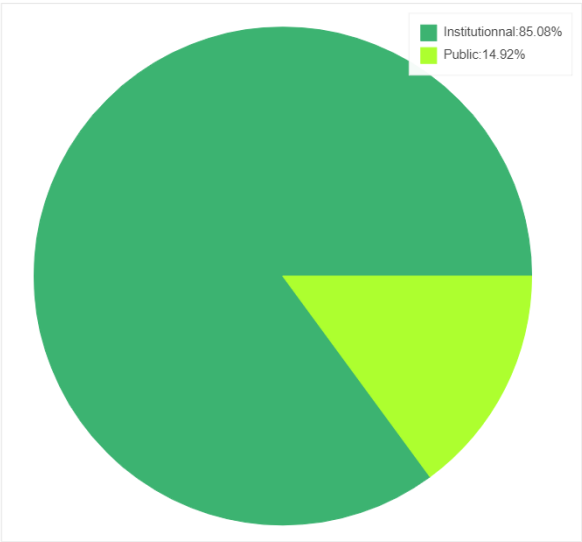
Holders of Norton



Holders of Dell



Holders of Salesforce



# PROCESS

- Collecting with different functions of Yahoo, building new functions to get tables with 5 companies at once.
  - Live price
  - Cash flow, balance sheet, income statement
  - Valuation prices
  - Shareholding
  - Basic information like sector, address, employees, url, logo,...
- Change columns names, remove some useless ones, pivot some tables, merging, make some queries with the SQL package, add calculations
- Reorganize dictionaries into data frames
- Application of the Bokeh library for different plots.
- Difficulties:
  - Apply some plotting to data frames because easiest way was to apply some visualization to dictionaries.
  - Find the right format as I was dealing with huge numbers



**QUESTIONS ?**

**THANK YOU FOR  
LISTENING**