

# Securities and Exchange Commission EDGAR Stock Market 2020 Analysis (Quarters 1- 3)

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Investment Analysis of Promising  
Emerging Companies

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# What is EDGAR?

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EDGAR, the Electronic Data Gathering, Analysis, and Retrieval system.

There are 8 data sets to review: submission, dimension, number, text, tag, presentation, rendering, and calculation.

All of them carry a certain value. However, we will focus specifically on the data sets submission and number.



# Data Questions

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- Can three financially strong but undervalued companies be identified based on the annual Financial Statements reports (working capital, cash per share, current ratio, earnings per share)?
- Does the Data show a trend?
- Is it possible to forecast financial trends?





# Let's dive in...

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Q1 2020, Q2 2020, Q3 2020

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# Submission Types of Reports

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- There are lots of types of the U.S. Securities and Exchange Commission forms that can be found at <https://www.sec.gov/forms>.
- However, we will pay special attention to one of the most common forms, 10-K, Annual report.

# Just a 10-K snapshot of AMERICAN SOFTWARE, INC.

## ITEM 6. SELECTED CONSOLIDATED FINANCIAL DATA

The selected consolidated financial data presented below as of and for the years ended April 30, 2020, 2019, 2018, 2017, and 2016 is derived from our audited consolidated financial statements. Consolidated Statements of Operations Data:

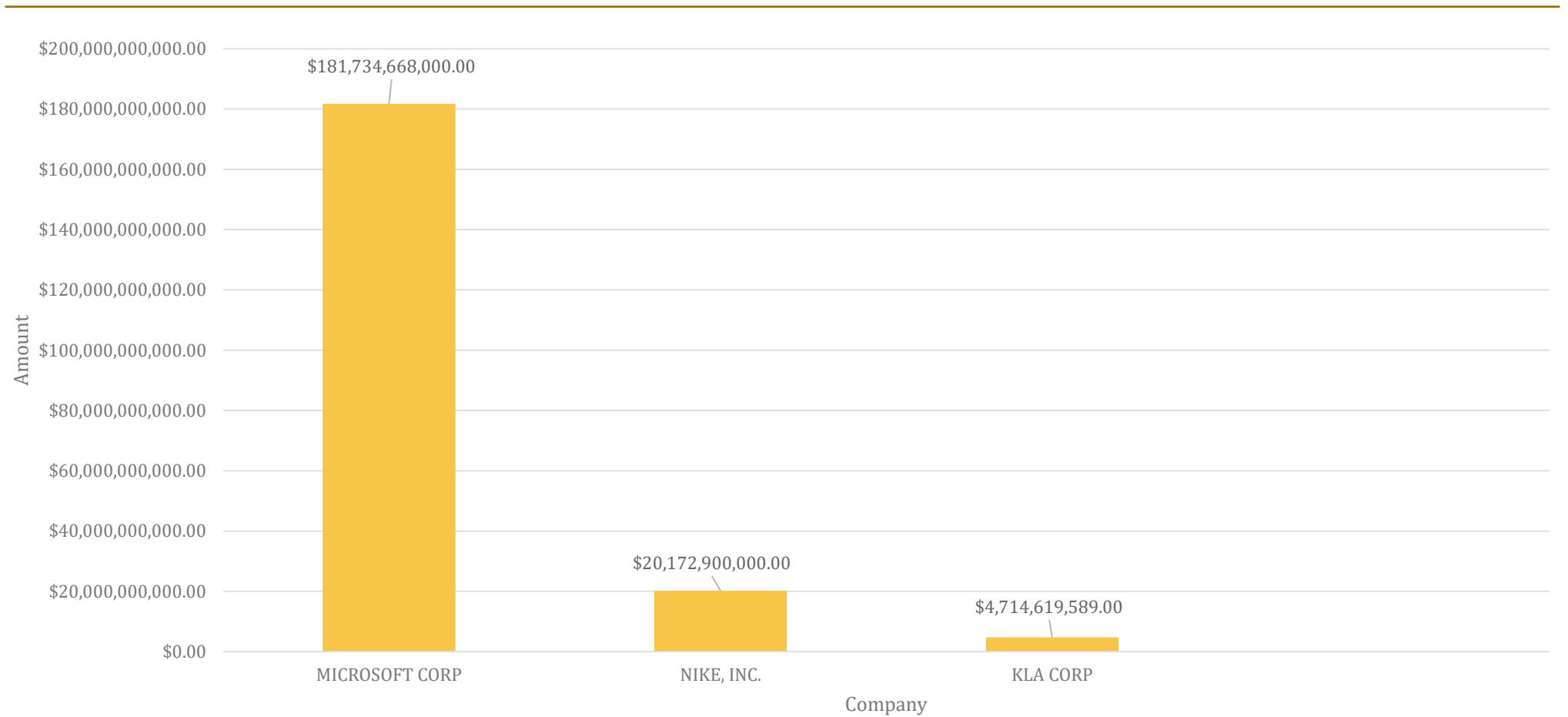
	Years Ended April 30,				
	2020	2019	2018	2017	2016
	(in thousands, except per share data)				
Revenues:					
Subscription fees	\$ 22,033	\$ 14,026	\$ 8,855	\$ 4,381	\$ 3,273
License fees	7,582	7,126	15,344	15,584	22,043
Professional services and other	42,774	42,154	44,663	43,932	47,826
Maintenance	43,077	45,400	43,841	42,389	40,747
Total revenues	115,466	108,706	112,703	106,286	113,889
Cost of revenues:					
Subscription fees	9,491	5,759	3,817	3,290	1,528
License fees	4,798	6,430	6,261	6,713	7,552
Professional services and other	30,695	31,421	30,596	31,374	35,708
Maintenance	7,324	8,356	9,326	9,707	9,441
Total cost of revenues	52,308	51,966	50,000	51,084	54,229
Gross margin	63,158	56,740	62,703	55,202	59,660
Operating expenses:					
Research and development costs	15,348	13,078	11,877	11,889	11,248
Sales and marketing expense	21,958	20,992	20,658	20,287	22,164
General and administrative expenses	19,519	17,006	16,057	14,219	12,449
Amortization of acquisition-related intangibles	285	388	580	1,041	272
Total operating expenses	57,110	51,464	49,172	47,436	46,133
Operating income	6,048	5,276	13,531	7,766	13,527
Other income, net	750	2,365	2,184	13,849	1,173
Earnings before income taxes	6,798	7,641	15,715	21,615	14,700
Income tax expense	56	838	3,662	6,994	4,458
Net earnings	\$ 6,742	\$ 6,803	\$ 12,053	\$ 14,621	\$ 10,242

# What are the top 3 companies?

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Selection After Comparative Analysis	
Company	Stock Price Increase after 10k release from June 30, 2020 - Present
MICROSOFT CORP	10%
NIKE, INC.	32%
KLA CORP	26%

# Working Capital Amount







# Key Performance Indicators

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The below formulas were used to select the top companies. Each company was present after the formulas were applied.

## Key Performance Indicators

**Current ratio** is a liquidity ratio that helps you understand whether the business can pay its short-term obligations—that is, obligations due within one year— with its current assets and liabilities.

Current Ratio = Current Assets / Current Liabilities

**Working capital** is a measure of the business's available operating liquidity, which can be used to fund day-to-day operations.

Working Capital = Current Assets - Current Liabilities

**The gross profit ratio** shows the proportion of profits generated by the sale of products or services, before selling and administrative expenses. It is used to examine the ability of a business to create sellable products in a cost-effective manner.

$(\text{Sales} - (\text{Direct materials} + \text{Direct Labor} + \text{Overhead})) \div \text{Sales}$

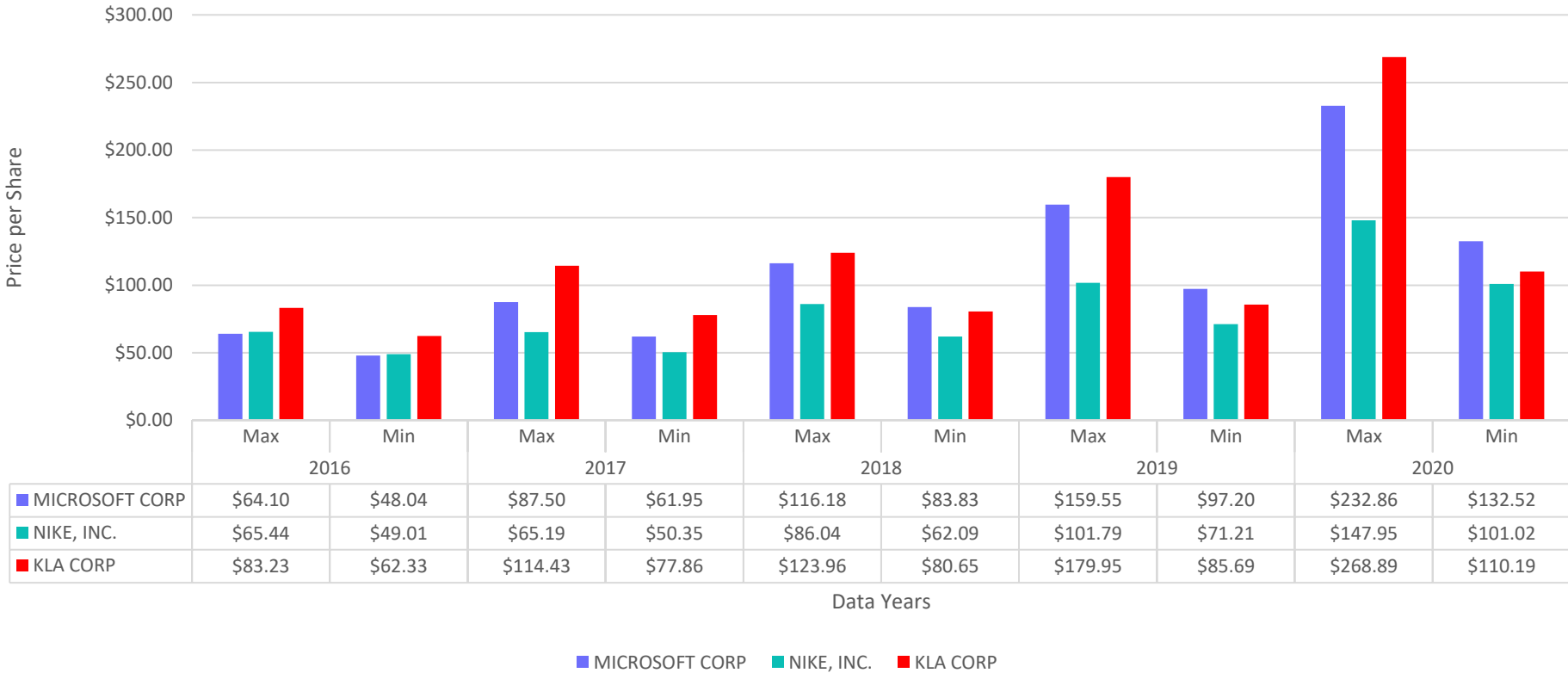
**Earnings per share** is calculated as a company's profit divided by the outstanding shares of its common stock. The resulting number serves as an indicator of a company's profitability.

Earnings Per Share = net profit / number of common shares outstanding

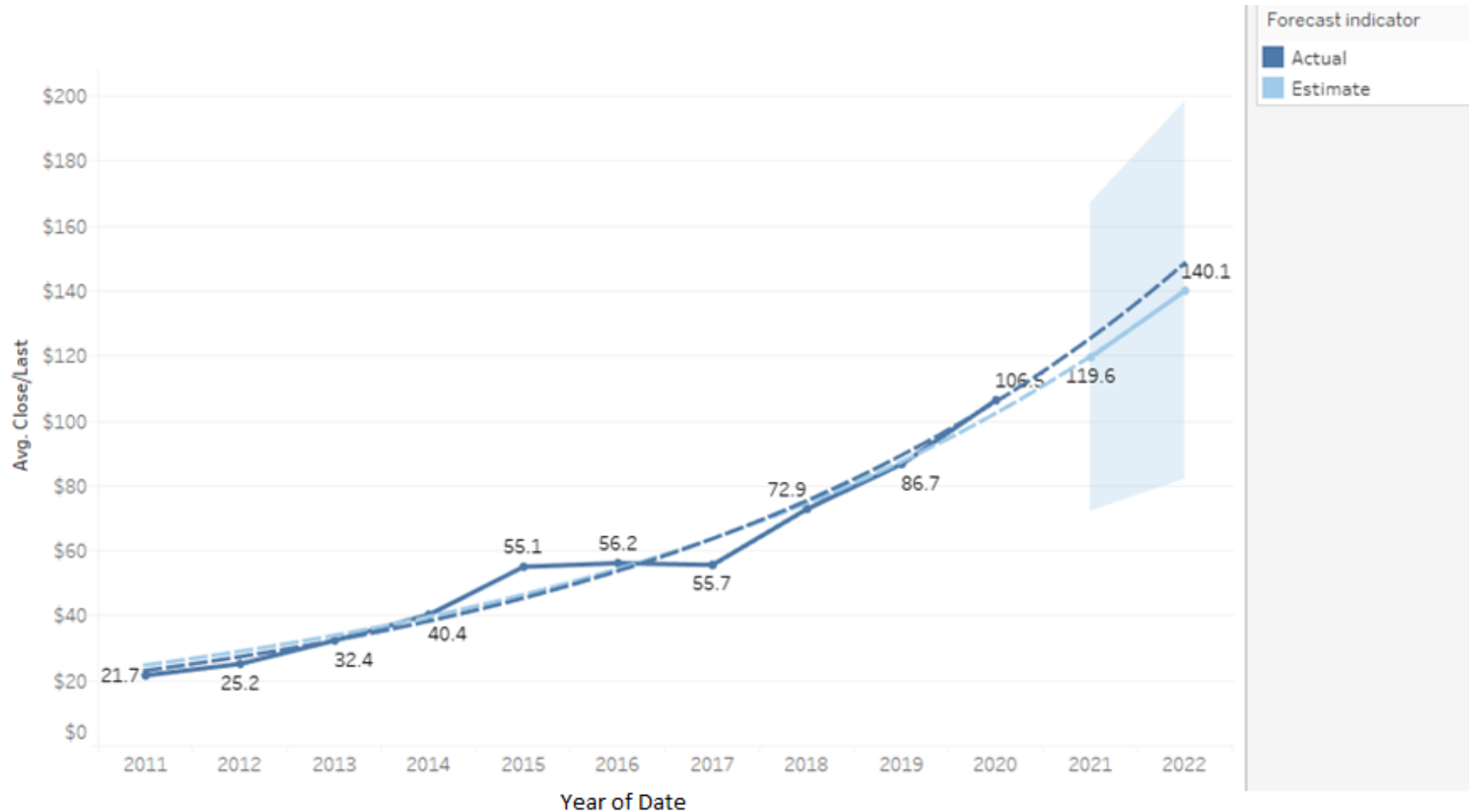
**Cash Per Share** - is used to determine a firm's liquidity and is a good indicator of the overall financial health of a company.

Cash Per Share = Total Cash / number of common shares outstanding

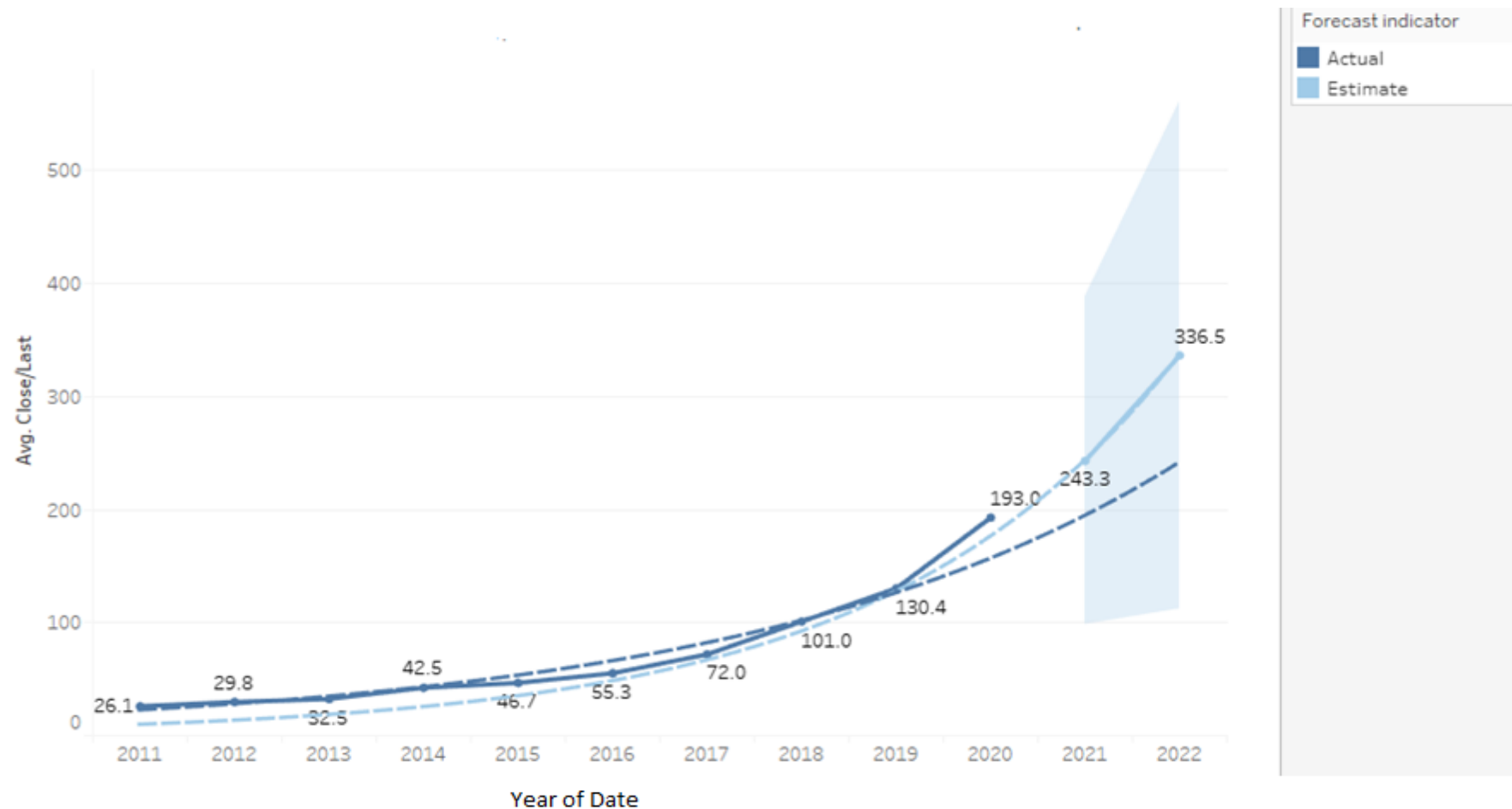
# Five-Year Common Stock Price Analysis



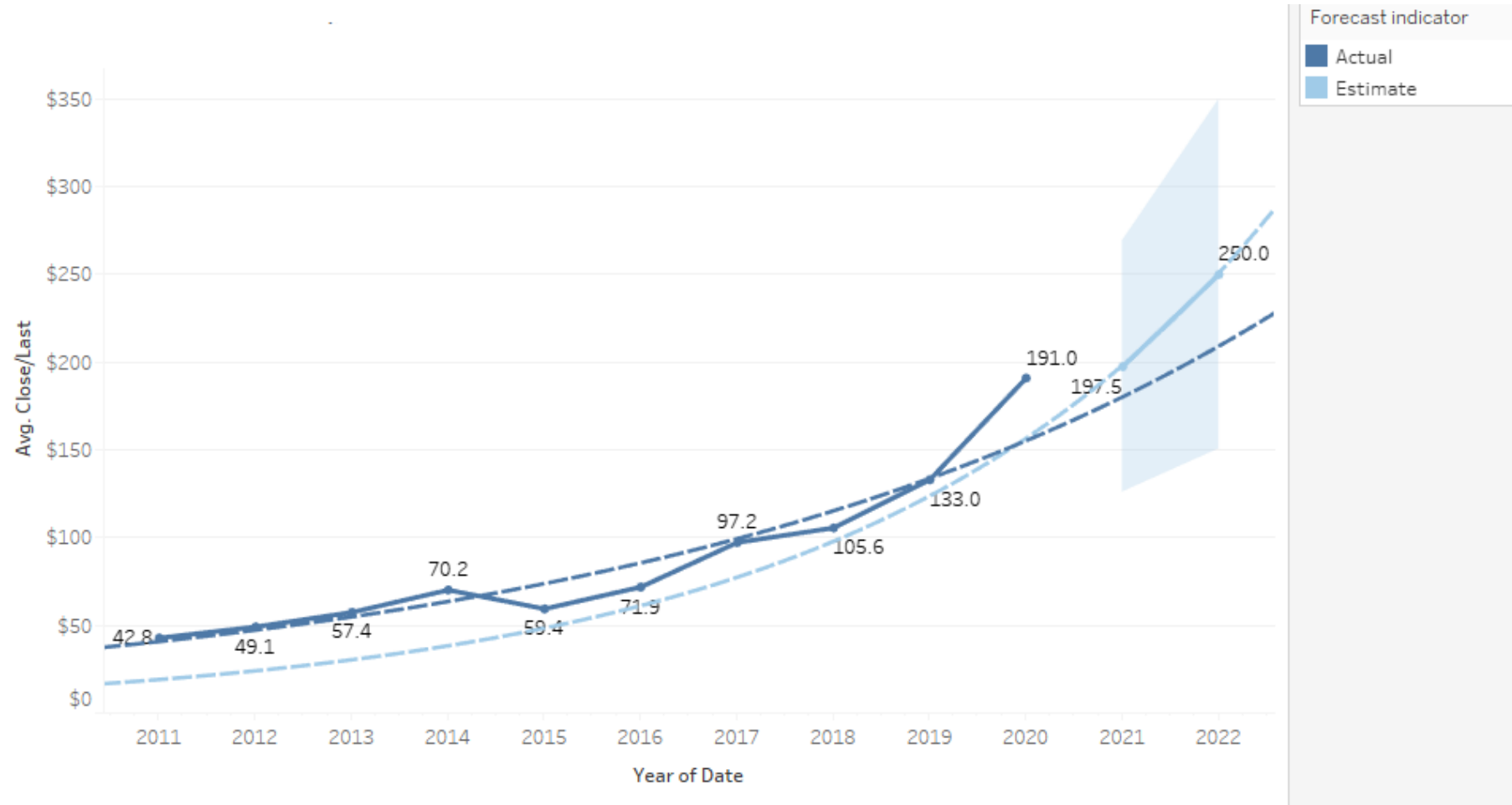
# Average Share Price of Nike, Inc. Common Stock With Forecast



# Average Share Price of Microsoft Common Stock With Forecast



# Average Share Price of KLA Corp Common Stock With Forecast







# Conclusions

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- There's a lot more to learn and more data questions to answer.
- In the 2020 Q1 data set there are no filings for FY2020. Since 2020 Q4 has recently closed, the data is not yet available. We are left with 2 quarters of financial data to work with as of right now. In order to get a full FY2020 financial picture, we will have to wait for 2021 Q1 to close and the data is released.
- The data sets contain historical filings.
- The majority of companies submit only one 10-K report for a respective FY.
- Microsoft, Nike, and KLA are the top strong undervalued stocks based on the conducted comparative analysis.
- Data does show financial trends, and it is possible to forecast them. However, financial projections are a set of assumptions based on historical company and industry results.
- The statements are open to interpretation, and as a result, investors often draw vastly different conclusions about a company's financial performance.
- Never blindly accept what stock analysts have to say and always do your own research.
- Incorporating more tables into the analysis will give so much more knowledge.



# Glossary

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- **Financial statements** are written records that convey the business activities and the financial performance of a company.

Financial statements include:

- **Balance sheet** provides an overview of assets, liabilities, and stockholders' equity as a snapshot in time;
- **Income statement** primarily focuses on a company's revenues and expenses during a particular period;
- **Cash flow statement** measures how well a company generates cash to pay its debt obligations, fund its operating expenses, and fund investments.
- A **10-K** is a comprehensive report filed annually by a publicly-traded company about its financial performance: includes its history, organizational structure, financial statements, earnings per share, subsidiaries, executive compensation, and any other relevant data.
- **Investment analysis** is a broad term for many different methods of evaluating investments, industry sectors, and economic trends. It can include charting past returns to predict future performance, selecting the type of investment that best suits an investor's needs, or evaluating individual securities such as stocks and bonds to determine their risks, yield potential, or price movements.
- **Stocks** are equity investments that represent ownership in a company. Stocks = “shares” or “equities”. You are a (part) business owner.

Companies issue shares as a means to raise large amounts of capital to fund projects that will ultimately lead to growth and create a return for investors.

The stock price of a company is simply the market's determination of the company's value, which is dependent on its assets, its current profits, and its expected future profits amongst other things.

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# Glossary (cont.)

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- A **fiscal year** is a one-year period that companies and governments use for financial reporting and budgeting. A fiscal year is most commonly used for accounting purposes to prepare financial statements. Although a fiscal year can start on January 1st and end on December 31st, not all fiscal years correspond with the calendar year.
- Fiscal years that vary from a calendar year are typically chosen due to the specific nature of the business. According to the IRS, a fiscal year consists of 12 consecutive months ending on the last day of any month except December.

# Sources

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- <https://www.sec.gov/>
- <https://www.sec.gov/edgar/search-and-access>
- <https://www.sec.gov/dera/data/financial-statement-data-sets.html>
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- <https://finance.yahoo.com/>
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- <https://gbr.pepperdine.edu/2010/08/the-role-of-finance-in-the-strategic-planning-and-decision-making-process/>
- <https://www.americancentury.com/content/direct/en/insights/guidance-planning/general-investing/general-investing-insights/fundamental-vs-quantitative.html>
- <https://www.chainofdemand.co/the-power-of-predictive-analytics/>
- [https://www.cashay.com/how-to-do-investment-analysis-123617633.html?guccounter=1&guce\\_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce\\_referrer\\_sig=AQAAABWh8ptUeYowaXy3bv\\_RMrtOI2-IVsznv8JHL11Xr13VeQIOG15262vXfxn0aTc0kHUZXmm0OVD7yZYAP9IvrM9EflIFdFIY1eYQh8jBTcBvrJFwLF\\_E40liIJpXqlcXgXc1kIEak0FC8Ef0RPBGo2BJKZdQ8azFNm7vAbalGEC](https://www.cashay.com/how-to-do-investment-analysis-123617633.html?guccounter=1&guce_referrer=aHR0cHM6Ly93d3cuZ29vZ2xlLmNvbS8&guce_referrer_sig=AQAAABWh8ptUeYowaXy3bv_RMrtOI2-IVsznv8JHL11Xr13VeQIOG15262vXfxn0aTc0kHUZXmm0OVD7yZYAP9IvrM9EflIFdFIY1eYQh8jBTcBvrJFwLF_E40liIJpXqlcXgXc1kIEak0FC8Ef0RPBGo2BJKZdQ8azFNm7vAbalGEC)
- <https://corporatefinanceinstitute.com/resources/knowledge/modeling/what-is-financial-modeling/>
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- [https://www.synario.com/resources/articles/getting-started/a-simple-guide-to-the-10-types-of-financial-models?campaignid=9503953380&adgroupid=105310358307&adid=440676176561&gclid=Cj0KCQiAqo3-BRDoARIsAE5vnaKo2bpgZIRNInc0h5IxE9XEIk\\_97EBpKUd4XzRx9pq6Qv04HKZNZ1AaAvnVEALw\\_wcB](https://www.synario.com/resources/articles/getting-started/a-simple-guide-to-the-10-types-of-financial-models?campaignid=9503953380&adgroupid=105310358307&adid=440676176561&gclid=Cj0KCQiAqo3-BRDoARIsAE5vnaKo2bpgZIRNInc0h5IxE9XEIk_97EBpKUd4XzRx9pq6Qv04HKZNZ1AaAvnVEALw_wcB)
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# Questions?

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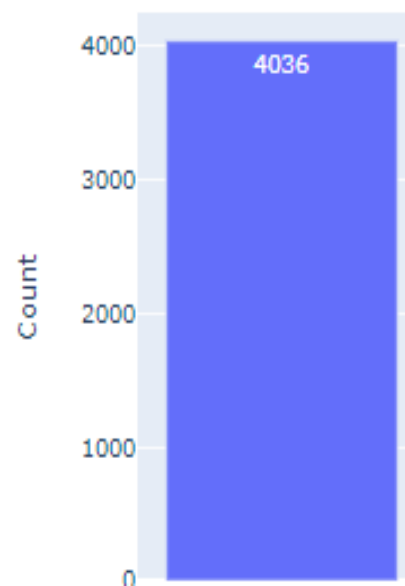
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# Exploratory Analysis

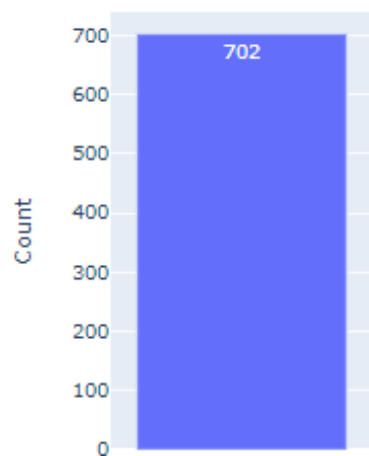
# The Number of Annual 10-K Forms

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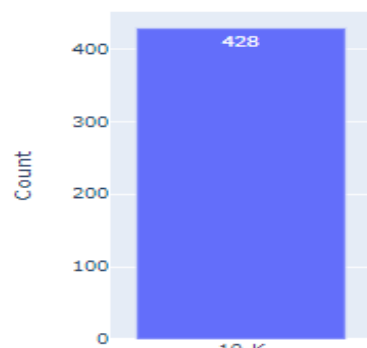
Number of Annual forms in 2020Q1



Number of Annual forms in 2020Q2

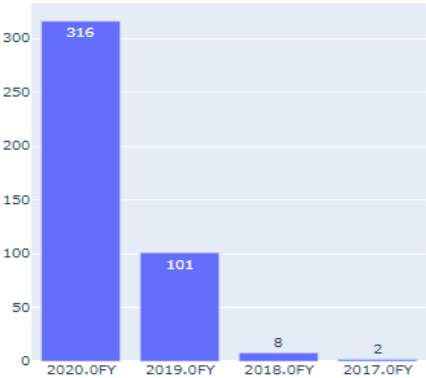
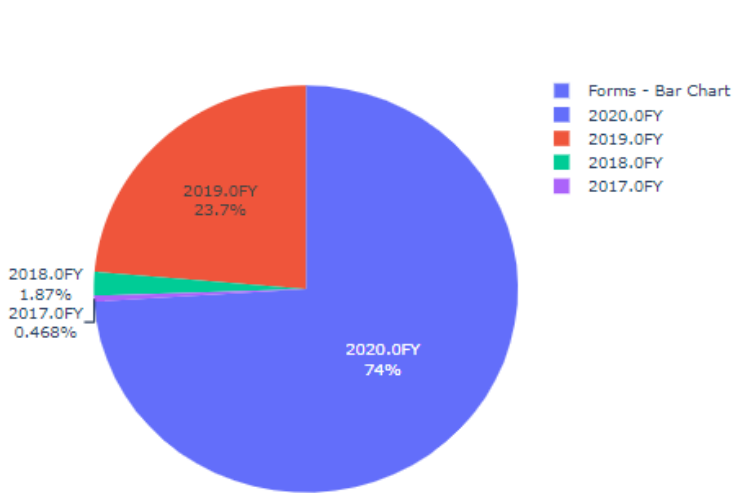


Number of Annual forms in 2020Q3

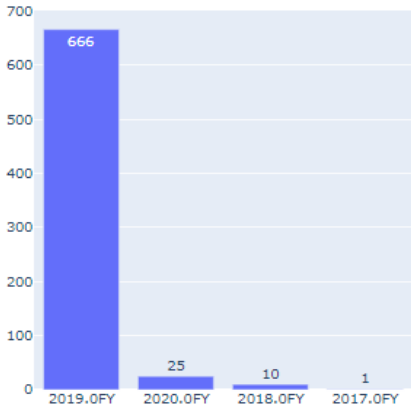
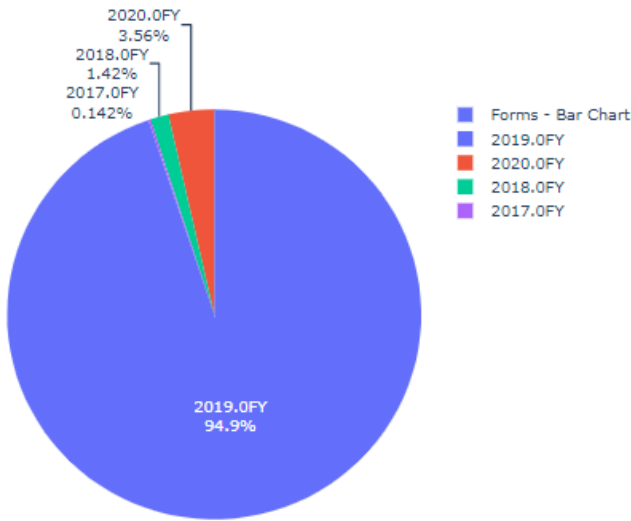


# Most Common Fiscal Years

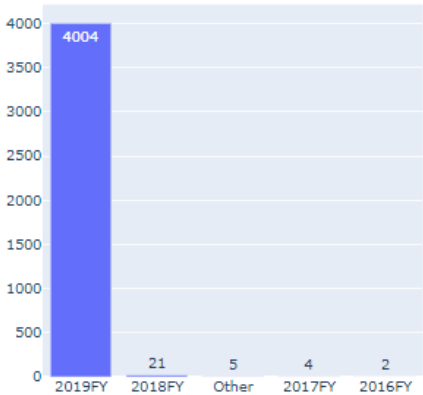
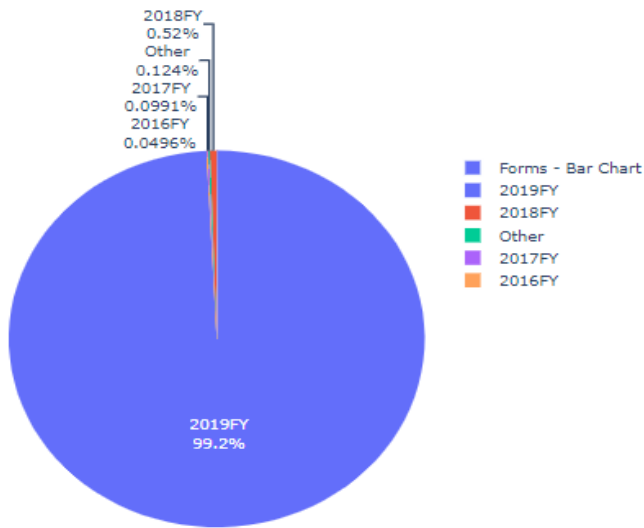
Most Common Fiscal Years in 2020Q3 Dataset



Most Common Fiscal Years in 2020Q2 Dataset

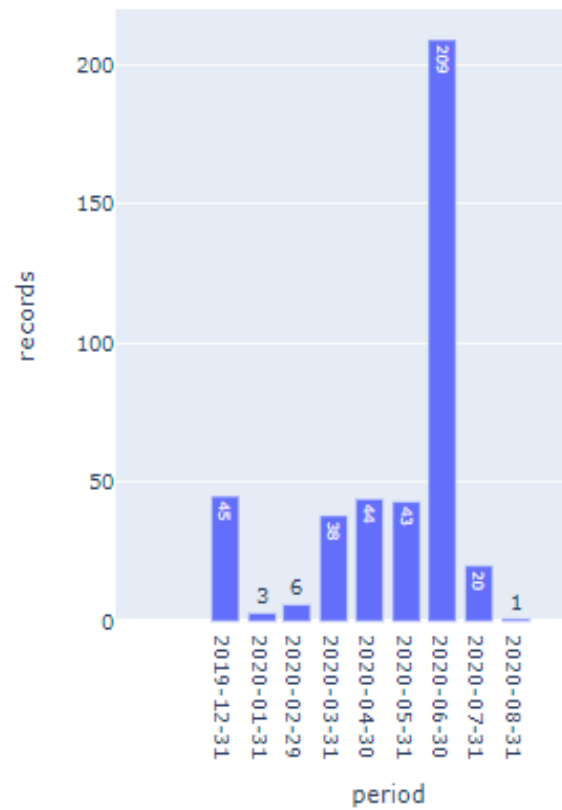


Most Common Fiscal Years in 2020Q1 Dataset

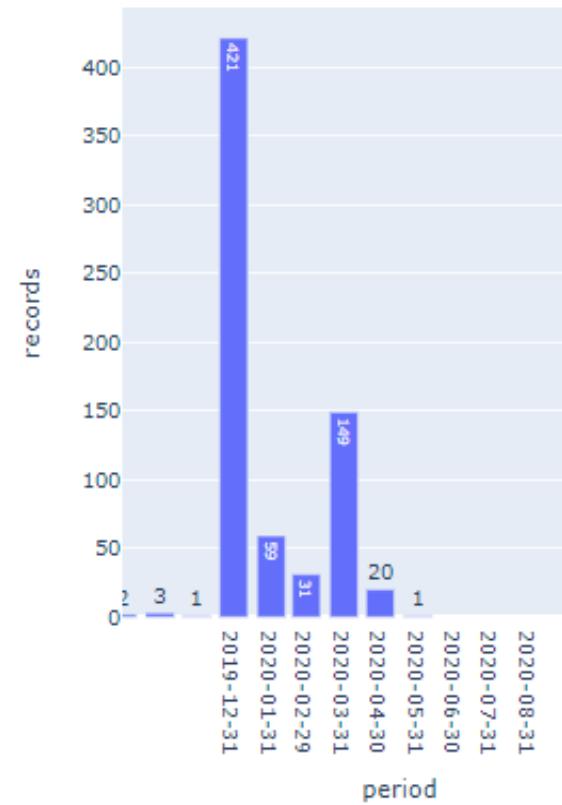


# 10-Ks Balance Sheet Dates

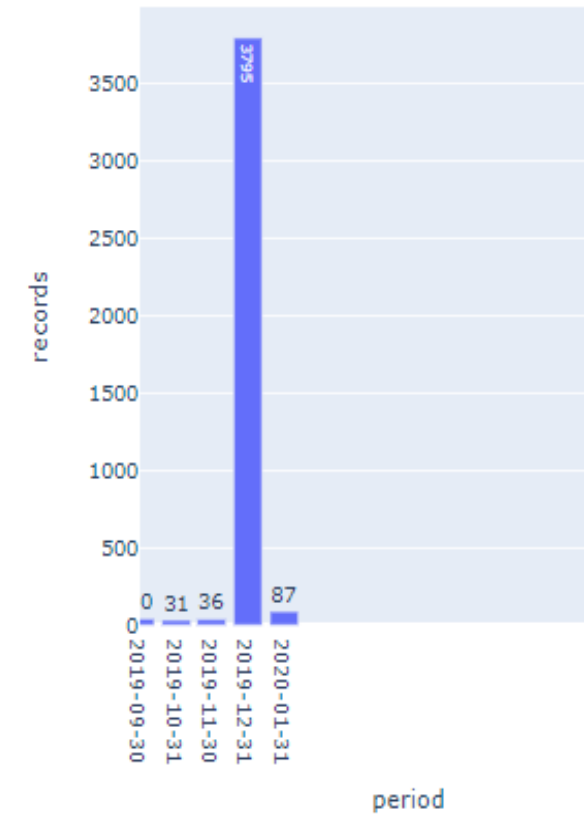
2020Q3



2020Q2



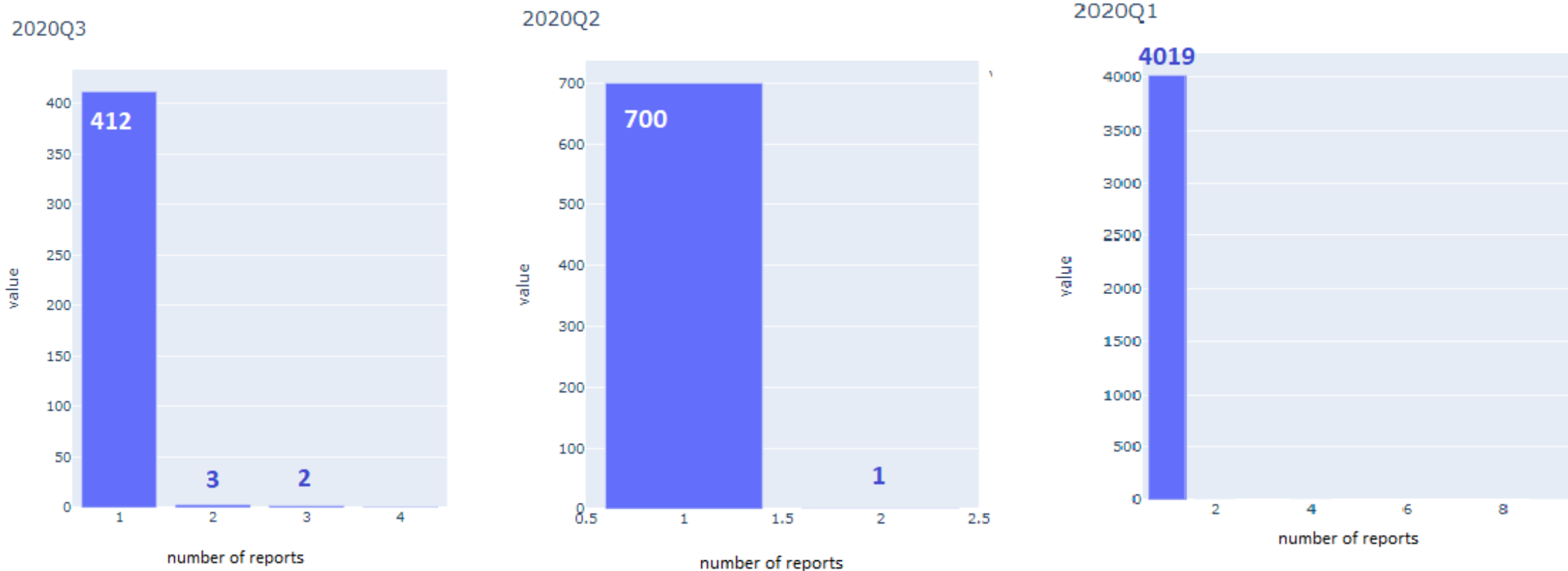
2020Q1





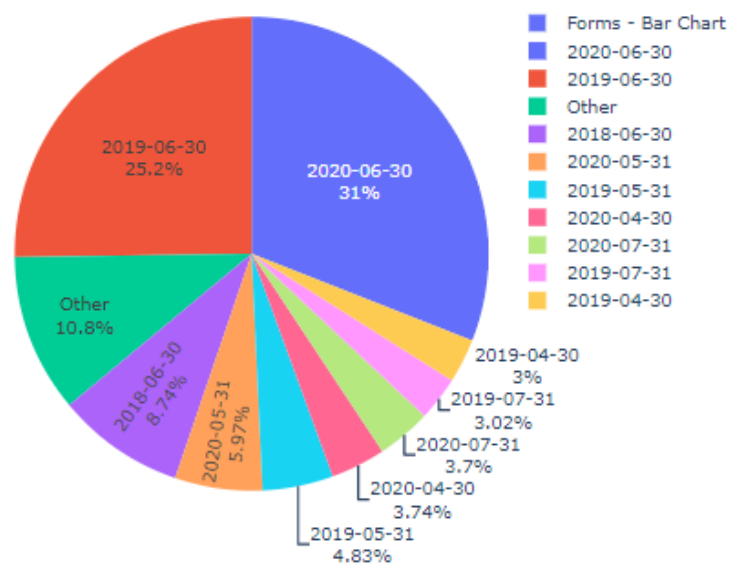
# How many 10-K reports were submitted by each company?

The Number of 10-Ks Reported by Each Company

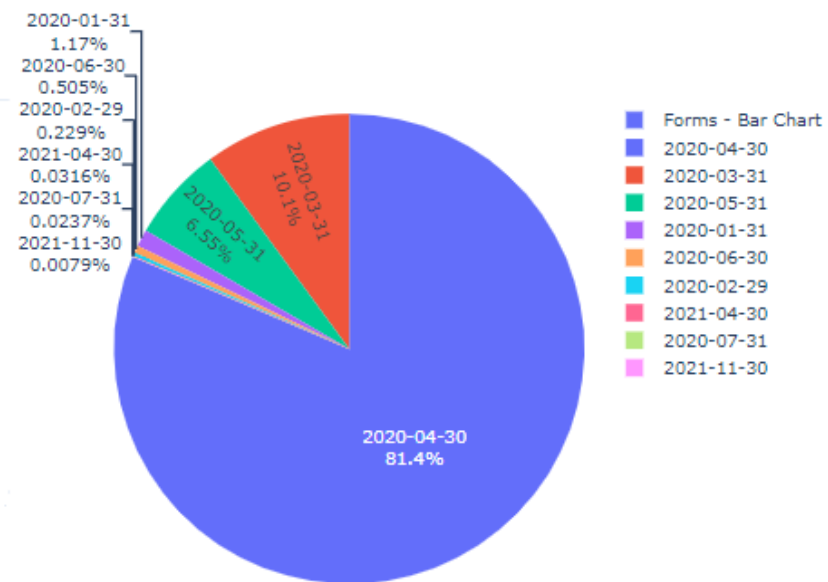


# 10-Ks Data in 2020 is valid through...

2020 Q3



2020 Q2

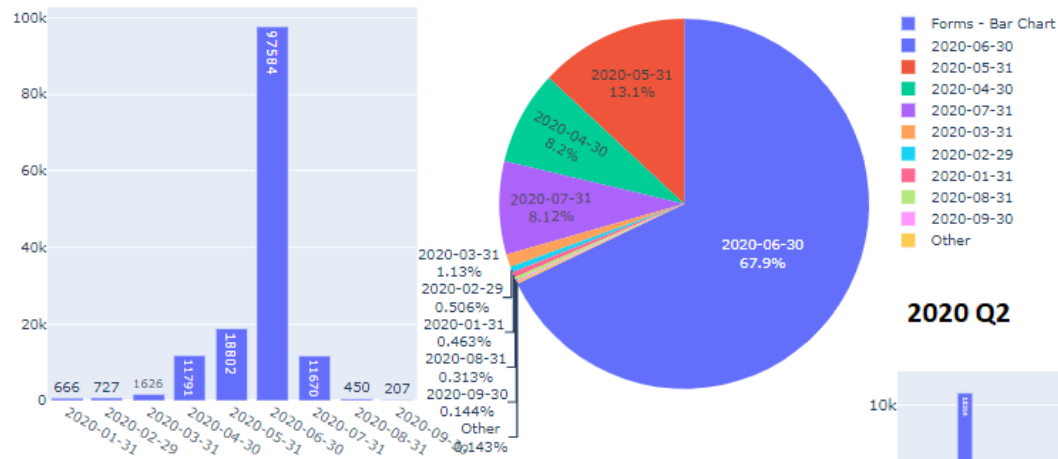


2020 Q1

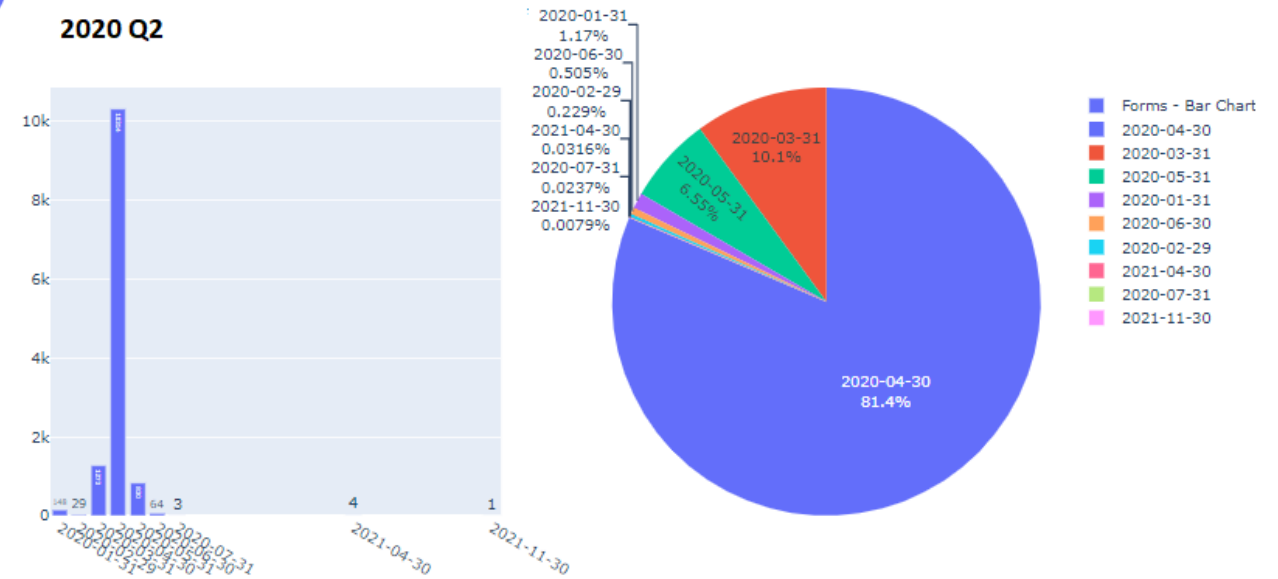
fy records		
8	2019	4004
7	2018	21
6	2017	4
5	2016	2
0	2011	1
1	2012	1
2	2013	1
3	2014	1
4	2015	1

# 10-Ks FY2020 Only Data is Valid through...

## 2020 Q3



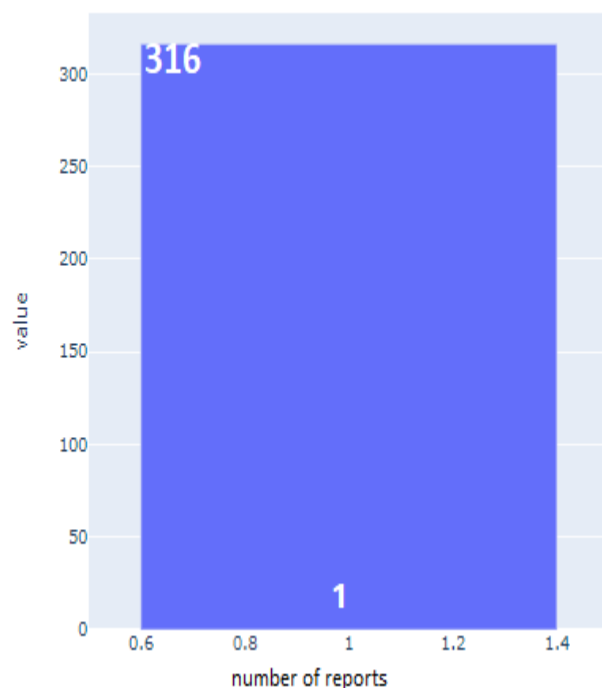
## 2020 Q2



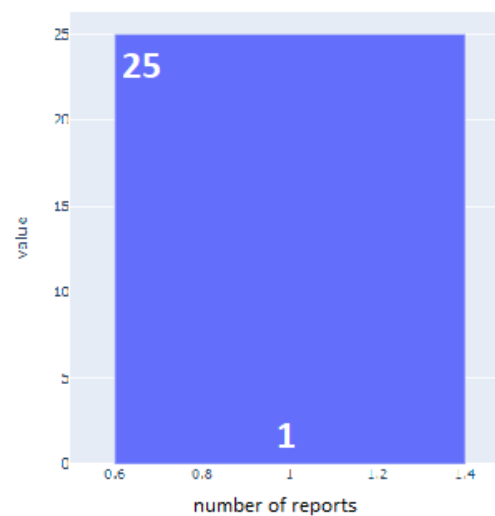
# The Number of 10-Ks for FY 2020 Reported by Each Company

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2020 Q3



2020 Q2



variable

cik

cik = registrant's number