source: https://abc.xyz/assets/investor/static/pdf/20220202_alphabet_10K.pdf
source: https://abc.xyz/assets/9a/bd/838c917c4b4ab21f94e84c3c2c65/goog-10-k-q4-2022.pdf
Note: Tables and figures are converted to images for demonstration purposes.

Revenues by Geography

The following table presents revenues by geography as a percentage of revenues, determined based on the addresses of our customers:

	Year Ended December 31,	
	2020	2021
United States	47 %	46 %
EMEA	30 %	31 %
APAC	18 %	18 %
Other Americas	5 %	5 %

The following table presents the foreign exchange effect on international revenues and total revenues (in millions, except percentages):

	Year Ended December 31,		% Change from Prior Year
	2020	2021	
EMEA revenues	$ 55,370	$ 79,107	43 %
EMEA constant currency revenues		76,321	38 %
APAC revenues	32,550	46,123	42 %
APAC constant currency revenues		45,666	40 %
Other Americas revenues	9,417	14,404	53 %
Other Americas constant currency revenues		14,317	52 %
United States revenues	85,014	117,854	39 %
Hedging gains (losses)	176	149	
Total revenues	$ 182,527	$ 257,637	41 %
Revenues, excluding hedging effect	$ 182,351	$ 257,488	
Exchange rate effect		(3,330)	
Total constant currency revenues		$ 254,158	39 %

EMEA revenue growth from 2020 to 2021 was favorably affected by foreign currency exchange rates, primarily due to the U.S. dollar weakening relative to the Euro and British pound.

APAC revenue growth from 2020 to 2021 was favorably affected by foreign currency exchange rates, primarily due to the U.S. dollar weakening relative to the Australian dollar, partially offset by the U.S. dollar strengthening relative to the Japanese yen.

Other Americas growth change from 2020 to 2021 was favorably affected by changes in foreign currency exchange rates, primarily due to the U.S. dollar weakening relative to the Canadian dollar, partially offset by the U.S. dollar strengthening relative to the Argentine peso and the Brazilian real.

Costs and Expenses

Cost of Revenues

The following tables present cost of revenues, including TAC (in millions, except percentages):

	Year Ended December 31,	
	2020	2021
TAC	$ 32,778	$ 45,566
Other cost of revenues	51,954	65,373
Total cost of revenues	$ 84,732	$ 110,939
Total cost of revenues as a percentage of revenues	46.4 %	43.1 %

Cost of revenues increased $26.2 billion from 2020 to 2021. The increase was due to an increase in other cost of revenues and TAC of $13.4 billion and $12.8 billion, respectively.

The increase in TAC from 2020 to 2021 was due to an increase in TAC paid to distribution partners and to Google Network partners, primarily driven by growth in revenues subject to TAC. The TAC rate decreased from 22.3% to 21.8% from 2020 to 2021 primarily due to a revenue mix shift from Google Network properties to Google Search & other properties.

The TAC rate on Google Search & other properties revenues and the TAC rate on Google Network revenues were both substantially consistent from 2020 to 2021. The increase in other cost of revenues from 2020 to 2021 was driven by increases in content acquisition costs primarily for YouTube, data center and other operations costs, and hardware costs. The increase in data center and Table of Contents Alphabet Inc. 36 other operations costs was partially offset by a reduction in depreciation expense due to the change in the estimated useful life of our servers and certain network equipment beginning in the first quarter of 2021.

Net Income Per Share

We compute net income per share of Class A, Class B, and Class C stock using the two-class method. Basic net income per share is computed using the weighted-average number of shares outstanding during the period. Diluted net income per share is computed using the weighted-average number of shares and the effect of potentially dilutive securities outstanding during the period. Potentially dilutive securities consist of restricted stock units and other contingently issuable shares. The dilutive effect of outstanding restricted stock units and other contingently issuable shares is reflected in diluted earnings per share by application of the treasury stock method. The computation of the diluted net income per share of Class A stock assumes the conversion of Class B stock, while the diluted net income per share of Class B stock does not assume the conversion of those shares.

The rights, including the liquidation and dividend rights, of the holders of our Class A, Class B, and Class C stock are identical, except with respect to voting. Furthermore, there are a number of safeguards built into our certificate of incorporation, as well as Delaware law, which preclude our Board of Directors from declaring or paying unequal per share dividends on our Class A, Class B, and Class C stock. Specifically, Delaware law provides that amendments to our certificate of incorporation which would have the effect of adversely altering the rights, powers, or preferences of a given class of stock must be approved by the class of stock adversely affected by the proposed amendment. In addition, our certificate of incorporation provides that before any such amendment may be put to a stockholder vote, it must be approved by the unanimous consent of our Board of Directors. As a result, the undistributed earnings for each year are allocated based on the contractual participation rights of the Class A, Class B, and Class C stock as if the earnings for the year had been distributed. As the liquidation and dividend rights are identical, the undistributed earnings are allocated on a proportionate basis.

In the years ended December 31, 2019, 2020 and 2021, the net income per share amounts are the same for Class A, Class B, and Class C stock because the holders of each class are entitled to equal per share dividends or distributions in liquidation in accordance with the Amended and Restated Certificate of Incorporation of Alphabet Inc.

The following tables set forth the computation of basic and diluted net income per share of Class A, Class B, and Class C stock (in millions, except share amounts which are reflected in thousands and per share amounts):

	Year Ended December 31, 2019		
	Class A	Class B	Class C
Basic net income per share:			
Numerator			
Allocation of undistributed earnings	$ 14,846	$ 2,307	$ 17,190
Denominator			
Number of shares used in per share computation	299,402	46,527	346,667
Basic net income per share	$ 49.59	$ 49.59	$ 49.59
Diluted net income per share:			
Numerator			
Allocation of undistributed earnings for basic computation	$ 14,846	$ 2,307	$ 17,190
Reallocation of undistributed earnings as a result of conversion of Class B to Class A shares	2,307	0	0
Reallocation of undistributed earnings	(126)	(20)	126
Allocation of undistributed earnings	$ 17,027	$ 2,287	$ 17,316
Denominator			
Number of shares used in basic computation	299,402	46,527	346,667
Weighted-average effect of dilutive securities			
Add:			
Conversion of Class B to Class A shares outstanding	46,527	0	0
Restricted stock units and other contingently issuable shares	413	0	5,547
Number of shares used in per share computation	346,342	46,527	352,214
Diluted net income per share	$ 49.16	$ 49.16	$ 49.16

	Year Ended December 31,		
	2020		
	Class A	Class B	Class C
Basic net income per share:			
Numerator			
Allocation of undistributed earnings	$ 17,733	$ 2,732	$ 19,804
Denominator			
Number of shares used in per share computation	299,815	46,182	334,819
Basic net income per share	$ 59.15	$ 59.15	$ 59.15
Diluted net income per share:			
Numerator			
Allocation of undistributed earnings for basic computation	$ 17,733	$ 2,732	$ 19,804
Reallocation of undistributed earnings as a result of conversion of Class B to Class A shares	2,732	0	0
Reallocation of undistributed earnings	(180)	(25)	180
Allocation of undistributed earnings	$ 20,285	$ 2,707	$ 19,984
Denominator			
Number of shares used in basic computation	299,815	46,182	334,819
Weighted-average effect of dilutive securities			
Add:			
Conversion of Class B to Class A shares outstanding	46,182	0	0
Restricted stock units and other contingently issuable shares	87	0	6,125
Number of shares used in per share computation	346,084	46,182	340,944
Diluted net income per share	$ 58.61	$ 58.61	$ 58.61

Stock-Based Award Activities

The following table summarizes the activities for unvested Alphabet RSUs for the year ended December 31, 2021:

	Unvested Restricted Stock Units	
	Number of Shares	Weighted-Average Grant-Date Fair Value
Unvested as of December 31, 2020	19,288,793	$ 1,262.13
Granted	10,582,700	$ 1,949.16
Vested	(11,209,486)	$ 1,345.98
Forfeited/canceled	(1,767,294)	$ 1,425.48
Unvested as of December 31, 2021	16,894,713	$ 1,626.13

The weighted-average grant-date fair value of RSUs granted during the years ended December 31, 2019 and 2020 was $1,092.36 and $1,407.97, respectively. Total fair value of RSUs, as of their respective vesting dates, during the years ended December 31, 2019, 2020, and 2021 were $15.2 billion, $17.8 billion, and $28.8 billion, respectively. As of December 31, 2021, there was $25.8 billion of unrecognized compensation cost related to unvested employee RSUs. This amount is expected to be recognized over a weighted-average period of 2.5 years. 401(k) Plans We have two 401(k) Savings Plans that qualify as deferred salary arrangements under Section 401(k) of the Internal Revenue Code. Under these 401(k) Plans, matching contributions are based upon the amount of the employees' contributions subject to certain limitations. We recognized expense of approximately $724 million, $855 million, and $916 million for the years ended December 31, 2019, 2020, and 2021, respectively. Note 14. Income Taxes Income from continuing operations before income taxes consisted of the following (in millions):

Deferred Income Taxes

Deferred income taxes reflect the net effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. Significant components of our deferred tax assets and liabilities were as follows (in millions):

	As of December 31,	
	2020	2021
Deferred tax assets:		
Accrued employee benefits	$ 580	$ 549
Accruals and reserves not currently deductible	1,049	1,816
Tax credits	3,723	5,179
Net operating losses	1,085	1,790
Operating leases	2,620	2,503
Intangible assets	1,525	2,034
Other	981	925
Total deferred tax assets	11,563	14,796
Valuation allowance	(4,823)	(7,129)
Total deferred tax assets net of valuation allowance	6,740	7,667
Deferred tax liabilities:		
Property and equipment, net	(3,382)	(5,237)
Net investment gains	(1,901)	(3,229)
Operating leases	(2,354)	(2,228)
Other	(1,580)	(946)
Total deferred tax liabilities	(9,217)	(11,640)
Net deferred tax assets (liabilities)	$ (2,477)	$ (3,973)

As of December 31, 2021, our federal, state, and foreign net operating loss carryforwards for income tax purposes were approximately $5.6 billion, $4.6 billion, and $1.7 billion respectively. If not utilized, the federal net operating loss carryforwards will begin to expire in 2023, foreign net operating loss carryforwards will begin to expire in 2025 and the state net operating loss carryforwards will begin to expire in 2028. It is more likely than not that certain net operating loss carryforwards will not be realized; therefore, we have recorded a valuation allowance against them. The net operating loss carryforwards are subject to various annual limitations under the tax laws of the different jurisdictions. As of December 31, 2021, our California R&D carryforwards for income tax purposes were approximately $5.0 billion that can be carried over indefinitely. We believe the state tax credit is not likely to be realized. As of December 31, 2021, our investment tax credit carryforwards for state income tax purposes were approximately $700 million and will begin to expire in 2025. We use the flow-through method of accounting for investment tax credits. We believe this tax credit is not likely to be realized. As of December 31, 2021, we maintained a valuation allowance with respect to California deferred tax assets, certain federal net operating losses, certain state tax credits, net deferred tax assets relating to certain Other Bets, and certain foreign net operating losses that we believe are not likely to be realized.

source: https://abc.xyz/assets/investor/static/pdf/20220202_alphabet_10K.pdf
source: https://abc.xyz/assets/9a/bd/838c917c4b4ab21f94e84c3c2c65/goog-10-k-q4-2022.pdf
Note: Tables and figures are converted to images for demonstration purposes.

MARKET FOR REGISTRANT’S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUER PURCHASES OF EQUITY SECURITIES

As of October 2, 2015, Alphabet Inc. became the successor issuer of Google Inc. pursuant to Rule 12g-3(a) under the Exchange Act. Our Class A common stock has been listed on the Nasdaq Global Select Market under the symbol “GOOG” since August 19, 2004 and under the symbol "GOOGL" since April 3, 2014. Prior to August 19, 2004, there was no public market for our stock. Our Class B common stock is neither listed nor traded. Our Class C capital stock has been listed on the Nasdaq Global Select Market under the symbol “GOOG” since April 3, 2014.

Holders of Record

As of December 31, 2021, there were approximately 4,907 and 1,733 stockholders of record of our Class A common stock and Class C capital stock, respectively. Because many of our shares of Class A common stock and Class C capital stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of stockholders represented by these record holders. As of December 31, 2021, there were approximately 64 stockholders of record of our Class B common stock.

Dividend Policy

We have never declared or paid any cash dividend on our common or capital stock. The primary use of capital continues to be to invest for the long-term growth of the business. We regularly evaluate our cash and capital structure, including the size, pace, and form of capital return to stockholders.

Issuer Purchases of Equity Securities

The following table presents information with respect to Alphabet's repurchases of Class A common stock and Class C capital stock during the quarter ended December 31, 2021:

Period	Total Number of Class A Shares Purchased (in thousands) [1]	Total Number of Class C Shares Purchased (in thousands) [1]	Average Price Paid per Class A Share [2]	Average Price Paid per Class C Share [2]	Total Number of Shares Purchased as Part of Publicly Announced Programs (in thousands) [1]	Approximate Dollar Value of Shares that May Yet Be Purchased Under the Program (in millions)
October 1 - 31	126	1,445	$ 2,812.76	$ 2,794.72	1,571	$ 26,450
November 1 - 30	289	1,393	$ 2,943.97	$ 2,956.73	1,682	$ 21,479
December 1 - 31	250	1,169	$ 2,880.79	$ 2,898.56	1,419	$ 17,371
Total	665	4,007			4,672	

(1) The repurchases are being executed from time to time, subject to general business and market conditions and other investment opportunities, through open market purchases or privately negotiated transactions, including through Rule 10b5-1 plans. The repurchase program does not have an expiration date. See Note 11 of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K for additional information related to share repurchases.

(2) Average price paid per share includes costs associated with the repurchases.

Stock Performance Graphs

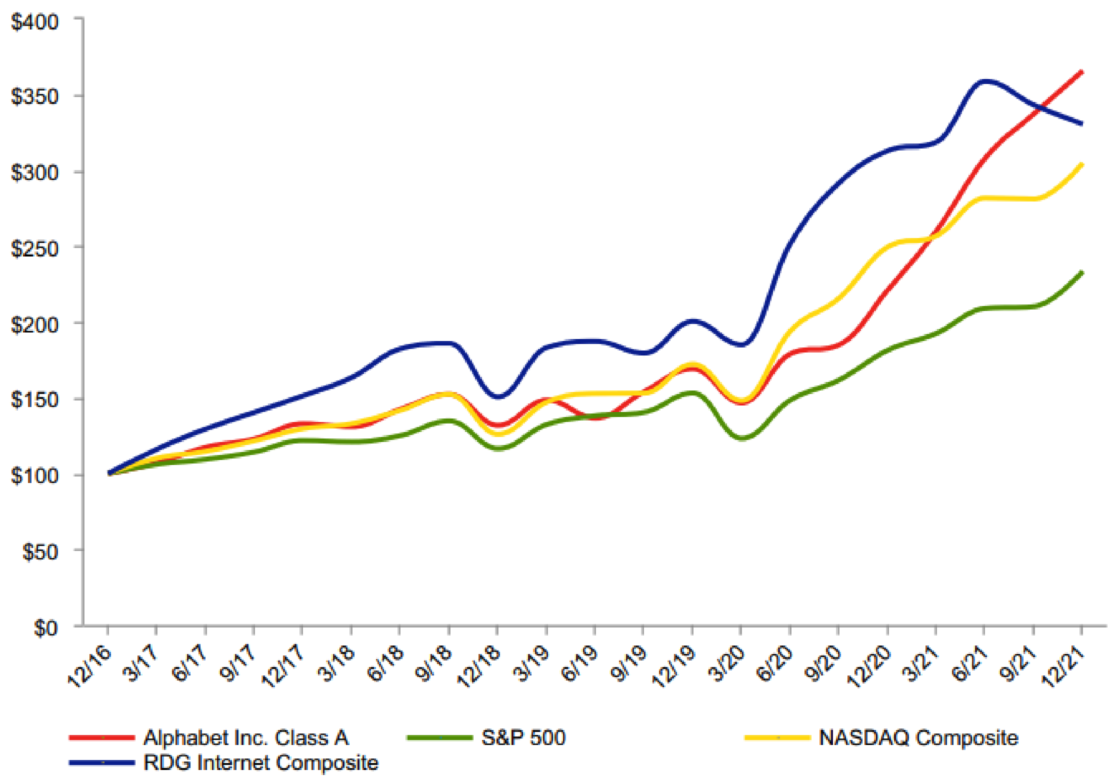
The graph below matches Alphabet Inc. Class A's cumulative 5-year total stockholder return on common stock with the cumulative total returns of the S&P 500 index, the NASDAQ Composite index, and the RDG Internet Composite index. The graph tracks the performance of a $100 investment in our common stock and in each index (with the reinvestment of all dividends) from December 31, 2016 to December 31, 2021. The returns shown are based on historical results and are not intended to suggest future performance.

COMPARISON OF CUMULATIVE 5-YEAR TOTAL RETURN*

ALPHABET INC. CLASS A COMMON STOCK

Among Alphabet Inc., the S&P 500 Index, the

NASDAQ Composite Index, and the RDG Internet Composite Index



*$100 invested on December 31, 2016 in stock or index, including reinvestment of dividends. Fiscal year ending December 31.

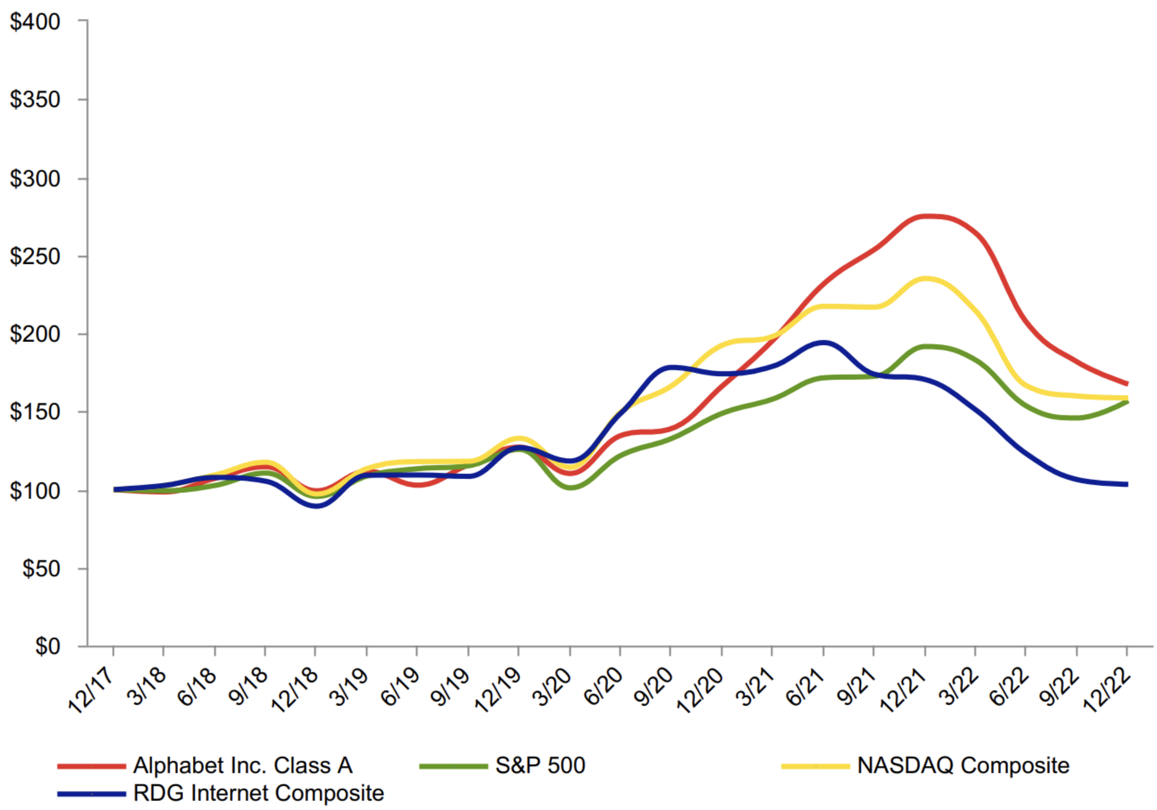
The graph below matches Alphabet Inc. Class A's cumulative 5-year total stockholder return on common stock with the cumulative total returns of the S&P 500 index, the NASDAQ Composite index, and the RDG Internet Composite index. The graph tracks the performance of a $100 investment in our common stock and in each index (with the reinvestment of all dividends) from December 31, 2017 to December 31, 2022. The returns shown are based on historical results and are not intended to suggest future performance.

COMPARISON OF CUMULATIVE 5-YEAR TOTAL RETURN*

ALPHABET INC. CLASS A COMMON STOCK

Among Alphabet Inc., the S&P 500 Index, the

NASDAQ Composite Index, and the RDG Internet Composite Index



*$100 invested on December 31, 2017 in stock or index, including reinvestment of dividends.

Executive Overview

The following table summarizes consolidated financial results for the years ended December 31, 2020 and 2021 unless otherwise specified (in millions, except for per share information and percentages):

	Year Ended December 31, 2020	2021	$ Change	% Change
Consolidated revenues	$ 182,527	$ 257,637	$ 75,110	41 %
Change in consolidated constant currency revenues				39 %
Cost of revenues	$ 84,732	$ 110,939	$ 26,207	31 %
Operating expenses	$ 56,571	$ 67,984	$ 11,413	20 %
Operating income	$ 41,224	$ 78,714	$ 37,490	91 %
Operating margin	23 %	31 %		8 %
Other income (expense), net	$ 6,858	$ 12,020	$ 5,162	75 %
Net Income	$ 40,269	$ 76,033	$ 35,764	89 %
Diluted EPS	$ 58.61	$ 112.20	$ 53.59	91 %
Number of Employees	135,301	156,500	21,199	16 %

- Revenues were $257.6 billion, an increase of 41%. The increase in revenues was primarily driven by Google Services and Google Cloud. The adverse effect of COVID-19 on 2020 advertising revenues also contributed to the year-over-year growth.
- Cost of revenues was $110.9 billion, an increase of 31%, primarily driven by increases in TAC and content acquisition costs.
- An overall increase in data centers and other operations costs was partially offset by a reduction in depreciation expense due to the change in the estimated useful life of our servers and certain network equipment. • Operating expenses were $68.0 billion, an increase of 20%, primarily driven by headcount growth, increases in advertising and promotional expenses and charges related to legal matters.

Other information:

- Operating cash flow was $91.7 billion, primarily driven by revenues generated from our advertising products.
- Share repurchases were $50.3 billion, an increase of 62%. See Note 11 of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K for further information.
- Capital expenditures, which primarily reflected investments in technical infrastructure, were $24.6 billion.
- In January 2021, we updated the useful lives of certain of our servers and network equipment, resulting in a reduction in depreciation expense of $2.6 billion recorded primarily in cost of revenues and R&D. See Note 1 of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K for further information.
- Our acquisition of Fitbit closed in early January 2021, and the related revenues are included in Google other. See Note 8 of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K for further information.
- On February 1, 2022, the Company announced that the Board of Directors had approved and declared a 20- for-one stock split in the form of a one-time special stock dividend on each share of the Company's Class A, Class B, and Class C stock. See Note 11 of the Notes to Consolidated Financial Statements included in Item 8 of this Annual Report on Form 10-K for additional information.

The Effect of COVID-19 on our Financial Results

We began to observe the effect of COVID-19 on our financial results in March 2020 when, despite an increase in users' search activity, our advertising revenues declined compared to the prior year. This was due to a shift of user search activity to less commercial topics and reduced spending by our advertisers. For the quarter ended June 30, 2020 our advertising revenues declined due to the continued effects of COVID-19 and the related reductions in global economic activity, but we observed a gradual return in user search activity to more commercial topics. This was followed by increased spending by our advertisers, which continued throughout the second half of 2020. Additionally, over the course of 2020, we experienced variability in our margins as many of our expenses are less variable in nature and/or may not correlate to changes in revenues. Market volatility contributed to fluctuations in the valuation of our equity investments. Further, our assessment of the credit deterioration of our customers due to changes in the macroeconomic environment during the period was reflected in our allowance for credit losses for accounts receivable.

Throughout 2021 we remained focused on innovating and investing in the services we offer to consumers and businesses to support our long-term growth. The impact of COVID-19 on 2020 financial results affected year-over-year growth trends. The COVID-19 pandemic continues to evolve, be unpredictable and affect our business and financial results. Our past results may not be indicative of our future performance, and historical trends in our financial results may differ materially.