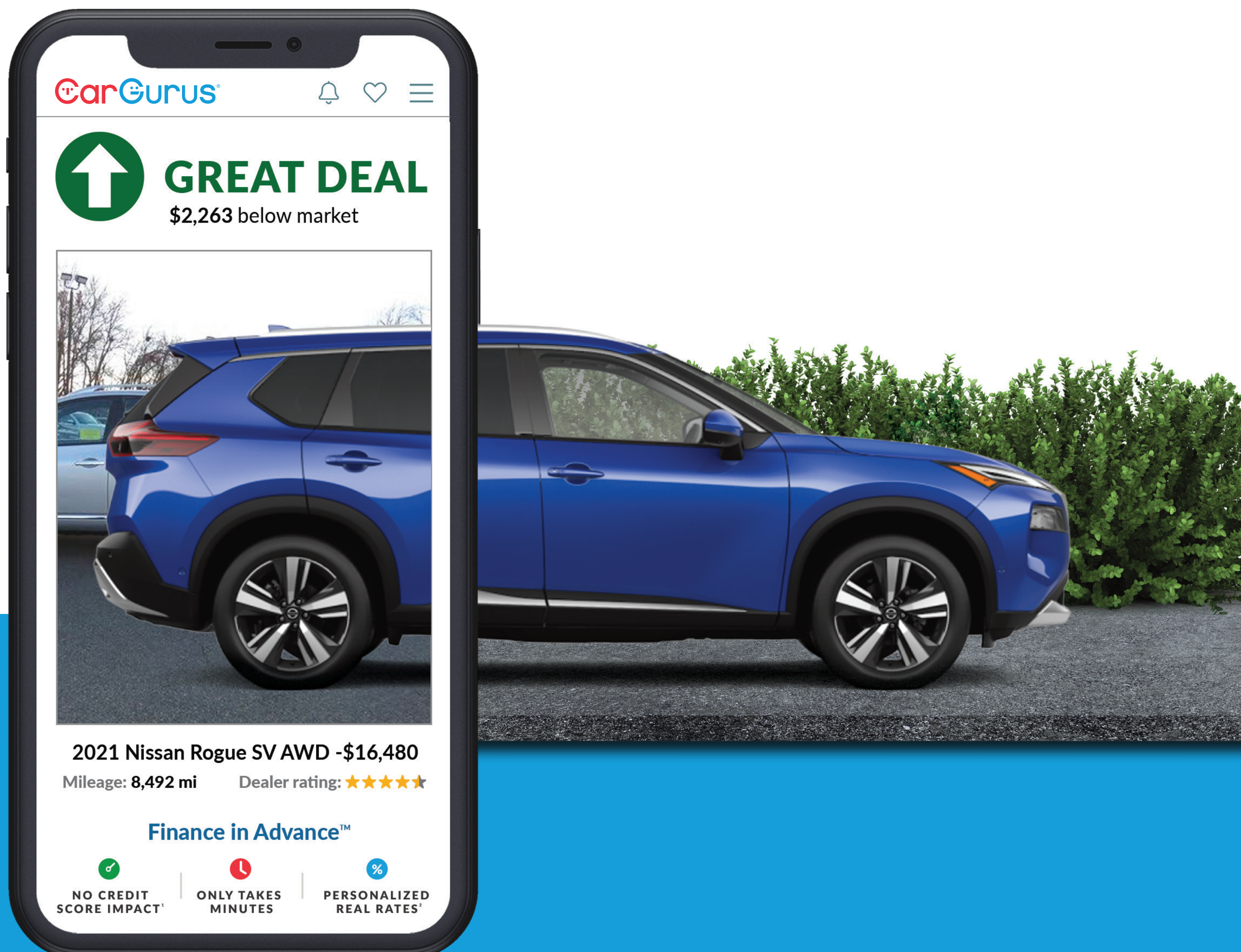
CarGurus®

2020 Annual Report



UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2020

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

FOR THE TRANSITION PERIOD FROM TO

Commission File Number 001-38233

CarGurus, Inc.
(Exact name of Registrant as specified in its Charter)

Delaware **(State or other jurisdiction of incorporation or organization)**	**04-3843478** **(I.R.S. Employer Identification No.)**
2 Canal Park, 4th Floor **Cambridge, Massachusetts** **(Address of principal executive offices)**	**02141** **(Zip Code)**

Registrant's telephone number, including area code: (617) 354-0068

Securities registered pursuant to Section 12(b) of the Act:

Title of Each Class	Trading Symbol	Name of Exchange on Which Registered
Class A Common Stock, par value $0.001 per share	**CARG**	**The Nasdaq Stock Market LLC (Nasdaq Global Select Market)**

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ☒ No ☐

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or 15(d) of the Act. Yes ☐ No ☒

Indicate by check mark whether the Registrant: (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the Registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the Registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the Registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒	Accelerated filer	☐
Non-accelerated filer	☐	Small reporting company	☐
		Emerging growth company	☐

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report. ☒

Indicate by check mark whether the Registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

The aggregate market value of the registrant's Class A common stock, par value $0.001 per share, held by non-affiliates of the registrant based on the closing price of the registrant's common stock as reported on the Nasdaq Global Market on June 30, 2020 was $2,193,762,306. Shares of voting and non-voting stock held by executive officers, directors and holders of more than 10% of the outstanding stock have been excluded from this calculation because such persons or institutions may be deemed affiliates. This determination of affiliate status is not a conclusive determination for other purposes.

As of February 4, 2021, the registrant had 97,723,371 shares of Class A common stock, and 19,076,500 shares of Class B common stock, par value $0.001 per share, outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant's definitive Proxy Statement for its 2021 Annual Meeting of Stockholders are incorporated by reference in Part III of this Annual Report on Form 10-K. Such Proxy Statement will be filed with the U.S. Securities and Exchange Commission within 120 days after the end of the fiscal year to which this report relates. Except with respect to information specifically incorporated by reference in this Form 10-K, the Proxy Statement is not deemed to be filed as part of this Form 10-K.

Table of Contents

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements within the meaning of the federal securities laws, which statements involve substantial risks and uncertainties. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, you can identify forward-looking statements because they contain words such as "anticipates," "believes," "could," "estimates," "expects," "intends," "likely," "may," "might," "plans," "potential," "predicts," "projects," "seeks," "should," "target," "will," "would," or similar expressions and the negatives of those terms. Forward-looking statements contained in this report include, but are not limited to, statements about:

- our future financial performance, including our expectations regarding our revenue, cost of revenue, gross profit or gross margin, operating expenses, ability to generate cash flow, and ability to achieve, and maintain, future profitability;
- our growth strategies and our ability to effectively manage that growth;
- our belief that we are building the world's most trusted and transparent automotive marketplace and creating a differentiated automotive search experience for consumers;
- our ability to deliver quality leads at a high volume for our dealer customers;
- our ability to maintain and acquire new customers;
- our ability to maintain and build our brand;
- our ability to succeed internationally;
- our ability to realize benefits from our acquisitions and successfully implement our integration strategies in connection therewith;
- our expectations regarding future share issuances and the exercise of put and call rights in connection with our acquisition of a majority interest in CarOffer, LLC;
- the impact of competition in our industry and innovation by our competitors;
- the impact of accounting pronouncements;
- the impact of litigation;
- our ability to hire and retain necessary qualified employees to expand our operations;
- our ability to adequately protect our intellectual property;
- our ability to stay abreast of and effectively comply with new or modified laws and regulations that currently apply or become applicable to our business and our beliefs regarding our compliance therewith;
- our ability to overcome challenges facing the automotive industry ecosystem, including global supply chain challenges, changes to trade policies and other macroeconomic issues;
- failure to maintain an effective system of internal controls necessary to accurately report our financial results and prevent fraud;
- our expectations regarding cash generation and the sufficiency of our cash to fund our operations;
- the future trading prices of our Class A common stock;
- our expectation that we will realize the benefits of deferred tax assets;
- our expected returns on investments;
- our ability to realize cost savings and achieve other benefits for our business from our expense reduction efforts, the impact of such reductions on our business and the timing of payments associated with such efforts;
- our outlook for our Restricted Listings product;
- our expectations for the impact on our revenue for the year ending December 31, 2021 from our suspension of charging subscription fees for subscribing dealers in the United Kingdom for the December 2020 and February 2021 service periods;
- our expectations regarding future fee reductions or waivers for customers;

- our belief that certain of our strengths, including our trusted marketplace for consumers, our strong value proposition for dealers and our data-driven approach, among other things, will lead to an advantage over our competitors;
- our belief that our partnerships with automotive lending companies provides more transparency to car shoppers and delivers highly qualified car shopper leads to participating dealers; and
- the impacts of the COVID-19 pandemic.

You should not rely upon forward-looking statements as predictions of future events. We have based the forward-looking statements contained in this report primarily on our current expectations and projections about future events and trends that we believe may affect our business, financial condition, operating results, and growth prospects. The outcome of the events described in these forward-looking statements is subject to risks, uncertainties, and other factors described in the section titled "Risk Factors" and elsewhere in this report. Moreover, we operate in a very competitive and rapidly changing environment. New risks and uncertainties emerge from time to time, and it is not possible for us to predict all risks and uncertainties that could have an impact on the forward-looking statements contained in this report. Further, our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, joint ventures, or investments we may make. We cannot assure you that the results, events, and circumstances reflected in the forward-looking statements will be achieved or occur, and actual results, events, or circumstances could differ materially from those described in the forward-looking statements.

The forward-looking statements made in this report relate only to events as of the date on which the statements are made. We undertake no obligation to update any forward-looking statements made in this report to reflect events or circumstances after the date of this report or to reflect new information or the occurrence of unanticipated events, except as required by law.

PART I

Item 1. Business.

BUSINESS

Overview

CarGurus is a global, online automotive marketplace connecting buyers and sellers of new and used cars. Using proprietary technology, search algorithms, and innovative data analytics, we believe we are building the world's most trusted and transparent automotive marketplace and creating a differentiated automotive search experience for consumers. Our trusted marketplace empowers consumers with unbiased third-party validation on pricing and dealer reputation as well as other information that aids them in finding "Great Deals from Top-Rated Dealers." Our selection provides the largest number of car listings available on any major U.S. online automotive marketplace. In addition to the United States, we operate online marketplaces under the CarGurus brand in Canada and the United Kingdom. We also operate two online marketplaces as independent brands: PistonHeads in the United Kingdom and Autolist in the United States.

A core principle of the CarGurus marketplace is transparency. For consumers considering used vehicles, we aggregate vehicle inventory from dealers and apply our proprietary analysis to generate a Deal Rating as one of: Great Deal, Good Deal, Fair Deal, High Priced, or Overpriced. Deal Rating illustrates how competitive a listing is compared to similar cars sold in the same region in recent history. We determine Deal Rating principally on the basis of both our proprietary Instant Market Value, or IMV, algorithm, which determines the market value of a used vehicle in a local market, and Dealer Rating, a measure of a dealer's reputation as determined by reviews of that dealer from our user community. As the only major U.S. online automotive marketplace that defaults to sorting organic search results based on a used car's Deal Rating, we enable consumers to find the most relevant car for their needs. For new cars, we help our users understand deal quality by providing price analysis and our Dealer Rating. We also provide our users information historically not widely available, such as Price History, Time on Site, and Vehicle History. We believe this approach brings greater transparency, trust, and efficiency to a consumer's car research and buying process, leading to higher engagement and a more informed consumer who is better prepared to purchase at the dealership.

Our large, engaged, and predominantly mobile user base presents an attractive audience of in-market consumers for our dealers. By presenting consumers with data such as our Deal Ratings, Price History, Time on Site, and Vehicle History, we believe our consumer audience is comprised of more informed, ready-to-purchase shoppers. By connecting dealers with such consumers, we believe we provide dealers with an efficient customer acquisition channel and attractive returns on their marketing spend with us. Dealers can list their inventory in our marketplace for free or with a subscription to one of our paid Listings packages. Non-paying dealers receive a limited number of anonymized email connections and access to a subset of the tools on our Dealer Dashboard at no cost. A dealer with a paid subscription receives connections with consumers that are not anonymous and are made through a wider variety of methods, including phone calls, email, managed text and chat, links to the dealer's website, and map directions to its dealerships. The primary objective of our traffic acquisition and site improvement efforts is to generate greater volumes of consumer leads to dealers. Leads are a subcategory of connections that we define as user inquiries via our marketplace to dealers by phone calls, email, or managed text and chat interactions. Dealers with our paid Listings packages are able to display their dealer name, address, and dealership information on their listings on our websites to gain brand recognition, which promotes walk-in traffic to the dealer. We also provide paying dealers with full access to our Dealer Dashboard, including inventory pricing tools informed by real-time market conditions, which helps them more effectively price, merchandise, and sell their cars. Our success with dealers is evidenced by the number of paying dealers – 23,934 paying dealers as of December 31, 2020 – in our U.S. marketplace.

Our scaled online marketplace model drives powerful network effects. The industry-leading inventory selection offered on our website from our U.S. dealers attracts a large and engaged consumer audience. The value of robust connections to this audience incentivizes dealers to purchase our paid Listings packages. Displaying listings from more paying dealers provides consumers with more dealer information and methods to contact them. More consumers – 36.2 million average monthly U.S. unique users in 2020 – and connections – 63.4 million in the U.S. in 2020 – drive greater value to paying dealers on our platform. Driven by these network effects, we continue to amass more data, which we use to continuously improve our search algorithms, the accuracy of Deal Ratings, our user experience, and, ultimately, the quality of the connections between consumers and dealers.

We generate marketplace subscription revenue from dealers through subscriptions to our products, including our paid Listings packages (which include optional features and enhancements such as Area Boost) and products marketed under our Real-time Performance Marketing suite, or RPM, including our Dealer Display advertising and audience targeting products. We also generate advertising and other revenue from auto manufacturers and other auto-related brand advertisers, as well as revenue from non-dealer products such as through our consumer financing partnerships and our peer-to-peer marketplace. Our financial performance over the last several years exemplifies the strength of our marketplace. In 2020, we generated net income of $77.6 million and our Adjusted EBITDA, a non-GAAP financial measure, was $160.8 million, compared to net income of $42.1 million and Adjusted EBITDA of $77.0 million in 2019 and net income of $65.2 million and Adjusted EBITDA of $49.7 million in 2018. See "Management's Discussion and Analysis of Financial Condition and Results of Operations — Adjusted EBITDA" for more information regarding our use of Adjusted EBITDA and a reconciliation of Adjusted EBITDA to our net income.

Consumer Challenges

As consumers determine the car they would like to purchase, the key questions they ask are:

- What type of vehicle should I buy?
- Where can I buy a car like this?
- What is a fair price for this particular type of vehicle?
- Have others had a good experience buying from this dealer?
- How much of the purchase process can I transact online?
- Can I obtain financing for this car, and at what cost?

In answering these questions, consumers historically had limited access to unbiased information on specific vehicles, car pricing, and dealer reputation. Every vehicle is unique, and so for consumers searching for a car, it is difficult to aggregate the relevant inventory of available cars across sellers, a difficulty exacerbated by the lack of consistency in the way that dealers characterize a car's attributes. Traditionally, dealers had more information about car prices than consumers did, as consumers had limited resources and tools to determine an appropriate price. Selecting the right dealer was also challenging for consumers as dealer reputations were historically based primarily on word-of-mouth. The lack of clear, unbiased, transparent information made it difficult for consumers to effectively compare vehicles, find the vehicles that best suited their needs and transact with well-regarded dealers. In addition, especially as a consequence of the COVID-19 pandemic, consumers are also increasingly interested in understanding which aspects of their buying journey they can carry out entirely online, including whether they pre-qualify for financing on a vehicle purchase before traveling to a dealership.

Dealer Challenges

The economics of dealerships depend largely on vehicle acquisition costs, sales volume, and customer acquisition efficiency. To achieve a high return on their marketing investments, dealers must find in-market consumers; yet because car purchases are infrequent, only a small percentage of consumers are shopping for a car at any given point in time. Traditional marketing channels, including television, radio, and newspaper, can effectively target locally but are inefficient in targeting the relatively small percentage of consumers who are actively in the market to buy a car. In addition, used car pricing is fluid because it is based on rapidly shifting supply and demand dynamics. Dealers need to find ways to manage constantly changing inventory and adjust pricing strategies to adapt to frequently changing market conditions.

Our Strengths

We believe that our competitive advantages are based on the following key strengths:

Trusted Marketplace for Consumers. We provide consumers with unbiased information, intuitive search results, and other tools that aids them in finding "Great Deals from Top-Rated Dealers." We offer the largest online selection of new and used car listings of any major U.S. online automotive marketplace. We aggregate and analyze these listings using proprietary technology and data along with innovative data analytics to create a differentiated automotive search experience for consumers. We believe that providing a transparent consumer experience with unbiased information has instilled trust in us among our users, helping us to become the most visited online automotive marketplace in the United States according to data from Comscore. In 2020, we experienced over 90.9 million average monthly sessions in the United States. We believe this user traffic, an indicator of consumer satisfaction and engagement, is critical to our marketplace success and will continue to strengthen our market position. We attract our audience from a diverse range of acquisition channels including, but not limited to, direct navigation, mobile applications, email, organic search, paid search advertising, social media advertising, display advertising, audience targeting, and brand advertising campaigns. In addition, we focus our efforts on attracting users that we believe are near a car purchasing decision, resulting in a higher quality audience to which our dealers can market. For our United States marketplace, in 2020 we generated 63.4 million connections and 38.3 million leads, compared with 65.3 million connections and 38.5 million leads in 2019. We define (i) connections as interactions between consumers and dealers via our marketplace through phone calls, email, managed text and chat, and clicks to access the dealer's website and map directions to the dealership and (ii) leads as user inquiries via our marketplace to dealers by phone calls, email, or managed text and chat.

Proprietary Search Algorithms and Data-Driven Approach. We have built an extensive repository of data on cars, prices, dealers, and the interactions between consumers and dealers that is the result of many years of data aggregation and regression modeling. Our proprietary search algorithms and data analytics allow us to use this valuable data to bring greater transparency to our platform. The primary product of this analysis is our determination of a used car's IMV, which, together with Dealer Rating, drives our Deal Rating. We calculate IMV by applying more than 20 ranking signals and more than 100 normalization rules to tens of millions of data points, including the make, model, trim, year, features, condition, history, geographic location, and mileage of the car. We apply the knowledge gained from analyzing the substantial volume of connections between consumers and dealers on our platform to build new features for our consumers and products for our dealers.

Strong Value Proposition to Dealers. We believe that our marketplace offers an efficient customer acquisition channel for dealers, helping them achieve attractive returns on their marketing spend with us. We provide our dealer base with connections to prospective car buyers; most of these connections have historically been for used cars. The primary objective of our traffic acquisition and site improvements is to generate greater volumes of consumer leads to our dealers. These leads include phone calls, email, and managed text and chat interactions for dealers, which we believe yield the highest value engagement for dealers. We provide all dealers with tools that are informed by real-time market conditions that help them merchandise and sell their cars, and our paying dealers get access to additional valuable information from our Pricing Tool and Market Analysis tool. Our strong value proposition to the dealer community is evidenced by our 6% growth in quarterly average revenue per subscribing dealer, or QARSD, in the United States in the fourth quarter of 2020 compared to the fourth quarter of 2019.

Network Effects Driven by Scale. With the majority of dealers in the United States listing inventory on our platform and having built the most visited online automotive marketplace in the United States, we believe that our scale creates powerful network effects that reinforce the competitive strength of our business model. Our large consumer audience increases our appeal to dealers and incentivizes more dealers to subscribe to our paid Listings packages to access the numerous benefits unavailable to non-paying dealers. Displaying listings from more paying dealers on our websites provides consumers with more dealer information and methods to contact those dealers. More consumers and connections drive greater value and a higher return to paying dealers' marketing spend on our platform. Driven by these network effects, we continue to amass data points, which we use to further strengthen our traffic acquisition efforts and marketplace search algorithms, the utility of analysis complementing each listing, the quality of our user experience, the value of connections between consumers and dealers, and the efficacy of our dealer digital marketing products.

Attractive Financial Model. We have a strong track record of revenue growth, profitability, and capital efficiency. We generated revenue of $551.5 million in 2020, $588.9 million in 2019, and $454.1 million in 2018, representing a year-over-year decline of 6% in 2020 – which we primarily attribute to the approximately $50 million impact of fee reductions that we provided to our paying dealers during the second quarter of 2020 in response to the COVID-19 pandemic – and a year-over-year increase of 30% in 2019. A significant portion of our revenue is recurring due to the subscription nature of our products, including from our Listings packages and our Dealer Display advertising and audience targeting products. Furthermore, our revenue base is highly diversified due to the fragmented nature of the automotive dealer industry. We also have been able to grow and invest in our future growth while improving profitability due to the operating leverage in our business model. On a consolidated basis, while our revenue declined 6% in 2020 and grew 30% in 2019, our Adjusted EBITDA grew 109% in 2020 and 55% in 2019. As a percentage of revenue, our Adjusted EBITDA margin expanded to 29% in 2020 from 13% in 2019 and from 11% in 2018. In the United States, which is our most developed market, while our revenue declined by 6% in 2020 and grew by 27% in 2019, we increased our income from operations to $120.8 million in 2020 from $73.9 million in 2019 and $58.4 million in 2018.

Experienced Management Team with Culture of Innovation. Our founder, Executive Chairman and Chairman of our Board of Directors, Langley Steinert, co-founded and was previously chairman of TripAdvisor, an online marketplace for travel-related content based on the mission of using technology and a data-driven approach to provide transparency for consumers' travel planning. Led by Mr. Steinert and a management team with extensive experience guiding technology companies in evolving industries – including Jason Trevisan, our Chief Executive Officer and Sam Zales, our President and Chief Operating Officer – we bring the same commitment to fostering a culture of innovation and delivering data-driven transparency to the automotive market.

Impacts of the COVID-19 Pandemic on our Business

The outbreak in 2020 of the novel strain of coronavirus that surfaced in Wuhan, China in December 2019 and was subsequently declared a pandemic by the World Health Organization, or COVID-19, resulted in a global slowdown of economic activity including worldwide travel restrictions, prohibitions of non-essential work activities, disruption and shutdown of businesses and uncertainty in global financial markets, all of which resulted in the COVID-19 pandemic having an impact on our financial performance in fiscal year 2020. As the COVID-19 pandemic endures and continues to have an impact on global economic activity, the extent to which the COVID-19 pandemic will adversely impact our future business operations, financial performance and results of operations is uncertain and will depend on many factors outside of our control. For a further discussion of the risks, uncertainties and actions taken in response to the COVID-19 pandemic, refer to Item 1A "Risk Factors" and Item 7 "Management's Discussion and Analysis of Financial Condition and Results of Operations".

Our Products

Consumer Marketplace

We provide consumers an online automotive marketplace where they can search for new and used car listings from our dealers. With our U.S. marketplace's peer-to-peer offering, consumers also have access to additional car listings from private sellers, and are able to sell their car to other consumers. Through our marketplace, we provide consumers with information that helps them find the most relevant car for their needs. A user accesses our marketplace through our websites or by using our mobile applications. Most users specify whether they are searching for used, certified pre-owned, or new cars and then provide their desired vehicle make and model and their postal code. Our product offerings described below are available through the U.S. CarGurus marketplace; their availability on our other marketplaces varies. We also offer paid listings subscriptions for dealers and display advertising products through the PistonHeads website, as well as paid listings subscriptions for dealers through the Autolist website.

Used and Certified Pre-Owned Cars

Using our proprietary search algorithms, we immediately display the results of the consumer's search, ranked by Deal Rating, on a search results page, or SRP. Eligible used car listings in our marketplace are assigned one of five Deal Ratings: Great Deal, Good Deal, Fair Deal, High Priced, or Overpriced. A Deal Rating illustrates how competitive a listing is compared to similar cars sold in the same region in recent history. A listing's Deal Rating is based primarily upon the IMV of the vehicle and the Dealer Rating of the dealer.

Instant Market Value. IMV is a proprietary algorithm that assesses the market value of a used vehicle in a local market and is a key input for determining a vehicle's Deal Rating. The IMV algorithm is the product of many years of regression modeling utilizing tens of millions of used car data points. IMV takes into account a number of factors, including comparable currently listed and previously sold used cars in the local market and vehicle details including make, model, trim, year, features, condition, history, and mileage. Our algorithm uses more than 20 ranking signals and more than 100 normalization rules that distill unstructured data from hundreds of sources across thousands of dealers.

Dealer Ratings. Dealer Ratings are derived from user-generated content from our users' experiences with dealers with which they have connected. To promote high-quality reviews, we require that a user have interacted with the dealer via our marketplace to submit a review. We believe this requirement, together with additional qualification standards, results in a more valuable Dealer Rating. Dealer Rating is an important component of a listing's Deal Rating and as a result can impact the organic search position of a listing.

Search Results Page. In addition to each car's Deal Rating, our SRP provides users with other useful information, including the difference between the listing price and the IMV that we have determined for the car, mileage, Dealer Rating, and dealer location for paying dealers. We provide in-depth search filters, including price, year, mileage, trim, color, options, condition, body style, miles per gallon, seating capacity, vehicle ownership history, usage history, seller type, and days on market, among others, which we believe deliver the most comprehensive search capability among major U.S. online automotive marketplaces. We also provide our users with additional features to aid their search, including similar vehicle recommendations, side-by-side vehicle comparisons, expert reviews, and user rankings. Our platform also gives users the ability to save searches and receive alerts that keep them informed of relevant developments in the market, including newly available inventory and price changes to cars they are monitoring.

Vehicle Detail Page. If a user clicks on one of the listings on the SRP, the user is taken to that listing's vehicle detail page, or VDP. VDPs are designed to provide numerous photos and a comprehensive description of the vehicle, dealer name, address, and dealership information for paying dealers, detailed dealer reviews, methods to contact the dealer, payment calculators, and helpful information about the vehicle, including:

- *Price History.* Changes to a vehicle's price on our platform. We also offer price change alerts to consumers on searches they have saved, which allow them to respond quickly to changes in the market.
- *Time on Site.* Length of time a vehicle has been on our platform and how many users have saved the vehicle to their list of favorite listings, indicators of the likely demand for the vehicle.
- *Vehicle History.* Title check, accident check, number of owners, and fleet status of the vehicle, giving consumers data that helps them better understand the vehicle's condition.

New Cars

Search results for new car listings are sorted by price of inventory matching the user's search, with the lowest priced listings sorted first. Our new car VDPs include our Dealer Rating and many of the other features of our used car listings, such as Price History and Time on Site. Deal Rating is not applicable to new car listings because it utilizes data not relevant to new cars. Instead, we analyze data on manufacturers' suggested retail prices, or MSRPs, and recent sales of similar new vehicles, accounting for trade-ins, incentives, and other factors that can affect the price of a new car, to provide users with comparative price information.

Sell My Car

We also allow our consumers to list their cars in our peer-to-peer marketplace in the United States. Our Sell My Car offering enables individual car owners to easily merchandise their vehicles, determine an appropriate selling price with our proprietary price guidance, and manage their listings and communications with prospective buyers from our audience. We collect a fee when the seller lists a vehicle on the peer-to-peer marketplace.

Autolist

Autolist provides consumers an online automotive marketplace through mobile applications on iOS and Android phones, as well as a website. The platform includes inventory from top automotive dealers across the U.S. and gives consumers quick access to manage their search on the go with real-time alerts of newly available inventory and changes that occur on cars and saved searches they have configured. An independent editorial staff produces content to keep consumers informed on the latest vehicles and trends in the automotive market.

PistonHeads

PistonHeads is a U.K. automotive marketplace, forum, and editorial site geared towards automotive enthusiasts. The platform allows consumers to search across a broad range of dealer and private seller listings, engage with other automotive enthusiasts through forums, and stay informed about automotive news through editorial articles and expert reviews.

Dealer Marketplace

Listings

Our marketplace connects dealers to a large audience of informed and engaged consumers. We offer multiple types of marketplace Listings subscriptions to dealers through the CarGurus U.S. platform (availability varies on our other marketplaces): Restricted Listings, which is free, and various levels of Listings packages, each of which requires a paid subscription. We price our paid Listings packages as a monthly, quarterly, semiannual, or annual subscription based on the dealer's inventory size, region, and our assessment of the return on investment, or ROI, our solution will provide them.

- *Restricted Listings.* We allow non-paying dealers to list their inventory in our marketplace as Restricted Listings (formerly referred to as Basic Listings). Restricted Listings do not display the name, address, website URL, or phone number of the relevant dealer and are subject to other limitations. Consumers can contact these dealers only through an anonymous, CarGurus-branded email address so the dealer does not receive any of the consumer's personal contact information from our platform. Dealers in our Restricted Listings tier are limited in the number of consumer connections they can receive in a month, with caps on lead volume based on the dealers' inventory size.
- *Listings Paid Subscriptions.* Paying dealers are able to subscribe to one of four Listings package levels: Standard, Enhanced, Featured or Featured Priority. These paid Listings packages are designed to provide dealers with a higher volume and quality of connections and leads from consumers than our Restricted Listings option. Dealers that subscribe to a paid Listings package gain the opportunity to connect with consumers directly through email, phone, and – excluding Standard Listings subscriptions – managed text and chat, an offering by which consumers communicate via real-time chat or text message with our agents who act on behalf of dealers. Listings for all paying dealers on our websites include a link to their website, dealership branding and information such as name, address, and hours of operation, and map directions to their dealership, helping consumers easily contact or visit the dealer, which we believe results in increased local brand awareness and walk-in traffic. A dealer that subscribes to our Featured or Featured Priority Listings package receives the same benefits of the Standard and Enhanced Listings packages, as well as opportunities for promotion of their Great Deal, Good Deal, and Fair Deal inventory in a clearly labeled section at the top of the SRP as well as on the VDP of dealers in the Restricted Listings package. Featured Priority listings are specifically promoted in the first position of the SRP. This premium placement for Featured and Featured Priority listings generates increased connection volume relative to Standard or Enhanced Listings packages. In addition, a dealer that pays for our Enhanced, Featured or Featured Priority Listings package may subscribe to our Area Boost feature, which expands the visibility of a dealer's inventory in the search results beyond its local market.

Dealer Dashboard and Merchandising Tools

All dealers with inventory on CarGurus may access the following Dealer Dashboard features and merchandising tools:

- *Performance Summary.* Provides dealers with real-time and historical data concerning the connections and consumer exposure they have received in our marketplace and through our digital marketing products. This enables dealers to analyze connections and SRP and VDP views at a granular level to inform the dealer's sales and merchandising efforts.
- *Dealer Insights.* Provides pricing analysis of the dealer's inventory, as well as a summary of a vehicle's missing information such as price, photos, or trim. This information helps dealers better merchandise their vehicles.
- *User Review Management.* Allows dealers to track and manage – but not edit or manipulate – their dealer reviews from our users. Dealers can respond to users, report potentially fraudulent reviews, and publish positive reviews to social media platforms for broader exposure.

Dealers subscribing to a paid Listings package also have access to the following additional features and tools:

- *Pricing Tool.* Helps dealers evaluate the impact of pricing changes for each used vehicle in their inventory and the resulting impact on the car's Deal Rating, empowering dealers to make informed pricing decisions based on market data in their local area.
- *Market Analysis.* Informs dealers of local market trends in used cars, such as the most searched makes and models in their local market. This information helps dealers align with local consumer preferences and inform strategies for increasing inventory turnover and efficient vehicle acquisition.

- *IMV Scan*. Allows dealers to scan a vehicle identification number, or VIN, using their smartphone, and receive information on the IMV of the vehicle in order to support dealers in deciding what to pay for a vehicle at a wholesale auto auction. IMV Scan is built into the CarGurus mobile app and is currently available to U.S. dealers that pay for our Enhanced, Featured or Featured Priority Listings packages.

Digital Marketing Products

We offer dealers subscribing to one of our Enhanced, Featured or Featured Priority Listings packages access to additional advertising products marketed primarily under our RPM suite. With RPM, dealers can reach our large and engaged automotive shopping audience through display advertising that appears in our CarGurus marketplace, on other sites on the internet, and/or on Facebook, a high-converting social platform. RPM helps dealers build brand awareness and acquire customers to their website and dealership. Advertisements can be targeted by the user's geography, search history, CarGurus website activity (including showing users relevant vehicles from a subscribing dealer's inventory that they have not yet discovered on our marketplace), and a number of other targeting factors. This product suite allows dealers to increase their visibility with in-market consumers and drive qualified traffic to their websites.

Pricing and Packaging

CarGurus' core offering is our Listings product suite, which offers a tiered set of packages. Listings are priced in a fixed monthly subscription fee that is based on the connection performance and ROI we expect to deliver for each dealer type, including factors such as location, inventory size and vehicle type. For improved performance, dealers can purchase higher Listings suite levels and add-ons available at an existing Listings suite level. Dealers may be renewed at higher rates commensurate with growth and updated performance expectations. RPM is also packaged in a tiered solution, and priced as a percentage of Listings while accounting for factors such as dealership characteristics and performance expectations.

Auto Manufacturer and Other Advertiser Products

Our platform offers auto manufacturers and others the ability to purchase display advertising on our sites to execute targeted marketing strategies:

- *Brand Reinforcement.* We allow auto manufacturers to buy advertising on our sites and target consumers based on the make, model, and postal code of the cars that a specific consumer is searching for, in order to increase exposure to interested consumers.
- *Category Sponsorship.* To address evolving priorities influenced by industry dynamics, seasonality, and other factors, we offer the ability to sponsor exclusively prominent high traffic pages on our sites, such as the New Car front page, Used Car front page, and Research Center.
- *Automobile Segment Exclusivity.* To support the introduction of new models or the success of existing models, we allow manufacturers to target specific automobile segments, such as SUV, sedan, hybrid, luxury, truck, and minivan.
- *Consumer Segment Exposure.* Auto manufacturers can target consumers both on CarGurus and third-party websites, including social media platforms, based on various parameters, including estimated household income and vehicle specifications, such as make or model, and postal codes.

Digital Retail and Consumer Finance

In recent years, both consumer demand and dealer receptiveness to digital retail has increased, as consumers have become more comfortable transacting some or all of their car buying process online. We are focused on addressing the needs of both consumers and dealers in this growing segment of automotive digital retail.

Consumer Finance

Through our partnerships with automotive lending companies, we allow eligible consumers on our U.S. website to pre-qualify for financing on cars from dealerships that offer financing from these partners. We primarily generate revenue from these partnerships based on the number of funded loans from consumers who pre-qualify with our lending partners through our site. We believe this program both provides more transparency to car shoppers about actual payments to be offered at the dealership specific to participating lenders, as well as delivers highly qualified car shopper leads to participating dealers.

Digital Retail

We continue to offer consumers the ability to transact additional elements of their car buying experience through our websites as they seek to complete more of this process online. For example, our shoppers can 'start purchase' from a VDP on eligible listings and utilize purchase options, including but not limited to estimating a car's trade-in value, deciding payment options, and selecting finance and insurance products. Additionally, to address the unique circumstances of the COVID-19 pandemic, we offer dealerships the ability to merchandise to consumers contactless service options, such as free home delivery or contactless purchase.

Wholesale

As the automotive industry continues to move further online, it has become even more important for dealers not only to sell their vehicles effectively at retail, but also to acquire the right inventory in the first place via wholesale transactions. In recent years, wholesale vehicle sales have begun shifting online and those trends have accelerated as a result of the COVID-19 pandemic. The traditional in-person physical auction model is being supplanted with online transactions that are easier, faster, and reduce the effect of geographic constraints.

During 2020, we conducted a pilot of our CarGurus Offers product that enabled dealers to purchase inventory directly from consumers who visited our site. The consumer entered their vehicle information on the Sell My Car page, and we helped facilitate the transaction with the buying dealer. We collected a transaction fee from the dealer for this service.

In January 2021, we completed our acquisition of a 51% ownership interest in CarOffer, LLC, or CarOffer. CarOffer is a modern-day automotive inventory transaction platform that allows dealers and dealer groups to buy, sell, and trade with automation and ease. The acquisition adds wholesale vehicle acquisition and selling capabilities to our portfolio of dealer offerings, creating a powerful new digital solution for dealers to sell and acquire vehicles at both retail and wholesale.

International

We also facilitate high-intent consumers to engage with automotive dealers in both Canada and the U.K. Like our U.S. offerings, CarGurus provides consumers in Canada and the U.K. with a transparent shopping experience, using our proprietary algorithms to determine market specific valuations for vehicles, and ordinating our organic search results based on Deal Ratings.

In Canada, CarGurus is a leading automotive marketplace that provides consumers a transparent shopping experience whether they are looking for a new or used car. In the U.K., CarGurus is a leading marketplace for dealers' listings of used vehicles, providing consumers with one of the broadest selections of inventory in the U.K. We also provide automotive shoppers rich expert review content, an active forum for automotive discussion, and offer privately owned inventory through the PistonHeads website.

Marketing and Brand

Consumer Marketing

CarGurus is the most visited online automotive marketplace in the United States, with more than 90.9 million and 36.2 million average monthly sessions and unique users, respectively in 2020. We have built our audience on the strength of our user experience, and remain focused on delivering an industry-leading consumer marketplace. Our intuitive search experience, combined with the largest inventory of any major U.S. online automotive marketplace and relevant content, updates, and tools provide unparalleled transparency and decision-support to consumers during their car search to help them buy with confidence. The strength of our consumer experience is one of our most powerful marketing tools, with "word of mouth" representing the second-most cited influence on consumers decision to visit CarGurus despite our substantial investments in paid marketing. This leading consumer experience also enables CarGurus to perform very well with search engines, generating a significant volume of free traffic from high-intent car shoppers.

A key pillar of our consumer marketing efforts is what we call algorithmic traffic acquisition. We employ a team of strategists, engineers and data scientists that optimizes our user acquisition through search engines, social media, and other digital marketing channels and has tested over one billion keywords on various search engines as well as sophisticated, personalized remarketing, to nurture consumers toward finding their right car. The sophistication of our data-driven algorithmic traffic acquisition continues to advance, with an ongoing focus on increasingly data-driven campaigns that drive high return on advertising spend. We believe our expertise in this area constitutes a competitive advantage over less sophisticated competitors and those who outsource these capabilities.

In parallel with our sophisticated paid and organic traffic acquisition efforts, we invest significant resources in optimizing our site experience and retention marketing efforts through email and app notifications to help consumers find the right car for them and connect with a dealer to make a purchase. Rigorous conversion rate optimization efforts help increase the ROI on our advertising spend. Our increasing focus on merchandising that drives more shoppers to connect with dealers with high subscription expansion opportunity creates a virtuous cycle of improved monetization that allows for reinvestment in further improvements to our consumer experience.

We augment our performance marketing, conversion rate optimization and retention marketing efforts with brand-building efforts. Our brand marketing efforts comprise investments in media, including television and online video, as well as expressing our unique brand value proposition throughout our core site experience and organic social channels as well as an active public relations program that allows us to gain significant, high-credibility earned media coverage. Despite a shorter tenure and lower investment in brand marketing than our primary competitors, we have made significant progress toward closing our brand awareness gaps since launching brand marketing in 2017 and believe that we are well-positioned to continue to strengthen our brand by continuing to invest in brand-building efforts and refining the articulation of our unique value proposition. As we close the awareness gap compared to our core competitors, we see significant opportunity to shift our brand focus from reach to driving greater understanding of and preference for our brand, further accelerating the strong consumer engagement and word of mouth benefits we already enjoy.

Dealer Marketing

The primary goals of our dealer marketing initiatives are to acquire dealers not yet in our marketplace, convert non-paying dealers into paying dealers, retain our existing paying dealers, and increase annual subscription revenues from our paying dealers. Our dealer marketing efforts aim to:

- *Educate Dealers on the Quality of Our Audience and Attractive ROI.* We educate dealers on our industry-leading monthly visits in the U.S., our strong user engagement, and the large number of connections that we facilitate through our marketplace. We also highlight to dealers how unique features of our platform, such as our consumer financing features and proprietary IMV analytics, yield consumers that we believe are more informed and better prepared to purchase at the dealership, which can lead to a higher ROI for the dealers' marketing spend.
- *Provide Thought Leadership that Educates Dealers on Marketplace Trends.* We generate insightful content on market trends and best practices in digital advertising that are shared through webinars, dealer forums, dealer advisory councils, our websites, and our participation in industry conferences and events. From time to time, we also host thought leadership events in local markets and an automotive conference, Navigate, to continue to share our insights and help build our brand among dealerships. In light of the COVID-19 pandemic, we shifted all of our in-person events, including Navigate, to fully virtual events to continue to provide thought leadership to dealers during these challenging times. In particular, we helped address their challenges by sharing the latest research and data-driven insights on how shopper behavior has evolved and continues to evolve during this global pandemic.
- *Provide Best Practices to Assist Dealers in Becoming Successful in Our Marketplace.* We provide ongoing communications through email, webinars, white papers, testimonials, and videos, which show dealers how to use our products to position their inventory for success on our platform and beyond. We maintain consistent communication with dealers via email, events and our Dealer Dashboard to ensure awareness of account performance and recent product updates.
- *Drive Product Engagement.* We use our email marketing capabilities and other marketing channels to drive dealer engagement with our products and platforms. This can include marketing around how dealers can improve their vehicle pricing and merchandising by using the tools in our dashboard, performance insights around the leads and connections they are receiving, and prompts to respond to reviews and manage their reputation. We also monitor dealer feedback on our products through surveys and product engagement to assess areas for further development or dealer education.

Sales

Our sales team is responsible for bringing dealers onto our marketplace and converting non-paying dealers to paid subscriptions. We have built an efficient inside sales and account management team of approximately 260 employees worldwide who sell our marketplace products to franchise and independent dealers. We have built a field sales team that works with strategic franchise and national dealership groups in large metropolitan areas in the U.S., Canada and the U.K. In addition, we have advertising sales employees based in the U.S. and Canada.

We have a comprehensive dealer account management process to assist dealers in becoming successful in our marketplace. We assign a Customer Success Associate to every new paying Listings dealer to assist with onboarding and integration with any relevant software systems. The designated Customer Success Associate spends time educating dealers on a range of topics, including effectively using the Dealer Dashboard, tracking sales, and measuring ROI for their marketing spend. After the onboarding period, a Dealer Relations Account Manager is designated to assist the dealer in utilizing our tools and maximizing ROI from our offerings, including effectively pricing vehicles, vehicle merchandising, and keeping inventory up to date with complete vehicle information. We believe our active communication with our dealers fosters customer satisfaction and increases customer retention.

People and Talent

Our investment in our greatest asset – our people – is integral to our core values, evidenced by our inclusion of employee engagement, retention and hiring targets as components of our 2020 strategic and organizational initiatives. Our Board of Directors oversees our people and talent efforts and views building our culture – from employee development and retention to diversity, equity, inclusion and belonging initiatives – as key to driving long-term value for our business and helping to mitigate risks. In February 2020, we hired our first Chief People Officer to ensure that our employees and culture are prioritized at every level of decision-making.

As of December 31, 2020, we had 827 full-time employees, 74 of whom were based outside the United States. None of our employees is represented by a labor union or covered by a collective bargaining agreement.

Culture, Values and Standards

Our company culture has developed out of our data-driven and innovative approach to the automotive market. We leverage data to drive innovation across all facets of our business and continuously optimize our products and processes to serve our consumers, dealers, advertisers, and partners. Our approach emphasizes original thought, impact, and collaboration across our organization, and we recognize and award employees who drive positive results across these constituencies. We invest in creating a work environment that facilitates partnership among our employees and promotes diversity, equity, inclusion and belonging. In that spirit, we have identified our core values as follows:

- **We are pioneering.** From the beginning, we set out to radically change how people buy and sell cars. We tackle difficult problems head on. We are curious. We are risk takers. We embrace change even if it's uncomfortable.
- **We are transparent.** We believe transparency is the foundation of trust and enables better decision making. We communicate clearly and honestly. We deliver unbiased guidance. Our products, services and company culture are built on these principles.
- **We are data-driven.** We rely on data, not hunches, to make decisions. We listen to our instincts but we validate through rapid testing, learning and optimizing. We translate complex data into actionable insights for our users, our customers and our people.
- **We are collaborative.** We celebrate our individual strengths and perspectives but know that our success requires teamwork. We partner, we listen and we leverage feedback from each other, our users and our customers.
- **We move quickly.** We believe there's power in speed. We iterate quickly and often, continuously improving as we go. We are not afraid to break things. If we fail, we do it fast, learn from it and move on.
- **We have integrity.** We act responsibly and consider the impact of our actions on each other, our partners and the world around us. We believe empathy, respect and fairness are essential. We set high ethical standards and expect principled leadership from our people.

Diversity, Inclusion and Belonging and Equal Employment Policy

We are an equal opportunity employer and strive to build and nurture a culture where inclusiveness is a reflex, not an initiative. With support from our Diversity, Inclusion and Belonging Advisory Team, we are committed to fostering diversity, equity, inclusion and belonging, as well as building a workplace where everyone can thrive. Our commitment to these principles helps us attract and retain the best talent, enables employees to realize their full potential and drives high performance through innovation and collaboration. In 2020, with respect to employees who chose to self-identify, we increased our female workforce in the U.S. from 30.9% to 32.3%. We saw increases in our female workforce at almost every level in the U.S., including technical and senior management roles. We also increased our representation of all underrepresented racial minorities in the U.S. from 23.3% to 25.9%.

Compensation and Benefits

The success of our business is fundamentally connected to the well-being of our people. Accordingly, we provide our eligible employees with competitive wages and access to flexible and convenient medical programs intended to meet their needs and the needs of their families. In addition to standard medical coverage, we offer the following benefits to our U.S. employees (availability internationally varies): dental and vision coverage, health savings and flexible spending accounts, paid time off, flexible work schedules on a case-by-case basis, employee assistance programs, short term and long term disability insurance and term life insurance, as well as paid access to certain family care resources. In response to the COVID-19 pandemic, we implemented changes that we determined were in the best interest of our employees, as well as the communities in which we operate, and which comply with government regulations. These changes included requiring our employees to work from home for several months.

Employee Engagement

In order to ensure that we are meeting our people and talent objectives we conduct an employee engagement survey at least annually to help our management team gain insight into and gauge employees' feelings, attitudes, and behaviors around working at CarGurus. Our latest survey, completed in December 2020, had a participation rate of over 87% of our employees worldwide and the survey results indicated that we excel in areas including manager empathy, alignment to company goals and belonging. Based on employee feedback, we also identified certain company-wide focus areas, including with respect to improving the resources and benefits we can provide for our employees as they continue to work outside of our offices during the COVID-19 pandemic, which we agree is important to our long-term success. Our culture has led to strong employee satisfaction and pride that has been recognized across the globe, as evidenced with the following awards: *Built In Boston's* "Best Places to Work" in 2019, 2020 and 2021; the Mass TLC "Tech Top 50" Company Culture in 2020; *Fortune*'s "Best Places to Work" in 2019; *Computerworld*'s "Best Places to Work in IT" in 2019 and 2020; *Boston Business Journal*'s "Best Places to Work" for five years in a row from 2015 to 2019; and *Boston Globe*'s "Top Place to Work" in 2014, 2015, 2016 and 2018.

Training and Development

Our people and talent strategy is essential for our ability to continue to develop and market innovative products and customer solutions. We continually invest in our employees' career growth and provide employees with a wide range of development opportunities, including face-to-face, virtual, social and self-directed learning, mentoring, coaching, and external development. In 2020, more than 96% of our employees participated in learning and development activities worldwide.

Technology and Product Development

We are a technology company focused on innovative, actionable data analysis. We design our mobile and web products to create a transparent experience for both consumers and dealers. We believe in rapid development, release frequent updates and have internal tools and automation that allow us to efficiently evolve our products. Our software is built using a combination of internally developed software, third-party software and services, and open source software.

Our Search Technology

Our search and ranking technology is served by a proprietary in-memory search index solution that is scalable, fast, and extensible. We have highly flexible interfaces that allow dealers to automatically add their inventory to our index, enabling us to quickly integrate hundreds of inventory sources with minimal effort and easily support inventory growth.

Our Mobile Technology

We have designed our marketplace to appeal to mobile users by developing our products with a mobile-first mindset. All of our search results pages use a single-page application type approach to eliminate page reloads and improve responsiveness. We also use techniques to load content onto a user's mobile device more efficiently.

Our Integrations

We make available several application program interfaces and web widgets that integrate with customer relationship management and inventory management solutions, among other platforms. These integrations allow dealers to incorporate designated data and tools into the fabric of their marketing and customer engagement strategies. For example, our Deal Rating Badges are used on dealer websites, which show our Deal Rating for cars that have been rated as a Great Deal, Good Deal, or Fair Deal. Our Deal Rating serves as trusted, third-party validation on dealer websites.

Infrastructure

Our development servers and U.S. and Canadian websites are hosted at third-party data centers near Boston, Massachusetts, as well as through third-party cloud services in the U.S. Our European websites are hosted on third-party cloud computing services near each of London, England and Dublin, Ireland. We use third-party content distribution networks to cache and serve many portions of our sites at locations across the globe. We monitor and test at the application, host, network, and full site levels to maintain availability and promote performance. We use third-party cloud computing services for many data processing jobs and backup/recovery services.

Competition

We face competition to attract consumers and paying dealers to our marketplaces and services and to attract advertisers to purchase our advertising products and services. Our competitors offer various marketplaces, products, and services that compete with us. Some of these competitors include:

- major U.S. online automotive marketplaces: AutoTrader.com, Cars.com, and TrueCar.com;
- other U.S. automotive websites, such as Edmunds.com, KBB.com and Carfax.com;
- online automotive marketplaces and websites in our international markets;
- online dealerships, such as Carvana and Vroom;
- sites operated by individual automobile dealers;
- internet search engines;
- social media marketplaces; and
- peer to peer marketplaces, such as Craigslist.

Competition for Consumers and Dealers

We compete for consumer visits with other online automotive marketplaces, free listing services, general search engines, and dealers' websites. We compete for consumers primarily on the basis of the quality of the consumer experience. We believe we compete favorably on user experience due to the number of our vehicle listings, the transparency of the information we provide on cars, prices, and dealers, the intuitive nature of our user interface, and our mobile user experience, among other factors.

We compete for dealers' marketing spend with offline customer acquisition channels, other online automotive marketplaces, dealers' own customer acquisition efforts on search engines and social media marketplaces, and other internet sites that attract consumers searching for vehicles. We compete primarily on the basis of the ROI that our marketplace provides. We believe we compete favorably due to our large user audience, high user engagement, and the volume and quality of connections we provide to well-informed consumers, which results in an attractive ROI for dealers.

Competition for Advertisers

We compete for a share of advertisers' total marketing budgets against media sites, websites dedicated to helping consumers shop for cars, major internet portals, search engines, and social media sites, among others. We also compete for a share of advertisers' overall marketing budgets with traditional media, such as television, radio, magazines, newspapers, automotive publications, billboards, and other offline advertising channels. We compete for advertising spend based on the marketing ROI that our marketplace provides. We believe we compete favorably due to our large user audience size, high user engagement, and the effectiveness and relevance of our advertising products.

Intellectual Property

We protect our intellectual property through a combination of patents, copyrights, trademarks, service marks, domain names, trade secret protections, confidentiality procedures, and contractual restrictions.

We have one issued U.S. patent with an expiration date of May 2034, two pending U.S. patent applications, and one pending international patent application. These applications cover proprietary technology that relates to various functionalities on our platform, generally in connection with pricing, ranking and detecting fraud in online listings. We intend to pursue additional patent protection to the extent we believe it would be beneficial to our competitive position.

We have a number of registered and unregistered trademarks, including "CarGurus," the CarGurus logo, the CG logo, and related marks, which we have registered as trademarks in the U.S. and certain other jurisdictions. We pursue additional trademark registrations to the extent we believe doing so would be beneficial to our competitive position. Our registered trademarks remain enforceable in the countries in which they are registered for as long as we continue to use the marks, and pay the fees to maintain the registrations, in those countries.

We are the registered holder of several domestic and international domain names that include "CarGurus" and variations of our trade names.

In addition to the protection provided by our intellectual property rights, we enter into confidentiality and proprietary rights agreements with our employees and relevant consultants, contractors, and business partners. We control the use of our proprietary technology and intellectual property through provisions in contracts with our customers and partners and our general and product-specific terms of use on our websites.

Regulatory

Various aspects of our business are, may become, or may be viewed by regulators from time to time as subject, directly or indirectly, to U.S. federal, state, local and foreign laws and regulations. In particular, the advertising and sale of new or used motor vehicles is highly regulated by the states and jurisdictions in which we do business. Although we do not sell motor vehicles and we believe that vehicle listings on our sites are not themselves advertisements, regulatory authorities or third parties could take the position that some of the laws or regulations applicable to dealers or to the manner in which motor vehicles are advertised and sold generally are directly applicable to our business. These advertising laws and regulations, which often originated decades before the emergence of the internet, are frequently subject to multiple interpretations, are not uniform across jurisdictions, sometimes impose inconsistent requirements with respect to new or used motor vehicles, and the manner in which they should be applied to our business model is not always clear. Regulators or other third parties could take, and on some occasions have taken, the position that our marketplace or related products violate applicable brokering, bird-dog, consumer protection, or advertising laws or regulations.

In order to operate in this regulated environment, we develop our products and services with a view toward appropriately managing the risk that our regulatory compliance, or the regulatory compliance of the dealers whose inventory is listed on our websites, could be challenged.

We consider applicable advertising and consumer protection laws and regulations in designing our products and services. With respect to paid advertising, other than Featured Listings, Featured Priority Listings and Dealer Display advertising and audience targeting products marketed under our Real-time Performance Marketing suite, we believe that most of the content displayed on the websites we operate does not constitute paid advertising for the sale of motor vehicles. Nevertheless, we endeavor to design our website content in a manner that would comply with relevant advertising regulations and consumer protection laws if, and to the extent that, the content is considered to be vehicle sales advertising.

Our websites and mobile applications enable us, dealers, and users to send and receive text messages and other mobile phone communications, which requires us to comply with the Telephone Consumer Protection Act, or TCPA, in the U.S. The TCPA, as interpreted and implemented by the Federal Communications Commission, or the FCC, and federal and state courts, imposes significant restrictions on utilization of telephone calls and text messages to residential and mobile telephone numbers as a means of communication, particularly when the prior express consent of the person being contacted has not been obtained.

In addition, we are subject to numerous federal, national, state, and local laws and regulations in the United States and around the world regarding privacy and the collection, processing, storage, sharing, disclosure, use, cross-border transfer, and protection of personal information and other data. While the scope of these laws and regulations is changing and remains subject to differing interpretations, we seek to comply with industry standards and all applicable laws, policies, legal obligations, and industry codes of conduct relating to privacy and data protection. We are also subject to the terms of our privacy policies and privacy-related obligations to third parties.

Corporate Information

We were originally organized on November 10, 2005 as a Massachusetts limited liability company under the name "Nimalex LLC." Effective July 15, 2006, we changed our name to "CarGurus LLC." On June 26, 2015, we converted from a Delaware limited liability company into a Delaware corporation and changed our name to "CarGurus, Inc."

Our principal executive offices are located at 2 Canal Park, 4th Floor, Cambridge, Massachusetts 02141, and our telephone number is (617) 354-0068. Our U.S. website is www.cargurus.com.

CarGurus, the CarGurus logo, and other trademarks or service marks of CarGurus appearing in this Annual Report on Form 10-K are the property of CarGurus, Inc. Trade names, trademarks, and service marks of other companies appearing in this Annual Report on Form 10-K are the property of their respective holders. We have omitted the ® and ™ designations, as applicable, for the trademarks used in this Annual Report on Form 10-K.

Additional Information

The following filings are available on our investor relations website after we file them with the Securities and Exchange Commission, or the SEC: Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q and Proxy Statements for our annual meetings of stockholders. These filings are also available for download free of charge on our investor relations website. Our investor relations website is located at http://investors.cargurus.com.

We webcast our earnings calls and certain events that we participate in or host with members of the investment community on our investor relations website. Additionally, we provide news and announcements regarding our financial performance, including SEC filings, investor events, press and earnings releases, on our investor relations website. Corporate governance information, including our policies concerning business conduct and ethics, is also available on our investor relations website under the heading "Governance." No content from any of our websites is intended to be incorporated by reference into this Annual Report on Form 10-K or in any other report or document we file with the SEC, and any reference to our websites is intended to be an inactive textual reference only.

Item 1A. Risk Factors.

Investing in our Class A common stock involves a high degree of risk. You should carefully consider the risks and uncertainties described below, together with all of the other information contained in this Annual Report on Form 10-K, including "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and related notes, before evaluating our business. Our business, financial condition, operating results, cash flow, and prospects could be materially and adversely affected by any of these risks or uncertainties. In that event, the trading price of our Class A common stock could decline. See "Special Note Regarding Forward-Looking Statements."

Risks Related to Our Business and Industry

Our business has been, and we expect it to continue to be, adversely affected by the COVID-19 pandemic.

The COVID-19 pandemic has caused an international health crisis and resulted in significant disruptions to the global economy as well as businesses and capital markets around the world. Our operations have been materially adversely affected by a range of factors related to the COVID-19 pandemic. In March, we closed all of our offices and began requiring our employees to work remotely until further notice, which has disrupted and may continue to disrupt how we operate our business. In addition, in an effort to limit the spread of COVID-19, many countries, as well as states and localities in the United States, implemented or mandated and continue to implement or mandate significant restrictions on travel and commerce, shelter-in-place or stay-at-home orders, and business closures. Fluctuation in infection rates in the regions in which we operate has resulted in periodic changes in restrictions that vary from region to region and may require rapid response to new or reinstated orders. Many of these orders resulted in, and may continue to result in, restrictions on the ability of consumers to buy and sell automobiles by restricting operations at dealerships and/or by closing or reducing the services provided by certain service providers upon which dealerships rely. In addition, these restrictions and continued concern about the spread of the disease have impacted car shopping by consumers and disrupted the operations of car dealerships, which has adversely affected and may continue to adversely affect the market for automobile purchases.

The automotive industry is also facing inventory supply problems, especially for used vehicles. The industry has experienced, and may continue to experience, a decline in used-car inventory for a number of reasons attributable to the COVID-19 pandemic, including: (i) fewer trade-ins from diminished vehicle sales; (ii) lease extensions on vehicles that consumers would have otherwise returned to the dealership; and (iii) the closure of or restrictions on the operations of wholesale auctions limiting dealers' ability to source stock and/or replenish inventory. Further, these auction closures and the limited supply of inventory have led to an increase in bids per vehicle and corresponding increases to wholesale auction prices. As the price of replenishing inventory through wholesale auctions has increased, dealers have increased, and may continue to increase, the prices they charge consumers. A high volume of price increases on vehicle sales at a rapid rate could impact our proprietary Instant Market Values, or IMV, and distribution of Deal Ratings. In addition, if our paying dealers continue to operate at reduced inventory levels or with increased costs, they may reduce or be unwilling to increase their advertising spend with us and/or may terminate their subscriptions at the conclusion of the committed term. Our ability to add new paying dealers or increase our fees with dealers may be impeded if dealers perceive they have less of a need for our products and services because of their limited inventory. Inventory challenges in the automotive industry have adversely impacted, and could continue to adversely impact, the amount of inventory on our websites, which could contribute to a decline in the number of consumer visits to our websites and/or the number of connections between consumers and dealers through our marketplaces. These inventory-related issues resulting from the COVID-19 pandemic may materially and adversely impact our business, financial condition and results of operations.

As a result of the travel and commerce restrictions and the impact on their businesses, a number of our dealer customers temporarily closed or are operating on a reduced capacity, and many dealerships are facing significant financial challenges. Such closures and circumstances led some paying dealers to cancel their subscriptions and/or reduce their spending with us, which has had and may continue to have a material adverse effect on our revenues and on our business. Additionally, in response to the increasing cancelations and the drop in consumer demand at the beginning of the COVID-19 pandemic, we reduced our spending on brand advertising and traffic acquisition, which resulted in fewer consumers using our platform during the year ended December 31, 2020, which in turn has, and may continue to, materially and adversely affect our business. While we have since restored a portion of that historical consumer spend, we may not in the future fully restore prior spending levels if we elect to redirect our investments elsewhere, including in favor of new product development. If such a strategy were not to result in the benefits that we expect, our business could be harmed. Our business relies on the ability of consumers to borrow funds to acquire automobiles and banks and other financing companies may limit or restrict lending to consumers as a result of the economic impacts of the COVID-19 pandemic, which may also materially and adversely affect our business.

Further, because of the significant financial challenges that dealerships have faced and continue to face as a result of the COVID-19 pandemic, we took measures to help our paying dealers maintain their business health during the COVID-19 pandemic. We proactively reduced the subscription fees for paying dealers by at least 50% on all marketplace subscriptions for the April and May 2020 service periods, as well as provided a fee reduction on all June 2020 marketplace subscriptions of 20% for paying dealers in the United States and Canada and 50% for paying dealers in the United Kingdom. As a result, the level of fees we received from paying dealers materially decreased during the year ended December 31, 2020, resulting in a material decline in our revenue and a material adverse effect to our business. In addition, despite our proactive fee reductions during the second quarter of 2020, we experienced increased customer cancellation rates and slowed paying dealer additions during such period, which materially and adversely affected our business for the year ended December 31, 2020. During the December 2020 and February 2021 service periods, we also waived marketplace subscription fees for paying dealers in the United Kingdom impacted by additional national lockdowns. We may again in the future experience slowed paying dealer additions and as a result may decide to re-institute further billings relief as we continue to assess the effects of the COVID-19 pandemic on our paying dealers and business operations. During the COVID-19 pandemic, we have also experienced, and may continue to experience, increased account delinquencies from dealer customers challenged by the COVID-19 pandemic that failed to pay us on time or at all.

These effects from the COVID-19 pandemic on our revenue caused us to implement certain cost-savings measures across our business, which have disrupted, and may continue to disrupt, our business and operations. For example, during the second quarter of 2020, we initiated a cost-savings initiative that included a reduction in our workforce, a limitation in discretionary spend across our business and our ceasing of certain international operations and expansion efforts. We also reduced consumer marketing across both algorithmic traffic acquisition and brand spend during the year ended December 31, 2020 in comparison to the prior year in an effort to reduce expenses and as a result of suppressed dealer inventory and resulting reduced demand for leads from dealers. Despite these measures, we may not achieve the costs savings or attract consumer visits at the levels we expect, which would adversely impact our cash flows and financial condition. These expense reduction activities, and any future cost savings actions that we may take, may yield unintended consequences, such as loss of key employees, undesired attrition, and the risk that we may not achieve the anticipated cost savings at the levels we expect, any of which may have a material adverse effect on our results of operations and/or financial condition. If the COVID-19 pandemic materially impacts our revenues in the future, we may also decide that additional disruptive measures are necessary to reduce our operating expenses.

The global nature of the COVID-19 pandemic has also had, and will continue to have, a significant impact on our international businesses. The crisis has halted our growth in existing markets and our expansion into additional markets. In particular, we ceased marketplace operations in Germany, Italy, and Spain, and halted any new international expansion efforts, which we believe will allow us to focus our financial and human capital resources on our more established international markets in Canada and the United Kingdom. Failure by us to succeed in these two markets, however, would materially and adversely affect our business and potential growth.

We continue to monitor and assess the effects of the COVID-19 pandemic on our commercial operations, including the impact on our revenue. However, we cannot at this time accurately predict what effects these conditions will ultimately have on our operations due to uncertainties relating to the duration of the pandemic, the extent and effectiveness of governmental responses and other preventative, treatment and containment actions or developments, including the distribution of recently approved vaccines, shifts in behavior going forward, and the length or severity of the travel and commerce restrictions imposed by relevant governmental authorities. Nor can we predict the adverse impact on the global economies and financial markets in which we operate, which may have a significant negative impact on our business, financial condition and results of operations.

Our business is substantially dependent on our relationships with dealers. If a significant number of dealers terminate their subscription agreements with us, our business and financial results would be materially and adversely affected.

Our primary source of revenue consists of subscription fees paid to us by dealers for access to enhanced features on our automotive marketplaces. Our subscription agreements with dealers generally may be terminated by us with 30 days' notice and by dealers with 30 days' notice at the end of the committed term. The majority of our contracts with dealers currently provide for one-month committed terms and do not contain contractual obligations requiring a dealer to maintain its relationship with us beyond the committed term. Accordingly, these dealers may cancel their subscriptions with us in accordance with the terms of their subscription agreements. A dealer's decision to cancel its subscription with us may be influenced by several factors, including national and regional dealership associations, national and local regulators, automotive manufacturers, consumer groups, and consolidated dealer groups. If any of these influential groups indicate that dealers should not enter into or maintain subscription agreements with us, this belief could become shared by dealers and we may lose a number of our paying dealers. If a significant number of our paying dealers terminate their subscriptions with us, our business and financial results would be materially and adversely affected.

If we fail to maintain or increase the number of dealers that pay subscription fees to us, or fail to maintain or increase the fees paid to us for subscriptions, our business and financial results would be materially and adversely affected.

As a result of the COVID-19 pandemic, many paying dealers cancelled their subscriptions with us (including, in some cases, with our permission prior to the end of the applicable contract term and notice period), which has caused a material adverse impact on our revenues, and it is possible that additional dealers will cancel their subscriptions as they continue to experience the effects of the COVID-19 pandemic. If paying dealers do not receive the volume of consumer connections that they expect during their subscription period, do not experience the level of car sales they expect from those connections, or fail to attribute consumer connections or sales to our platform, they may terminate their subscriptions at the conclusion of the committed term. If we fail to maintain or expand our base of paying dealers or fail to maintain or increase the level of fees that we receive from them, our business and financial results would be materially and adversely affected.

We allow dealers to list their inventory in CarGurus marketplaces for free; however, we impose certain limitations on such free listings, such as capping the number of leads that non-paying dealers in the U.S. may receive within a 30-day period, not displaying non-paying dealer identity and contact information, and prohibiting access to the paid features of our marketplaces. We continue to adapt our free listings product, Restricted Listings, in our CarGurus marketplaces and in the future, we may decide to impose additional restrictions on Restricted Listings or modify the services available to non-paying dealers. These changes to our Restricted Listings product may result in less inventory being displayed to consumers, which may impair our efforts to attract consumers, and cause non-paying dealers to receive fewer leads and connections, which may make it more difficult for us to convert such dealers to paying dealers. If dealers do not subscribe to our paid offerings at the rates we expect, our business and financial results would be materially and adversely affected.

If dealers or other advertisers reduce their advertising spending with us and we are unable to replace the reduced advertising spending, our advertising revenue and business would be harmed.

A significant amount of revenue is derived from advertising revenues generated primarily through advertising sales, including display advertising and audience targeting services, to dealers, auto manufacturers, and other auto-related brand advertisers. We compete for this advertising revenue with other online automotive marketplaces and with television, print media, and other traditional advertising channels. Our ability to attract and retain advertisers and to generate advertising revenue depends on a number of factors, including our ability to: increase the number of consumers using our marketplaces; compete effectively for advertising spending with other online automotive marketplaces; continue to develop our advertising products; keep pace with changes in technology and the practices and offerings of our competitors; and offer an attractive ROI to our advertisers for their advertising spend with us.

Our agreements with dealers for display advertising generally include terms ranging from one month to one year and may be terminated by us with 30 days' notice and by dealers with 30 days' notice at the end of the committed term. The contracts do not contain contractual obligations requiring an advertiser to maintain its relationship with us beyond the committed term. Certain of our other advertising contracts, including those with auto manufacturers, typically do not have ongoing commitments to advertise in our marketplaces beyond a committed term. As a result of the COVID-19 pandemic, some advertisers have cancelled or reduced their advertising with us, which has caused a material adverse impact on our revenues, and it is possible that advertising customers will continue to cancel or reduce their advertising with us as they continue to experience the effects of the COVID-19 pandemic. In addition, a reduction in consumer visits to our sites as a result of the COVID-19 pandemic resulted in the delivery of fewer impressions for our advertising customers than anticipated during the year ended December 31, 2020, which has caused, and may continue to cause, an adverse impact on our advertising revenues. We may not succeed in capturing a greater share of our advertisers' spending if we are unable to convince advertisers of the effectiveness or superiority of our advertising services as compared to alternative channels. If current advertisers reduce their advertising spending with us and we are unable to replace such reduced advertising spending, our advertising revenue and business and financial results would be harmed.

If we are unable to provide a compelling vehicle search experience to consumers through our platform, the number of connections between consumers and dealers using our marketplaces may decline and our business and financial results would be materially and adversely affected.

If we fail to continue to provide a compelling vehicle search experience to consumers, the number of connections between consumers and dealers through our marketplaces could decline, which in turn could lead dealers to suspend listing their inventory in our marketplaces, cancel their subscriptions, or reduce their spending with us. If dealers pause or cancel listing their inventory in our marketplaces, we may not be able to attract a large consumer audience, which may cause other dealers to pause or cancel their use of our marketplaces. This reduction in the number of dealers using our marketplaces would likely materially and adversely affect our marketplaces and our business and financial results. As consumers increasingly use their mobile devices to access the internet and our marketplaces, our success depends, in part, on our ability to provide consumers with a robust and user-friendly experience through their mobile devices. We believe that our ability to provide a compelling vehicle search experience, both on desktop computers and through mobile devices, is subject to a number of factors, including our ability to: maintain attractive marketplaces for consumers and dealers; continue to innovate and introduce products for our marketplaces; launch new products that are effective and have a high degree of consumer engagement; display a wide variety of automobile inventory to attract more consumers to our websites; provide mobile applications that engage consumers; maintain the compatibility of our mobile applications with operating systems, such as iOS and Android, and with popular mobile devices running such operating systems; and access and analyze a sufficient amount of data to enable us to provide relevant information to consumers, including pricing information and accurate vehicle details.

We rely on internet search engines to drive traffic to our websites, and if we fail to appear prominently in the search results, our traffic would decline and our business would be adversely affected.

We rely, in part, on internet search engines such as Google, Bing, and Yahoo! to drive traffic to our websites. The number of consumers we attract to our marketplaces from search engines is due in part to how and where our websites rank in unpaid search results. These rankings can be affected by a number of factors, many of which are not under our direct control and may change frequently. For example, when a consumer searches for a vehicle in an internet search engine, we rely on a high organic search ranking of our webpages to refer the consumer to our websites. Our competitors' internet search engine optimization efforts may result in their websites receiving higher search result rankings than ours, or internet search engines could change their methodologies in a way that would adversely affect our search result rankings. If internet search engines modify their methodologies in ways that are detrimental to us, if our efforts to improve our search engine optimization are unsuccessful or less successful than our competitors' internet search engine optimization efforts, our ability to attract a large consumer audience could diminish and traffic to our marketplaces could decline. In addition, internet search engine providers could provide dealer and pricing information directly in search results, align with our competitors, or choose to develop competing products. Reductions in our own search advertising spend or more aggressive spending by our competitors could also cause us to incur higher advertising costs and/or reduce our market visibility to prospective users. Our websites have experienced fluctuations in organic and paid search result rankings in the past, and we anticipate fluctuations in the future. Any reduction in the number of consumers directed to our websites through internet search engines could harm our business and operating results.

Any inability by us to develop new products, or achieve widespread consumer and dealer adoption of those products, could negatively impact our business and financial results.

Our success depends on our continued innovation to provide products that make our marketplaces, websites, and mobile applications useful for consumers and dealers or that otherwise provide value to consumers and dealers. We anticipate that over time we may reach a point when investments in our current products are less productive and the growth of our revenue will require more focus on developing new products for consumers and dealers. These new products must be widely adopted by consumers and dealers in order for us to continue to attract consumers to our marketplaces and dealers to our products and services. Accordingly, we must continually invest resources in product, technology, and development in order to improve the attractiveness and comprehensiveness of our marketplaces and their related products and effectively incorporate new internet and mobile technologies into them. Our ability to engage in these activities may decline as a result of the impact of the COVID-19 pandemic and our cost-savings initiatives on our business. These product, technology, and development expenses may include costs of hiring additional personnel, engaging third-party service providers and conducting other research and development activities. In addition, revenue relating to new products is typically unpredictable and our new products may have lower gross margins, lower retention rates, and higher marketing and sales costs than our existing products. We are likely to continue to modify our pricing models for both existing and new products so that our prices for our offerings reflect the value those offerings are providing to consumers and dealers. Our pricing models may not effectively reflect the value of products to dealers, and, if we are unable to provide marketplaces and products that consumers and dealers want to use, they may reduce or cease the use of our marketplaces and products. Without innovative marketplaces and related products, we may be unable to attract additional, unique consumers or retain current consumers, which could affect the number of dealers that become paying dealers and the number of advertisers that want to advertise in our marketplaces, as well as the amounts that they are willing to pay for our products, which could, in turn, negatively impact our business and financial results.

We may be unable to maintain or grow relationships with data providers, or may experience interruptions in the data they provide, which may create a less valuable or transparent shopping experience and negatively affect our business and operating results.

We obtain data from many third-party data providers, including inventory management systems, automotive website providers, customer relationship management systems, dealer management systems, governmental entities, and third-party data licensors. Our business relies on our ability to obtain data for the benefit of consumers and dealers using our marketplaces. For example, our success in each market is dependent in part upon our ability to obtain and maintain inventory data and other vehicle information for those markets. The large amount of inventory and vehicle information available in our marketplaces is critical to the value we provide for consumers. The loss or interruption of such inventory data or other vehicle information could decrease the number of consumers using our marketplaces. We could experience interruptions in our data access for a number of reasons, including difficulties in renewing our agreements with data providers, changes to the software used by data providers, efforts by industry participants to restrict access to data, increased fees we may be charged by data providers and the effects of the COVID-19 pandemic. Our marketplaces could be negatively affected if any current provider terminates its relationship with us or our service from any provider is interrupted. If there is a material disruption in the data provided to us, the information that we provide to consumers and dealers using our marketplaces may be limited. In addition, the quality, accuracy, and timeliness of this information may suffer, which may lead to a less valuable and less transparent shopping experience for consumers using our marketplaces and could negatively affect our business and operating results.

The failure to build, maintain and protect our brands would harm our ability to attract a large consumer audience and to expand the use of our marketplaces by consumers and dealers.

While we are focused on building our brand recognition, maintaining and enhancing our brands will depend largely on the success of our efforts to maintain the trust of consumers and dealers and to deliver value to each consumer and dealer using our marketplaces. Our ability to protect our brands is also impacted by the success of our efforts to optimize our significant brand spend and overcome the intense competition in brand marketing across our industry, including competitors that may imitate our messaging. In addition, as a result of suppressed dealer inventory and resulting reduced demand for leads by dealers since the onset of the COVID-19 pandemic, we reduced our brand spend and we may decide to continue to suppress our brand spend in the future depending on the continued impact of the COVID-19 pandemic. If consumers believe that we are not focused on providing them with a better automobile shopping experience, or if we fail to overcome brand marketing competition and maintain a differentiated value proposition in consumers' minds, our reputation and the strength of our brands may be adversely affected.

Complaints or negative publicity about our business practices and culture, our management team and employees, our marketing and advertising campaigns, our compliance with applicable laws and regulations, the integrity of the data that we provide to consumers, data privacy and security issues, and other aspects of our business, irrespective of their validity, could diminish consumers' and dealers' confidence and participation in our marketplaces and could adversely affect our brands. There can be no assurance that we will be able to maintain or enhance our brands, and failure to do so would harm our business growth prospects and operating results.

Portions of our platform enable consumers and dealers using our marketplaces to communicate with one another and other persons seeking information or advice on the internet. Claims of defamation or other injury could be made against us for content posted on our websites. In addition, negative publicity and user sentiment generated as a result of fraudulent or deceptive conduct by users of our marketplaces could damage our reputation, reduce our ability to attract new users or retain our current users, and diminish the value of our brands.

Our past growth is not indicative of our future growth, and our ability to grow our revenue in the future is uncertain due to the impact of the COVID-19 pandemic.

Our revenue decreased to $551.5 million for the year ended December 31, 2020 from $588.9 million for the year ended December 31, 2019, representing a 6% decrease between such periods – which we primarily attribute to the approximately $50 million impact of fee reductions that we provided to our paying dealers during the second quarter of 2020 in response to the COVID-19 pandemic – and increased to $588.9 million for the year ended December 31, 2019 from $454.1 million for the year ended December 31, 2018, representing a 30% increase between such periods. Our revenue in 2021 and beyond may continue to be impacted by the COVID-19 pandemic. In addition, we will not be able to grow as expected, or at all, if we fail to: increase the number of consumers using our marketplaces; maintain and expand the number of dealers that subscribe to our marketplaces and maintain and increase the fees that they are paying; attract and retain advertisers placing advertisements in our marketplaces; further improve the quality of our marketplaces and introduce high quality new products; and increase the number of connections between consumers and dealers using our marketplaces and connections to paying dealers, in particular. If our revenue declines further or fails to grow, investors' perceptions of our business may be adversely affected, and the market price of our Class A common stock could decline.

We may require additional capital to pursue our business objectives and respond to business opportunities, challenges, or unforeseen circumstances. If we are unable to generate sufficient cash flows or if capital is not available to us, our business, operating results, financial condition, and prospects could be adversely affected.

If we are unable to generate sufficient cash flows, we would require additional capital to pursue our business objectives and respond to business opportunities, challenges, or unforeseen circumstances, including the effects of the COVID-19 pandemic, as well as to make marketing expenditures to improve our brand awareness, develop new products, further improve our platform and existing products, enhance our operating infrastructure, and acquire complementary businesses and technologies. Accordingly, we may need to engage in equity or debt financings to secure additional funds. However, additional funds may not be available when we need them on terms that are acceptable to us or at all. Volatility in the credit markets, particularly as a result of the COVID-19 pandemic, may also have an adverse effect on our ability to obtain debt financing. If we are unable to obtain adequate financing or financing on terms satisfactory to us when we require it, our ability to continue to pursue our business objectives and to respond to business opportunities, challenges, or unforeseen circumstances could be significantly limited, and our business, operating results, financial condition, and prospects could be adversely affected.

Our international operations involve risks that may differ from, or are in addition to, our domestic operational risks.

While we ceased operations of our marketplaces in Germany, Italy and Spain and stopped development of emerging marketplaces, we continue to operate marketplaces in the United Kingdom and Canada, which are less familiar competitive environments and involve various risks, including the need to invest significant resources and the likelihood that returns on such investments will not be achieved for several years, or possibly at all. We expect to continue to incur losses in the United Kingdom and Canada, and face various other challenges.

For example, in the United Kingdom and Canada, we were not the first market entrant, and our competitors may be more established or otherwise better positioned than we are to succeed. Our competitors may offer services to dealers that make dealers dependent on them, such as hosting dealers' websites and providing inventory feeds for dealers, which would make it difficult to attract dealers to our marketplaces. Dealers may also be parties to agreements with other dealers and syndicates that prevent them from being able to access our marketplaces. Any of these barriers could impede our operations in our international markets, which could affect our business and potential growth.

In addition to English, we have made portions of our marketplaces available in French and Spanish. We may have difficulty in modifying our technology and content for use in non-English-speaking market segments or gaining acceptance by users in non-English-speaking market segments. Our ability to manage our business and conduct our operations internationally requires considerable management attention and resources, and is subject to the particular challenges of supporting a business in an environment of multiple languages, cultures, customs, legal and regulatory systems, alternative dispute resolution systems, and commercial infrastructures. Operating internationally may subject us to different risks or increase our exposure in connection with current risks, including risks associated with: recruiting, managing and retaining qualified multilingual employees, including sales personnel; adapting our websites and mobile applications to conform to local consumer behavior; increased competition from local websites and mobile applications and potential preferences by local populations for local providers; compliance with applicable foreign laws and regulations, including different privacy, censorship, and liability standards and regulations, and different intellectual property laws; providing solutions in different languages and for different cultures, which may require that we modify our solutions and features so they are culturally relevant in different countries; the enforceability of our intellectual property rights; credit risk and higher levels of payment fraud; compliance with anti-bribery laws, including compliance with the Foreign Corrupt Practices Act and the United Kingdom Bribery Act; currency exchange rate fluctuations; adverse changes in trade relationships among foreign countries and/or between the United States and such countries, including as related to the United Kingdom's exit from the European Union, or the EU, commonly referred to as "Brexit"; double taxation of our international earnings and potentially adverse tax consequences arising from the tax laws of the United States or the foreign jurisdictions in which we operate; and higher costs of doing business internationally.

Dealer closures or consolidations could reduce demand for our products, which may decrease our revenue.

In the past, the number of United States dealers has declined due to dealership closures and consolidations as a result of factors such as global economic downturns and we expect this has occurred and will continue to occur as a result of the COVID-19 pandemic. When dealers consolidate, the services they previously purchased separately are often purchased by the combined entity in a lesser quantity or for a lower aggregate price than before, leading to volume compression and loss of revenue. Further dealership consolidations or closures could reduce the aggregate demand for our products and services. If dealership closures and consolidations occur in the future, our business, financial position and results of operations could be materially and adversely affected.

We depend on key personnel to operate our business, and if we are unable to retain, attract and integrate qualified personnel, or if we experience turnover of our key personnel, our ability to develop and successfully grow our business could be materially and adversely affected.

We believe our success has depended, and continues to depend, on the efforts and talents of our executives and employees. Our future success depends on our continuing ability to attract, develop, motivate, and retain highly qualified and skilled employees. Qualified individuals are in high demand, and we may incur significant costs to attract and retain them, and we may become less competitive in attracting and retaining employees as a result of our expense reduction efforts due to the COVID-19 pandemic. In addition, any unplanned turnover or our failure to develop an adequate succession plan for any of our executive officers or key employees, or the reduction in their involvement in the management of our business, could materially adversely affect our ability to execute our business plan and strategy, and we may not be able to find adequate replacements on a timely basis, or at all. Our executive officers and other employees are at-will employees, which means they may terminate their employment relationships with us at any time, and their knowledge of our business and industry would be extremely difficult to replace. We cannot ensure that we will be able to retain the services of any members of our senior management or other key employees. If we do not succeed in attracting well-qualified employees or retaining and motivating existing employees, our business could be materially and adversely affected.

In January 2021, we announced the promotion of Jason Trevisan from Chief Financial Officer and President, International to the role of Chief Executive Officer, and the transition of Langley Steinert from Chief Executive Officer to Executive Chairman. Additionally, Scot Fredo, our former Senior Vice President, Financial Planning & Analysis, was appointed to succeed Jason Trevisan in the role of Chief Financial Officer. We may face risks related to these and other transitions in our leadership team, including the disruption of our operations and the depletion of our institutional knowledge base.

We may be subject to disputes regarding the accuracy of Instant Market Values, Deal Ratings, Dealer Ratings, New Car Price Guidance and other features of our marketplaces.

We provide consumers using our CarGurus marketplaces with our proprietary IMV, Deal Ratings, and Dealer Ratings, as well as other features to help them evaluate vehicle listings, including price guidance for new car listings, or New Car Price Guidance. Our valuation models depend on the inventory listed on our sites as well as public information regarding automotive sales. If the inventory on our site declines significantly, or if the number of automotive sales declines significantly or used car sales prices become volatile, whether as a result of the COVID-19 pandemic or otherwise, our valuation models may not perform as expected. Revisions to or errors in our automated valuation models, or the algorithms that underlie them, may cause the IMV, the Deal Rating, New Car Price Guidance, or other features to vary from our expectations regarding the accuracy of these tools. In addition, from time to time, regulators, consumers, dealers and other industry participants may question or disagree with our IMV, Deal Rating, Dealer Rating or New Car Price Guidance. Any such questions or disagreements could result in distraction from our business or potentially harm our reputation, could result in a decline in consumers’ use of our marketplaces and could result in legal disputes.

We are subject to a complex framework of laws and regulations, many of which are unsettled, still developing and contradictory, which have in the past, and could in the future, subject us to claims, challenge our business model, or otherwise harm our business.

Various aspects of our business are, may become, or may be viewed by regulators from time to time as subject, directly or indirectly, to United States federal, state and local laws and regulations, and to foreign laws and regulations.

Local Motor Vehicle Sales, Advertising and Brokering, and Consumer Protection Laws

The advertising and sale of new and used motor vehicles is highly regulated by the jurisdictions in which we do business. Although we do not sell motor vehicles, and although we believe that vehicle listings on our sites are not themselves advertisements, regulatory authorities or third parties could take the position that some of the laws or regulations applicable to dealers or to the manner in which motor vehicles are advertised and sold generally are directly applicable to our business. These advertising laws and regulations are frequently subject to multiple interpretations and are not uniform from jurisdiction to jurisdiction, sometimes imposing inconsistent requirements with respect to new or used motor vehicles. If our marketplaces and related products are determined to not comply with relevant regulatory requirements, we or dealers could be subject to civil and criminal penalties, including fines, or the award of significant damages in class actions or other civil litigation, as well as orders interfering with our ability to continue providing our marketplaces and related products and services in certain jurisdictions. In addition, even absent such a determination, to the extent dealers are uncertain about the applicability of such laws and regulations to our business, we may lose, or have difficulty increasing the number of paying dealers, which would affect our future growth.

If regulators or other third parties take the position that our marketplaces or related products violate applicable brokering, bird-dog, consumer protection, consumer finance or advertising laws or regulations, responding to such allegations could be costly, could require us to pay significant sums in settlements, could require us to pay civil and criminal penalties, including fines, could interfere with our ability to continue providing our marketplaces and related products in certain jurisdictions, or could require us to make adjustments to our marketplaces and related products or the manner in which we derive revenue from dealers using our platform, any or all of which could result in substantial adverse publicity, termination of subscriptions by dealers, decreased revenues, distraction for our employees, increased expenses, and decreased profitability.

Federal Laws and Regulations

The United States Federal Trade Commission, or the FTC, has the authority to take actions to remedy or prevent acts or practices that it considers to be unfair or deceptive and that affect commerce in the United States. If the FTC takes the position in the future that any aspect of our business, including our advertising and privacy practices, constitutes an unfair or deceptive act or practice, responding to such allegations could require us to defend our practices and pay significant damages, settlements, and civil penalties, or could require us to make adjustments to our marketplaces and related products and services, any or all of which could result in substantial adverse publicity, distraction for our employees, loss of participating dealers, lost revenues, increased expenses, and decreased profitability.

Our platforms enable us, dealers, and users to send and receive text messages and other mobile phone communications. The TCPA, as interpreted and implemented by the FCC and federal and state courts, impose significant restrictions on utilization of telephone calls and text messages to residential and mobile telephone numbers as a means of communication, particularly if the prior express consent of the person being contacted has not been obtained. Violations of the TCPA may be enforced by the FCC, by state attorneys general, or by others through litigation, including class actions. Furthermore, several provisions of the TCPA, as well as applicable rules and orders, are open to multiple interpretations, and compliance may involve fact-specific analyses.

Any failure by us, or the third parties on which we rely, to adhere to, or successfully implement, appropriate processes and procedures in response to existing or future laws and regulations could result in legal and monetary liability, fines and penalties, or damage to our reputation in the marketplace, any of which could have a material adverse effect on our business, financial condition, and results of operations. Even if the claims are meritless, we may be required to expend resources and pay costs to defend against regulatory actions or third-party claims. Additionally, any change to applicable laws or their interpretations that further restricts the way consumers and dealers interact through our platforms, or any governmental or private enforcement actions related thereto, could adversely affect our ability to attract customers and could harm our business, financial condition, results of operations, and cash flows.

Antitrust and Other Laws

Antitrust and competition laws prohibit, among other things, any joint conduct among competitors that would lessen competition in the marketplace. A governmental or private civil action alleging the improper exchange of information, or unlawful participation in price maintenance or other unlawful or anticompetitive activity, even if unfounded, could be costly to defend and could harm our business, results of operations, financial condition, and cash flows.

Claims could be made against us under both United States and foreign laws, including claims for defamation, libel, invasion of privacy, false advertising, intellectual property infringement, or claims based on other theories related to the nature and content of the materials disseminated by our marketplaces and on portions of our websites. Our defense against any of these actions could be costly and involve significant time and attention of our management and other resources. If we become liable for information transmitted in our marketplaces, we could be directly harmed and we may be forced to implement new measures to reduce our exposure to this liability.

The foregoing description of laws and regulations to which we are or may be subject is not exhaustive, and the regulatory framework governing our operations is subject to continuous change. We are, and we will continue to be, exposed to legal and regulatory risks including with respect to privacy, tax, law enforcement, content, intellectual property, competition, and other matters. The enactment of new laws and regulations or the interpretation of existing laws and regulations, both domestically and internationally, may affect the operation of our business, directly or indirectly, which could result in substantial regulatory compliance costs, civil or criminal penalties, including fines, adverse publicity, loss of subscribing dealers, lost revenues, increased expenses, and decreased profitability. Further, investigations by governmental agencies, including the FTC, into allegedly anticompetitive, unfair, deceptive or other business practices by us or dealers using our marketplaces, could cause us to incur additional expenses and, if adversely concluded, could result in substantial civil or criminal penalties and significant legal liability, or orders requiring us to make adjustments to our marketplaces and related products and services.

Our business is subject to risks related to the larger automotive industry ecosystem, which could have a material adverse effect on our business, revenue, results of operations, and financial condition.

Decreases in consumer demand could adversely affect the market for automobile purchases and, as a result, reduce the number of consumers using our platform. Consumer purchases of new and used automobiles generally decline during recessionary periods and other periods in which disposable income is adversely affected and we believe that we have entered such a period as a result of the COVID-19 pandemic. Purchases of new and used automobiles are typically discretionary for consumers and have been, and may continue to be, affected by negative trends in the economy, including: the effects of the COVID-19 pandemic, the cost of energy and gasoline; the availability and cost of credit; rising interest rates; reductions in business and consumer confidence; stock market volatility; and increased unemployment.

Further, in recent years the market for motor vehicles has experienced rapid changes in technology and consumer demands. Self-driving technology, ride sharing, transportation networks, and other fundamental changes in transportation including those arising as a result of the COVID-19 pandemic could impact consumer demand for the purchase of automobiles. A reduction in the number of automobiles purchased by consumers could adversely affect dealers and car manufacturers and lead to a reduction in other spending by these groups, including targeted incentive programs.

In addition, our business may be negatively affected by challenges to the larger automotive industry ecosystem, including global supply chain challenges, changes to trade policies, including tariff rates and customs duties, trade relations between the United States and China and other macroeconomic issues, including the ongoing effects of the COVID-19 pandemic. These factors could have a material adverse effect on our business, revenue, results of operations, and financial condition.

Making decisions that we believe are in the best interests of our marketplaces may cause us to forgo short-term gains in pursuit of potential but uncertain long-term growth.

In the past, we have forgone, and we will in the future continue to forgo, certain expansion or short-term revenue opportunities that we do not believe are in the long-term best interests of our marketplaces, even if such decisions negatively impact our results of operations in the short term. For example, during select monthly service periods in 2020 we provided paying dealers with marketplace subscriptions at no cost or at a discount in an effort to help our paying dealers maintain their business health during the COVID-19 pandemic. However, such strategies may not result in the long-term benefits that we expect, in which case our user traffic and engagement, business, and financial results could be harmed.

A significant disruption in service on our websites or mobile applications could damage our reputation and result in a loss of consumers, which could harm our business, brands, operating results, and financial condition.

Our brands, reputation, and ability to attract consumers, dealers, and advertisers depend on the reliable performance of our technology infrastructure and content delivery. We have experienced, and we may in the future experience, interruptions with our systems. Interruptions in these systems, whether due to system failures, computer viruses, ransomware, physical or electronic break-ins, or otherwise, could affect the security or availability of our marketplaces on our websites and mobile applications, and prevent or inhibit the ability of dealers and consumers to access our marketplaces. For example, past disruptions have impacted our ability to activate customer accounts and manage our billing activities in a timely manner. Such interruptions could also result in third parties accessing our confidential and proprietary information, including our intellectual property. Problems with the reliability or security of our systems could harm our reputation, harm our ability to protect our confidential and proprietary information, result in a loss of consumers and dealers, and result in additional costs.

Substantially all of the communications, network, and computer hardware used to operate our platforms is located in the United States near Boston, Massachusetts, and internationally near each of London, England and Dublin, Ireland. Although we can host our CarGurus' marketplace from two alternative locations in the United States and we believe our systems are redundant, there may be exceptions for certain hardware or software. In addition, we do not own or control the operation of these facilities. We also use third-party hosting services to back up some data but do not maintain redundant systems or facilities for some of the services. A disruption to one or more of these systems may cause us to experience an extended period of system unavailability, which could negatively impact our relationship with consumers, customers and advertisers. Our systems and operations are vulnerable to damage or interruption from fire, flood, power loss, telecommunications failure, terrorist attacks, acts of war, electronic and physical break-ins, computer viruses, earthquakes, and similar events. The occurrence of any of these events could result in damage to our systems and hardware or could cause them to fail. In addition, we may not have sufficient protection or recovery plans in certain circumstances.

Problems faced by our third-party web hosting providers could adversely affect the experience consumers have while using our marketplaces. Our third-party web hosting providers could close their facilities without adequate notice. Any financial difficulties, up to and including bankruptcy, faced by our third-party web hosting providers or any of the service providers whose services they use, which may be exacerbated as a result of the COVID-19 pandemic, may have negative effects on our business, the nature and extent of which are difficult to predict. If our third-party web hosting providers are unable to keep up with our capacity needs, our business could be harmed.

Any errors, defects, disruptions, or other performance or reliability problems with our network operations could cause interruptions in access to our marketplaces as well as delays and additional expense in arranging new facilities and services and could harm our reputation, business, operating results, and financial condition. Although we carry insurance, it may not be sufficient to compensate us for the potentially significant losses, including the potential harm to the future growth of our business, that may result from interruptions in our service as a result of system failures.

We collect, process, store, transfer, share, disclose, and use consumer information and other data, and our actual or perceived failure to protect such information and data or respect users' privacy could damage our reputation and brands and harm our business and operating results.

Some functions of our marketplaces involve the storage and transmission of consumers' information, such as IP addresses, contact information of users who connect with dealers and profile information of users who create accounts on our marketplaces, as well as dealers' information. We also process and store personal and confidential information of our vendors, partners, and employees. Some of this information may be private, and security breaches could expose us to a risk of loss or exposure of this information, which could result in potential liability, litigation, and remediation costs. For example, hackers could steal our users' profile passwords, names, email addresses, phone numbers, and other personal information. We rely on encryption and authentication technology licensed from third parties to effect secure transmission of such information. Like all information systems and technology, our websites, mobile applications, and information systems are subject to computer viruses, break-ins, phishing attacks, attempts to overload the systems with denial-of-service or other attacks, ransomware, and similar incidents or disruptions from unauthorized use of our computer systems, any of which could lead to interruptions, delays, or website shutdowns, and could cause loss of critical data and the unauthorized disclosure, access, acquisition, alteration, and use of personal or other confidential information. If we experience compromises to our security that result in website or mobile application performance or availability problems, the complete shutdown of our websites or mobile applications, or the loss or unauthorized disclosure, access, acquisition, alteration, or use of confidential information, consumers, customers, advertisers, partners, vendors, and employees may lose trust and confidence in us, and consumers may decrease the use of our websites or stop using our websites entirely, dealers may stop or decrease their subscriptions with us, and advertisers may decrease or stop advertising on our websites.

Further, outside parties have attempted and will likely continue to attempt to fraudulently induce employees, consumers, or advertisers to disclose sensitive information in order to gain access to our information or our consumers', dealers', advertisers', and employees' information. As cyber-attacks increase in frequency and sophistication, our cyber-security and business continuity plans may not be effective in anticipating, preventing and effectively responding to all potential cyber-risk exposures. In addition, because the techniques used to obtain unauthorized access, disable or degrade service, or sabotage systems change frequently, often are not recognized until after having been launched against a target, and may originate from less regulated and remote areas around the world, we may be unable to proactively address these techniques or to implement adequate preventative measures.

Any or all of the issues above could adversely affect our brand reputation, negatively impact our ability to attract new consumers and increase engagement by existing consumers, cause existing consumers to curtail or stop use of our marketplaces or close their accounts, cause existing dealers and advertisers to cancel their contracts, cause employees to terminate their employment, cause employment candidates to be unwilling to pursue employment opportunities or accept employment offers, and or subject us to governmental or third-party lawsuits, investigations, regulatory fines, or other actions or liability, thereby harming our business, results of operations, and financial condition.

There are numerous federal, national, state, and local laws and regulations in the United States and around the world regarding privacy and the collection, processing, storage, sharing, disclosure, use, cross-border transfer, and protection of personal information and other data. These laws and regulations are evolving, are subject to differing interpretations, may be costly to comply with, may result in regulatory fines or penalties, may subject us to third-party lawsuits, may be inconsistent between countries and jurisdictions, and may conflict with other requirements.

We seek to comply with industry standards and are subject to the terms of our privacy policies and privacy-related obligations to third parties, as well as all applicable laws and regulations relating to privacy and data protection. However, it is possible that these obligations may be interpreted and applied in new ways or in a manner that is inconsistent from one jurisdiction to another and may conflict with other rules or our practices and that new regulations could be enacted. Several proposals have recently become effective or are pending, as applicable, before federal, state, local, and foreign legislative and regulatory bodies that could significantly affect our business, including the General Data Protection Regulation in the EU, or the GDPR, which went into effect on May 25, 2018, the California Consumer Privacy Act, or the CCPA, which went into effect on January 1, 2020, and the California Privacy Rights Act, or the CPRA, which goes into effect January 1, 2023. The GDPR and CCPA in particular have already required, and along with the CPRA, may further require, us to change our policies and procedures and may in the future require us to make changes to our marketplaces and other products. These and other requirements could reduce demand for our marketplaces and other offerings, require us to take on more onerous obligations in our contracts and restrict our ability to store, transfer, and process data, which may seriously harm our business. Similarly, Brexit and the *Schrems II* decision of the Court of Justice of the EU may require us to change our policies and procedures and, if we are not in compliance, may also seriously harm our business. We may not be entirely successful in our efforts to comply with the evolving regulations to which we are subject due to various factors within our control, such as limited internal resource allocation, or outside our control, such as a lack of vendor cooperation, new regulatory interpretations, or lack of regulatory guidance in respect of certain GDPR, CCPA, or CPRA requirements.

Any failure or perceived failure by us to comply with United States and international data protection laws and regulations, our privacy policies, or our privacy-related obligations to consumers, customers, employees and other third parties, or any compromise of security that results in the unauthorized release or transfer of sensitive information, which could include personal information or other user data, may result in governmental investigations, enforcement actions, regulatory fines, litigation, criminal penalties, or public statements against us by consumer advocacy groups or others, and could cause consumers and dealers to lose trust in us, which could significantly impact our brand reputation and have an adverse effect on our business. Additionally, if any third party that we share information with experiences a security breach or fails to comply with its privacy-related legal obligations or commitments to us, such matters may put employee, consumer or dealer information at risk and could in turn expose us to claims for damages or regulatory fines or penalties and harm our reputation, business, and operating results.

Our ability to attract consumers to our own websites and to provide certain services to our customers depends on the collection of consumer data from various sources, which may be restricted by consumer choice, privacy restrictions, and developments in laws, regulations and industry standards.

The success of our consumer marketing and the delivery of internet advertisements for our customers depends on our ability to leverage data, including data that we collect from our customers, data we receive from our publisher partners and third parties, and data from our operations. Using cookies and non-cookie-based technologies, such as mobile advertising identifiers, we collect information about the interactions of users with our customers' and publishers' digital properties (including, for example, information about the placement of advertisements and users' shopping or other interactions with our customers' websites or advertisements). Our ability to successfully leverage such data depends on our continued ability to access and use such data, which could be restricted by a number of factors, including: increasing consumer adoption of "do not track" mechanisms as a result of legislation including GDPR, CCPA, and CPRA; privacy restrictions imposed by web browser developers, advertising partners or other software developers that impair our ability to understand the preferences of consumers by limiting the use of third-party cookies or other tracking technologies or data indicating or predicting consumer preferences; and new developments in, or new interpretations of, privacy laws, regulations and industry standards.

Each of these developments could materially impact our ability to collect consumer data and deliver relevant internet advertisements to attract consumers to our websites or to deliver targeted advertising for our advertising customers. If we are unsuccessful in evolving our advertising and marketing strategies to adapt to and mitigate these evolving consumer data limitations, our business results could be materially impacted.

We have been, and may again be, subject to intellectual property disputes, which are costly to defend and could harm our business and operating results.

We have been and expect in the future to be subject to claims and litigation alleging that we infringe others' intellectual property rights, including the trademarks, copyrights, patents, and other intellectual property rights of third parties, including from our competitors or non-practicing entities. We may also learn of possible infringement to our trademarks, copyrights, patents, and other intellectual property. In addition, we could be subject to lawsuits where consumers and dealers posting content on our websites disseminate materials that infringe the intellectual property rights of third parties.

Patent and other intellectual property litigation may be protracted and expensive, and the results are difficult to predict and may result in significant settlement costs or payment of substantial damages. Many potential litigants, including patent holding companies, have the ability to dedicate substantially greater resources to enforce their intellectual property rights and to defend claims that may be brought against them. Furthermore, a successful claimant could secure a judgment that requires us to stop offering some features or prevents us from conducting our business as we have historically done or may desire to do in the future. We might also be required to seek a license and pay royalties for the use of such intellectual property, which may not be available on commercially acceptable terms, or at all. Alternatively, we may be required to modify our marketplaces and features while we develop non-infringing substitutes, which could require significant effort and expense and may ultimately not be successful.

In addition, we use open source software in our platform and will use open source software in the future. From time to time, we may face claims from companies that incorporate open source software into their products, claiming ownership of, or demanding release of, the source code, the open source software, or derivative works that were developed using such software, or otherwise seeking to enforce the terms of the applicable open source license. These claims could also result in litigation, require us to purchase a costly license or require us to devote additional product, technology, and development resources to change our platforms or services, any of which would have a negative effect on our business and operating results.

Even if these matters do not result in litigation or are resolved in our favor or without significant cash settlements, these matters, and the time and resources necessary to litigate or resolve them, could harm our business, our operating results, and our reputation.

Failure to adequately protect our intellectual property could harm our business and operating results.

Our business depends on our intellectual property, the protection of which is crucial to the success of our business. We rely on a combination of patent, trademark, trade secret, and copyright law and contractual restrictions to protect our intellectual property. In addition, we attempt to protect our intellectual property, technology, and confidential information by requiring our employees and consultants to enter into confidentiality and assignment of inventions agreements and third parties to enter into nondisclosure agreements as we deem appropriate. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy aspects of our platform's features, software, and functionality or obtain and use information that we consider proprietary.

Competitors may adopt trademarks or trade names similar to ours, thereby harming our ability to build brand identity and possibly leading to user confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other registered trademarks, or trademarks that incorporate variations of our trademarks. We have registered the CARGURUS and CG logos, as well as the word-mark CARGURUS, in the U.S., Canada and the United Kingdom.

We currently hold the "CarGurus.com" internet domain name and various other related domain names relating to our brands. The regulation of domain names is subject to change. Regulatory bodies could establish additional top-level domains, appoint additional domain name registrars, or modify the requirements for holding domain names. As a result, we may not be able to acquire or maintain all domain names that use the names of our brands. In addition, third parties have created and may in the future create copycat or squatter domains to deceive consumers, which could harm our brands, interfere with our ability to register domain names, and result in additional costs.

We may be unable to halt the operations of websites that aggregate or misappropriate our data.

From time to time, third parties may misappropriate our data through website scraping, robots, or other means and aggregate this data with data from other sources. In addition, copycat websites may misappropriate data in our marketplaces and attempt to imitate our brands or the functionality of our websites. If we become aware of such activities, we intend to employ technological or legal measures in an attempt to halt their operations. However, we may be unable to detect and remedy all such activities in a timely manner. In some cases, our available remedies may not be adequate to protect us against the impact of such operations. Regardless of whether we can successfully enforce our rights against these third parties, any measures that we may take could require us to expend significant financial or other resources, which could harm our business, results of operations, and financial condition. In addition, to the extent that such activity creates confusion among consumers or advertisers, our brands and business could be harmed.

Seasonality and other factors may cause fluctuations in our operating results and our marketing spend.

Across the retail automotive industry, consumer purchases are typically greatest in the first three quarters of each year, due in part to the introduction of new vehicle models from manufacturers and the seasonal nature of consumer spending, and our consumer-marketing spend generally fluctuates accordingly. As consumer automotive purchases slow in the fourth quarter, our rate of marketing spend typically also slows. This seasonality has not been immediately apparent historically due to the overall growth of other operating expenses. In addition, reduction of our marketing spend in response to COVID-19-related expense management and shifts in demand from dealers and consumers could impact the efficiency of our marketing spend. For example, a larger portion of our advertising may run during peak holiday seasonality for retail advertisers, inflating our media costs. As our growth rates moderate or cease, the impact of these seasonality trends and other influences on our results of operations could become more pronounced.

Failure to deal effectively with fraud or other illegal activity could lead to potential legal liability, harm our business, cause us to lose paying dealer customers and adversely affect our reputation, financial performance and prospects for growth.

Based on the nature of our business we are exposed to potential fraudulent and illegal activity in our marketplaces, including: listings of automobiles that are not owned by the purported dealer or that the dealer has no intention of selling at the listed price; receipt of fraudulent leads that we may send to our dealers; and deceptive practices in our peer-to-peer marketplace. The measures we have in place to detect and limit the occurrence of such fraudulent and illegal activity in our marketplaces may not always be effective or account for all types of fraudulent or other illegal activity. Further, the measures that we use to detect and limit the occurrence of fraudulent and illegal activity must be dynamic, as technologies and ways to commit fraud and illegal activity are continually evolving. Failure to limit the impact of fraudulent and illegal activity on our websites could lead to potential legal liability, harm our business, cause us to lose paying dealer customers and adversely affect our reputation, financial performance and prospects for growth.

Risks Related to Our Class A Common Stock

Our founder controls a majority of the voting power of our outstanding capital stock, and, therefore, has control over key decision-making and could control our actions in a manner that conflicts with the interests of other stockholders.

Primarily by virtue of his holdings in shares of our Class B common stock, which has a ten-to-one voting ratio compared to our Class A common stock, Langley Steinert, our founder, Chairman of the Board and Executive Chairman, is able to exercise voting rights with respect to a majority of the voting power of our outstanding capital stock and therefore has the ability to control the outcome of matters submitted to our stockholders for approval, including the election of directors and any merger, consolidation, or sale of all or substantially all of our assets. This concentrated control could delay, defer, or prevent a change of control, merger, consolidation, or sale of all or substantially all of our assets that our other stockholders support, or conversely this concentrated control could result in the consummation of such a transaction that our other stockholders do not support. This concentrated control could also discourage a potential investor from acquiring our Class A common stock, which might harm the trading price of our Class A common stock. In addition, Mr. Steinert has significant influence in the management and major strategic investments of our company as a result of his positions as Executive Chairman, and his ability to control the election or replacement of our directors. As Chairman of the Board and our Executive Chairman, Mr. Steinert owes a fiduciary duty to our stockholders and must act in good faith in a manner he reasonably believes to be in the best interests of our stockholders. If Mr. Steinert's status as an officer and a director is terminated, his fiduciary duties to our stockholders will also terminate, but his voting power as a stockholder will not be reduced as a result of such termination unless such termination is either made voluntarily by Mr. Steinert or due to Mr. Steinert's death, or if the sum of the number of shares of our capital stock held by Mr. Steinert, by any Family Member of Mr. Steinert, and by any Permitted Entity of Mr. Steinert (as such terms are defined in our amended and restated certificate of incorporation), assuming the exercise and settlement in full of all outstanding options and convertible securities and calculated on an as-converted to Class A common stock basis, is less than 9,091,484 shares. As a stockholder, even a controlling stockholder, Mr. Steinert is entitled to vote his shares in his own interests, which may not always be aligned with the interests of our other stockholders.

We believe that Mr. Steinert's continued control of a majority of the voting power of our outstanding capital stock is beneficial to us and is in the best interests of our stockholders. In the event that Mr. Steinert no longer controls a majority of the voting power, whether as a result of the disposition of some or all his shares of Class A or Class B common stock, the conversion of the Class B common stock into Class A common stock in accordance with its terms, or otherwise, our business or the trading price of our Class A common stock may be adversely affected.

The multiple class structure of our common stock has the effect of concentrating voting control with our founder and certain other holders of our Class B common stock, which will limit or preclude the ability of our stockholders to influence corporate matters.

Our Class B common stock has ten votes per share and our Class A common stock has one vote per share. Our founder and certain of his affiliates hold a substantial number of the outstanding shares of our Class B common stock and therefore hold a substantial majority of the voting power of our outstanding capital stock. Because of the ten-to-one voting ratio between our Class B and Class A common stock, the holders of our Class B common stock collectively control a majority of the combined voting power of our common stock and therefore are able to control all matters submitted to our stockholders for approval so long as the shares of Class B common stock represent at least 9.1% of all outstanding shares of our Class A and Class B common stock. This concentrated control will limit or preclude the ability of our other stockholders to influence corporate matters for the foreseeable future.

Transfers by holders of Class B common stock will generally result in those shares converting into Class A common stock, subject to limited exceptions, such as certain transfers effected for estate planning or charitable purposes. The conversion of Class B common stock into Class A common stock has had and will continue to have the effect, over time, of increasing the relative voting power of those holders of Class B common stock who retain such shares. If, for example, Mr. Steinert retains a significant portion of his holdings of Class B common stock, he could continue to control a majority of the combined voting power of our outstanding capital stock.

The trading price of our Class A common stock has been and may continue to be volatile and the value of our stockholders' investment in our stock could decline.

The trading price of our Class A common stock has been and may continue to be volatile and fluctuate substantially. The trading price of our Class A common stock depends on a number of factors, including those described in this "Risk Factors" section, many of which are beyond our control and may not be related to our operating performance. Factors that could cause fluctuations in the trading price of our Class A common stock include the following: changes in the operating performance and stock market valuations of other technology companies generally, or those in our industry in particular; sales of shares of our Class A common stock by us or our stockholders; adverse changes to recommendations regarding our stock by securities analysts that cover us; failure of securities analysts to maintain coverage of us, changes in financial estimates by any securities analysts who follow our company, or our failure to meet these estimates or the expectations of investors; announcements by us or our competitors of new products; the public's reaction to our issuances of earnings guidance or other public announcements and filing; real or perceived inaccuracies in our key metrics; actions of an activist stockholder; actual or anticipated changes in our operating results or fluctuations in our operating results or developments in our business, our competitors' businesses, or the competitive landscape generally; litigation involving us or investigations by regulators into our operations or those of our competitors; developments or disputes concerning our proprietary rights; announced or completed acquisitions of businesses or technologies by us or our competitors; new laws or regulations or new interpretations of existing laws or regulations applicable to our business; changes in accounting standards, policies, or guidelines; any significant change in our management; changes in the automobile industry; and general economic conditions, including as related to the COVID-19 pandemic.

Our status as a "controlled company" could make our Class A common stock less attractive to some investors or otherwise harm the trading price of our Class A common stock.

More than 50% of our voting power is held by Mr. Steinert. As a result, we are a "controlled company" under the corporate governance rules for Nasdaq-listed companies and may elect not to comply with certain Nasdaq corporate governance requirements. We rely and have relied on certain or all of these exemptions. Accordingly, should the interests of our controlling stockholder differ from those of other stockholders, the other stockholders may not have the same protections afforded to stockholders of companies that are subject to all of the corporate governance rules for Nasdaq-listed companies. Our status as a controlled company could make our Class A common stock less attractive to some investors or otherwise harm our stock price.

General Risk Factors

We participate in a highly competitive market, and pressure from existing and new companies may adversely affect our business and operating results.

We face significant competition from companies that provide listings, car-shopping information, lead generation, marketing, and car-buying services designed to help consumers shop for cars and to enable dealers to reach these consumers. Our competitors include online automotive marketplaces and websites, internet search engines, digital marketing providers, peer to peer marketplaces, sites operated by automobile dealers, and online dealerships. We compete with these and other companies for a share of dealers' overall marketing budget for online and offline media marketing spend and we compete with these and other companies in attracting consumers to our websites. To the extent that dealers view alternative marketing and media strategies to be superior to our marketplaces, we may not be able to maintain or grow the number of dealers subscribing to, and advertising on, our marketplaces, and our business and financial results may be adversely affected. We also expect that new competitors will continue to enter the online automotive retail industry with competing marketplaces, products, and services, and that existing competitors will expand to offer competing products or services, which could have an adverse effect on our business and financial results.

Our competitors could significantly impede our ability to expand the number of dealers using our marketplaces or could offer discounts that could significantly impede our ability to maintain our pricing structure. Our competitors may also develop and market new technologies that render our existing or future platforms and associated products less competitive, unmarketable, or obsolete. In addition, if our competitors develop platforms with similar or superior functionality to ours, or if our web traffic declines, we may need to decrease our subscription and advertising fees. If we are unable to maintain our current pricing structure due to competitive pressures, our revenue would likely be reduced and our financial results would be negatively affected.

Our existing and potential competitors may have significantly more financial, technical, marketing, and other resources than we have, which may allow them to offer more competitive pricing and the ability to devote greater resources to the development, promotion, and support of their marketplaces, products, and services. They may also have more extensive automotive industry relationships than we have, longer operating histories, and greater name recognition. In addition, these competitors may be able to respond more quickly with technological advances and to undertake more extensive marketing or promotional campaigns than we can. To the extent that any competitor has existing relationships with dealers or auto manufacturers for marketing or data analytics solutions, those dealers and auto manufacturers may be unwilling to partner with us. If we are unable to compete with these competitors, the demand for our marketplaces and related products and services could substantially decline.

We rely on third-party service providers and strategic partners for many aspects of our business, and any failure to maintain these relationships or to successfully integrate certain third-party platforms could harm our business.

Our success depends upon our relationships with third parties, including, among others, our payment processor, our data center hosts, our information technology providers and our data providers for inventory and vehicle information. If these third parties experience difficulty meeting our requirements or standards, have adverse audit results, violate the terms of our agreements or applicable law, fail to obtain or maintain applicable licenses, or if the relationships we have established with such third parties expire or otherwise terminate, it could make it difficult for us to operate some aspects of our business, which could damage our business and reputation. In addition, if such third-party service providers or strategic partners were to cease operations, temporarily or permanently, face financial distress or other business disruptions, increase their fees, or if our relationships with these providers or partners deteriorate or terminate, whether as a result of the COVID-19 pandemic or otherwise, we could suffer increased costs and we may be unable to provide consumers with content or provide similar services until an equivalent provider could be found or we could develop replacement technology or operations. In addition, if we are unsuccessful in identifying or finding high-quality partners, if we fail to negotiate cost-effective relationships with them, or if we ineffectively manage these relationships, it could have an adverse impact on our business and financial results.

Our enterprise systems require that we integrate the platforms hosted by certain third-party service providers. We are responsible for integrating these platforms and updating them to maintain proper functionality. Issues with these integrations, our failure to properly update third-party platforms or any interruptions to our internal enterprise systems could harm our business by causing delays in our ability to quote, activate service and bill new and existing customers on our platform.

We must maintain proper and effective internal controls over financial reporting and any failure to maintain the adequacy of these internal controls may adversely affect investor confidence in our company and, as a result, the value of our Class A common stock.

We are required, pursuant to Section 404 and the related rules adopted by the SEC, to furnish a report by management on, among other things, the effectiveness of our internal control over financial reporting on an annual basis. This assessment includes disclosure of any material weaknesses identified by our management in our internal control over financial reporting. During the evaluation and testing process, if we identify and fail to remediate one or more material weaknesses in our internal control over financial reporting, we will be unable to assert that our internal controls are effective.

In addition, our independent registered public accounting firm must attest to the effectiveness of our internal control over financial reporting under Section 404. Our independent registered public accounting firm may issue a report that is adverse to us in the event it is not satisfied with the level at which our controls are documented, designed or operating. We may not be able to remediate any future material weaknesses, or to complete our evaluation, testing and required remediation in a timely fashion. We are also required to disclose significant changes made to our internal control procedures on a quarterly basis. Our compliance with Section 404 requires that we incur substantial accounting expense and expend significant management efforts.

Any failure to maintain internal control over financial reporting could severely inhibit our ability to accurately report our financial condition or results of operations. If we are unable to assert that our internal control over financial reporting is effective or our independent registered public accounting firm is unable to express an opinion on the effectiveness of our internal control over financial reporting when it is required to issue such opinion, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of our Class A common stock could decline, and we could be subject to sanctions or investigations by Nasdaq, the SEC or other regulatory authorities.

We expect our results of operations to fluctuate on a quarterly and annual basis.

Our revenue and results of operations could vary significantly from period to period and may fail to match expectations as a result of a variety of factors, some of which are outside of our control, including the effects of the COVID-19 pandemic. Our results may vary as a result of fluctuations in the number of dealers subscribing to our marketplaces and the size and seasonal variability of our advertisers' marketing budgets. As a result of the potential variations in our revenue and results of operations, period-to-period comparisons may not be meaningful and the results of any one period should not be relied on as an indication of future performance. In addition, our results of operations may not meet the expectations of investors or public market analysts who follow us, which may adversely affect the trading price of our Class A common stock.

We could be subject to adverse changes in tax laws, regulations and interpretations, plus challenges to our tax positions.

We are subject to taxation in the United States and certain other jurisdictions in which we operate. Changes in applicable tax laws or regulations may be proposed or enacted that could materially and adversely affect our effective tax rate, tax payments, results of operations, financial condition and cash flows. In addition, tax laws and regulations are complex and subject to varying interpretations. There is also uncertainty over sales tax liability as a result of the U.S. Supreme Court's decision in *South Dakota v. Wayfair, Inc.*, which could precipitate reactions by legislators, regulators and courts that could adversely increase our tax administrative costs and tax risk, and negatively affect our overall business, results of operations, financial condition and cash flows. We are also regularly subject to audits by tax authorities. For example, we are currently under federal employment tax audit for tax years 2016 – 2018; New York State sales and uses tax audit for tax years 2014 – 2020 and Ohio State commercial activity tax audit for tax years 2013 – 2019. Any adverse development or outcome in connection with these tax audits, and any other audits or litigation, could materially and adversely impact our effective tax rate, tax payments, results of operations, financial condition and cash flows.

Confidentiality agreements may not adequately prevent disclosure of our trade secrets and other proprietary information.

In order to protect our technologies and processes, we rely in part on confidentiality agreements with our employees, independent contractors, and other advisors. These agreements may not effectively prevent disclosure of confidential information, including trade secrets, and may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. To the extent that our employees, contractors, or other third parties with whom we do business use intellectual property owned by others in their work for us, disputes may arise as to the rights to related or resulting know-how and inventions. In addition, any changes in, or unexpected interpretations of, intellectual property laws may compromise our ability to enforce our trade secret and intellectual property rights. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our proprietary rights, and failure to obtain or maintain protection of our trade secrets or other proprietary information could harm our business, results of operations, reputation, and competitive position.

Item 1B. Unresolved Staff Comments.

Not applicable.

Item 2. Properties.

We do not own any real property. Our principal executive offices are located in Cambridge, Massachusetts where we lease a total of approximately 185,064 square feet of space in various parcels in three buildings. We also lease office space in Dublin, Ireland and San Francisco, California for our European and Autolist operations, respectively. We believe that our current facilities are suitable and adequate to meet our current needs. We believe that suitable additional space or substitute space will be available in the future to accommodate our operations as needed. In January 2021, CarOffer, LLC, our majority-owned subsidiary, entered into a sublease for office space at 15601 Dallas Parkway in Addison, Texas, which we expect CarOffer to occupy in March 2021 for its operations. In 2019, we entered into a lease for office space at 1001 Boylston Street in Boston, Massachusetts, which we expect to occupy in 2023.

Item 3. Legal Proceedings.

From time to time we may become involved in legal proceedings or be subject to claims arising in the ordinary course of our business. We are not presently subject to any pending or threatened litigation that we believe, if determined adversely to us, individually, or taken together, would reasonably be expected to have a material adverse effect on our business or financial results.

Item 4. Mine Safety Disclosures.

Not applicable.

PART II

Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.

Market Information for Common Stock

Our Class A common stock has been listed on the Nasdaq Global Select Market under the symbol "CARG" since October 12, 2017. Prior to that date, there was no public trading market for our Class A common stock. Our initial public offering, or IPO, was priced at $16.00 per share on October 11, 2017.

On February 10, 2021, the last reported sale price of our Class A common stock on the Nasdaq Global Select Market was $35.61 per share.

Holders

As of February 4, 2021, we had 34 holders of record of our Class A common stock. The actual number of stockholders is greater than this number of record holders, and includes stockholders who are beneficial owners but whose shares are held in street name by brokers and other nominees. The number of holders of record does not include stockholders whose shares may be held in trust by other entities.

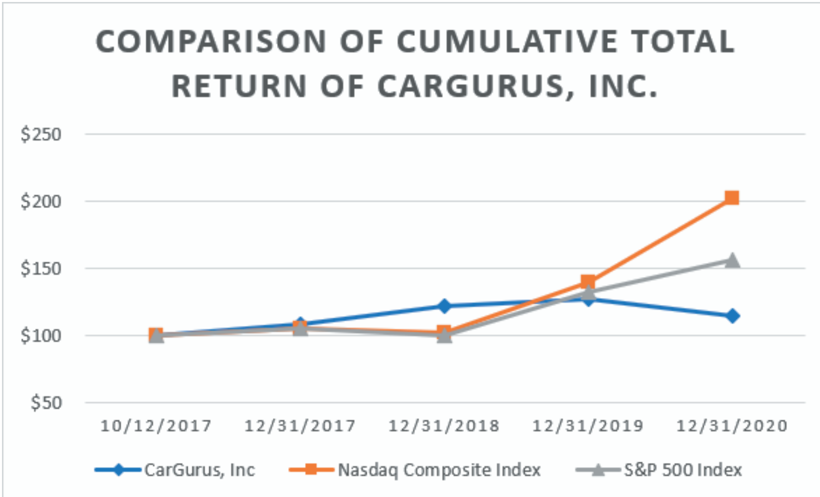
Dividends

We have never declared or paid any cash dividends on our common stock. We currently anticipate that we will retain future earnings to fund development and growth of our business, and we do not anticipate paying cash dividends in the foreseeable future.

Performance Graph

This performance graph shall not be deemed "soliciting material" or to be "filed" with the Securities and Exchange Commission for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, or the Exchange Act, or otherwise be subject to the liabilities under that section, and shall not be deemed to be incorporated by reference into any filing of CarGurus, Inc. under the Exchange Act or the Securities Act of 1933, as amended.

The following graph shows a comparison from October 12, 2017 (the date our Class A common stock commenced trading on the Nasdaq Global Select Market) through December 31, 2020 of the cumulative total return for our Class A common stock, the Nasdaq Composite Index and the S&P 500 Index. All values assume a $100 initial cash investment and data for the Nasdaq Composite Index and the S&P 500 Index assume reinvestment of dividends, if any. Such returns are based on historical results and are not intended to suggest future performance.



	10/12/2017	12/31/2017	12/31/2018	12/31/2019	12/31/2020
CARG	100	109	122	128	115
S&P 500 Index	100	105	101	132	157
Nasdaq Computer Index	100	105	102	139	202

Recent Sales of Unregistered Securities

None.

Purchases of Equity Securities

None.

Item 6. Selected Consolidated Financial Data.

Not applicable.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.

You should read the following discussion and analysis of our financial condition and results of operations together with our consolidated financial statements and the related notes and other financial information included elsewhere in this report. Some of the information contained in this discussion and analysis or elsewhere in this report, including information with respect to our plans and strategy for our business and our performance and future success, includes forward-looking statements that involve risks and uncertainties. See "Special Note Regarding Forward-Looking Statements." You should review the "Risk Factors" section of this Annual Report on Form 10-K for a discussion of important factors that could cause actual results to differ materially from the results described in or implied by the forward-looking statements contained in the following discussion and analysis.

In this discussion, we use financial measures that are considered non-GAAP financial measures under Securities and Exchange Commission rules. These rules regarding non-GAAP financial measures require supplemental explanation and reconciliation, which are included elsewhere in this Annual Report on Form 10-K. Investors should not consider non-GAAP financial measures in isolation from or in substitution for, financial information presented in compliance with United States generally accepted accounting principles, or GAAP.

This section of this Annual Report on Form 10-K discusses 2020 and 2019 items and year-to-year comparisons between 2020 and 2019. Discussions of 2018 items and year-to-year comparisons between 2019 and 2018 can be found in "Management's Discussion and Analysis of Financial Condition and Results of Operations" in Part II, Item 7 of our Annual Report on Form 10-K for the fiscal year ended December 31, 2019.

Company Overview

CarGurus is a global, online automotive marketplace connecting buyers and sellers of new and used cars. Using proprietary technology, search algorithms, and innovative data analytics, we believe we are building the world's most trusted and transparent automotive marketplace and creating a differentiated automotive search experience for consumers. Our trusted marketplace empowers consumers with unbiased third-party validation on pricing and dealer reputation as well as other information that aids them in finding "Great Deals from Top-Rated Dealers."

We are headquartered in Cambridge, Massachusetts and were incorporated in the State of Delaware on June 26, 2015. We operate principally in the United States. In addition to the United States, we operate online marketplaces under the CarGurus brand in Canada and the United Kingdom. We also operated online marketplaces in Germany, Italy, and Spain until we ceased the operations of each of these marketplaces in the second quarter of 2020. In the United States and the United Kingdom, we also operate the Autolist and PistonHeads online marketplaces, respectively, as independent brands. We have subsidiaries in the United States, Canada, Ireland, and the United Kingdom. Additionally, we have two reportable segments, United States and International. See Note 14 of our consolidated financial statements included elsewhere in this Annual Report on Form 10-K for more information on our segment reporting and geographical information.

We generate marketplace subscription revenue from dealers primarily through Listings and Dealer Display subscriptions, and advertising and other revenue from automobile manufacturers and other auto-related brand advertisers as well as partnerships with financing services companies. We generated revenue of $551.5 million in 2020 and $588.9 million in 2019, representing a year-over-year decrease of 6%.

In 2020, we generated net income of $77.6 million and our Adjusted EBITDA was $160.8 million, compared to a net income of $42.1 million and Adjusted EBITDA of $77.0 million in 2019. See "Adjusted EBITDA" below for more information regarding our use of Adjusted EBITDA, a non-GAAP financial measure, and a reconciliation of Adjusted EBITDA to our net income.

COVID-19 Update

In December 2019, a novel strain of coronavirus, now referred to as COVID-19, surfaced and in 2020 was declared a pandemic by the World Health Organization after spreading globally. This pandemic has caused an international health crisis and resulted in significant disruptions to the global economy as well as businesses and capital markets around the world.

The COVID-19 pandemic and its adverse effects have become widespread in the locations where we, and our customers, suppliers and third-party business partners conduct business and as a result, we have experienced disruptions in our operations. For example, in March 2020, we closed all of our offices (including our corporate headquarters) and began requiring our employees to work remotely until further notice. In addition, in an effort to limit the spread of COVID-19, many countries, as well as states and localities in the United States, implemented or mandated and continue to implement or mandate significant restrictions on travel and commerce, shelter-in-place or stay-at-home orders, and business closures. Many of these orders resulted in restrictions on the ability of consumers to buy and sell automobiles by restricting operations at dealerships and/or by closing or reducing the services provided by certain service providers upon which dealerships rely. In addition, these restrictions and continued concern about the spread of the disease have impacted car shopping by consumers and disrupted the operations of car dealerships, which has adversely affected the market for automobile purchases. While consumer demand has improved since the initial impact of the COVID-19 pandemic, the automotive industry is experiencing, and may continue to experience, inventory supply problems, especially resulting from wholesale used-car auction closures and escalating auction prices, which have adversely affected the level of used-car inventory held by our paying dealers and displayed on our websites.

As a result of the travel and commerce restrictions and the impact on their businesses, for periods during the year ended December 31, 2020 a number of our dealer customers temporarily closed or operated on a reduced capacity, and many dealerships remain temporarily closed, continue to operate on a reduced capacity, and/or otherwise face significant financial challenges. Such closures and circumstances led some paying dealers to cancel their subscriptions and/or reduce their spending with us, which has had and may continue to have a material adverse effect on our revenues and our business. We also experienced an increase in account delinquencies from dealer customers challenged by the COVID-19 pandemic that failed to pay us on time or at all.

Further, because of the significant financial challenges that dealerships have faced and continue to face as a result of the COVID-19 pandemic, we took measures to help our paying dealers maintain their business health during the COVID-19 pandemic. We proactively reduced the subscription fees for paying dealers by at least 50% on all marketplace subscriptions for the April and May 2020 service periods, as well as provided a fee reduction on all June 2020 marketplace subscriptions of 20% for paying dealers in the United States and Canada and 50% for paying dealers in the United Kingdom. These fee reductions resulted in a modification to contracts with initial contractual periods greater than one month. For any contract modified, we calculated the remaining transaction price and allocated the consideration over the remaining performance obligations. These fee reductions materially and adversely impacted revenue for the year ended December 31, 2020, resulting in an approximately $50 million decrease in marketplace subscription revenue. During the December 2020 and February 2021 service periods, we also suspended charging subscription fees for subscribing dealers in the United Kingdom. These fee reductions did not materially impact revenue for the year ended December 31, 2020 and are not expected to materially impact revenue for the year ending December 31, 2021. We continue to monitor and assess the effects of the COVID-19 pandemic on our paying dealers and may in the future take additional measures to help our paying dealers maintain their business health during the COVID-19 pandemic.

These effects from the COVID-19 pandemic on our revenue caused us to implement certain cost-savings measures across our business. For example, during the second quarter of 2020, we initiated a cost-savings initiative that included a reduction in our workforce of approximately 13%, restricted future hiring, and limited discretionary spend across our business, including by eliminating, reducing or pausing certain vendor relationships and ceasing certain international operations and expansion efforts. In particular, we ceased marketplace operations in Germany, Italy, and Spain, and halted any new international expansion efforts, which we believe allows us to focus our financial and human capital resources on our more established international markets in Canada and the United Kingdom. We also reduced consumer marketing across both algorithmic traffic acquisition and brand spend during the year ended December 31, 2020 in comparison to the year ended December 31, 2019 in an effort to reduce expenses and as a result of suppressed dealer inventory and the resulting reduced demand for leads by dealers.

In May 2020, cancellations by paying dealers began to stabilize, which we believe resulted from the resumption of consumer activity as well as the fee reductions that we provided to our customers. In July 2020, we returned to normal contractual billings in all markets until subscription fees were reduced again for the December 2020 and February 2021 service periods for paying dealers in the United Kingdom. Additionally, we increased our consumer marketing expenses as consumer activity increased and governments began to implement phased re-opening policies.

We continue to monitor and assess the effects of the COVID-19 pandemic on our commercial operations, including the future impact on our revenue. However, we cannot at this time accurately predict what effects these conditions will ultimately have on our future revenue and operations. See the "Risk Factors" section of this Annual Report on Form 10-K for further discussion of the impacts of the COVID-19 pandemic on our business.

Key Business Metrics

We regularly review a number of metrics, including the key metrics listed below, to evaluate our business, measure our performance, identify trends affecting our business, formulate financial projections, and make operating and strategic decisions. We believe it is important to evaluate these metrics for the United States and International segments. The

International segment derives revenues from marketplace subscriptions, advertising services, and other revenues from customers outside of the United States. International markets perform differently from the United States market due to a variety of factors, including our operating history in each market, our rate of investment, market size, market maturity, competition and other dynamics unique to each country.

Monthly Unique Users

For each of our websites, we define a monthly unique user as an individual who has visited any such website within a calendar month, based on data as measured by Google Analytics. We calculate average monthly unique users as the sum of the monthly unique users of each of our websites in a given period, divided by the number of months in that period. We count a unique user the first time a computer or mobile device with a unique device identifier accesses any of our websites during a calendar month. If an individual accesses a website using a different device within a given month, the first access by each such device is counted as a separate unique user. If an individual uses multiple browsers on a single device and/or clears their cookies and returns to our site within a calendar month, multiple users would be recorded. We view our average monthly unique users as a key indicator of the quality of our user experience, the effectiveness of our advertising and traffic acquisition, and the strength of our brand awareness. Measuring unique users is important to us and we believe it provides useful information to our investors because our marketplace subscription revenue depends, in part, on our ability to provide dealers with connections to our users and exposure to our marketplace audience. We define connections as interactions between consumers and dealers on our marketplace through phone calls, email, managed text and chat, and clicks to access the dealer's website or map directions to the dealership.

Average Monthly Unique Users	Year Ended December 31, 2020	2019
	(in thousands)	
United States	36,228 (1)	36,804
International	8,335	10,353
Total	44,563	47,157

(1) Includes users from the Autolist website.

Monthly Sessions

We define monthly sessions as the number of distinct visits to our websites that take place each month within a given time frame, as measured and defined by Google Analytics. We calculate average monthly sessions as the sum of the monthly sessions in a given period, divided by the number of months in that period. A session is defined as beginning with the first page view from a computer or mobile device and ending at the earliest of when a user closes their browser window, after 30 minutes of inactivity, or each night at midnight (i) Eastern Time for our United States and Canada websites, other than the Autolist website, (ii) Pacific Time for the Autolist website, (iii) Greenwich Mean Time for our U.K. websites, and (iv) Central European Time (or Central European Summer Time when daylight savings is observed) for our Germany, Italy, and Spain websites, which ceased operations in the second quarter of 2020. A session can be made up of multiple page views and visitor actions, such as performing a search, visiting vehicle detail pages, and connecting with a dealer. We believe that measuring the volume of sessions in a time period, when considered in conjunction with the number of unique users in that time period, is an important indicator to us of consumer satisfaction and engagement with our marketplace, and we believe it provides useful information to our investors because the more satisfied and engaged consumers we have, the more valuable our service is to dealers.

Average Monthly Sessions	Year Ended December 31, 2020	2019
	(in thousands)	
United States	90,909 (1)	99,412
International	19,326	24,955
Total	110,235	124,367

(1) Includes sessions from the Autolist website.

Number of Paying Dealers

We define a paying dealer as a dealer account with an active, paid marketplace subscription at the end of a defined period. The number of paying dealers we have is important to us and we believe it provides valuable information to investors because it is indicative of the value proposition of our marketplace products, as well as our sales and marketing success and opportunity, including our ability to retain paying dealers and develop new dealer relationships.

	As of December 31,	
Number of Paying Dealers	**2020**	**2019 (2)**
United States	23,934 (1)	26,289
International	6,697	7,329
Total	30,631	33,618

(1) Includes paying dealers from the Autolist website.

(2) In our Quarterly Report on Form 10-Q for the quarter ended June 30, 2020, filed with the SEC on August 6, 2020, we announced that we had modified our method for calculating paying dealers to align our data with an enterprise system upgrade, or the Internal System Upgrade, and had replaced our Average Annual Revenue per Subscribing Dealer key metric with Quarterly Average Revenue per Subscribing Dealer, or QARSD. As a result of the Internal System Upgrade, and to provide consistency in our year-to-year comparisons, we have recast our paying dealer calculation as of December 31, 2019 to reflect the updated calculation methodology.

Quarterly Average Revenue per Subscribing Dealer (QARSD)

We define QARSD, which is measured at the end of a fiscal quarter, as the marketplace subscription revenue during that trailing quarter divided by the average number of paying dealers in that marketplace during the quarter. We calculate the average number of paying dealers for a period by adding the number of paying dealers at the end of such period and the end of the prior period and dividing by two. This information is important to us, and we believe it provides useful information to investors, because we believe that our ability to grow QARSD is an indicator of the value proposition of our products and the return on investment, or ROI, that our paying dealers realize from our products. In addition, increases in QARSD, which we believe reflect the value of exposure to our engaged audience in relation to subscription cost, are driven in part by our ability to grow the volume of connections to our users and the quality of those connections, which result in increased opportunity to upsell package levels and cross-sell additional products to our paying dealers.

	At December 31,	
Quarterly Average Revenue per Subscribing Dealer (QARSD)	**2020**	**2019**
United States	$ 5,304	$ 5,016
International	$ 1,060	$ 1,265
Consolidated	$ 4,382	$ 4,215

Adjusted EBITDA

To provide investors with additional information regarding our financial results, we monitor and have presented within this Annual Report on Form 10-K Adjusted EBITDA, which is a non-GAAP financial measure. This non-GAAP financial measure is not based on any standardized methodology prescribed by United States generally accepted accounting principles, or GAAP, and is not necessarily comparable to similarly titled measures presented by other companies.

We define Adjusted EBITDA as net income, adjusted to exclude: depreciation and amortization, stock-based compensation expense, acquisition-related expenses, restructuring expenses, other income, net, and the provision for (benefit from) income taxes. We have presented Adjusted EBITDA within this Annual Report on Form 10-K because it is a key measure used by our management and board of directors to understand and evaluate our operating performance, generate future operating plans, and make strategic decisions regarding the allocation of capital. In particular, we believe that the exclusion of certain items in calculating Adjusted EBITDA can produce a useful measure for period-to-period comparisons of our business.

We use Adjusted EBITDA to evaluate our operating performance and trends and make planning decisions. We believe Adjusted EBITDA helps identify underlying trends in our business that could otherwise be masked by the effect of the expenses that we exclude. Accordingly, we believe that Adjusted EBITDA provides useful information to investors and others in understanding and evaluating our operating results, enhancing the overall understanding of our past performance and future prospects, and allowing for greater transparency with respect to key financial metrics used by our management in its financial and operational decision-making. In addition, we evaluate our Adjusted EBITDA in relation to our revenue. We refer to this as Adjusted EBITDA margin and define it as Adjusted EBITDA divided by total revenue.

Our Adjusted EBITDA is not prepared in accordance with GAAP, and should not be considered in isolation of, or as an alternative to, measures prepared in accordance with GAAP. There are a number of limitations related to the use of Adjusted EBITDA rather than net income, which is the most directly comparable GAAP equivalent. Some of these limitations are:

- Adjusted EBITDA excludes depreciation and amortization expense and, although these are non-cash expenses, the assets being depreciated may have to be replaced in the future;
- Adjusted EBITDA excludes stock-based compensation expense, which will be, for the foreseeable future, a significant recurring expense for our business and an important part of our compensation strategy;
- Adjusted EBITDA excludes transactions and one-time acquisition-related expenses incurred by us during a reporting period, which may not be reflective of our operational performance during such period, for acquisitions that have been completed as of the filing date of our annual or quarterly report (as applicable) relating to such period;
- Adjusted EBITDA excludes restructuring expenses incurred by us during a reporting period, which may not be reflective of our operational performance during such period;
- Adjusted EBITDA excludes other income, net which primarily includes interest income earned on our cash, cash equivalents, and investments, sublease income and net foreign exchange gains and losses;
- Adjusted EBITDA excludes the provision for (benefit from) income taxes; and
- other companies, including companies in our industry, may calculate Adjusted EBITDA differently, which reduces its usefulness as a comparative measure.

Because of these limitations, we consider, and you should consider, Adjusted EBITDA together with other operating and financial performance measures presented in accordance with GAAP.

The following table presents a reconciliation of Adjusted EBITDA to net income, the most directly comparable measure calculated in accordance with GAAP, for each of the periods presented.

	Year Ended December 31,	
	2020	2019
	(in thousands)	
Reconciliation of Adjusted EBITDA:		
Net income	$ 77,553	$ 42,146
Depreciation and amortization	11,342	7,817
Stock-based compensation expense	45,321	34,301
Acquisition-related expenses	2,906	549
Restructuring expenses (1)	3,514	—
Other income, net	(1,354)	(4,383)
Provision for (benefit from) income taxes	21,557	(3,441)
Adjusted EBITDA	$ 160,839	$ 76,989

(1) Excludes stock-based compensation expense of $753 for the year ended December 31, 2020 related to the expense reduction plan approved by our Board of Directors on April 13, 2020 to address the impact of the COVID-19 pandemic on our business, or the Expense Reduction Plan, as the amount is already included within the stock-based compensation line item in the Reconciliation of Adjusted EBITDA.

Components of Consolidated Income Statements

Revenue

We derive revenue from two sources: (1) marketplace subscription revenue, which consists primarily of Listings and Dealer Display subscriptions, and (2) advertising and other revenue, which consists primarily of display advertising revenue from auto manufacturers and other auto-related brand advertisers as well as partnerships with financing services companies.

Marketplace Subscription Revenue

We offer multiple types of marketplace Listings packages to our dealers through our CarGurus U.S. platform (availability varies on our other marketplaces): Restricted Listings (formerly referred to as Basic Listings), which is free; and various levels of Listings packages, which each require a paid subscription under a monthly, quarterly, semiannual, or annual subscription basis.

Our subscriptions for customers generally auto-renew on a monthly basis and are cancellable by dealers with 30 days' advance notice at the end of the committed term, although during the second quarter of 2020 we did not require 30 days' advance notice of termination from dealers who cancelled as a result of the COVID-19 pandemic. Subscription pricing is determined based on a dealer's inventory size, region, and our assessment of the connections and ROI the platform will provide them and is subject to discounts and/or fee reductions that we may offer from time to time. We also offer all dealers on our platform access to our Dealer Dashboard, which includes a performance summary, Dealer Insights tool, and user review management platform. Only dealers subscribing to a paid Listings package also have access to the Pricing Tool, Market Analysis tool and our IMV Scan tool.

In addition to displaying inventory in our marketplace and providing access to the Dealer Dashboard, we offer dealers subscribing to certain of our Listings packages other subscription advertising and customer acquisition products and enhancements, including Dealer Display, which is marketed under our Real-time Performance Marketing suite. With Dealer Display, dealers can buy display advertising that appears in our marketplace, on other sites on the internet and/or on Facebook, a highly converting social platform. Such advertisements can be targeted by the user's geography, search history, CarGurus website activity (including showing a consumer relevant vehicles from a dealer's inventory that the consumer has not yet discovered on our marketplace), and a number of other targeting factors, allowing dealers to increase their visibility with in-market consumers and drive qualified traffic for dealers.

We also offer paid Listings packages for the Autolist website and paid Listings and display products for the PistonHeads website.

As a result of the COVID-19 pandemic, we experienced a material adverse impact on our marketplace revenue as paying dealers cancelled their subscriptions with us (including, in some cases, with our permission prior to the end of the applicable contract term and notice period) and due to the fee reductions that we provided to customers for the April, May and June service periods in response to the COVID-19 pandemic, which resulted in reductions in the overall transaction price. In May 2020, cancellations by paying dealers began to stabilize, which we believe resulted from the resumption of consumer activity as well as the fee reductions that we provided to our customers. In July 2020, we returned to normal contractual billings in all markets until subscription fees were reduced again for the December 2020 and February 2021 service periods for paying dealers in the United Kingdom.

Advertising and Other Revenue

Advertising and other revenue consists primarily of non-dealer display advertising revenue from auto manufacturers and other auto-related brand advertisers sold on a cost per thousand impressions, or CPM, basis. An impression is an advertisement loaded on a web page. In addition to advertising sold on a CPM basis, we also have advertising sold on a cost per click basis. Auto manufacturers and other brand advertisers can execute advertising campaigns that are targeted across a wide variety of parameters, including demographic groups, behavioral characteristics, specific auto brands, categories such as Certified Pre-Owned, and segments such as hybrid vehicles.

Advertising and other revenue also includes revenue from partnerships with certain financing services companies pursuant to which we enable eligible consumers on our CarGurus U.S. website to pre-qualify for financing on cars from dealerships that offer financing through such companies. We primarily generate revenue from these partnerships based on the number of funded loans from consumers who pre-qualify with our lending partners through our site.

We also offer non-dealer display products for the Autolist and PistonHeads websites.

As a result of the COVID-19 pandemic, we experienced a material adverse impact on our advertising revenue as some advertisers cancelled or reduced their advertising with us (including, in certain cases, with our permission prior to the end of the applicable contract term). In May 2020, cancellations by advertising customers began to stabilize, which we believe resulted from the resumption of consumer activity.

In addition, a reduction in consumer visits to our sites during the COVID-19 pandemic resulted in the delivery of fewer impressions for our advertising customers than anticipated, which caused an adverse impact on our advertising revenue. This impact was partially offset by the increase in consumer visits over the remainder of the year to our sites as we increased our consumer marketing expenses in response to the recovery in consumer car shopping activity.

Revenue from partnerships with financing services companies was not adversely impacted by the COVID-19 pandemic.

For a description of our revenue accounting policies, see "— Critical Accounting Policies and Significant Estimates."

Cost of Revenue

Cost of revenue primarily consists of costs related to supporting and hosting our product offerings. These costs include salaries, benefits, incentive compensation, and stock-based compensation for our customer support team and third-party service provider costs such as data center and networking expenses, allocated overhead costs, depreciation expense associated with our property and equipment, and amortization of capitalized website development costs. We allocate overhead costs, such as rent and facility costs, information technology costs, and employee benefit costs, to all departments based on headcount. As such, general overhead expenses are reflected in cost of revenue and each operating expense category. Despite our implementation of the Expense Reduction Plan, we expect these expenses to increase as we continue to scale our business and introduce new products.

Operating Expenses

Sales and Marketing

Sales and marketing expenses consist primarily of personnel and related expenses for our sales and marketing team, including salaries, benefits, incentive compensation, commissions, stock-based compensation, and travel costs; costs associated with consumer marketing, such as traffic acquisition, brand building, and public relations activities; costs associated with dealer marketing, such as content marketing, customer and promotional events, and industry events; amortization of internal-use software; and allocated overhead costs. A portion of our commissions that are related to obtaining a new contract is capitalized and amortized over the estimated benefit period of customer relationships. All other sales and marketing costs are expensed as incurred. We expect sales and marketing expenses to fluctuate from quarter to quarter as we respond to the COVID-19 pandemic and changes in the competitive landscape affecting our consumer audience and brand awareness, which will impact our quarterly results of operations.

Product, Technology, and Development

Product, technology, and development expenses, which include research and development costs, consist primarily of personnel and related expenses for our development team, including salaries, benefits, incentive compensation, stock-based compensation and allocated overhead costs. Other than website development and internal-use software costs as well as other costs that qualify for capitalization, research and development costs are expensed as incurred. Despite our implementation of the Expense Reduction Plan, we expect product, technology, and development expenses to increase as we invest in additional engineering resourcing to develop new solutions and make improvements to our existing platform.

General and Administrative

General and administrative expenses consist primarily of personnel and related expenses for our executive, finance, legal, people & talent, and administrative teams, including salaries, benefits, incentive compensation, and stock-based compensation, in addition to the costs associated with professional fees for external legal, accounting and other consulting services, insurance premiums, payment processing and billing costs, and allocated overhead costs. General and administrative costs are expensed as the products and services are provided. Despite our implementation of the Expense Reduction Plan, we expect general and administrative expenses to increase as we continue to scale our business.

Depreciation and Amortization

Depreciation and amortization expenses consist of depreciation on property and equipment and amortization of intangible assets.

Other Income, Net

Other income, net consists primarily of interest income earned on our cash, cash equivalents, and investments, sublease income and net foreign exchange gains and losses.

Provision for (Benefit from) Income Taxes

We are subject to federal and state income taxes in the United States and taxes in foreign jurisdictions in which we operate. We have recorded a provision for income taxes for the year ended December 31, 2020 as a result of our consolidated taxable income position and recognized a benefit from income taxes for the year ended December 31, 2019 as a result of stock-based compensation benefits recorded. We recognize deferred tax assets and liabilities based on temporary differences between the financial reporting and income tax bases of assets and liabilities using statutory rates. We regularly assess the need to record a valuation allowance against net deferred tax assets if, based upon the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized. Our valuation allowances against our net deferred tax assets as of December 31, 2020 and 2019 were both immaterial.

Results of Operations

The following table sets forth our selected consolidated income statements data for each of the periods indicated. The period-to-period comparison of financial results is not necessarily indicative of future results.

	Year Ended December 31,	
	2020	2019
	(dollars in thousands)	
Revenue:		
Marketplace subscription	$ 484,978	$ 526,043
Advertising and other	66,473	62,873
Total revenue	551,451	588,916
Cost of revenue	42,706	36,300
Gross profit	508,745	552,616
Operating expenses:		
Sales and marketing	256,979	393,844
Product, technology, and development	85,726	69,462
General and administrative	62,166	50,434
Depreciation and amortization	6,118	4,554
Total operating expenses	410,989	518,294
Income from operations	97,756	34,322
Other income, net:		
Interest income	1,075	2,984
Other income, net	279	1,399
Total other income, net	1,354	4,383
Income before income taxes	99,110	38,705
Provision for (benefit from) income taxes	21,557	(3,441)
Net income	$ 77,553	$ 42,146

	Year Ended December 31,	
	2020	2019
	(dollars in thousands)	
Additional Financial Data		
Revenue		
United States	$ 519,835	$ 555,007
International	31,616	33,909
Total	$ 551,451	$ 588,916
Income (Loss) from Operations		
United States	$ 120,836	$ 73,872
International	(23,080)	(39,550)
Total	$ 97,756	$ 34,322

The following table sets forth our selected consolidated income statements data as a percentage of revenue for each of the periods indicated.

	Year Ended December 31,	
	2020	2019
Revenue:		
Marketplace subscription	88%	89%
Advertising and other	12	11
Total revenue	100%	100%
Cost of revenue	8	6
Gross profit	92	94
Operating expenses:		
Sales and marketing	47	67
Product, technology, and development	16	12
General and administrative	11	9
Depreciation and amortization	1	1
Total operating expenses	75	88
Income from operations	18	6
Other income, net:		
Interest income	0	1
Other income, net	0	0
Total other income, net	0	1
Income before income taxes	18	7
Provision for (benefit from) income taxes	4	(1)
Net income	14%	7%

	Year Ended December 31,	
	2020	2019
Additional Financial Data		
Revenue		
United States	94%	94%
International	6	6
Total	100%	100%
Income (Loss) from Operations		
United States	22%	13%
International	(4)	(7)
Total	18%	6%

Note amounts in tables above may not sum due to rounding.

Year Ended December 31, 2020 Compared to Year Ended December 31, 2019

Revenue

Revenue by Source

	Year Ended December 31,		Change	
	2020	2019	Amount	%
	(dollars in thousands)			
Revenue				
Marketplace subscription	$ 484,978	$ 526,043	$ (41,065)	(8)%
Advertising and other	66,473	62,873	3,600	6
Total	$ 551,451	$ 588,916	$ (37,465)	(6)%
Percentage of total revenue:				
Marketplace subscription	88%	89%		
Advertising and other	12	11		
Total	100%	100%		

Overall revenue decreased $37.5 million, or 6%, in the year ended December 31, 2020 compared to the year ended December 31, 2019. Marketplace subscription revenue decreased by 8% and advertising and other revenue increased by 6%.

Marketplace subscription revenue decreased $41.1 million in the year ended December 31, 2020 compared to the year ended December 31, 2019 and represented 88% of total revenue for the year ended December 31, 2020 and 89% of total revenue for the year ended December 31, 2019. This decrease in marketplace subscription revenue was attributable primarily to the approximately $50 million impact of fee reductions that we provided to our paying dealers during the second quarter of 2020 in response to the COVID-19 pandemic. Of the approximately $50 million in billing concessions, approximately $47 million resulted in revenue reductions during the second quarter of 2020, with the remaining impact spread over the life of the contract term. We also provided fee reductions to paying dealers for the December 2020 and February 2021 service periods. These fee reductions resulted in reductions in the overall transaction price. The decrease in marketplace subscription revenue was also attributable to a 9% decrease in the number of United States and International paying dealers, to 30,631 as of December 31, 2020 from 33,618 as of December 31, 2019 as paying dealers cancelled their subscriptions with us (including, in some cases, with our permission prior to the end of the applicable contract term and notice period) primarily as a result of the impact of the COVID-19 pandemic.

Advertising and other revenue increased $3.6 million in the year ended December 31, 2020 compared to the year ended December 31, 2019 and represented 12% of total revenue for the year ended December 31, 2020 and 11% of total revenue for the year ended December 31, 2019. The increase was due primarily to a $7.4 million increase in other revenue primarily due to revenue from partnerships with financing services companies. The increase in advertising and other revenue was offset by a $3.8 million decrease in advertising revenue as some advertisers cancelled or reduced their advertising with us (including, in some cases, with our permission prior to the end of the applicable contract term) primarily as a result of the impact of the COVID-19 pandemic.

Revenue by Segment

	Year Ended December 31,		Change	
	2020	2019	Amount	%
	(dollars in thousands)			
Revenue				
United States	$ 519,835	$ 555,007	$ (35,172)	(6)%
International	31,616	33,909	(2,293)	(7)
Total	$ 551,451	$ 588,916	$ (37,465)	(6)%
Percentage of total revenue:				
United States	94%	94%		
International	6	6		
Total	100%	100%		

United States revenue decreased $35.2 million, or 6%, in the year ended December 31, 2020 compared to the year ended December 31, 2019. This decrease in United States revenue was attributable primarily to the approximately $47 million impact of fee reductions that we provided to our paying dealers during the second quarter of 2020 in response to the COVID-19 pandemic. These fee reductions resulted in reductions in the overall transaction price. The decrease in United States revenue was also attributable to a 9% decrease in United States paying dealers as paying dealers cancelled their subscriptions with us (including, in certain cases, with our permission prior to the end of the applicable contract term and notice period) primarily as a result of the impact of the COVID-19 pandemic. This decrease was offset in part by the increase in United States revenue from partnerships with financing services companies of $7.7 million.

International revenue decreased $2.3 million, or 7%, in the year ended December 31, 2020 compared to the year ended December 31, 2019. This decrease in international revenue was attributable primarily to the approximately $3 million impact of fee reductions that we provided to our paying dealers during the second quarter of 2020 in response to the COVID-19 pandemic. We also provided fee reductions to paying dealers for the December 2020 and February 2021 service periods. These fee reductions resulted in reductions in the overall transaction price. The decrease in international revenue was also attributable to a 9% decrease in the number of International paying dealers as paying dealers cancelled their subscriptions with us (including, in certain cases, with our permission prior to the end of the applicable contract term and notice period) primarily as a result of the impact of the COVID-19 pandemic.

Cost of Revenue

	Year Ended December 31,		Change	
	2020	2019	Amount	%
	(dollars in thousands)			
Cost of revenue	$ 42,706	$ 36,300	$ 6,406	18%
Percentage of total revenue	8%	6%		

Cost of revenue increased $6.4 million, or 18%, in the year ended December 31, 2020 compared to the year ended December 31, 2019. The increase was due primarily to a $3.1 million increase in fees related to provisioning advertising campaigns on our websites, a $2.0 million increase in data center and hosting costs, a $1.7 million increase in amortization due to the write-off of international websites in connection with the Expense Reduction Plan and amortization of website development costs, and a $1.6 million increase primarily related to a reduction of vendor rebates. These increases were offset in part by a $1.8 million decrease in salaries and employee-related costs due to a 31% decrease in average headcount primarily in connection with the Expense Reduction Plan. The increase for the year ended December 31, 2020 is inclusive of cost of revenue associated with Autolist of $0.9 million.

Operating Expenses

Sales and Marketing Expenses

	Year Ended December 31,		Change	
	2020	2019	Amount	%
	(dollars in thousands)			
Sales and marketing	$ 256,979	$ 393,844	$ (136,865)	(35)%
Percentage of total revenue	47%	67%		

Sales and marketing expenses decreased $136.9 million, or 35%, in the year ended December 31, 2020 compared to the year ended December 31, 2019. The decrease was due primarily to a $131.6 million decrease in advertising costs, a $2.3 million decrease in travel related expenses, a $2.2 million decrease in consulting and recruiting expenses, a $2.0 million decrease in employee expenses due to employees working remotely, and a $1.5 million decrease in marketing costs related to events and vendor expenses. These decreases were offset in part by a $1.5 million increase in employee severance and related benefits expense due to the Expense Reduction Plan and a $1.0 million increase in rent costs due to additional office space at 55 Cambridge Parkway, in Cambridge, Massachusetts.

Product, Technology, and Development Expenses

	Year Ended December 31,		Change	
	2020	2019	Amount	%
	(dollars in thousands)			
Product, technology, and development	$ 85,726	$ 69,462	$ 16,264	23%
Percentage of total revenue	16%	12%		

Product, technology, and development expenses increased $16.3 million, or 23%, in the year ended December 31, 2020 compared to the year ended December 31, 2019. The increase was due primarily to a $11.1 million increase in salaries and employee-related costs, exclusive of stock-based compensation expense, which increased $5.6 million. The increase in salaries and employee-related costs and stock-based compensation expense was due primarily to a 19% increase in average headcount to support our growth plans and product innovations. The increase in product, technology, and development expenses for the year ended December 31, 2020 was also due in part to a $2.1 million increase in rent costs due to additional office space at 55 Cambridge Parkway, in Cambridge, Massachusetts. These increases were offset in part by a, $1.1 million decrease in employee expenses due to employees working remotely, $0.5 million decrease in consulting and recruiting expenses, a decrease of $0.4 million in travel expenses, and a decrease in other product, technology, and development expenses as a result of the Expense Reduction Plan. The increase for the year ended December 31, 2020 is inclusive of product, technology, and development expenses associated with the integration and development of Autolist technology of $5.3 million.

General and Administrative Expenses

	Year Ended December 31,		Change	
	2020	2019	Amount	%
	(dollars in thousands)			
General and administrative	$ 62,166	$ 50,434	$ 11,732	23%
Percentage of total revenue	11%	9%		

General and administrative expenses increased $11.7 million, or 23%, in the year ended December 31, 2020 compared to the year ended December 31, 2019. The increase was due primarily to a $2.6 million increase in salaries and employee-related costs, exclusive of stock-based compensation expense, which increased $4.9 million. The increase in salaries and employee-related costs and stock-based compensation expense was due primarily to a 5% increase in average headcount to support our expanded operations as we continue to grow our business. The increase in general and administrative expenses was also due in part to a $2.4 million increase in tax payments, a $1.1 million increase in legal expenses primarily due to acquisition-related expenses and a $1.0 million increase in insurance expenses. The increase for the year ended December 31, 2020 was offset in part by a decrease in various general and administrative expenses as a result of cost-savings efforts we implemented in response to the COVID-19 pandemic. The increase for the year ended December 31, 2020 is inclusive of general and administrative expenses associated with Autolist of $2.1 million.

Depreciation and Amortization Expenses

	Year Ended December 31,		Change	
	2020	2019	Amount	%
	(dollars in thousands)			
Depreciation and amortization	$ 6,118	$ 4,554	$ 1,564	34%
Percentage of total revenue	1%	1%		

Depreciation and amortization expenses increased $1.6 million, or 34%, in the year ended December 31, 2020 compared to the year ended December 31, 2019, due primarily to an increase in amortization of intangible assets related to the acquired intangible assets from Autolist and an increase in depreciation related to the leasehold improvements associated with additional office space leased at 55 Cambridge Parkway in Cambridge, Massachusetts.

Other Income, net

	Year Ended December 31,		Change	
	2020	2019	Amount	%
	(dollars in thousands)			
Other income, net				
Interest income	$ 1,075	$ 2,984	$ (1,909)	(64)%
Other income	279	1,399	(1,120)	(80)
Total other income, net	$ 1,354	$ 4,383	$ (3,029)	(69)%
Percentage of total revenue:				
Interest income	0%	1%		
Other income	0	0		
Total other income, net	0%	1%		

Other income, net decreased $3.0 million, or 69%, in the year ended December 31, 2020 compared to the year ended December 31, 2019. The $1.9 million decrease in interest income was due primarily to lower investments in and return on certificates of deposit during the year ended December 31, 2020. The $1.1 million decrease in other income, net was primarily due to a $0.9 million decrease in a foreign currency gain. In the year ended December 31, 2019, we had a foreign currency gain associated with an intercompany receivable related to the acquisition of PistonHeads.

Provision for (Benefit From) Income Taxes

	Year Ended December 31,		Change	
	2020	2019	Amount	%
	(dollars in thousands)			
Provision for (benefit from) income taxes	$ 21,557	$ (3,441)	$ (24,998)	NM
Percentage of total revenue	4%	(1)%		

The difference in provision for (benefit from) income taxes recorded during the years ended December 31, 2020 and 2019, was principally due to lower income before income taxes for the year ended December 31, 2019 and $10.9 million excess stock-based compensation benefits recorded during the year ended December 31, 2019, as compared to the higher income before income taxes for the year ended December 31, 2020, offset by benefits generated under the Coronavirus Aid, Relief, and Economic Security Act.

Income (Loss) from Operations by Segment

	Year Ended December 31,		Change	
	2020	2019	Amount	%
	(dollars in thousands)			
United States	$ 120,836	$ 73,872	$ 46,964	64%
International	(23,080)	(39,550)	16,470	42
Total	$ 97,756	$ 34,322	$ 63,434	185%
Percentage of segment revenue:				
United States	23%	13%		
International	(73)%	(117)%		

United States income from operations increased $47.0 million, or 64%, in the year ended December 31, 2020 compared to the year ended December 31, 2019. This increase was due to decreases in operating expenses of $88.4 million related to cost savings efforts in connection with the COVID-19 pandemic, offset by decreases in revenue of $35.2 million and increases cost of revenue of $6.2 million.

International loss from operations decreased $16.5 million, or 42% in the year ended December 31, 2020 compared to the year ended December 31, 2019. The decrease was due to decreases in operating expenses of $18.9 million due to ceasing of operations in certain markets and cost savings related to the Expense Reduction Plan, offset by decreases in revenue of $2.3 million and increases in cost of revenue of $0.1 million.

Liquidity and Capital Resources

Cash, Cash Equivalents and Investments

At December 31, 2020 and 2019, our principal sources of liquidity were cash and cash equivalents of $190.3 million and $59.9 million, respectively, and investments in certificates of deposit with terms of greater than 90 days but less than one year of $100.0 million and $111.7 million, respectively.

Sources and Uses of Cash

Our cash flows from operating, investing, and financing activities, as reflected in the consolidated statements of cash flows, are summarized in the following table:

	Year Ended December 31,	
	2020	2019
	(in thousands)	
Net cash provided by operating activities	$ 156,743	$ 70,116
Net cash used in investing activities	(16,895)	(22,257)
Net cash used in financing activities	(10,085)	(14,693)
Impact of foreign currency on cash	440	(1)
Net increase in cash, cash equivalents, and restricted cash	$ 130,203	$ 33,165

Our operations have been financed primarily from operating activities. We generated cash from operating activities of $156.7 million during 2020 and $70.1 million during 2019.

We believe that our existing sources of liquidity will be sufficient to fund our operations for at least the next 12 months from the date of the filing of this Annual Report on Form 10-K. During the second quarter of 2020 in connection with the COVID-19 pandemic, we implemented the Expense Reduction Plan, pursuant to which we reduced our workforce, ceased operation of certain international marketplaces, halted expansion efforts in any new international markets, and implemented targeted reductions in sales and marketing expenses, including across both algorithmic traffic acquisition and brand spend, and discretionary operating expenses. Our future capital requirements will depend on many factors, including the further impact of the COVID-19 pandemic, our revenue, costs associated with our sales and marketing activities and the support of our product, technology, and development efforts, our investments in international markets, and the timing and extent of our cost savings related to the Expense Reduction Plan. Cash from operations could also be affected by various risks and uncertainties, including, but not limited to, the effects of the COVID-19 pandemic and other risks detailed in the "Risk Factors" section of this Annual Report on Form 10-K.

To the extent that existing cash, cash equivalents, and investments and cash from operations are insufficient to fund our future activities, we may need to raise additional funds through a public or private equity or debt financing. Additional funds may not be available on terms favorable to us, or at all, including due to increased volatility in the capital markets attributable to the COVID-19 pandemic.

Operating Activities

Cash provided by operating activities of $156.7 million during 2020 was due primarily to net income of $77.6 million, adjusted for $45.1 million of stock-based compensation expense, $22.2 million of deferred taxes, $11.6 million of amortization of deferred contract costs, $11.3 million of depreciation and amortization and $1.9 million of provision for doubtful accounts. Cash provided by operating activities was also attributable to a $7.5 million increase in accrued expenses, accrued income taxes, and other liabilities, a $3.9 million decrease in accounts receivable, and a $3.5 million decrease in prepaid expenses, prepaid income taxes, and other assets. The increases in cash flow from operations were partially offset by a $15.1 million decrease in accounts payable, and a $11.4 million increase in deferred contract costs.

Cash provided by operating activities of $70.1 million during 2019 was due primarily to net income of $42.1 million, adjusted for $34.3 million of stock-based compensation expense, $8.4 million of amortization of deferred contract costs and $7.8 million of depreciation and amortization, partially offset by $3.7 million of deferred taxes. Cash provided by operating activities was also attributable to a $4.3 million increase in accounts payable, a $2.8 million increase in accrued expenses, accrued income taxes, and other liabilities and a $1.2 million increase in deferred revenue, partially offset by a $16.0 million increase in deferred contract costs, a $9.6 million increase in accounts receivable, and a $1.5 million decrease in lease obligations.

Investing Activities

Cash used in investing activities of $16.9 million during 2020 was due to $21.1 million of acquisition cash payments, net of cash acquired, $4.6 million related to the capitalization of website development costs, and $3.0 million of purchases of property and equipment, offset in part by $111.7 million of maturities in certificates of deposit, net of investments in certificates of deposit of $100.0 million.

Cash used in investing activities of $22.3 million during 2019 was due to $19.1 million of acquisition cash payments, $11.2 million of purchases of property and equipment and $3.0 million related to the capitalization of website development costs. This was offset by $188.9 million of maturities of certificates of deposit, net of investments in certificates of deposit of $177.8 million.

Financing Activities

Cash used in financing activities of $10.1 million during 2020 was due primarily to the payment of withholding taxes on net share settlements of restricted stock units of $11.2 million, partially offset by $1.1 million related to the proceeds from the issuance of common stock related to the exercise of vested stock options.

Cash used in financing activities of $14.7 million during 2019 was due primarily to the payment of withholding taxes and option costs on net share settlements of restricted stock units and stock options of $16.5 million, partially offset by $1.8 million related to the proceeds from the exercise of stock options.

Contractual Obligations and Known Future Cash Requirements

Contractual Obligations and Commitments

We do not have any debt or material finance obligations as of December 31, 2020. All of our property, equipment, and internal-use software have been purchased with cash, with the exception of amounts related to unpaid property and equipment and internal-use software as disclosed in the consolidated statements of cash flows and immaterial amounts related to obligations under one finance lease as of December 31, 2020. We have no material long-term purchase obligations outstanding with any vendors or third parties.

Leases

Our primary operating lease obligations consist of various leases for office space in: Boston, Massachusetts; Cambridge, Massachusetts; San Francisco, California; and Dublin, Ireland. We also have an operating lease obligation for data center space in Needham, Massachusetts.

Our leases have various lease terms expected to continue through 2038. The terms of our Massachusetts and San Francisco lease agreements provide for rental payments that increase on an annual basis. The leases in Boston, Massachusetts and Cambridge, Massachusetts have associated letters of credit, which are recorded as restricted cash within the consolidated balance sheet. At December 31, 2020 and 2019, restricted cash was $10,627 and $10,803, respectively, and primarily related to cash held at a financial institution in an interest-bearing cash account as collateral for the letters of credit related to the contractual provisions for the Company's building leases. At December 31, 2020 and 2019, portions of restricted cash were classified as short-term assets and long-term assets.

On January 25, 2021, the Company entered into a lease for approximately 61,826 square feet of office space in Addison, Texas. Details of this acquisition are more fully described in Note 16 of our consolidated financial statements included in Item 8 of this Annual Report on Form 10-K.

Set forth below is information concerning our known contractual obligations at December 31, 2020 that are fixed and determinable.

	Total	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years
			(in thousands)		
Operating lease obligations	$ 342,559	$ 14,424	$ 28,892	$ 45,118	$ 254,125
Total contractual obligations	$ 342,559	$ 14,424	$ 28,892	$ 45,118	$ 254,125

The table above includes leases signed but not yet commenced as of December 31, 2020 and is based on expected commencement dates.

Acquisitions

On January 14, 2021 we completed the acquisition of a 51% interest in CarOffer, LLC, an automated instant vehicle trade platform based in Plano, Texas. Details of this acquisition are more fully described in Note 16 of our consolidated financial statements included in Item 8 of this Annual Report on Form 10-K.

Off-Balance Sheet Arrangements

As of December 31, 2020 and 2019, we did not have any off-balance sheet arrangements or leases that are less than twelve months in duration, that have or are reasonably likely to have a current or future material effect on our financial condition, changes in financial condition, revenues or expenses, results of operations, liquidity, capital expenditures, or capital resources.

Critical Accounting Policies and Significant Estimates

The preparation of the consolidated financial statements in conformity with GAAP requires us to make estimates and assumptions that affect reported amounts of assets and liabilities, and the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the reporting period.

Although we regularly assess these estimates, actual results could differ materially from these estimates. We base our estimates on historical experience and various other assumptions that we believe to be reasonable under the circumstances. Actual results may differ from our estimates if these results differ from historical experience, or other assumptions do not turn out to be substantially accurate, even if such assumptions are reasonable when made. Changes in estimates are recorded in the period in which they become known.

Significant estimates relied upon in preparing the consolidated financial statements include the determination of sales allowance and variable consideration in our revenue recognition, allowance for doubtful accounts, the expensing and capitalization of product, technology, and development costs for website development and internal-use software, the valuation and recoverability of goodwill and intangible assets and other long-lived assets, the recoverability of our net deferred tax assets and related valuation allowance and stock-based compensation. Accordingly, we consider these to be our critical accounting policies, and believe that of our significant accounting policies, which are described in Note 2 to the notes to our consolidated financial statements included in Item 8 of this Annual Report on Form 10-K, these involve a greater degree of judgment and complexity.

Revenue Recognition

Sources of Revenue

We derive revenue from two sources: (1) marketplace subscription revenue, which consists primarily of Listings and Dealer Display subscriptions, and (2) advertising and other revenue, which consists primarily of display advertising revenue from auto manufacturers and other auto-related brand advertisers as well as partnerships with financing services companies.

Marketplace Subscription Revenue

We offer multiple types of marketplace Listings packages to our dealers through our CarGurus U.S. platform (availability varies on our other marketplaces): Restricted Listings (formerly referred to as Basic Listings), which is free; and various levels of Listings packages, which each require a paid subscription under a monthly, quarterly, semiannual, or annual subscription basis.

Our subscriptions for customers generally auto-renew on a monthly basis and are cancellable by dealers with 30 days' advance notice at the end of the committed term, although during the second quarter of 2020 we did not require 30 days' advance notice of termination from dealers who cancelled as a result of the COVID-19 pandemic. Subscription pricing is determined based on a dealer's inventory size, region, and our assessment of the connections and ROI the platform will provide them and is subject to discounts and/or fee reductions that we may offer from time to time. We also offer all dealers on our platform access to our Dealer Dashboard, which includes a performance summary, Dealer Insights tool, and user review management platform. Only dealers subscribing to a paid Listings package also have access to the Pricing Tool, Market Analysis tool and our IMV Scan tool.

Dealer customers do not have the right to take possession of our software.

In addition to displaying inventory in our marketplace and providing access to the Dealer Dashboard, we offer dealers subscribing to certain of our Listings packages other subscription advertising and customer acquisition products and enhancements, including Dealer Display, which is marketed under our Real-time Performance Marketing suite. With Dealer Display, dealers can buy display advertising that appears in our marketplace, on other sites on the internet and/or on Facebook, a highly converting social media platform. Such advertisements can be targeted by the user's geography, search history, CarGurus website activity (including showing a consumer relevant vehicles from a dealer's inventory that the consumer has not yet discovered on our marketplace), and a number of other targeting factors, allowing dealers to increase their visibility with in-market consumers and drive qualified traffic for dealers.

Payment is typically due on first day of each calendar month and is recorded as accounts receivable or short-term deferred revenue when payment is received in advance of services being delivered to the customers.

We also offer paid Listings packages for the Autolist website and paid Listings and display products for the PistonHeads website.

Advertising and Other Revenue

Advertising and other revenue consists primarily of non-dealer display advertising revenue from auto manufacturers and other auto-related brand advertisers sold on a cost per thousand impressions, or CPM, basis. An impression is an advertisement loaded on a web page. In addition to advertising sold on a CPM basis, we also have advertising sold on a cost per click basis. Auto manufacturers and other brand advertisers can execute advertising campaigns that are targeted across a wide variety of parameters, including demographic groups, behavioral characteristics, specific auto brands, categories such as Certified Pre-Owned, and segments such as hybrid vehicles. We do not provide minimum impression guarantees or other types of minimum guarantees in our contracts with customers. Pricing is primarily based on advertisement size and position on our websites and mobile applications, and fees are billed monthly in arrears. Unbilled accounts receivable relate to services rendered in the current period, but generally not invoiced until the subsequent period.

We sell advertising directly to auto manufacturers and other auto related brand advertisers, as well as indirectly through revenue sharing arrangements with advertising exchange partners. Company-sold advertising is not subject to revenue sharing arrangements. Company-sold advertising revenue is recognized based on the gross amount charged to the advertiser. Partner-sold advertising revenue is recognized based on the net amount of revenue received from the content partners.

Revenue from advertising sold directly by us is recorded on a gross basis because we are the principal in the arrangement, control the ad placement and timing of the campaign, and establish the selling price. We enter into contractual arrangements directly with advertisers and are directly responsible for the fulfillment of the contractual terms including any remedy for issues with such fulfillment.

Advertising revenue subject to revenue sharing agreements between us and advertising exchange partners is recognized based on the net amount of revenue received from the partner. The advertising partner is responsible for fulfillment, including the acceptability of the services delivered. In partner-sold advertising arrangements, the advertising partner has a direct contractual relationship with the advertiser. There is no contractual relationship between us and the advertiser for partner-sold transactions. When an advertising exchange partner sells advertisements, the partner is responsible for fulfilling the advertisements, and accordingly, we have determined the advertising partner is the principal in the arrangement. Additionally, for auction-based partner agreements, we have latitude in establishing the floor price, but the final price established by the exchange server is at market rates.

Customers are billed monthly in arrears and payment terms are generally thirty to sixty days from the date invoiced.

Advertising and other revenue also includes revenue from partnerships with certain financing services companies pursuant to which we enable eligible consumers on our CarGurus U.S. website to pre-qualify for financing on cars from dealerships that offer financing through such companies. We primarily generate revenue from these partnerships based on the number of funded loans from consumers who pre-qualify with our lending partners through our site.

We also offer non-dealer display products for the Autolist and PistonHeads websites.

Revenue Recognition

Accounting Standards Codifications, or ASC, Topic 606, Revenue from Contracts with Customers, or ASC 606, outlines a comprehensive five-step revenue recognition model based on the principle that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. To achieve this core principle, we apply the following five steps:

1) *Identify the contract with a customer*
2) *Identify the performance obligations in the contract*
3) *Determine the transaction price*
4) *Allocate the transaction price to performance obligations in the contract*
5) *Recognize revenue when or as we satisfy a performance obligation*

Marketplace Subscription Revenue

For dealer listings, we provide a single similar service each day for a period of time. Each time increment (i.e., one day), rather than the underlying activities, is distinct and substantially the same and therefore our performance obligation is to provide a series of daily activities over the contract term. Similar to the dealer listings, the dealer display advertising is considered a promise to provide a single similar service each day. Each time increment is distinct and substantially the same and therefore our performance obligation is to provide a series of daily activities over the contract term.

Total consideration for marketplace subscription revenue is stated within the contracts. There are no contractual cash refund rights, but credits may be issued to a customer at our sole discretion. At the portfolio level, there is also variable consideration, that needs to be included in the transaction price. Variable consideration consists of sales allowances, usage fees, and concessions that change the transaction price of the unsatisfied or partially unsatisfied performance obligation. We recognize that there are times when there is a customer satisfaction issue or other circumstance that will lead to a credit. Due to the known possibility of future credits, a monthly sales allowance review is performed to defer revenue at a portfolio level for such future adjustments in the period of incurrence. We establish sales allowances at the time of revenue recognition based on our history of adjustments and credits provided to our customers. In assessing the adequacy of the sales allowance, we evaluate our history of adjustments and credits made through the date of the issuance of the financial statements. Estimated sales adjustments, credits and losses may vary from actual results which could lead to material adjustments to the financial statements. Sales allowances are recorded as a reduction to revenue in the consolidated income statements.

Performance obligations are satisfied over time as the customer simultaneously receives and consumes the benefit of the service. Revenue is recognized ratably over the subscription period beginning on the date we start providing services to the customer under the contract. Revenue is presented net of any taxes collected from customers.

Advertising and Other Revenue

For advertising revenue, the performance obligation is to publish the agreed upon campaign on our websites and load the related impressions.

Advertising contracts state the transaction price within the agreement with payment being based on the number of clicks or impressions delivered on our websites. Total consideration is based on output and deemed variable consideration constrained by an agreed upon delivery schedule. Additionally, there are generally no contractual cash refund rights. Certain contracts do contain the right for credits in situations in which impressions are not displayed in compliance with contractual specifications. At an individual contract level, we may give a credit for a customer satisfaction issue or other circumstance. Due to the known possibility of future credits, a monthly review is performed to defer revenue at an individual contract level for such future adjustments in the period of incurrence.

As consideration is driven by the number of impressions delivered on our websites, the consideration for each period is allocated to the period in which the service was rendered.

Performance obligations for company-sold advertising revenue and partner-sold advertising revenue are satisfied over time as impressions are delivered. Revenue is recognized based on the total number of impressions delivered within the specified period. Revenue from advertising sold directly by us is recognized based on the gross amount charged to the advertiser and advertising revenue sold by partners is recognized based on the net amount of revenue received from the content partners. Revenue is presented net of any taxes collected from customers.

Other revenue includes revenue from contracts for which the performance obligation is a series of distinct services with the same level of effort daily. For these contracts, we estimate the value of the variable consideration in determining the transaction price and allocate it to the performance obligation. Revenue is estimated and recognized on a ratable basis over the contractual term. We reassess the estimate of variable consideration at each reporting period.

Contracts with Multiple Performance Obligations

We periodically enter into arrangements that include Listings and Dealer Display within marketplace subscription revenue. These contracts include multiple promises that we evaluate to determine if the promises are separate performance obligations. Performance obligations are identified based on services to be transferred to a customer that are distinct within the context of the contractual terms. Once the performance obligations have been identified, we determine the transaction price, which includes estimating the amount of variable consideration to be included in the transaction price, if any. If required, the transaction price is allocated to each performance obligation in the contract based on a relative standalone selling price method as the performance obligation is being satisfied. For our arrangements that include Listings and Dealer Display, the performance obligations were satisfied over a consistent period of time and therefore the allocations did not impact the revenue recognized.

Costs to Obtain a Contract

Commissions paid to sales representatives and payroll taxes are considered costs to obtain a contract. Under ASC 606, the costs to obtain a contract require capitalization and amortization of those costs over the period of benefit. Although the guidance specifies the accounting for an individual contract with a customer, as a practical expedient, we have opted to apply the guidance to a portfolio of contracts with similar characteristics. We have opted to apply another practical expedient to immediately expense the incremental cost of obtaining a contract when the underlying related asset would have been amortized over one year or less. As such, we applied this practical expedient to advertising contracts as the term is one year or less and these contracts do not renew automatically. The practical expedient is not applicable to marketplace subscription contracts as the period of benefit including renewals is anticipated to be greater than one year as commissions paid on contract renewals are not commensurate with the commissions paid on the initial contract. The assets are periodically assessed for impairment.

For marketplace subscription customers, the commissions paid on contracts with new customers, in addition to any commission amount related to incremental sales, are capitalized and amortized over the estimated benefit period of the customer relationship taking into account factors such as peer estimates of technology lives and customer lives as well as our own historical data. Commissions paid that are not directly related to obtaining a new contract are expensed as incurred.

Additionally, we allocate employer payroll tax expense to the commission expense in proportion to the overall payroll taxes paid during the respective period. As such, capitalized payroll taxes are amortized in the same manner as the underlying capitalized commissions.

The assets recognized for costs to obtain a contract were \$20.0 million and \$20.1 million as of December 31, 2020, and December 31, 2019, respectively. Amortization expense recognized during the years ended December 31, 2020 and 2019 related to costs to obtain a contract were \$11.6 million and \$8.4 million, respectively.

Accounts Receivable and Allowance for Doubtful Accounts

Accounts receivable are recorded based on the amount due from the customer and do not bear interest.

We are exposed to credit losses primarily through our trade accounts receivable. We offset gross trade accounts receivable with an allowance for doubtful accounts. The allowance for doubtful accounts is our best estimate of the amount of probable credit losses in our existing accounts receivable and is based upon historical loss trends, the number of days that billings are past due, an evaluation of the potential risk of loss associated with specific accounts, current conditions, and reasonable and supportable forecasts of economic conditions.

Amounts are charged against the allowance after all means of collection have been exhausted, the potential for recovery is considered remote and when it is determined that expected credit losses may occur. We do not have any off-balance sheet credit exposure related to our customers. Provisions for allowances for doubtful accounts are recorded in general and administrative expense within the consolidated income statements. Unbilled accounts receivable are recorded for services rendered in the current period, but generally not invoiced until the subsequent period.

We also consider current economic trends when evaluating the adequacy of the allowance for doubtful accounts. If circumstances relating to specific customers change, or unanticipated changes occur in the general business environment, particularly as it affects auto dealers, such as the impacts of the COVID-19 pandemic, our estimate of the recoverability of receivables could be further adjusted.

In light of the COVID-19 pandemic, we assessed the implications on accounts receivable and increased its allowance for doubtful accounts to $616 as of December 31, 2020 as compared to $240 as of December 31, 2019. The increase in account delinquencies due to the COVID-19 pandemic resulted in $1,930 of bad debt expense and $1,554 of write offs, net of recoveries for the year ended December 31, 2020.

Below is a summary of the changes in our allowance for doubtful accounts for the years ended December 31, 2020 and 2019:

	Balance at Beginning of Period	Provision	Write–offs, net of recoveries	Balance at End of Period
Year ended December 31, 2020	$ 240	$ 1,930	$ (1,554)	$ 616
Year ended December 31, 2019	479	1,091	(1,330)	240

Impairment of Long-Lived Assets

We evaluate the recoverability of long-lived assets, such as property and equipment and intangible assets, for impairment at least annually and whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. During this review, we re-evaluate the significant assumptions used in determining the original cost and estimated lives of long-lived assets. Although the assumptions may vary from asset to asset, they generally include operating results, changes in the use of the asset, cash flows, and other indicators of value. Management then determines whether the remaining useful life continues to be appropriate, or whether there has been an impairment of long-lived assets based primarily upon whether expected future undiscounted cash flows are sufficient to support the assets' recovery. Recoverability of these assets is measured by comparison of the carrying amount of the asset to the future undiscounted cash flows the asset is expected to generate. If the asset is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset.

For the year ended December 31, 2020, we did not identify any impairment of long-lived assets other than $1.2 million of write-offs in capitalized website development costs, of which $0.8 million related to the exit of certain international markets. For the year ended December 31, 2019, we did not identify any impairment of long-lived assets.

Capitalized Website Development and Internal-Use Software Costs

We capitalize certain costs associated with the development of our websites and internal-use software products after the preliminary project stage is complete and until the software is ready for its intended use. Research and development costs incurred during the preliminary project stage or costs incurred for data conversion activities, training, maintenance, and general and administrative or overhead costs are expensed as incurred. Capitalization begins when the preliminary project stage is complete, management authorizes and commits to the funding of the software project with the required authority, it is probable the project will be completed, the software will be used to perform the functions intended and certain functional and quality standards have been met. Qualified costs incurred during the operating stage of our software applications relating to upgrades and enhancements are capitalized to the extent it is probable that they will result in added functionality, while costs that cannot be separated between maintenance of, and minor upgrades and enhancements to, websites and internal-use software are expensed as incurred.

Capitalized website and software development costs are amortized on a straight-line basis over an estimated useful life of three years beginning with the time when the product is ready for intended use. Amounts amortized are presented through cost of revenue. We evaluate the useful lives of these assets on an annual basis and tests for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets.

During the years ended December 31, 2020 and 2019, we capitalized $6.4 million and $4.2 million of website development costs, respectively. We recorded amortization expense associated with our capitalized website development costs of $3.3 million, including write offs of $0.8 million of capitalized website development costs related to the exit of certain international markets, and $1.6 million for the years ended December 31, 2020 and 2019, respectively.

Since the adoption of ASU 2018-15, Intangibles – Goodwill and Other – Internal-Use Software (Subtopic 350-24): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that is a Service Contract (ASU 2018-15), on January 1, 2019, we evaluate upfront costs including implementation, set-up or other costs (collectively, implementation costs) for hosting arrangements under the internal-use software framework. Costs related to preliminary project activities and post implementation activities are expensed as incurred, whereas costs incurred in the development stage are generally capitalized. Capitalized implementation costs are amortized on a straight-line basis over an estimated useful life of the term of the hosting arrangement, taking into consideration several other factors such as, but not limited to, options to extend the hosting arrangement or options to terminate the hosting arrangement, beginning with the time when the software is ready for intended use. Amounts amortized are presented through operating expense, rather than depreciation or amortization. We evaluate the useful lives of these assets on an annual basis and tests for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets.

During the years ended December 31, 2020 and 2019, we launched separate initiatives designed to evaluate and enhance our enterprise applications. During the year ended December 31, 2020 we capitalized $0.3 million of implementation costs in other non-current assets. During the year ended December 31, 2019 we capitalized $2.6 million and $0.6 million of implementation costs in other non-current assets and in prepaid expenses, prepaid income taxes and other current assets, respectively. We recorded amortization expense associated with our internal-use software of $0.7 million and $0.1 million for the years ended December 31, 2020 and 2019, respectively.

Business Combinations

Valuation of Acquired Assets and Liabilities

We measure all consideration transferred in a business combination at its acquisition-date fair value. Consideration transferred is determined by the acquisition-date fair value of assets transferred, liabilities assumed, including contingent consideration obligations, as applicable. We measure goodwill as the excess of the consideration transferred over the net of the acquisition-date amounts of assets acquired less liabilities assumed.

We make significant assumptions and estimates in determining the fair value of the acquired assets and liabilities as of the acquisition date, especially the valuation of intangible assets and certain tax positions. We record estimates as of the acquisition date and reassess the estimates at each reporting period up to one year after the acquisition date. Changes in estimates made prior to finalization of purchase accounting are recorded to goodwill.

Intangible Assets

Intangible assets are recorded at their estimated fair value at the date of acquisition. We amortize intangible assets over their estimated useful lives on a straight-line basis. Amortization is recorded over the relevant estimated useful lives ranging from three to eleven years.

We evaluate the useful lives of these assets on an annual basis and test for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets. If the estimate of an intangible asset's remaining useful life is changed, we amortize the remaining carrying value of the intangible asset prospectively over the revised remaining useful life.

For the years ended December 31, 2020 and 2019, we did not identify any impairment of our intangible assets.

Goodwill

Goodwill is recorded when consideration paid in a purchase acquisition exceeds the fair value of the net assets acquired. Goodwill is not amortized, but rather is tested for impairment annually or more frequently if facts and circumstances warrant a review. Conditions that could trigger a more frequent impairment assessment include, but are not limited to, a significant adverse change in certain agreements, significant underperformance relative to historical or projected future operating results, an economic downturn affecting automotive marketplaces, increased competition, a significant reduction in our stock price for a sustained period or a reduction of our market capitalization relative to net book value.

We have determined that we have two reporting units, United States and International, as of and for the year ended December 31, 2020. We elected to bypass the optional qualitative test for impairment and proceed to Step 1 which is a quantitative impairment test. We evaluate impairment annually on October 1 by comparing the estimated fair value of each reporting unit to its carrying value. We estimate fair value using a market approach, based on market multiples derived from public companies that we identify as peers. In 2020, we calculated the fair value of our reporting units using the market approach, which required us to estimate the forecasted revenue and estimate revenue market multiples using publicly available information for each of our reporting units. Developing these assumptions required the use of significant judgment and estimates. Actual results may differ from these forecasts.

For the years ended December 31, 2020 and 2019, we did not identify any impairment of our goodwill.

Income Taxes

We account for income taxes in accordance with the liability method. Under this method, deferred tax assets and liabilities are recognized based on temporary differences between the financial reporting and income tax bases of assets and liabilities using statutory rates. In addition, this method requires a valuation allowance against net deferred tax assets if, based upon the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

We account for uncertain tax positions recognized in the consolidated financial statements by prescribing a more-likely-than-not threshold for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. Interest and penalties, if applicable, related to uncertain tax positions would be recognized as a component of income tax expense. We have no recorded liabilities for uncertain tax positions as of December 31, 2020 and 2019.

The Tax Cuts and Jobs Act subjects a U.S. shareholder to tax on global intangible low-taxed income, or GILTI, earned by certain foreign subsidiaries. An entity can make an accounting policy election, per the FASB Staff Q&A, Topic 740, No. 5, Accounting for Global Intangible Low-Taxed Income, either to recognize deferred taxes for temporary basis differences expected to reverse as GILTI in future years or to provide for the tax expense related to GILTI in the year the tax is incurred as a period expense only. We elected to account for GILTI as a period cost in the year the tax is incurred.

Stock-Based Compensation

For stock-based awards issued under our stock-based compensation plans, the fair value of each award is determined on the date of grant. We recognize compensation expense for service-based awards on a straight-line basis over the requisite service period for each separate vesting portion of the award, with the amount of compensation expense recognized at any date at least equaling the portion of the grant-date fair value of the award that is vested at that date.

For RSUs granted subsequent to the IPO, the fair value is determined based on the closing price of our Class A common stock as reported on the Nasdaq Global Select Market on the date of grant.

We issue shares for stock option exercises and RSUs out of our shares available for issuance. No options were granted during the years ended December 31, 2020 and 2019.

We account for forfeitures when they occur. The tax effect of differences between tax deductions related to stock compensation and the corresponding financial statement expense compensation are recorded to tax expense. Excess tax benefits recognized on stock-based compensation expense are classified as an operating activity in the consolidated statements of cash flows.

During 2020, we recorded immaterial tax demerits related to stock-based compensation as compared to $11.1 million of excess tax benefits related to stock-based compensation during 2019.

Recently Issued Accounting Pronouncements

Information concerning recently issued accounting pronouncements may be found in Note 2 to our consolidated financial statements appearing elsewhere in this Annual Report on Form 10-K.

Item 7A. Quantitative and Qualitative Disclosures about Market Risk.

Market risk represents the risk of loss that may affect our financial position due to adverse changes in financial market prices and rates. We are exposed to market risks as described below.

Interest Rate Risk

We did not have any long-term borrowings as of December 31, 2020 or 2019.

We had cash, cash equivalents, and investments of $290.3 million and $171.6 million at December 31, 2020 and 2019, respectively, which consist of bank deposits, money market funds and certificates of deposit with maturity dates ranging from six to nine months. Such interest-earning instruments carry a degree of interest rate risk. Given recent changes in the interest rate environment and in an effort to ensure liquidity, we expect lower returns from our investments for the foreseeable future. To date, fluctuations in interest income have not been material to the operations of the business.

We do not enter into investments for trading or speculative purposes and have not used any derivative financial instruments to manage our interest rate risk exposure.

Inflation Risk

We do not believe that inflation has had a material effect on our business, financial condition, or results of operations to date. However, if our costs were to become subject to significant inflationary pressures, we may not be able to fully offset such higher costs through price increases. Our inability or failure to do so could harm our business, operating results, and financial condition.

Foreign Currency Exchange Risk

Historically, because our operations and sales have been primarily in the United States, we have not faced any significant foreign currency risk. As of December 31, 2020 and 2019, we have foreign currency exposures in the British pound, the Euro and the Canadian dollar, although such exposure is not significant.

Our foreign subsidiaries have intercompany accounts that are eliminated upon consolidation, and these accounts expose us to foreign currency exchange rate fluctuations. Exchange rate fluctuations on short-term intercompany accounts are recorded in our consolidated income statements under the heading other income, net. Long-term intercompany accounts are recorded in our consolidated balance sheets under the heading accumulated other comprehensive income.

As we seek to grow our international operations in Canada and the United Kingdom, our risks associated with fluctuation in currency rates may become greater, and we will continue to reassess our approach to managing these risks.

Item 8. Financial Statements and Supplementary Data.

CarGurus, Inc.

Index to Consolidated Financial Statements

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of CarGurus, Inc.

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of CarGurus, Inc. (the Company) as of December 31, 2020 and 2019, the related consolidated statements of income, comprehensive income, stockholders' equity and cash flows for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "consolidated financial statements"). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) and our report dated February 11, 2021 expressed an unqualified opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

	Revenue Recognition
Description of the Matter	For the year ended December 31, 2020, the Company recognized revenue of $551.5 million. As explained in Note 2 to the consolidated financial statements, the Company recognizes revenue in accordance with Accounting Standard Codification Topic 606, *Revenue from Contracts with Customers,* upon transfer of control of promised services to customers in an amount that reflects the consideration the Company expects to receive in exchange for those services. Management's recognition of revenue was challenging because of the higher extent of audit effort and because the amounts are material to the consolidated financial statements and related disclosures. During our risk assessment process, we identified a higher inherent risk related to revenue primarily due to the size of the account and the volume of activity, as well as the focus on revenue from readers of the financial statements.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's revenue recognition process, including controls designed to mitigate the risk of override of controls. This included testing controls over management's review of manual journal entries and revenue related account reconciliations.

We substantively tested the Company's revenue recognized for the year ended December 31, 2020, through a combination of data analytics and tests of details. Our audit procedures included, among others, performing a correlation analysis between the related accounts (i.e., revenue, deferred revenue, account receivables, and cash) and testing the existence of cash receipts tied to revenue recognition. Additionally, we reconciled revenue recognized to the Company's general ledger to test completeness and performed substantive test of details over significant customers deemed to be key items and a representative sample of the remaining transactions.

Realizability of Deferred Tax Assets

Description of the Matter

As explained in Note 13 to the consolidated financial statements, the Company had gross deferred tax assets of $48.0 million, gross deferred tax liabilities of $28.4 million, and a valuation allowance of $0.2 million, resulting in net deferred tax assets of $19.5 million as of December 31, 2020. As of December 31, 2020, the Company has significant deferred tax assets, including those generated as a result of excess tax deductions related to stock-based compensation awards. Deferred tax assets are reduced by a valuation allowance if, based upon the weight of all available evidence, it is more likely than not that some portion, or all, of the deferred tax assets will not be realized. Based upon the level of historical U.S. earnings and future projections over the period in which the net deferred tax assets are deductible, at this time, management believes it is more likely than not that the Company will realize $47.9 million of the benefits of these deductible differences.

Auditing management's assessment of the realizability of its deferred tax assets (including the recognition, measurement, and disclosure of deferred tax assets) involved challenging auditor judgment because the assessment process is complex, involves judgment and includes assumptions about the Company's ability to generate sufficient taxable income in future periods to realize these benefits. The Company's ability to generate taxable income may be impacted by various economic and industry conditions.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's income tax process, including the Company's assessment of the realizability of deferred tax assets. This included testing controls over management's review of the deferred tax rollforward and valuation allowance position.

We tested management's assessment of the realizability of deferred tax assets, including future taxable income exclusive of reversing temporary differences and carryforwards. Audit procedures performed, among others, included evaluating the assumptions used by the Company to determine the projections of future taxable income by jurisdiction and testing the completeness and accuracy of the underlying data used in its projections. For example, we tested the Company's scheduling of the reversal of existing temporary taxable differences and compared the projections of future taxable income with the actual results of prior periods as well as management's consideration of current industry and economic trends. In addition, we also assessed the historical accuracy of management's projections and reconciled the projections of future taxable income with other forecasted consolidated financial information prepared by the Company. This analysis is especially challenging because of the Company's limited history and limited opportunity to implement tax planning strategies at this point in the life cycle of the Company. In addition, we involved our tax professionals to evaluate the application of tax law in the Company's projections of future taxable income.

Business Combinations – Valuation of Acquired Intangible Assets

Description of the Matter

As described in Note 4 to the consolidated financial statements, the Company completed its acquisition of Auto List, Inc. (“Autolist”) during fiscal year 2020 for net consideration of $21.1 million. The transaction was accounted for as a business combination whereby the total purchase price was allocated to assets acquired and liabilities assumed based on the respective fair values.

Auditing the Company's accounting for its acquisition of Autolist was complex due to the significant estimation uncertainty in the Company’s determination of the fair value of identified intangible assets of $7.6 million, which consisted of brand name, developed technology, and customer relationships. The significant estimation uncertainty was primarily due to the complexity of the valuation models prepared by management to measure the fair value of the intangible assets and the sensitivity of the respective fair values to the significant underlying assumptions. The significant assumptions used to estimate the fair value of the intangible assets included the discount rates and revenue growth rates. These significant assumptions are especially challenging to audit as they are forward looking and could be affected by future economic and market conditions.

How We Addressed the Matter in Our Audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company’s valuation of acquired intangible assets. This included testing controls over the Company’s estimation process supporting the recognition and measurement of intangible assets, as well as controls over management’s judgments and evaluation of underlying assumptions regarding the valuation.

Our audit procedures to test the estimated fair value of the acquired intangible assets included, among others, evaluating the Company’s valuation methodology used to estimate the fair value of the brand name, developed technology, and customer relationship intangible assets. We involved our valuation professionals to assist with our evaluation of the methodology used by the Company and certain assumptions included in the fair value estimates. For example, our valuation professionals performed independent comparative calculations to estimate the acquired entities’ discount rate. Additionally, we evaluated the significant assumptions used by the Company, primarily consisting of projected financial information of the acquired entity (e.g., revenue growth rates), and evaluated the completeness and accuracy of the underlying data supporting the significant assumptions and estimates. Specifically, when evaluating the assumptions related to the revenue growth rates and changes in the business that would drive these forecasted growth rates, we compared the assumptions to historical results of the acquired entity and current industry and economic trends.

/s/ Ernst & Young LLP

We have served as the Company’s auditor since 2016.

Boston, Massachusetts
February 11, 2021

CarGurus, Inc.

Consolidated Balance Sheets

(in thousands, except share and per share data)

	At December 31, 2020		At December 31, 2019	
Assets				
Current assets:				
Cash and cash equivalents	$	190,299	$	59,920
Investments		100,000		111,692
Accounts receivable, net of allowance for doubtful accounts of $616 and $240, respectively		18,235		22,124
Prepaid expenses, prepaid income taxes and other current assets		12,385		15,424
Deferred contract costs		10,807		9,544
Restricted cash		250		250
Total current assets		331,976		218,954
Property and equipment, net		27,483		27,950
Intangible assets, net		10,862		3,920
Goodwill		29,129		15,207
Operating lease right-of-use assets		60,835		59,986
Restricted cash		10,377		10,553
Deferred tax assets		19,774		42,713
Deferred contract costs, net of current portion		9,189		10,514
Other non-current assets		2,673		3,826
Total assets	$	502,298	$	393,623
Liabilities and stockholders' equity				
Current liabilities:				
Accounts payable	$	21,563	$	36,731
Accrued expenses, accrued income taxes and other current liabilities		24,751		18,262
Deferred revenue		9,137		9,984
Operating lease liabilities		11,085		8,781
Total current liabilities		66,536		73,758
Operating lease liabilities		58,810		60,818
Deferred tax liabilities		291		284
Other non–current liabilities		3,075		1,908
Total liabilities		128,712		136,768
Commitments and contingencies (Note 10)				
Stockholders' equity:				
Preferred stock, $0.001 par value; 10,000,000 shares authorized; no shares issued and outstanding		—		—
Class A common stock, $0.001 par value; 500,000,000 shares authorized; 94,310,309 and 91,819,649 shares issued and outstanding at December 31, 2020 and 2019, respectively		94		92
Class B common stock, $0.001 par value; 100,000,000 shares authorized; 19,076,500 and 20,314,644 shares issued and outstanding at December 31, 2020 and 2019, respectively		19		20
Additional paid–in capital		242,181		205,234
Retained earnings		129,412		51,859
Accumulated other comprehensive income (loss)		1,880		(350)
Total stockholders' equity		373,586		256,855
Total liabilities and stockholders' equity	$	502,298	$	393,623

The accompanying notes are an integral part of these consolidated financial statements.

CarGurus, Inc.

Consolidated Income Statements

(in thousands, except share and per share data)

	Year Ended December 31, 2020	2019	2018
Revenue	$ 551,451	$ 588,916	$ 454,086
Cost of revenue[1]	42,706	36,300	24,811
Gross profit	508,745	552,616	429,275
Operating expenses:			
Sales and marketing	256,979	393,844	315,939
Product, technology, and development	85,726	69,462	47,866
General and administrative	62,166	50,434	39,475
Depreciation and amortization	6,118	4,554	2,804
Total operating expenses	410,989	518,294	406,084
Income from operations	97,756	34,322	23,191
Other income, net:			
Interest income	1,075	2,984	2,283
Other income, net	279	1,399	10
Total other income, net	1,354	4,383	2,293
Income before income taxes	99,110	38,705	25,484
Provision for (benefit from) income taxes	21,557	(3,441)	(39,686)
Net income	$ 77,553	$ 42,146	$ 65,170
Net income per share attributable to common stockholders: (Note 12)			
Basic	$ 0.69	$ 0.38	$ 0.60
Diluted	$ 0.68	$ 0.37	$ 0.57
Weighted–average number of shares of common stock used in computing net income per share attributable to common stockholders:			
Basic	112,854,524	111,450,443	108,833,028
Diluted	113,849,815	113,431,850	113,364,712

(1) Includes depreciation, amortization and impairment expense for the years ended December 31, 2020, 2019, and 2018 of $5,224, $3,263, and $2,225, respectively.

The accompanying notes are an integral part of these consolidated financial statements.

CarGurus, Inc.

Consolidated Statements of Comprehensive Income

(in thousands)

	Year Ended December 31,		
	2020	2019	2018
Net income	$ 77,553	$ 42,146	$ 65,170
Other comprehensive income (loss):			
Foreign currency translation adjustment	2,230	(421)	(157)
Comprehensive income	$ 79,783	$ 41,725	$ 65,013

The accompanying notes are an integral part of these consolidated financial statements.

CarGurus, Inc.

Consolidated Statements of Stockholders' Equity

(in thousands, except share data)

	Class A Common Stock		Class B Common Stock		Additional Paid–in Capital	(Accumulated Deficit) Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
Balance at December 31, 2017	77,884,754	$ 78	28,226,104	$ 28	$ 185,190	$ (58,499)	$ 228	$ 127,025
Net income	—	—	—	—	—	65,170	—	65,170
Stock–based compensation expense	—	—	—	—	21,284	—	—	21,284
Issuance of common stock upon exercise of stock options	3,186,489	3	10,690	—	3,629	—	—	3,632
Issuance of common stock upon vesting of restricted stock units	1,781,201	2	—	—	(2)	—	—	—
Payment of withholding taxes on net share settlements of equity awards	(658,931)	—	—	—	(25,885)	—	—	(25,885)
Cumulative adjustment from adoption of revenue recognition standard	—	—	—	—	—	3,042	—	3,042
Conversion of common stock	7,534,710	7	(7,534,710)	(7)	—	—	—	—
Foreign currency translation adjustment	—	—	—	—	—	—	(157)	(157)
Balance at December 31, 2018	89,728,223	90	20,702,084	21	184,216	9,713	71	194,111
Net income	—	—	—	—	—	42,146	—	42,146
Stock–based compensation expense	—	—	—	—	35,682	—	—	35,682
Issuance of common stock upon exercise of stock options	838,928	—	—	—	1,807	—	—	1,807
Issuance of common stock upon vesting of restricted stock units	1,317,736	1	—	—	(1)	—	—	—
Payment of withholding taxes on net share settlements of equity awards	(452,678)	—	—	—	(16,470)	—	—	(16,470)
Conversion of common stock	387,440	1	(387,440)	(1)	—	—	—	—
Foreign currency translation adjustment	—	—	—	—	—	—	(421)	(421)
Balance at December 31, 2019	91,819,649	92	20,314,644	20	205,234	51,859	(350)	256,855
Net income	—	—	—	—	—	77,553	—	77,553
Stock–based compensation expense	—	—	—	—	46,996	—	—	46,996
Issuance of common stock upon exercise of stock options	352,212	—	—	—	1,136	—	—	1,136
Issuance of common stock upon vesting of restricted stock units	1,347,464	1	—	—	(1)	—	—	—
Payment of withholding taxes and option costs on net share settlement of restricted stock units and stock options	(447,160)	—	—	—	(11,184)	—	—	(11,184)
Conversion of common stock	1,238,144	1	(1,238,144)	(1)	—	—	—	—
Foreign currency translation adjustment	—	—	—	—	—	—	2,230	2,230
Balance at December 31, 2020	94,310,309	$ 94	19,076,500	$ 19	$ 242,181	$ 129,412	$ 1,880	$ 373,586

The accompanying notes are an integral part of these consolidated financial statements.

CarGurus, Inc.

Consolidated Statements of Cash Flows

(in thousands)

	Year Ended December 31,		
	2020	2019	2018
Operating Activities			
Net income	$ 77,553	$ 42,146	$ 65,170
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation and amortization	11,342	7,817	5,029
Currency gain on foreign denominated transactions	23	(690)	(190)
Deferred taxes	22,235	(3,734)	(39,040)
Provision for doubtful accounts	1,930	1,091	1,680
Stock–based compensation expense	45,090	34,301	20,794
Amortization of deferred contract costs	11,605	8,416	3,689
Changes in operating assets and liabilities:			
Accounts receivable, net	3,889	(9,608)	(1,911)
Prepaid expenses, prepaid income taxes, and other assets	3,484	(378)	(11,753)
Deferred contracts costs	(11,378)	(15,979)	(12,987)
Accounts payable	(15,077)	4,268	9,345
Accrued expenses, accrued income taxes and other liabilities	7,450	2,760	3,100
Deferred revenue	(861)	1,174	4,508
Deferred rent	—	—	4,289
Lease obligations	(542)	(1,468)	—
Net cash provided by operating activities	156,743	70,116	51,723
Investing Activities			
Purchases of property and equipment	(2,952)	(11,205)	(5,956)
Capitalization of website development costs	(4,579)	(3,021)	(1,522)
Cash paid for acquisitions, net of cash acquired	(21,056)	(19,139)	—
Investments in certificates of deposit	(100,000)	(177,808)	(212,800)
Maturities of certificates of deposit	111,692	188,916	140,000
Net cash used in investing activities	(16,895)	(22,257)	(80,278)
Financing Activities			
Payment of initial public offering costs	—	—	(1,142)
Proceeds from exercise of stock options	1,136	1,807	3,632
Financing cash flows from finance leases	(37)	(30)	—
Payment of withholding taxes and option costs on net share settlement of restricted stock units and stock options	(11,184)	(16,470)	(25,885)
Net cash used in financing activities	(10,085)	(14,693)	(23,395)
Impact of foreign currency on cash, cash equivalents, and restricted cash	440	(1)	(44)
Net increase (decrease) in cash, cash equivalents, and restricted cash	130,203	33,165	(51,994)
Cash, cash equivalents, and restricted cash at beginning of period	70,723	37,558	89,552
Cash, cash equivalents, and restricted cash at end of period	$ 200,926	$ 70,723	$ 37,558
Supplemental disclosure of cash flow information:			
Cash paid for income taxes	$ 2,831	$ 300	$ 2,308
Unpaid purchases of property and equipment and internal-use software	$ 136	$ 647	$ 5,287
Capitalized stock-based compensation expense in website development and internal-use software costs	$ 1,906	$ 1,381	$ 490
Cash paid for operating lease liabilities	$ 14,941	$ 10,906	—

The accompanying notes are an integral part of these consolidated financial statements.

CarGurus, Inc.

Notes to Consolidated Financial Statements

(in thousands, except share and per share data, unless otherwise noted)

1. Organization and Business Description

CarGurus, Inc. (the "Company"), is a global, online automotive marketplace connecting buyers and sellers of new and used cars. Using proprietary technology, search algorithms, and innovative data analytics, the Company believes it is building the world's most trusted and transparent automotive marketplace and creating a differentiated automotive search experience for consumers. The Company's trusted marketplace empowers consumers with unbiased third-party validation on pricing and dealer reputation as well as other information that aids them in finding "Great Deals from Top-Rated Dealers."

The Company is headquartered in Cambridge, Massachusetts and was incorporated in the State of Delaware on June 26, 2015. The Company operates principally in the United States. In addition to the United States, it operates online marketplaces under the CarGurus brand in Canada and the United Kingdom. The Company also operated online marketplaces in Germany, Italy, and Spain until it ceased the operations of each of these marketplaces in the second quarter of 2020. In the United States and the United Kingdom, the Company also operates the Autolist and PistonHeads online marketplaces, respectively, as independent brands. The Company has subsidiaries in the United States, Canada, Ireland, and the United Kingdom. See Note 14 of the Company's consolidated financial statements included elsewhere in this Annual Report on Form 10-K for more information on the Company's segment reporting and geographical information.

The Company is subject to a number of risks and uncertainties common to companies in its and similar industries and stages of development including, but not limited to, rapid technological changes, competition from substitute products and services from larger companies, management of international activities, protection of proprietary rights, patent litigation, and dependence on key individuals.

2. Summary of Significant Accounting Policies

Basis of Presentation

The consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP"). Any reference in these notes to applicable guidance is meant to refer to GAAP as found in the Accounting Standards Codification ("ASC") and Accounting Standards Update ("ASU") of the Financial Accounting Standards Board ("FASB").

In the consolidated balance sheet for the year end ended December 31, 2019, the Company has presented other current assets with prepaid expense and prepaid income taxes to conform to current year presentation as it did not meet the disclosure threshold.

In the consolidated statements of cash flows for the years ended December 31, 2019 and 2018, the Company has presented other non-current liabilities with accrued expenses, accrued income taxes and other current liabilities to conform to current year presentation as it did not meet the disclosure threshold.

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of the Company and its subsidiaries. All intercompany balances and transactions have been eliminated in consolidation.

Subsequent Event Considerations

The Company considers events or transactions that occur after the balance sheet date but prior to the issuance of the financial statements to provide additional evidence for certain estimates or to identify matters that require additional disclosure. The Company has evaluated all subsequent events and determined that there are no material recognized or unrecognized subsequent events requiring disclosure, other than those disclosed in Note 16 of these consolidated financial statements.

Use of Estimates

The preparation of consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and the disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenue and expenses during the reporting period.

Although the Company regularly assesses these estimates, actual results could differ materially from these estimates. The Company bases its estimates on historical experience and various other assumptions that it believes to be reasonable under the circumstances. Actual results may differ from management's estimates if these results differ from historical experience, or other assumptions do not turn out to be substantially accurate, even if such assumptions are reasonable when made. Changes in estimates are recorded in the period in which they become known.

Significant estimates relied upon in preparing these consolidated financial statements include the determination of sales allowance and variable consideration in the Company's revenue recognition, allowance for doubtful accounts, the expensing and capitalization of product, technology, and development costs for website development and internal-use software, the valuation and recoverability of goodwill and intangible assets and other long-lived assets, the recoverability of the Company's net deferred tax assets and related valuation allowance and stock-based compensation. Accordingly, the Company considers these to be its critical accounting policies, and believes that of the Company's significant accounting policies, these involve a greater degree of judgment and complexity.

Concentration of Credit Risk

The Company has no significant off-balance sheet risk, such as foreign exchange contracts, option contracts, or other foreign hedging arrangements. Financial instruments that potentially expose the Company to concentrations of credit risk consist primarily of cash, cash equivalents, investments, and trade accounts receivable.

The Company maintains its cash, cash equivalents, and investments principally with accredited financial institutions of high credit standing. Although the Company deposits its cash, cash equivalents, and investments with multiple financial institutions, its deposits may often exceed governmental insured limits.

Credit risk with respect to accounts receivable is dispersed due to the large number of customers. The Company routinely assesses the creditworthiness of its customers. The Company generally has not experienced any material losses related to receivables from individual customers, or groups of customers. The Company does not require collateral. Due to these factors, no additional credit risk beyond amounts provided for collection losses is believed by management to be probable in the Company's accounts receivable.

For the years ended December 31, 2020, 2019, and 2018, no individual customer accounted for more than 10% of total revenue.

As of December 31, 2020, one customer accounted for 10% of net accounts receivable. As of December 31, 2019 one customer accounted for 18% of net accounts receivable.

Included in net accounts receivable at December 31, 2020 and 2019, is $7,426 and $8,880, respectively, of unbilled accounts receivable related primarily to advertising customers billed within a period subsequent to services rendered.

Cash, Cash Equivalents, and Investments

Cash and cash equivalents primarily consist of cash on deposit with banks, and amounts held in interest-bearing money market accounts. Cash equivalents are carried at cost, which approximates their fair market value.

The Company considers all highly liquid investments with an original maturity of 90 days or less at the date of purchase to be cash equivalents. Investments not classified as cash equivalents with maturities less than one year from the balance sheet date are classified as short-term investments, while investments with maturities in excess of one year from the balance sheet date are classified as long-term investments. Management determines the appropriate classification of investments at the time of purchase, and re-evaluates such determination at each balance sheet date.

The Company's investment policy, which was approved by the Audit Committee of the Company's board of directors (the "Board"), permits investments in fixed income securities, including U.S. government and agency securities, non-U.S. government securities, money market instruments, commercial paper, certificates of deposit, corporate bonds, and asset-backed securities.

As of December 31, 2020 and 2019, investments consisted of U.S. certificates of deposit ("CDs") with remaining maturities of less than twelve months. The Company classifies CDs with readily determinable market values as held-to-maturity, because it is the Company's intention to hold such investments until they mature. As such, investments were recorded at amortized cost at December 31, 2020 and 2019. The Company adjusts the cost of investments for amortization of premiums and accretion of discounts to maturity, if any. For the years ended December 31, 2020, 2019 and 2018, the Company did not have any premiums or discounts. Realized gains and losses from sales of the Company's investments are included in other income, net. There were no realized gains or losses on investments for the years ended December 31, 2020, 2019 or 2018.

The Company reviews investments for other-than-temporary impairment whenever the fair value of an investment is less than the amortized cost and evidence indicates that an investment's carrying amount is not recoverable within a reasonable period of time. Other-than-temporary impairments of investments are recognized in the consolidated income statements if the Company has experienced a credit loss or if it is more likely than not that the Company will be required to sell the investment before recovery of the amortized cost basis. Evidence considered in this assessment includes reasons for the impairment, compliance with the Company's investment policy, the severity and duration of the impairment, and changes in value subsequent to the end of the period. As of December 31, 2020 and 2019, the Company determined that no other-than-temporary impairments were required to be recognized in the consolidated income statements.

Restricted Cash

At December 31, 2020 and 2019, restricted cash was $10,627 and $10,803, respectively, and primarily related to cash held at a financial institution in an interest-bearing cash account as collateral for the letters of credit related to the contractual provisions for the Company's building leases.

Accounts Receivable and Allowance for Doubtful Accounts

Accounts receivable are recorded based on the amount due from the customer and do not bear interest.

The Company is exposed to credit losses primarily through its trade accounts receivable. The Company offsets gross trade accounts receivable with an allowance for doubtful accounts. The allowance for doubtful accounts is the Company's best estimate of the amount of probable credit losses in the Company's existing accounts receivable and is based upon historical loss trends, the number of days that billings are past due, an evaluation of the potential risk of loss associated with specific accounts, current conditions, and reasonable and supportable forecasts of economic conditions.

Amounts are charged against the allowance after all means of collection have been exhausted, the potential for recovery is considered remote and when it is determined that expected credit losses may occur. The Company does not have any off-balance sheet credit exposure related to its customers. Provisions for allowances for doubtful accounts are recorded in general and administrative expense within the consolidated income statements. Unbilled accounts receivable are recorded for services rendered in the current period, but generally not invoiced until the subsequent period.

The Company also considers current economic trends when evaluating the adequacy of the allowance for doubtful accounts. If circumstances relating to specific customers change, or unanticipated changes occur in the general business environment, particularly as it affects auto dealers, such as the impacts of the novel strain of coronavirus that surfaced in December 2019 and was subsequently declared a pandemic in 2020 by the World Health Organization after spreading globally ("COVID-19"), the Company's estimates of the recoverability of receivables could be further adjusted.

In light of the COVID-19 pandemic, the Company assessed the implications on accounts receivable and increased its allowance for doubtful accounts to $616 as of December 31, 2020 as compared to $240 as of December 31, 2019. The increase in account delinquencies due to the COVID-19 pandemic resulted in $1,930 of bad debt expense and $1,554 of write offs, net of recoveries for the year ended December 31, 2020.

Below is a summary of the changes in the Company's allowance for doubtful accounts for the years ended December 31, 2020, 2019, and 2018:

	Balance at Beginning of Period	Provision	Write–offs, net of recoveries	Balance at End of Period
Year ended December 31, 2020	$ 240	$ 1,930	$ (1,554)	$ 616
Year ended December 31, 2019	479	1,091	(1,330)	240
Year ended December 31, 2018	494	1,680	(1,695)	479

Property and Equipment

Property and equipment are stated at cost less accumulated depreciation and amortization using the straight-line method over the estimated useful lives of the assets. Leasehold improvements are amortized over the shorter of the lease term or the estimated useful life of the related asset. The estimated useful lives of the Company's property and equipment are as follows:

	Estimated Useful Life (In Years)
Capitalized equipment	3
Capitalized software	3
Capitalized website development	3
Furniture and fixtures	5
Right-of-use assets	Lesser of asset life or lease term
Leasehold improvements	Lesser of asset life or lease term

Expenditures for repairs and maintenance are charged to expense as incurred, whereas major betterments are capitalized as additions to property and equipment.

Impairment of Long-Lived Assets

The Company evaluates the recoverability of long-lived assets, such as property and equipment and intangible assets, for impairment at least annually and whenever events or changes in circumstances indicate that the carrying value of an asset may not be recoverable. During this review, the Company re-evaluates the significant assumptions used in determining the original cost and estimated lives of long-lived assets. Although the assumptions may vary from asset to asset, they generally include operating results, changes in the use of the asset, cash flows, and other indicators of value. Management then determines whether the remaining useful life continues to be appropriate, or whether there has been an impairment of long-lived assets based primarily upon whether expected future undiscounted cash flows are sufficient to support the assets' recovery. Recoverability of these assets is measured by comparison of the carrying amount of the asset to the future undiscounted cash flows the asset is expected to generate. If the asset is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset.

For the year ended December 31, 2020, the Company did not identify any impairment of long-lived assets other than $1,151 of write-offs in capitalized website development costs, of which $844 related to the exit of certain international markets. For the years ended December 31, 2019 and 2018, the Company did not identify any impairment of long-lived assets.

Capitalized Website Development and Internal-Use Software Costs

The Company capitalizes certain costs associated with the development of its websites and internal-use software products after the preliminary project stage is complete and until the software is ready for its intended use. Research and development costs incurred during the preliminary project stage or costs incurred for data conversion activities, training, maintenance, and general and administrative or overhead costs are expensed as incurred. Capitalization begins when the preliminary project stage is complete, management authorizes and commits to the funding of the software project with the required authority, it is probable the project will be completed, the software will be used to perform the functions intended and certain functional and quality standards have been met. Qualified costs incurred during the operating stage of our software applications relating to upgrades and enhancements are capitalized to the extent it is probable that they will result in added functionality, while costs that cannot be separated between maintenance of, and minor upgrades and enhancements to, websites and internal-use software are expensed as incurred.

Capitalized website and software development costs are amortized on a straight-line basis over their estimated useful life of three years beginning with the time when it is ready for intended use. Amounts amortized are presented through cost of revenue. Management evaluates the useful lives of these assets on an annual basis and tests for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets.

During the years ended December 31, 2020 and 2019, the Company capitalized $6,396 and $4,176 of website development costs, respectively. The Company recorded amortization expense associated with its capitalized website development costs of $3,324, including write offs of $844 of capitalized website development costs related to the exit of certain international markets, for the year ended December 31, 2020. The Company recorded amortization expense associated with its capitalized website development costs of $1,643 and $1,508 for the years ended December 31, 2019 and 2018, respectively.

Since the adoption of ASU 2018-15, Intangibles – Goodwill and Other – Internal-Use Software (Subtopic 350-24): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement that is a Service Contract (ASU 2018-15), on January 1, 2019, the Company evaluates upfront costs including implementation, set-up or other costs (collectively, implementation costs) for hosting arrangements under the internal-use software framework. Costs related to preliminary project activities and post implementation activities are expensed as incurred, whereas costs incurred in the development stage are generally capitalized. Capitalized implementation costs are amortized on a straight-line basis over an estimated useful life of the term of the hosting arrangement, taking into consideration several other factors such as, but not limited to, options to extend the hosting arrangement or options to terminate the hosting arrangement, beginning with the time when the software is ready for intended use. Amounts amortized are presented through operating expense, rather than depreciation or amortization. Management evaluates the useful lives of these assets on an annual basis and tests for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets.

During the years ended December 31, 2020 and 2019, the Company launched separate initiatives designed to evaluate and enhance its enterprise applications. During the year ended December 31, 2020 the Company capitalized $332 of implementation costs in other non-current assets. During the year ended December 31, 2019, the Company capitalized $2,615 and $616 of implementation costs in other non-current assets and in prepaid expenses, prepaid income taxes and other current assets, respectively. The Company recorded amortization expense associated with its internal-use software of $690 and $132 for the years ended December 31, 2020 and 2019, respectively.

Business Combinations

Valuation of Acquired Assets and Liabilities

The Company measures all consideration transferred in a business combination at its acquisition-date fair value. Consideration transferred is determined by the acquisition-date fair value of assets transferred, liabilities assumed, including contingent consideration obligations, as applicable. The Company measures goodwill as the excess of the consideration transferred over the net of the acquisition-date amounts of assets acquired less liabilities assumed.

The Company makes significant assumptions and estimates in determining the fair value of the acquired assets and liabilities as of the acquisition date, especially the valuation of intangible assets and certain tax positions. The Company records estimates as of the acquisition date and reassess the estimates at each reporting period up to one year after the acquisition date. Changes in estimates made prior to finalization of purchase accounting are recorded to goodwill.

Intangible Assets

Intangible assets are recorded at their estimated fair value at the date of acquisition. The Company amortizes intangible assets over their estimated useful lives on a straight-line basis. Amortization is recorded over the relevant estimated useful lives ranging from three to eleven years.

The Company evaluates the useful lives of these assets on an annual basis and tests for impairment whenever events or changes in circumstances occur that could impact the recoverability of these assets. If the estimate of an intangible asset's remaining useful life is changed, the Company amortizes the remaining carrying value of the intangible asset prospectively over the revised remaining useful life.

For the years ended December 31, 2020 and 2019, the Company did not identify any impairment of its intangible assets.

Goodwill

Goodwill is recorded when consideration paid in a purchase acquisition exceeds the fair value of the net assets acquired. Goodwill is not amortized, but rather is tested for impairment annually or more frequently if facts and circumstances warrant a review. Conditions that could trigger a more frequent impairment assessment include, but are not limited to, a significant adverse change in certain agreements, significant underperformance relative to historical or projected future operating results, an economic downturn affecting automotive marketplaces, increased competition, a significant reduction in our stock price for a sustained period or a reduction of our market capitalization relative to net book value.

The Company has determined that it had two reporting units, United States and International, as of and for the year ended December 31, 2020. The Company elected to bypass the optional qualitative test for impairment and proceed to Step 1, which is a quantitative impairment test. The Company evaluates impairment annually on October 1 by comparing the estimated fair value of each reporting unit to its carrying value. The Company estimates fair value using a market approach, based on market multiples derived from public companies that are identified as peers. In 2020, the Company calculated the fair value of its reporting units using the market approach, which required the Company to estimate the forecasted revenue and estimate revenue market multiples using publicly available information for each of their reporting units. Developing these assumptions required the use of significant judgment and estimates. Actual results may differ from these forecasts.

For the years ended December 31, 2020 and 2019, the Company did not identify any impairment of its goodwill.

Leases

In February 2016, the FASB issued ASC Topic 842, Leases ("ASC 842"), which requires a lessee to recognize most leases on the consolidated balance sheet but recognize expenses on the consolidated income statement in a manner similar to current practice. The update states that a lessee will recognize a lease liability for the obligation to make lease payments and a right-of-use asset for the right to use the underlying assets for the lease term. The Company adopted ASC 842 as of January 1, 2019, using the additional transition method offered through ASU No. 2018-11 Targeted Improvements. This approach provides a method for recording existing leases at the adoption date and recognizing a cumulative-effect adjustment to the opening balance of retained earnings in the period of adoption.

Upon adoption of ASC 842, the Company elected the transition relief package, permitted within the standard, pursuant to which the Company did not reassess the classification of existing leases, whether any expired or existing contracts contain a lease, and whether existing leases have any initial direct costs. The Company also elected the practical expedient of not separating lease components from non-lease components for all leases. There was no cumulative-effective adjustment to the opening balance of retained earnings. The Company reviews all material contracts for embedded leases to determine if they have a right-of-use asset.

The Company recognizes rent expense on a straight-line basis over the lease period. The depreciable life of assets and leasehold improvement are limited by the expected lease term, unless there is a transfer of title or purchase option reasonably certain of exercise. The Company allocates lease costs across all departments based on headcount in the respective location.

Variable lease payments that depend on an index or a rate are included in the lease payments and are measured using the prevailing index or rate at the measurement date. Variable lease payments not based on an index or a rate are excluded from lease payments and are expensed as incurred.

The Company made an accounting policy election to not recognize a lease liability or right-of-use asset on its consolidated balance sheet for leases with an initial term of twelve months or less, and instead to recognize lease payments on the consolidated income statement on a straight-line basis over the lease term and variable lease payments that do not depend on an index or rate as expense in the period in which the achievement of the specified target that triggers the variable lease payments becomes probable.

Adoption of the new standard resulted in the recording of net lease assets and lease liabilities of $52,334 and $63,280, respectively, as of January 1, 2019. The standard did not materially impact the consolidated statement of cash flows and had no impact on the consolidated income statement.

Contingent Liabilities

The Company has certain contingent liabilities that arise in the ordinary course of business activities. The Company accrues for loss contingencies when losses become probable and are reasonably estimable. If the reasonable estimate of the loss is a range and no amount within the range is a better estimate, the minimum amount of the range is recorded as a liability. The Company does not accrue for contingent losses that, in its judgment, are considered to be reasonably possible, but not probable; however, it discloses the range of such reasonably possible losses.

Income Taxes

The Company accounts for income taxes in accordance with the liability method. Under this method, deferred tax assets and liabilities are recognized based on temporary differences between the financial reporting and income tax bases of assets and liabilities using statutory rates. In addition, this method requires a valuation allowance against net deferred tax assets if, based upon the available evidence, it is more likely than not that some or all of the deferred tax assets will not be realized.

The Company accounts for uncertain tax positions recognized in the consolidated financial statements by prescribing a more-likely-than-not threshold for financial statement recognition and measurement of a tax position taken or expected to be taken in a tax return. Interest and penalties, if applicable, related to uncertain tax positions would be recognized as a component of income tax expense. The Company has no recorded liabilities for uncertain tax positions as of December 31, 2020 and 2019.

The Tax Cuts and Jobs Act subjects a U.S. shareholder to tax on global intangible low-taxed income ("GILTI") earned by certain foreign subsidiaries. An entity can make an accounting policy election, per the FASB Staff Q&A, Topic 740, No. 5, Accounting for Global Intangible Low-Taxed Income ("ASC 740"), either to recognize deferred taxes for temporary basis differences expected to reverse as GILTI in future years or to provide for the tax expense related to GILTI in the year the tax is incurred as a period expense only. The Company has elected to account for GILTI as a period cost in the year the tax is incurred.

Fair Value of Financial Instruments

The Company measures eligible assets and liabilities at fair value with changes in value recognized in earnings. There were no liabilities that were measured at fair value as of December 31, 2020 and 2019. Fair value treatment may be elected either upon initial recognition of an eligible asset or liability or, for an existing asset or liability, if an event triggers a new basis of accounting. The Company did not elect to remeasure any of its existing financial assets and did not elect the fair value option for any financial assets transacted during the years ended December 31, 2020 and 2019.

ASC 820, *Fair Value Measurements and Disclosures*, establishes a three-level valuation hierarchy for instruments measured at fair value that distinguishes between assumptions based on market data (observable inputs) and the Company's own assumptions (unobservable inputs). Observable inputs are inputs that market participants would use in pricing the asset or liability based on market data obtained from sources independent of the Company. Unobservable inputs are inputs that reflect the Company's assumptions about the inputs that market participants would use in pricing the asset or liability, and are developed based on the best information available in the circumstances.

ASC 820 identifies fair value as the exchange price, or exit price, representing the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants based on the highest and best use of the asset or liability. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. The Company uses valuation techniques to measure fair value that maximize the use of observable inputs and minimize the use of unobservable inputs. These inputs are prioritized as follows:

Level 1 — Quoted unadjusted prices for identical instruments in active markets.

Level 2 — Quoted prices for similar instruments in active markets, quoted prices for identical or similar instruments in markets that are not active, and model-derived valuations in which all observable inputs and significant value drivers are observable in active markets.

Level 3 — Model-derived valuations in which one or more significant inputs or significant value drivers are unobservable, including assumptions developed by the Company.

The Company has evaluated the estimated fair value of financial instruments using available market information. The use of different market assumptions, estimation methodologies, or both, could have a significant effect on the estimated fair value amounts.

The carrying amounts of the Company's financial instruments, which include cash and cash equivalents, investments, accounts receivable, accounts payable, and accrued expenses, approximated their fair values at December 31, 2020 and 2019 due to the short-term nature of these instruments.

Foreign Currency Translation

The reporting currency of the Company is the U.S. dollar. The functional currency of the Company's foreign subsidiaries is the local currency of each subsidiary. All assets and liabilities in the balance sheets of entities whose functional currency is a currency other than the U.S. dollar are translated into U.S. dollar equivalents at exchange rates as follows: (1) asset and liability accounts at period-end rates; (2) income statement accounts at weighted-average exchange rates for the period; and (3) stockholders' equity accounts at historical exchange rates. The resulting translation adjustments are excluded from net income and reflected as a separate component of stockholders' equity. Foreign currency transaction gains and losses are included in net income for the period. The Company may periodically have certain intercompany foreign currency transactions that are deemed to be of a long-term investment nature; exchange adjustments related to those transactions are made directly to a separate component of stockholders' equity.

Revenue Recognition

Sources of Revenue

The Company derives its revenue from two sources: (1) marketplace subscription revenue, which consists primarily of Listings and Dealer Display subscriptions, and (2) advertising and other revenue, which consists primarily of display advertising revenue from auto manufacturers and other auto-related brand advertisers as well as partnerships with financing services companies.

Marketplace Subscription Revenue

The Company offers multiple types of marketplace Listings packages to its dealers through its CarGurus U.S. platform (availability varies on the Company's other marketplaces): Restricted Listings (formerly referred to as Basic Listings), which is free; and various levels of Listings packages, which each require a paid subscription under a monthly, quarterly, semiannual, or annual subscription basis.

The Company's subscriptions for customers generally auto-renew on a monthly basis and are cancellable by dealers with 30 days' advance notice at the end of the committed term, although during the second quarter of 2020 the Company did not require 30 days' advance notice of termination from dealers who cancelled as a result of the COVID-19 pandemic. Subscription pricing is determined based on a dealer's inventory size, region, and our assessment of the connections and return on investment, or ROI, the platform will provide them and is subject to discounts and/or fee reductions that the Company may offer from time to time. The Company also offers all dealers on the platform access to its Dealer Dashboard, which includes a performance summary, Dealer Insights tool, and user review management platform. Only dealers subscribing to a paid Listings package also have access to the Pricing Tool, Market Analysis tool and IMV Scan tool.

Dealer customers do not have the right to take possession of the Company's software.

In addition to displaying inventory in the Company's marketplace and providing access to the Dealer Dashboard, the Company offers dealers subscribing to certain of its Listings packages other subscription advertising and customer acquisition products and enhancements, including Dealer Display, which is marketed under our Real-time Performance Marketing suite. With Dealer Display, dealers can buy display advertising that appears in the Company's marketplace, on other sites on the internet, and/or on Facebook, a highly converting social media platform. Such advertisements can be targeted by the user's geography, search history, CarGurus website activity (including showing a consumer relevant vehicles from a dealer's inventory that the consumer has not yet discovered on the Company's marketplace), and a number of other targeting factors, allowing dealers to increase their visibility with in-market consumers and drive qualified traffic for dealers.

Payment is typically due on first day of each calendar month and is recorded as accounts receivable or short-term deferred revenue when payment is received in advance of services being delivered to the customers.

The Company also offers paid Listings packages for the Autolist website and paid Listings and display products for the PistonHeads website.

Advertising and Other Revenue

Advertising and other revenue consists primarily of non-dealer display advertising revenue from auto manufacturers and other auto-related brand advertisers sold on a cost per thousand impressions, or CPM basis. An impression is an advertisement loaded on a web page. In addition to advertising sold on a CPM basis, the Company also has advertising sold on a cost per click basis. Auto manufacturers and other brand advertisers can execute advertising campaigns that are targeted across a wide variety of parameters, including demographic groups, behavioral characteristics, specific auto brands, categories such as Certified Pre-Owned, and segments such as hybrid vehicles. The Company does not provide minimum impression guarantees or other types of minimum guarantees in its contracts with customers. Pricing is primarily based on advertisement size and position on the Company's websites and mobile applications, and fees are billed monthly in arrears. Unbilled accounts receivable relate to services rendered in the current period, but generally not invoiced until the subsequent period.

The Company sells advertising directly to auto manufacturers and other auto related brand advertisers, as well as indirectly through revenue sharing arrangements with advertising exchange partners. Company-sold advertising is not subject to revenue sharing arrangements. Company-sold advertising revenue is recognized based on the gross amount charged to the advertiser. Partner-sold advertising revenue is recognized based on the net amount of revenue received from the content partners.

Revenue from advertising sold directly by the Company is recorded on a gross basis because the Company is the principal in the arrangement, controls the ad placement and timing of the campaign, and establishes the selling price. The Company enters into contractual arrangements directly with advertisers and is directly responsible for the fulfillment of the contractual terms including any remedy for issues with such fulfillment.

Advertising revenue subject to revenue sharing agreements between the Company and advertising exchange partners is recognized based on the net amount of revenue received from the partner. The advertising partner is responsible for fulfillment, including the acceptability of the services delivered. In partner-sold advertising arrangements, the advertising partner has a direct contractual relationship with the advertiser. There is no contractual relationship between the Company and the advertiser for partner-sold transactions. When an advertising exchange partner sells advertisements, the partner is responsible for fulfilling the advertisements, and accordingly, the Company has determined the advertising partner is the principal in the arrangement. Additionally, for auction-based partner agreements, the Company has latitude in establishing the floor price, but the final price established by the exchange server is at market rates.

Customers are billed monthly in arrears and payment terms are generally thirty to sixty days from the date invoiced.

Advertising and other revenue also includes revenue from partnerships with certain financing services companies pursuant to which the Company enables eligible consumers on the Company's U.S. website to pre-qualify for financing on cars from dealerships that offer financing through such companies. The Company primarily generates revenues from these partnerships based on the number of funded loans from consumers who pre-qualify with our lending partners through our site.

The Company also offers non-dealer display products for the Autolist and PistonHeads websites.

Revenue Recognition

ASC Topic 606, Revenue from Contracts with Customers, or ASC 606, outlines a comprehensive five-step revenue recognition model based on the principle that an entity should recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. To achieve this core principle, the Company applies the following five steps:

1) Identify the contract with a customer

2) Identify the performance obligations in the contract

3) Determine the transaction price

4) Allocate the transaction price to performance obligations in the contract

5) Recognize revenue when or as the Company satisfies a performance obligation

Marketplace Subscription Revenue

For dealer listings, the Company provides a single similar service each day for a period of time. Each time increment (i.e., one day), rather than the underlying activities, is distinct and substantially the same and therefore the performance obligation of the Company is to provide a series of daily activities over the contract term. Similar to the dealer listings, the dealer display advertising is considered a promise to provide a single similar service each day. Each time increment is distinct and substantially the same and therefore the performance obligation of the Company is to provide a series of daily activities over the contract term.

Total consideration for marketplace subscription revenue is stated within the contracts. There are no contractual cash refund rights, but credits may be issued to a customer at the sole discretion of the Company. At the portfolio level, there is also variable consideration that needs to be included in the transaction price. Variable consideration consists of sales allowances, usage fees, and concessions that change the transaction price of the unsatisfied or partially unsatisfied performance obligation. The Company recognizes that there are times when there is a customer satisfaction issue or other circumstance that will lead to a credit. Due to the known possibility of future credits, a monthly sales allowance review is performed to defer revenue at a portfolio level for such future adjustments in the period of incurrence. The Company establishes sales allowances at the time of revenue recognition based on its history of adjustments and credits provided to its customers. In assessing the adequacy of the sales allowance, the Company evaluates its history of adjustments and credits made through the date of the issuance of the financial statements. Estimated sales adjustments, credits and losses may vary from actual results which could lead to material adjustments to the financial statements. Sales allowances are recorded as a reduction to revenue in the consolidated income statements.

Performance obligations are satisfied over time as the customer simultaneously receives and consumes the benefit of the service. Revenue is recognized ratably over the subscription period beginning on the date the Company starts providing services to the customer under the contract. Revenue is presented net of any taxes collected from customers.

Advertising and Other Revenue

For advertising revenue, the performance obligation is to publish the agreed upon campaign on the Company's websites and load the related impressions.

Advertising contracts state the transaction price within the agreement with payment being based on the number of clicks or impressions delivered on the Company's websites. Total consideration is based on output and deemed variable consideration constrained by an agreed upon delivery schedule. Additionally, there are generally no contractual cash refund rights. Certain contracts do contain the right for credits in situations in which impressions are not displayed in compliance with contractual specifications. At an individual contract level, the Company may give a credit for a customer satisfaction issue or other circumstance. Due to the known possibility of future credits, a monthly review is performed to defer revenue at an individual contract level for such future adjustments in the period of incurrence.

As consideration is driven by the number of impressions delivered on the CarGurus websites, the consideration for each period is allocated to the period in which the service was rendered.

Performance obligations for company-sold advertising revenue and partner-sold advertising revenue are satisfied over time as impressions are delivered. Revenue is recognized based on the total number of impressions delivered within the specified period. Revenue from advertising sold directly by the Company is recognized based on the gross amount charged to the advertiser and advertising revenue sold by partners is recognized based on the net amount of revenue received from the content partners. Revenue is presented net of any taxes collected from customers.

Other revenue includes revenue from contracts for which the performance obligation is a series of distinct services with the same level of effort daily. For these contracts, the Company estimates the value of the variable consideration in determining the transaction price and allocates it to the performance obligation. Revenue is estimated and recognized on a ratable basis over the contractual term. The Company reassesses the estimate of variable consideration at each reporting period.

Contracts with Multiple Performance Obligations

The Company periodically enters into arrangements that include Listings and Dealer Display within marketplace subscription revenue. These contracts include multiple promises that the Company evaluates to determine if the promises are separate performance obligations. Performance obligations are identified based on services to be transferred to a customer that are distinct within the context of the contractual terms. Once the performance obligations have been identified, the Company determines the transaction price, which includes estimating the amount of variable consideration to be included in the transaction price, if any. If required, the transaction price is allocated to each performance obligation in the contract based on a relative standalone selling price method as the performance obligation is being satisfied. For the Company's arrangements that include Listings and Dealer Display, the performance obligations were satisfied over a consistent period of time and therefore the allocations did not impact the revenue recognized.

Costs to Obtain a Contract

Commissions paid to sales representatives and payroll taxes are considered costs to obtain a contract. Under ASC 606, the costs to obtain a contract require capitalization and amortization of those costs over the period of benefit. Although the guidance specifies the accounting for an individual contract with a customer, as a practical expedient, the Company has opted to apply the guidance to a portfolio of contracts with similar characteristics. The Company has opted to apply another practical expedient to immediately expense the incremental cost of obtaining a contract when the underlying related asset would have been amortized over one year or less. As such, the Company applied this practical expedient to advertising contracts as the term is one year or less and these contracts do not renew automatically. The practical expedient is not applicable to marketplace subscription contracts as the period of benefit including renewals is anticipated to be greater than one year as commissions paid on contract renewals are not commensurate with the commissions paid on the initial contract. The assets are periodically assessed for impairment.

For marketplace subscription customers, the commissions paid on contracts with new customers, in addition to any commission amount related to incremental sales, are capitalized and amortized over the estimated benefit period of the customer relationship taking into account factors such as peer estimates of technology lives and customer lives as well as the Company's own historical data. Commissions paid that are not directly related to obtaining a new contract are expensed as incurred.

Additionally, the Company allocates employer payroll tax expense to the commission expense in proportion to the overall payroll taxes paid during the respective period. As such, capitalized payroll taxes are amortized in the same manner as the underlying capitalized commissions.

The assets recognized for costs to obtain a contract were $19,996, $20,058, and $12,505, as of December 31, 2020, December 31, 2019, and December 31, 2018, respectively. Amortization expense recognized during the years ended December 31, 2020, 2019, and 2018 related to costs to obtain a contract was $11,605, $8,416, and $3,689, respectively.

Deferred Revenue

Deferred revenue primarily consists of payments received in advance of revenue recognition from the Company's marketplace revenue and is recognized as the revenue recognition criteria are met. The Company generally invoices its customers monthly. Accordingly, the deferred revenue balances do not represent the total contract value of annual or multiyear subscription agreements. Deferred revenue that is expected to be recognized during the succeeding 12-month period is recorded as current deferred revenue and the remaining portion is recorded as noncurrent in the consolidated balance sheets. All deferred revenue was recorded as current for all periods presented.

Cost of Revenue

Cost of revenue primarily consists of costs related to supporting and hosting the Company's product offerings. These costs include salaries, benefits, incentive compensation and stock-based compensation for the Company's customer support team, and third-party service provider costs such as data center and networking expenses, allocated overhead costs, depreciation and amortization expense associated with the Company's property and equipment, and amortization of capitalized website development costs.

Stock-Based Compensation

For stock-based awards issued under the Company's stock-based compensation plans, which are more fully described in Note 11, the fair value of each award is determined on the date of grant. The Company recognizes compensation expense for service-based awards on a straight-line basis over the requisite service period for each separate vesting portion of the award, with the amount of compensation expense recognized at any date at least equaling the portion of the grant-date fair value of the award that is vested at that date.

For restricted stock units ("RSUs") granted subsequent to the Initial Public Offering ("IPO"), the fair value is determined based on the closing price of the Company's Class A common stock as reported on the Nasdaq Global Select Market on the date of grant.

The Company issues shares for stock option exercises and RSUs out of its shares available for issuance. No options were granted during the years ended December 31, 2020, 2019, and 2018.

The Company accounts for forfeitures when they occur. The tax effect of differences between tax deductions related to stock compensation and the corresponding financial statement expense compensation are recorded to tax expense. Excess tax benefits recognized on stock-based compensation expense are classified as an operating activity in the consolidated statements of cash flows.

During 2020, the Company recorded immaterial tax demerits related to stock-based compensation as compared to excess tax benefits of $11,115 and $40,765 recorded for the years ended December 31, 2019 and 2018 respectively.

See Note 11 of consolidated financial statements included elsewhere in this Annual Report on Form 10-K for a summary of the stock option and RSU activity for the year ended December 31, 2020.

Advertising Costs

Advertising costs are expensed as incurred. Advertising expense, which is included within sales and marketing expense in the consolidated income statements, was $155,580, $287,107, and $238,640 for the years ended December 31, 2020, 2019, and 2018, respectively.

Comprehensive Income

Comprehensive income is defined as the change in stockholders' equity of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. Comprehensive income consists of net income and other comprehensive income (loss), which includes certain changes in equity that are excluded from net income. Specifically, cumulative foreign currency translation adjustments are included in accumulated other comprehensive income (loss). As of December 31, 2020 and 2019, accumulated other comprehensive income (loss) is presented separately on the consolidated balance sheets and consists entirely of cumulative foreign currency translation adjustments.

Recent Accounting Pronouncements Adopted

Goodwill and Intangibles

In January 2017, the FASB issued ASU 2017-04, *Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* ("ASU 2017-04"). ASU 2017-04 simplifies the accounting for goodwill impairment by eliminating Step 2 of the goodwill impairment test. Under previous guidance, Step 2 of the goodwill impairment test required entities to calculate the implied fair value of goodwill in the same manner as the amount of goodwill recognized in a business combination by assigning the fair value of a reporting unit to all of the assets and liabilities of the reporting unit. The carrying value in excess of the implied fair value was recognized as goodwill impairment. Under ASU 2017-04, goodwill impairment is recognized based on Step 1 of the goodwill impairment test, which calculates the carrying value in excess of the reporting unit's fair value. The standard was effective beginning in January 2020, with early adoption permitted. The Company adopted the guidance on January 1, 2020 and applied it on a prospective basis. The adoption did not have a material impact on its consolidated financial statements.

Credit Losses

In June 2016, the FASB issued ASU 2016-13, *Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments* ("ASU 2016-13"). ASU 2016-13 and its subsequent related updates establish a forward-looking "expected loss model" that requires entities to estimate current expected credit losses on accounts receivable and financial instruments by using all practical and relevant information. ASU 2016-13 and its subsequent related updates were effective for fiscal years beginning after December 15, 2019, including interim periods within those fiscal years, with early adoption permitted. The Company adopted the guidance on January 1, 2020 and applied it on a prospective basis. The adoption did not have a material impact on the consolidated financial statements.

Recent Accounting Pronouncements Not Yet Adopted

From time to time, new accounting pronouncements are issued by the FASB or other standard-setting bodies and adopted by the Company on or prior to the specified effective date. Unless otherwise discussed, the Company believes that the impact of recently issued standards that are not yet effective will not have a material impact on its financial position or results of operations upon adoption.

In December 2019, the FASB issued ASU 2019-12, Income Taxes – Simplifying the Accounting for Income Taxes ("ASU 2019-12"). ASU 2019-12 simplifies the accounting for income taxes by removing several exceptions in the current standard and adding guidance to reduce complexity in certain areas, such as requiring that an entity reflect the effect of an enacted change in tax laws or rates in the annual effective tax rate computation in the interim period that includes the enactment date. The standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2020, with early adoption permitted. The Company does not expect the impact of ASU 2019-12 to be material to its consolidated financial statements.

3. Revenue Recognition

The following table summarizes revenue from contracts with customers by revenue source for the years ended December 31, 2020, 2019 and 2018.

	2020	2019	2018
United States			
Marketplace subscription revenue	$ 456,505	$ 496,730	$ 390,254
Advertising and other revenue	63,330	58,277	46,912
Total	519,835	555,007	437,166
International			
Marketplace subscription revenue	28,473	29,313	15,526
Advertising and other revenue	3,143	4,596	1,394
Total	31,616	33,909	16,920
Total Revenue			
Marketplace subscription revenue	484,978	526,043	405,780
Advertising and other revenue	66,473	62,873	48,306
Total	$ 551,451	$ 588,916	$ 454,086

The Company provides disaggregation of revenue based on the marketplace subscription versus advertising and other revenue classification in the table above and based on geographic region (see Note 14 of consolidated financial statements included elsewhere in this Annual Report on Form 10-K) as it believes these categories best depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors.

ASC 606 requires that the Company disclose the aggregate amount of transaction price that is allocated to performance obligations that have not yet been satisfied as the relevant year end.

For contracts with an original expected duration greater than one year, the aggregate amount of the transaction price allocated to the performance obligations that were unsatisfied as of December 31, 2020 is approximately $17.7 million, which the Company expects to recognize over the next twelve months.

For contracts with an original expected duration of one year or less, the Company has applied the practical expedient available under ASC 606 to not disclose the amount of transaction price allocated to unsatisfied performance obligations as of December 31, 2020. For performance obligations not satisfied as of December 31, 2020, and to which this expedient applies, the nature of the performance obligations, the variable consideration and any consideration from contracts with customers not included in the transaction price is consistent with performance obligations satisfied as of December 31, 2020.

Revenue recognized during the year ended December 31, 2020 and 2019 from amounts included in deferred revenue at the beginning of the period was $9,984 and $8,811, respectively.

In response to the COVID-19 pandemic, the Company reduced the subscription fees for paying dealers by at least 50% on all marketplace subscriptions for the April and May 2020 service periods, as well as provided a fee reduction on all June 2020 marketplace subscriptions of 20% for paying dealers in the United States and Canada and 50% for paying dealers in the United Kingdom. These fee reductions resulted in a modification to contracts with initial contractual periods greater than one month. For any contract modified, the Company calculated the remaining transaction price and allocated the consideration over the remaining performance obligations. These fee reductions materially and adversely impacted revenue for the year ended December 31, 2020, resulting in an approximately $50 million decrease in marketplace subscription revenue. During the December 2020 and February 2021 service periods, the Company also suspended charging subscription fees for subscribing dealers in the United Kingdom. These fee reductions did not materially impact revenue for the year ended December 31, 2020 and are not expected to materially impact revenue for the year ending December 31, 2021. These fee reductions are included in the Company's variable consideration assessment.

4. Acquisitions

On January 16, 2020, the Company acquired Autolist, an automotive shopping platform based in San Francisco, California, pursuant to an Agreement and Plan of Merger by and among the Company, Alpine Merger Sub, Inc., a Delaware corporation and wholly-owned subsidiary of the Company ("Merger Sub"), Auto List, Inc., a Delaware corporation ("Target"), and the securityholders' representative therein, pursuant to which, among other things, the Company acquired Target through the merger of Merger Sub with and into Target (the "Merger"), with Target surviving as a wholly owned subsidiary of the Company. The Company paid an aggregate of $21.1 million, net of cash acquired, to consummate the Merger, which amount included $2.2 million that was set aside in escrow to secure post-closing claims. The Merger was intended to both expand the Company's consumer audience in the United States and enhance its value proposition for subscribing dealers.

As of December 31, 2020, the Company incurred total acquisition-related costs of $1.4 million related to the Merger, of which $1.0 million was incurred during the year ended December 31, 2020 and $0.4 million incurred during the year ended December 31, 2019. Acquisition-related costs were excluded from the purchase price allocation as they were primarily comprised of one-time severance and bonus related expenses. For the year ended December 31, 2020, $0.5 million, $0.3 million, and $0.2 million of acquisition-related costs were recorded as operating expense and allocated to product, technology, and development, general and administrative, and sales and marketing, respectively, within the consolidated income statement.

The acquisition has been accounted for as a business combination under the acquisition method and, accordingly, the total purchase price is allocated to the acquired assets and assumed liabilities. The following table presents the adjusted purchase price allocation recorded in the Company's consolidated balance sheet as of the acquisition date, which was finalized as of December 31, 2020:

	Adjusted Fair Value at Date of Acquisition [(4)]
Cash and cash equivalents	$ 50
Restricted cash	220
Accounts receivable	1,862
Intangible assets [(1)]	7,600
Goodwill [(2)]	12,477
Operating lease right-of-use assets	2,169
Other assets, net	162
Accounts payable and accrued expenses	(358)
Operating lease liabilities - current	(446)
Operating lease liabilities - non-current	(1,723)
Deferred tax liabilities [(3)]	(687)
Total purchase price	$ 21,326

(1) Identifiable definite-lived intangible assets were comprised of brand, developed technology, and customer relationships of $5,600, $1,200, and $800, respectively, with estimated useful lives of 9 years, 3 years, and 3 years, respectively, which will be amortized on a straight-line basis over their estimated useful lives. The fair value of the brand has been estimated using the multi-period excess earnings method which is a variation of the income approach. The fair value of the developed technology and customer relationships has been estimated using a cost approach, which assesses the cost to redevelop the mobile application and technology, and relationships, respectively.

(2) The goodwill represents the excess value of the purchase price over net assets acquired. The goodwill in this transaction is primarily attributable to expected consumer traffic growth and shopper connections for dealers across both the CarGurus and Autolist websites, creating additional value for the Company's premium subscription customers. All goodwill is assigned to the United States reporting segment. The acquisition of Autolist is treated as a stock acquisition for tax purposes and goodwill is not deductible for tax purposes.

(3) The estimated deferred tax liability corresponds to the acquired intangible assets which have no tax basis.

(4) The Company refined its estimates of the fair value of certain accounts included within the preliminary purchase price allocation, which resulted in an immaterial adjustment to accounts receivable, cash paid, deferred tax liability and goodwill.

Actual and pro forma results for this acquisition have not been presented as the financial impact to the Company's consolidated financial statements is not material.

5. Fair Value of Financial Instruments Including Cash, Cash Equivalents and Investments

The following tables present, for each of the fair value levels, the Company's assets that are measured at fair value on a recurring basis at December 31, 2020 and 2019:

	December 31, 2020			
	Quoted Prices in Active Markets for Identical Assets (Level 1 Inputs)	Significant Other Observable Inputs (Level 2 Inputs)	Significant Unobservable Inputs (Level 3 Inputs)	Total
Cash equivalents:				
Money market funds	$ 112,431	$ —	$ —	$ 112,431
Investments:				
Certificates of deposit	—	100,000	—	100,000
Total	$ 112,431	$ 100,000	$ —	$ 212,431

	December 31, 2019			
	Quoted Prices in Active Markets for Identical Assets (Level 1 Inputs)	Significant Other Observable Inputs (Level 2 Inputs)	Significant Unobservable Inputs (Level 3 Inputs)	Total
Cash equivalents:				
Money market funds	$ 29,196	$ —	$ —	$ 29,196
Investments:				
Certificates of deposit	—	111,692	—	111,692
Total	$ 29,196	$ 111,692	$ —	$ 140,888

The following is a summary of investments as of December 31, 2020 and 2019.

	December 31, 2020			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Investments:				
Certificates of deposit due in one year or less	$ 100,000	$ —	$ —	$ 100,000
Total	$ 100,000	$ —	$ —	$ 100,000

	December 31, 2019			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Investments:				
Certificates of deposit due in one year or less	$ 111,692	$ —	$ —	$ 111,692
Total	$ 111,692	$ —	$ —	$ 111,692

6. Property and Equipment, Net

Property and equipment, net consists of the following:

	At December 31,	
	2020	2019
Capitalized equipment	$ 8,108	$ 7,923
Capitalized software	149	181
Capitalized website development costs	16,328	11,083
Furniture and fixtures	7,320	6,809
Leasehold improvements	20,507	19,507
Construction in progress	1,024	524
Finance lease right-of-use assets	41	78
	53,477	46,105
Less accumulated depreciation and amortization	(25,994)	(18,155)
Property and equipment, net	$ 27,483	$ 27,950

Depreciation and amortization expense, excluding amortization of intangible assets, was $9,349 for the year ended December 31, 2020, including write-offs of $1,151. Depreciation and amortization expense, excluding amortization of intangible assets, was $7,168, and $5,029 for the years ended December 31 2019 and 2018, respectively. Capitalized website development costs increased $5,245 due to continued investment in our product offerings.

7. Goodwill and Other Intangible Assets

Goodwill

The changes in the carrying value of goodwill were as follows:

	United States	International	Total
Balance at December 31, 2019	$ —	$ 15,207	$ 15,207
Autolist acquisition [(1)]	12,477	—	12,477
Foreign currency translation adjustment	—	1,445	1,445
Balance at December 31, 2020	$ 12,477	$ 16,652	$ 29,129

(1) See Note 4 of consolidated financial statements included elsewhere in this Annual Report on Form 10-K.

The Company assessed its goodwill for impairment and concluded that there was no impairment as of December 31, 2020.

Other Intangible Assets

Intangible assets as of December 31, 2020 and 2019 consist of the following:

	At December 31, 2020			
	Weighted Average Remaining Useful Life (years)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Brand	8.4	$ 9,405	$ 1,235	$ 8,170
Customer relationships	1.6	1,886	938	948
Developed Technology	1.0	2,213	469	1,744
Total		$ 13,504	$ 2,642	$ 10,862

	At December 31, 2019			
	Weighted Average Remaining Useful Life (years)	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Brand	10.0	$ 3,524	$ 313	$ 3,211
Customer relationships	2.0	1,045	336	709
Total		$ 4,569	$ 649	$ 3,920

The Company recorded amortization expense related to intangible assets of $1,993 and $649 for the year ended December 31, 2020 and 2019, respectively.

The Company assessed its intangible assets for impairment and concluded that there was no impairment as of December 31, 2020.

Estimated amortization expense of intangible assets for future periods as of December 31, 2020, is as follows:

Year Ending December 31,	Amortization Expense
2021	$ 2,371
2022	1,984
2023	1,254
2024	972
2025	972
Thereafter	3,309
Total	$ 10,862

8. Accrued Expenses, Accrued Income Taxes and Other Current Liabilities

Accrued expenses, accrued income taxes and other current liabilities consist of the following:

	At December 31,	
	2020	2019
Accrued bonus	$ 10,845	$ 8,637
Accrued commissions	3,941	3,153
Other accrued expenses, accrued income taxes and other current liabilities	9,965	6,472
Total	$ 24,751	$ 18,262

9. Restructuring

On April 13, 2020, the Board of Directors of the Company approved an expense reduction plan to address the impact of the COVID-19 pandemic on the Company's business (the "Expense Reduction Plan"), pursuant to which the Company initiated a reduction in its workforce of approximately 13%, ceased operation of its Germany, Italy and Spain marketplaces, and halted expansion efforts in any new international markets.

The Expense Reduction Plan was completed in the second quarter of 2020 and during such quarter resulted in restructuring charges of $3,248 for employee severance and related benefits expense and $1,019 for write-off of capitalized website development costs and deferred contract costs from international marketplaces.

The following table summarizes restructuring accrual activity for employee severance and related benefits expense for the year ended December 31, 2020:

	Employee Severance and Related Benefits
Balance at December 31, 2019	$ —
Charges	3,248
Cash disbursements	(2,581)
Noncash settlements	(667)
Balance at December 31, 2020	$ —

For the year ended December 31, 2020, $2,160, $737, $207, and $144 of employee severance and related benefits expense was recorded as product, technology, and development, general and administrative, sales and marketing, and cost of revenue, respectively, within the consolidated income statement. All of the accrued employee severance and related benefits were paid as of December 31, 2020 and were recorded within accrued expenses, accrued income taxes and other current liabilities on the consolidated balance sheets, prior to being paid. For the year ended December 31, 2020, $667 of employee severance and related benefits expense was recorded as stock-based compensation expense within the consolidated statements of cash flows.

For the year ended December 31, 2020, $844 and $175 of the write-off of capitalized website development costs and deferred contract costs from international marketplaces were recorded as cost of revenue and sales and marketing, respectively, within the consolidated income statement. For the year ended December 31, 2020, $844 of the write-off of capitalized website development costs from international marketplaces was recorded as depreciation and amortization within the consolidated statements of cash flows.

10. Commitments and Contingencies

Contractual Obligations and Commitments

All of the Company's property, equipment, and internal-use software have been purchased with cash with the exception of amounts related to unpaid property and equipment and internal-use software as disclosed in the consolidated financial statements and immaterial amounts related to obligations under one finance lease as of December 31, 2020. The Company has no material long-term purchase obligations outstanding with any vendor or third party.

Leases

The Company's primary operating lease obligations consist of various leases for office space in: Boston, Massachusetts; Cambridge, Massachusetts; San Francisco, California; and Dublin, Ireland. The Company also has an operating lease obligation for data center space in Needham, Massachusetts.

On June 12, 2020, the Company amended its operating lease agreement in Boston, Massachusetts at 1001 Boylston Street, which was originally entered into on December 19, 2019 for the lease of 273,595 square feet of office space (the "Original Boston Lease Agreement"). Pursuant to this amendment, the Company exercised its right to reduce the amount of office space agreed to under the lease to 225,428 square feet, and the parties agreed to certain other changes to the lease as set forth in the amendment. As the lease has been signed but the lease term has not commenced, there is no impact to the consolidated financial statements.

The Original Boston Lease Agreement provides for leasehold improvement incentives and provides for annual rent increases through the term of the lease. The “Commencement Date” of the lease term is the earlier to occur of (i) the date that is twelve months following the Delivery Date (as defined in the lease) and (ii) the date that the Company first occupies the premises for the normal conduct of business for the Permitted Use (as defined in the lease). The initial term will commence on the Commencement Date and expire on the date that is one hundred and eighty full calendar months after the Commencement Date (plus the partial month, if any, immediately following the Commencement Date). The lease provides for the option to terminate early under certain circumstances including if there is a material delay in construction (subject to the terms and conditions of the lease), and contains two Company options to extend the lease term (including for a portion of the office space thereunder) for an additional period of five years.

On August 30, 2019, the Company amended its operating lease agreement in Cambridge, Massachusetts at 55 Cambridge Parkway, which was originally entered into on March 11, 2016 and subsequently amended on July 30, 2016, for the lease of 51,923 square feet of office space. The 2019 amendment granted the Company an additional 36,689 square feet of office space and extended the non-cancellable lease term through 2025 for the office space currently occupied. The Company accounted for the additional 36,689 square feet of office space as a new lease as it provides an additional right-of-use asset that is not included in the original lease and the additional lease payments were determined to be commensurate with the standalone price of the additional space. The non-cancellable lease term of the additional space ends in 2025, with a portion ending in 2023. The term extension of the existing 51,923 square feet of office space was recorded as a lease modification within the consolidated balance sheet as of December 31, 2019. The lease, as amended, provides for (i) an option to extend the lease term with respect to a portion of the office space for an additional period of five years, (ii) leasehold improvement incentives and (iii) annual rent increases through the term of the lease.

On May 1, 2019, the Company entered into an operating lease in Needham, Massachusetts for the lease of data center space with a non-cancellable term through 2022 with automatic renewal for one year thereafter if not terminated. The lease provides for annual rent increases through the term of the lease.

On January 10, 2019, Auto List, Inc., which the Company acquired on January 16, 2020, entered into an operating lease in San Francisco, California at 332 Pine St. for the lease of 6,345 square feet of office space with a non-cancellable lease term through 2024. The lease provides for annual rent increases through the term of the lease.

On June 19, 2018, the Company entered into an operating lease in Cambridge, Massachusetts at 121 First Street for the lease of 48,393 square feet of office space with a non-cancellable lease term through 2033 with an option to extend the lease term for two additional periods of five years each. The lease provides for leasehold improvement incentives and annual rent increases through the term of the lease. The Company subleased the fifth floor and recorded the sublease income in other income, net within the consolidated income statement. The sublease expired in August 2020. The sublease income is immaterial as of December 31, 2020 and 2019.

On September 26, 2017, the Company assumed an operating lease, which was entered into by the original lessee on August 12, 2013, for the lease of 13,345 square feet of office space in Dublin, Ireland at Styne House, Upper Hatch Street with a non-cancellable term through 2023. The lease provided for a rent increase at the end of year five of the original lease term.

On October 8, 2014, the Company entered into an operating lease in Cambridge, Massachusetts at 2 Canal Park for the lease of 48,059 square feet of office space with a non-cancellable lease term through 2022 with an option to extend the lease term for one additional period of five years. The lease provides for leasehold improvement incentives and annual rent increases through the term of the lease.

The Company’s financing lease obligations consist of a lease for office equipment and are immaterial.

The leases in Boston, Massachusetts and Cambridge, Massachusetts have associated letters of credit, which are recorded as restricted cash within the consolidated balance sheet. At December 31, 2020 and 2019, restricted cash was $10,627 and $10,803, respectively, and primarily related to cash held at a financial institution in an interest-bearing cash account as collateral for the letters of credit related to the contractual provisions for the Company’s building leases. At December 31, 2020 and 2019, portions of restricted cash were classified as short-term assets and long-term assets.

During the years ended December 31, 2020, 2019 and 2018, the Company recognized $14,157, $10,260, and $7,711 respectively, of lease costs for leases that have commenced.

For leases that have commenced as of December 31, 2020 and 2019, the weighted average remaining lease term was 7.7 years and 8.8 years, respectively, and the weighted average discount rate was 5.3% and 5.2%, respectively. As the Company's leases do not provide an implicit rate, the Company uses an estimated incremental borrowing rate based on the information available at lease commencement in determining the present value of lease payments. The Company estimated the incremental borrowing rate based on the rate of interest the Company would have to pay to borrow a similar amount on a collateralized basis over a similar term. The Company has no historical debt transactions and a collateralized rate is estimated based on a group of peer companies. The Company used the incremental borrowing rate on January 1, 2019 for leases that commenced prior to that date.

Future minimum lease payments as of December 31, 2020 are as follows:

Year Ending December 31,	Operating Lease Commitments
2021	$ 14,424
2022	15,886
2023	12,757
2024	11,304
2025	4,227
Thereafter	30,392
Total lease payments	88,990
Less imputed interest	(19,095)
Total	$ 69,895

The chart above does not include options to extend lease terms that are not reasonably certain of being exercised or leases signed but not yet commenced as of December 31, 2020. Total estimated future minimum lease payments for leases signed but not yet commenced as of December 31, 2020, which consists only of the 1001 Boylston Street lease, are estimated to be $253,570 and has an expected commencement date of June 2023.

Legal Matters

From time to time the Company may become involved in legal proceedings or be subject to claims arising in the ordinary course of its business. The Company is not presently subject to any pending or threatened litigation that it believes, if determined adversely to the Company, individually, or taken together, would reasonably be expected to have a material adverse effect on its business or financial results.

Guarantees and Indemnification Obligations

In the ordinary course of business, the Company enters into agreements with its customers, partners and service providers that include commercial provisions with respect to licensing, infringement, indemnification, and other common provisions. The Company does not, in the ordinary course, agree to guaranty or indemnification obligations for the Company under its contracts with customers. Based on historical experience and information known at December 31, 2020 and 2019, the Company has not incurred any costs for guarantees or indemnities.

11. Stock-based Compensation

Equity Incentive Plans

The Company's Amended and Restated 2006 Equity Incentive Plan (the "2006 Plan") provided for the issuance of non-qualified stock options, restricted stock and stock awards to the Company's employees, officers, directors and consultants. The 2006 Plan authorized up to an aggregate of 3,444,668 shares of the Company's Class B common stock for such issuances. In conjunction with the effectiveness of the Company's 2015 Equity Incentive Plan (the "2015 Plan"), the Board voted that no further stock options or other equity-based awards may be granted under the 2006 Plan.

In 2015, the Board first adopted the 2015 Plan, which became effective on June 26, 2015. The 2015 Plan provided for the issuance of stock-based incentives to employees, consultants and non-employee directors. As of the effective date of the 2015 Plan, up to 603,436 shares of common stock were authorized for issuance under the 2015 Plan. The 2015 Plan was amended and restated effective August 6, 2015 to permit the granting of restricted stock units ("RSUs") under the 2015 Plan, to remove Class B common stock from the pool of shares available for issuance under the 2015 Plan and to make certain other desired changes. The 2015 Plan was further amended and restated at October 15, 2015 to add a ten-year term and to make certain other desired changes.

The 2015 Plan was further amended and restated effective August 22, 2016 to merge the 2006 Plan into the 2015 Plan, to increase the number of shares of Class A common stock that may be issued under the 2015 Plan, and to lengthen the term of the 2015 Plan to expire on August 21, 2026. In addition, pursuant to this amendment and restatement of the 2015 Plan, prior to giving effect to the recapitalization that occurred on June 21, 2017, there were (i) 618,691 shares of Class A common stock, plus (ii) 802,562 shares of Class B common stock authorized under the 2015 Plan; provided, however, that (1) the number of shares of Class A common stock was increased, on a share for share basis, by the number of shares of Class B common stock that were (a) subject to outstanding options granted under the 2006 Plan that expired, terminated, or were cancelled for any reason without having been exercised, (b) surrendered in payment of the exercise price of outstanding options granted under the 2006 Plan or (c) withheld in satisfaction of tax withholding upon exercise of outstanding options granted under the 2006 Plan, and the number of shares of Class B common stock reserved under the amended and restated 2015 Plan was decreased, on a corresponding share for share basis, (2) no new awards of Class B common stock could be granted under the amended and restated 2015 Plan, and (3) except with respect to outstanding options granted under the 2006 Plan that were exercised on or after the date of the amendment and restatement, no Class B common stock could be issued under the 2015 Plan.

In connection with the recapitalization that occurred on June 21, 2017, the 2015 Plan was further amended and restated to account for each outstanding common stock option being adjusted such that each share of common stock underlying such option became two shares of Class A common stock and four shares of Class B common stock underlying such option, and each outstanding RSU being adjusted such that each share of common stock issuable upon settlement of such RSU became two shares of Class A common stock and four shares of Class B common stock issuable upon settlement of such RSU. Pursuant to the 2015 Plan as further amended in connection with the recapitalization, there were (i) 3,181,740 shares of Class A common stock and (ii) 5,161,644 shares of Class B common stock authorized for issuance under the 2015 Plan.

In connection with the IPO, in October 2017, the Board adopted, and the Company's stockholders approved, the Omnibus Incentive Compensation Plan (the "2017 Plan") for the purpose of granting incentive stock options, non-qualified stock options, stock awards, stock units, other share-based awards and cash awards to employees, advisors and consultants to the Company and its subsidiaries and non-employee members of the Board. The 2017 Plan is the successor to the 2015 Plan. The 2017 Plan authorizes the issuance or transfer of the sum of: (i) 7,800,000 shares of the Company's Class A common stock, plus (ii) the number of shares of our Class A common stock (up to 4,500,000 shares) equal to the sum of (x) the number of shares of Class A common stock and Class B common stock of the Company subject to outstanding awards under the 2015 Plan as of October 10, 2017 that terminate, expire or are cancelled, forfeited, exchanged, or surrendered on or after October 10, 2017 without having been exercised, vested, or paid prior to October 10, 2017, including shares tendered or withheld to satisfy tax withholding obligations with respect to outstanding grants under the 2015 Plan, plus (y) the number of shares of Class A common stock reserved for issuance under the 2015 Plan that remain available for grant under the 2015 Plan as of October 10, 2017. The aggregate number of shares of Class A common stock that may be issued or transferred under the 2017 Plan pursuant to incentive stock options will not exceed 12,300,000 shares of Class A common stock. Unless determined otherwise by the Compensation Committee of the Board, as of the first trading day of January of each calendar year during the term of the 2017 Plan (excluding any extensions), eligible beginning with calendar year 2019, an additional number of shares of Class A common stock will be added to the number of shares of the Company's Class A common stock authorized to be issued or transferred under the 2017 Plan and the number of shares authorized to be issued or transferred pursuant to incentive stock options, equal to 4% of the total number of shares of our Class A common stock outstanding on the last trading day in December of the immediately preceding calendar year, or 6,000,000 shares, whichever is less, or such lesser amount as determined by the Board (the "Evergreen Increase"). The Compensation Committee of the Board determined to not effectuate the Evergreen Increase that was otherwise scheduled to have occurred on each of January 2, 2019, January 2, 2020 and January 4, 2021. In conjunction with the adoption of the 2017 Plan, options and RSUs outstanding under the 2015 Plan will remain outstanding but no additional grants will be made from the 2015 Plan.

At December 31, 2020, 4,589,386 shares of Class A common stock were available for issuance under the 2017 Plan.

Stock Options

The following is a summary of the stock option activity for all stock-based compensation plans during the year ended December 31, 2020:

	Common Stock	Weighted-Average Exercise Price for Equity	Weighted-Average Remaining Contractual Life (In Years)	Aggregate Intrinsic Value[1]
Outstanding, December 31, 2019	942,885	$ 2.45	5.0	$ 30,859
Granted	—	—		
Exercised	(352,212)	3.23		8,401
Forfeited	(276)	6.78		
Outstanding, December 31, 2020	590,397	$ 1.99	4.0	$ 17,560
Options exercisable at December 31, 2020	590,397	$ 1.99	4.0	$ 17,560

(1) The aggregate intrinsic value as of December 31, 2020 and 2019 was calculated based on the positive difference, if any, between the estimated fair value of our common stock on December 31, 2020 and 2019, respectively, or the date of exercise, as appropriate, and the exercise price of the underlying options.

There were no options granted in the years ended December 31, 2020, 2019 and 2018.

The aggregate intrinsic value for options exercised during the years ended December 31, 2019 and 2018 was $28,902 and $111,227, respectively.

As of December 31, 2020, there was no unrecognized stock-based compensation expense related to unvested stock options.

Restricted Stock Units

The following is a summary of the RSU activity during the year ended December 31, 2020:

	Number of Shares	Weighted-Average Grant Date Fair Value	Aggregate Intrinsic Value
Unvested outstanding, December 31, 2019	3,083,301	$ 33.89	$ 108,471
Granted	2,348,836	28.47	
Vested	(1,347,464)	30.14	
Forfeited	(600,857)	29.04	
Unvested outstanding, December 31, 2020	3,483,816	$ 32.52	$ 110,538

The weighted-average grant-date fair value of RSUs granted was $39.07 and $35.79 per share in 2019 and 2018, respectively.

RSUs that vested and settled during the year ended December 31, 2019 totaled 1,317,736. RSUs that vested and settled during the year ended December 31, 2018 totaled 1,781,201, which included 1,087,279 and 693,922 RSUs that vested in 2018 and 2017, respectively. RSUs that vested prior to April 10, 2018 did not settle until the expiration of shareholder lock-up agreements on such date.

The total fair value of RSUs vested was $40,613, $31,533 and $15,994 in the years ended December 31, 2020, 2019 and 2018, respectively.

As of December 31, 2020, there was $95,138 of unrecognized stock-based compensation expense related to unvested RSUs that is expected to be recognized over a weighted-average period of 2.6 years.

Stock-based Compensation Expense

For the years ended December 31, 2020, 2019, and 2018, total stock-based compensation expense was $45,321, $34,301, and $20,794, respectively. The following two tables show stock compensation expense by award type and where the stock compensation expense is recorded in the Company's consolidated income statements:

	Year Ended December 31,		
	2020	2019	2018
Options	$ 17	$ 155	$ 247
Restricted stock units	45,304	34,146	20,547
Total stock-based compensation expense	$ 45,321	$ 34,301	$ 20,794

	Year Ended December 31,		
	2020	2019	2018
Cost of revenue	$ 293	$ 354	$ 354
Sales and marketing expense	10,564	9,989	5,111
Product, technology, and development expense	20,741	15,159	9,865
General and administrative expense	13,723	8,799	5,464
Total stock-based compensation expense	$ 45,321	$ 34,301	$ 20,794

Excluded from stock-based compensation expense is $1,906, $1,381, and $490 of capitalized website development costs and internal-use software costs in 2020, 2019 and 2018, respectively.

The income tax benefit from stock-based compensation expense was $4,796, $2,953, and $1,945 in the years ended December 31, 2020, 2019, and 2018, respectively.

During the years ended December 31, 2020, 2019, and 2018, the Company withheld 447,160, 452,678, and 658,931 shares of Class A common stock, respectively, to satisfy employee tax withholding requirements and option costs due to net share settlements and cashless exercises of options. The shares withheld return to the authorized, but unissued, pool under the 2017 Plan and can be reissued by the Company. Total payments for the employees' tax obligations to the taxing authorities and for option costs due to net share settlements and cashless exercises of options were $11,184, $16,470, and 25,885 for the years ended December 31, 2020, 2019 and 2018, respectively, and are reflected as a financing activity within the consolidated statements of cash flows.

Common Stock Reserved for Future Issuance

At December 31, 2020, the Company had reserved the following shares of Class A common stock for future issuance:

Common stock options outstanding	590,397
Restricted stock units outstanding	3,483,816
Shares available for issuance under the 2017 Plan	4,589,386
Total shares of authorized common stock reserved for future issuance	8,663,599

12. Earnings Per Share

Net income per share for the years ended December 31, 2020, 2019, and 2018 was computed by dividing net income by the weighted-average number of common shares outstanding during the reporting period. The Company computes the weighted-average number of common shares outstanding during the reporting period using the total number of shares of Class A common stock and Class B common stock outstanding as of the last day of the previous year end reporting period plus the weighted-average of any additional shares issued and outstanding during the reporting period.

The Company has two classes of common stock authorized: Class A common stock and Class B common stock. The rights of the holders of Class A and Class B common stock are identical, except with respect to voting and conversion. Each share of Class A common stock is entitled to one vote per share and each share of Class B common stock is entitled to ten votes per share. Each share of Class B common stock is convertible into one share of Class A common stock at the option of the holder at any time or automatically upon certain events described in the Company's amended and restated certificate of incorporation, including upon either the death or voluntary termination of the Company's Executive Chairman. The Company allocates undistributed earnings attributable to common stock between the common stock classes on a one-to-one basis when computing net income per share. As a result, basic and diluted net income per share of Class A common stock and per share of Class B common stock are equivalent.

During the years ended December 31, 2020, 2019, and 2018, holders of Class B common stock converted 1,238,144 shares, 387,440 shares and 7,534,710 shares, respectively, of Class B common stock to Class A common stock.

Diluted net income per share gives effect to all potentially dilutive securities. Potential diluted securities for the years ended December 31, 2020, 2019 and 2018 consist of shares of common stock issuable upon the exercise of stock options and shares of common stock issuable upon the vesting of RSUs. The dilutive effect of these common stock equivalents is reflected in diluted earnings per share by application of the treasury stock method.

For the years ended December 31, 2020, 2019, and 2018, dilutive net income per share was calculated by dividing net income by the weighted-average number of shares of common stock outstanding during the period plus the dilutive impact of stock options and shares of common stock issuable upon the vesting of RSUs.

The following table presents a reconciliation of the numerator and denominator used in the calculation of basic and diluted net income per share:

	Year Ended December 31,		
	2020	2019	2018
Numerator:			
Net income	$ 77,553	$ 42,146	$ 65,170
Denominator:			
Weighted–average number of shares of common stock used in computing net income per share attributable to common stockholders — basic	112,854,524	111,450,443	108,833,028
Dilutive effect of share equivalents resulting from stock options	674,018	1,155,906	3,009,748
Dilutive effect of share equivalents resulting from unvested restricted stock units	321,273	825,501	1,521,936
Weighted–average number of shares of common stock used in computing net income per share — diluted	113,849,815	113,431,850	113,364,712
Net income per share attributable to common stockholders:			
Basic	$ 0.69	$ 0.38	$ 0.60
Diluted	$ 0.68	$ 0.37	$ 0.57

The following potentially dilutive common stock equivalents have been excluded from the calculation of diluted weighted-average shares outstanding for the years ended December 31, 2020, 2019, and 2018, as their effect would have been anti-dilutive for the periods presented:

	Year Ended December 31,		
	2020	2019	2018
Restricted stock units outstanding	2,722,226	1,144,287	126,816

13. Income Taxes

The domestic and foreign components of income before income taxes are as follows:

	Year Ended December 31,		
	2020	2019	2018
United States	$ 97,120	$ 37,476	$ 24,426
Foreign	1,990	1,229	1,058
Income before income taxes	$ 99,110	$ 38,705	$ 25,484

The provision for (benefit from) income taxes contained the following components:

	Year Ended December 31,		
	2020	2019	2018
Current (benefit) provision:			
Federal	$ (3,733)	$ —	$ (860)
State	2,288	(220)	92
Foreign	767	513	122
	(678)	293	(646)
Deferred provision (benefit):			
Federal	19,539	(2,377)	(27,675)
State	2,734	(1,306)	(11,499)
Foreign	(38)	(51)	134
	22,235	(3,734)	(39,040)
Income tax provision (benefit)	$ 21,557	$ (3,441)	$ (39,686)

The Company's effective tax rate for the year ended December 31, 2020 is greater than the U.S. federal statutory rate primarily due to state and local income taxes with partial offset by the benefits from the U.S. federal and state research and development credits and the Coronavirus Aid, Relief, and Economic Security Act (the "CARES Act"). The Company's effective tax rates for the years ending December 31, 2019 and 2018 are less than the U.S. federal statutory rate primarily due to federal and state research and development credits and excess tax deductions related to stock-based compensation awards.

	Year Ended December 31,		
	2020	2019	2018
U.S. federal taxes at statutory rate	21.0%	21.0%	21.0%
State taxes, net of federal benefit	6.2	0.2	(25.6)
Nondeductible expenses	0.4	2.9	4.1
Stock compensation	0.2	(22.0)	(127.2)
Foreign rate differential	(0.2)	(0.3)	(0.4)
Credits	(3.2)	(10.3)	(28.4)
CARES Act	(2.4)	—	—
Other	(0.2)	(0.2)	0.7
Total	21.8%	(8.7)%	(155.8)%

The approximate income tax effect of each type of temporary difference and carryforward as of December 31, 2020 and 2019 is as follows:

	As of December 31, 2020	As of December 31, 2019
Deferred tax assets:		
Net operating loss carryforwards	$ 3,735	$ 35,977
Credit carryforwards	17,572	10,472
Stock-based compensation	4,796	2,953
Lease liability	18,671	17,965
Intangible Assets	—	62
Accruals and reserves	3,249	1,185
	48,023	68,614
Valuation Allowance	(158)	(62)
	47,865	68,552
Deferred tax liabilities:		
Prepaid expenses	(1,482)	(1,523)
Deferred commissions	(5,144)	(5,100)
Right of use assets	(15,920)	(15,270)
Intangible assets	(1,025)	—
Fixed assets	(4,811)	(4,230)
	(28,382)	(26,123)
Net deferred tax assets	$ 19,483	$ 42,429

The Company accounts for income taxes in accordance with the liability method. Under this method, deferred income taxes are recognized for the future tax consequences of differences between the tax and financial accounting bases of assets and liabilities at each reporting period. Deferred income taxes are based on enacted tax laws and statutory tax rates applicable to the period in which these differences are expected to affect taxable income. A valuation allowance is established when necessary to reduce deferred tax assets to the amounts expected to be realized.

The Company has provided an immaterial valuation allowance against its net deferred tax assets at December 31, 2020 and 2019. Based upon the level of historical U.S. earnings and future projections over the period in which the net deferred tax assets are deductible, at this time, management believes it is more likely than not that the Company will realize the benefits of these deductible differences, with the exception of the deferred tax asset related to intangible assets in Ireland. The change in the valuation allowance for the years ended December 31, 2020 and 2019 was $96 and $62, respectively.

As of December 31, 2020, the Company has federal and state net operating loss ("NOL") carryforwards of $8,463 and $29,741, respectively. Prior to the enactment of the CARES Act on March 27, 2020, federal NOLs would generally carryforward indefinitely, subject to an annual limitation of 80% of taxable income. The CARES Act temporarily removed the 80% limitation on NOLs to offset taxable income for tax years prior to 2021. The 80% annual taxable income limitation will resume for tax years 2021 and on. The federal NOL carryforward does not expire and the state NOL carryforwards, excluding Florida and Georgia which carryforward indefinitely, expire at various dates beginning in 2028. As of December 31, 2020, the Company has federal and state tax credit carryforwards of $11,931 and $7,141, respectively, available to reduce future tax liabilities that expire at various dates through 2040. Utilization of the NOL and tax credit carryforwards, respectively, may be subject to an annual limitation due to ownership change limitations that have occurred previously or that could occur in the future, as provided by Section 382 of the Internal Revenue Code ("Section 382"), as well as similar state provisions. Ownership changes may limit the amount of NOL or tax credit carryforwards that can be utilized annually to offset future taxable income and tax, respectively. In general, an ownership change, as defined by Section 382, results from transactions that increase the ownership of five-percent stockholders in the stock of a corporation by more than 50 percent in the aggregate over a three-year period.

The Company previously adopted the provision for uncertain tax positions under ASC 740. At December 31, 2020 and 2019, the Company had no recorded liabilities for uncertain tax positions and had no accrued interest or penalties related to uncertain tax positions.

The Company permanently reinvests the earnings, if any, of its foreign subsidiaries and, therefore, does not provide for U.S. income taxes that could result from the distribution of those earnings to the Company. As of December 31, 2020, the amount of unrecognized deferred U.S. taxes on these earnings would be de minimis.

The Company and its subsidiaries are subject to various U.S. federal, state, and foreign income tax examinations. The Company is currently not subject to income tax examination as a result of applicable statute of limitations of the Internal Revenue Service ("IRS") and state jurisdictions for the tax years of 2016 and prior. The Company is currently open to examination in its foreign jurisdictions for tax years 2018 and after. In 2019, the IRS commenced a federal employment tax audit with respect to the 2018, 2017 and 2016 calendar years, which is still open. In 2020, the IRS initiated a federal income tax audit associated with tax year 2017, which closed in January 2021. In 2020, the Company received notifications from the State of New York where the Company is under sales tax audit for the tax years 2014 to 2020 and from the State of Ohio where the Company is under commercial activity tax audit for the tax years 2013 to 2019. Both state audits remain open.

14. Segment and Geographic Information

The Company has two reportable segments, United States and International. Segment information is presented in the same manner as the Company's chief operating decision maker, (the "CODM"), reviews the Company's operating results in assessing performance and allocating resources. The CODM reviews revenue and operating income (loss) for each reportable segment as a proxy for the operating performance of the Company's United States and International operations. The Company's Chief Executive Officer is the CODM on behalf of both reportable segments.

The United States segment derives revenues from marketplace subscriptions, advertising services, and other revenues from customers within the United States. The International segment derives revenues from marketplace subscriptions, advertising services, and other revenues from customers outside of the United States. A majority of the Company's operational overhead expenses, including technology and personnel costs, and other general and administrative costs associated with running the Company's business, are incurred in the United States and not allocated to the International segment. Revenue and costs discretely incurred by reportable segments, including depreciation and amortization, are included in the calculation of reportable segment income (loss) from operations. Segment operating income (loss) does not reflect the transfer pricing adjustments related to the Company's foreign subsidiaries, which are recorded for statutory reporting purposes. Asset information is assessed and reviewed on a global basis.

Information regarding the Company's operations by segment and geographical area is presented as follows:

	Year Ended December 31,		
	2020	2019	2018
Segment revenue:			
United States	$ 519,835	$ 555,007	$ 437,166
International	31,616	33,909	16,920
Total revenue	$ 551,451	$ 588,916	$ 454,086

	Year Ended December 31,		
	2020	2019	2018
Segment income (loss) from operations:			
United States	$ 120,836	$ 73,872	$ 58,387
International	(23,080)	(39,550)	(35,196)
Total income from operations	$ 97,756	$ 34,322	$ 23,191

As of December 31, 2020, total assets held outside of the United States were $32,012, primarily attributable to $16,652 of goodwill and $3,571 of intangible assets. As of December 31, 2019, total assets held outside of the United States were $32,528, primarily attributable to $15,207 of goodwill and $3,920 of intangible assets.

For the year ended December 31, 2020, employee severance and related benefits expense attributable to the United States and International segments were $2,492 and $756, respectively. For the year ended December 31, 2020, the entirety of the write-off of capitalized website development costs and deferred contract costs from international marketplaces was attributable to the International segment. The Company ceased the operations of the International segment online marketplaces in Germany, Italy, and Spain in the second quarter of 2020.

15. Employee Benefit Plans

The Company maintains a defined contribution savings plan for all eligible U.S. employees under Section 401(k) of the Code. Effective July 1, 2017, the Company implemented a matching policy, under which the Company matches 50% of an employee's annual contributions to the 401(k) plan, up to a maximum of the lesser of (i) 6% of the employee's base salary, bonus and commissions paid during the year or (ii) $5,000. Matching contributions are subject to vesting based on the employee's start date and length of service. Employees can designate the investment of their 401(k) accounts into several mutual funds. The Company does not allow investment in its common stock through the 401(k) plan.

Total employer contributions to the 401(k) plan were $2,675, $2,708, and $1,953 during the years ended December 31, 2020, 2019 and 2018, respectively.

16. Subsequent Events

CarOffer

Membership Interest Purchase Agreement

On January 14, 2021, the Company acquired a 51% interest in CarOffer, an automated instant vehicle trade platform based in Plano, Texas, pursuant to the terms of a Membership Interest Purchase Agreement (the "Purchase Agreement") dated as of December 9, 2020 (the "Agreement Date"), as amended, by and among the Company, CarOffer, CarOffer Investors Holding, LLC, a Delaware limited liability company ("TopCo"), each of the Members of TopCo (the "Members"), and Bruce T. Thompson, an individual residing in Texas (the "Members' Representative"). The acquisition is intended to add wholesale vehicle purchasing and selling capabilities to CarGurus' portfolio of dealer offerings and create a complete and efficient digital solution for dealers to sell and acquire vehicles at both retail and wholesale.

Upon consummation of the transactions contemplated by the Purchase Agreement (the "Closing"), the Company acquired a 51% interest in CarOffer for an aggregate consideration of $140,250,000 (the "Total Consideration"), such Total Consideration consisting of (a) shares of Class A common stock of the Company, par value $0.001 per share (the "Company Class A Common Stock"), in the aggregate amount of $70,125,000 (the "Stock Consideration") and (b) $70,125,000 in cash (the "Cash Consideration"), subject to certain adjustments set forth in the Purchase Agreement. The Cash Consideration, which was paid out at the Closing, includes the following amounts paid into escrow by the Company: (i) $4.0 million to secure certain payment obligations of the Members in respect of the Purchase Price Adjustment Amount (as defined in the Purchase Agreement) under the Purchase Agreement; (ii) $0.7 million to secure certain indemnification payment obligations of the Members under the Purchase Agreement; and (iii) $175,000 to secure certain indemnification payment obligations of the Members in respect of certain specified matters under the Purchase Agreement. The number of shares of Company Class A Common Stock issued following the Closing in connection with the Stock Consideration was 3,115,282, which was calculated by reference to a value of $22.51 per share, which equals the volume-weighted average closing price per share of Company Class A Common Stock on the Nasdaq Stock Market for the 28 consecutive trading days ending on the third Business Day (as defined in the Purchase Agreement) preceding the Agreement Date. Pursuant to the Purchase Agreement, the remaining equity in CarOffer (the "Remaining Equity") is being indirectly retained by the existing equity holders of CarOffer and subject to certain call and put arrangements.

Pursuant to the Purchase Agreement, the Company also established a retention pool in an aggregate amount of $8.0 million in the form of RSUs to be issued pursuant to the Company's standard form of RSU agreement under the 2017 Plan, (i) $6.0 million of which was granted to certain CarOffer employees following the Closing in accordance with the terms of the Purchase Agreement and (ii) $2.0 million of which is being made available for issuance to future CarOffer employees in accordance with the terms of the Purchase Agreement.

Second Amended and Restated Limited Liability Company Agreement

In addition, the Company, TopCo, each Member and CarOffer MidCo, LLC, a Delaware limited liability company, entered into the Second Amended and Restated Limited Liability Company Agreement, dated December 9, 2020 (the "CarOffer Operating Agreement"), pursuant to which, among other matters, the Company secured the right to appoint a majority of the members of the Board of Managers of CarOffer, other rights customary for a transaction of this nature and the put and call rights described below.

In the second half of 2022, the Company will have a call right (the “2022 Call Right”), exercisable in its sole discretion, to acquire a portion of the Remaining Equity representing up to twenty-five percent (25%) of the fully diluted capitalization of CarOffer (such acquired Remaining Equity, the “2022 Acquired Remaining Equity”) at an implied CarOffer value (the “2022 Call Right Value”) of seven (7) times CarOffer’s trailing twelve months gross profit as of June 30, 2022 (calculated in accordance with the defined terms and subject to the adjustments set forth in the CarOffer Operating Agreement). If the 2022 Call Right is exercised by the Company, the 2022 Acquired Remaining Equity will be purchased ratably across all of the non-Company holders of CarOffer equity securities. The consideration to be paid by the Company in connection with the exercise of the 2022 Call Right will be in the form of cash and/or shares of Company Class A Common Stock, as determined by the Company in its sole discretion.

In the second half of 2024, (a) the Company will have a call right (the “2024 Call Right”), exercisable in its sole discretion, to acquire all, and not less than all, of the Remaining Equity that it has not acquired pursuant to the 2022 Call Right and the Closing, at the greater of (i) (x) one hundred million dollars ($100,000,000), and (y) the 2022 Call Right Value, whichever is less, and (ii) an implied CarOffer value of twelve (12) times CarOffer’s trailing twelve months EBITDA as of June 30, 2024 (in each case calculated in accordance with the defined terms and subject to the adjustments set forth in the CarOffer Operating Agreement), and (b) the representative of the holders of the Remaining Equity will have a put right (the “2024 Put Right”), exercisable in his, her or their sole discretion, to have the holders of the Remaining Equity sell to the Company, all, and not less than all, of the Remaining Equity at an implied CarOffer value of twelve (12) times CarOffer’s trailing twelve months EBITDA as of June 30, 2024 (calculated in accordance with the defined terms and subject to the adjustments set forth in the CarOffer Operating Agreement). The determination of whether the 2024 Call Right or the 2024 Put Right is ultimately exercised is as set forth in the CarOffer Operating Agreement. The consideration to be paid by the Company in connection with the exercise of either the 2024 Call Right or the 2024 Put Right, as applicable, will be in the form of cash and/or shares of Company Class A Common Stock, as determined by the Company in its sole discretion.

The Company issued the Stock Consideration described herein and intends to issue any additional shares of Company Class A Common Stock described herein, as applicable, in reliance upon the exemptions from registration afforded by Section 4(a)(2) of the Securities Act and Rule 506 of Regulation D promulgated thereunder.

The foregoing summary of the Purchase Agreement, the CarOffer Operating Agreement and the transactions contemplated thereby do not purport to be complete and is subject to, and qualified in its entirety by, the full text of the Purchase Agreement and the CarOffer Operating Agreement, which are filed as exhibits to this Annual Report on Form 10-K.

For the year ended December 31, 2020, the Company incurred total acquisition-related costs of $1.9 million related to the CarOffer acquisition, which were recorded as general and administrative operating expense within the consolidated income statement. Acquisition-related costs will be excluded from the purchase price allocation as they were primarily comprised of legal, professional and consulting expenses.

As the transaction occurred subsequent to period-end, the Company is still evaluating the purchase price allocation of the transaction but expects the primary assets acquired to be intangible assets, tangible assets and goodwill and expects to assume liabilities. The allocation is expected to be finalized during the first half of 2021.

Sublease

On January 25, 2021, CarOffer entered into a sublease for approximately 61,826 square feet of office space in Addison, Texas. The sublease is for a period of 118 months and commences on March 1, 2021. CarOffer’s monthly base rent for the premises, which is payable from January 1, 2022, will initially be approximately $151,989, and will increase each year up to a maximum monthly base rent of approximately $185,184.

Executive Leadership Changes

On January 21, 2021, the Company announced that (i) Langley Steinert has transitioned from his role as Chief Executive Officer of the Company to Executive Chairman of the Company, (ii) Jason Trevisan, the Company’s former Chief Financial Officer, Treasurer, and President, International, has been appointed to serve as the Company’s Chief Executive Officer, and (iii) Scot Fredo, the Company’s former Senior Vice President, Financial Planning & Analysis, has been appointed to serve as the Company’s Chief Financial Officer and Treasurer, in each case, effective January 18, 2021 (the “Effective Date”).

In addition, the Board increased the size of the Board from seven members to eight, and filled the newly created vacancy on the Board by appointing Mr. Trevisan as a Class I director of the Company, with such appointment becoming effective as of the Effective Date. Mr. Trevisan will serve as a director of the Company until the Company's 2021 annual meeting of stockholders, at which Mr. Trevisan will be nominated to stand for election to the Board.

As Executive Chairman, Mr. Steinert will continue to serve as Chairman of the Board and, in addition to the responsibilities applicable to all other members of the Board, Mr. Steinert will be responsible for, among other things: (i) providing leadership and direction to, and facilitating the operations and deliberations of, the Board, (ii) managing and presiding at Board and shareholder meetings and ensuring the Board oversees key developments and issues critical to the Company's business and strategy, (iii) coordinating with the Board and the Chief Executive Officer to develop the strategy for the Company's future operations and product development, to identify opportunities for value-enhancing strategic initiatives and merger and acquisition opportunities, and to provide guidance on the Company's annual budget and capital allocation plans and (iv) acting as the principal liaison between the members of the Board and the Chief Executive Officer.

In connection with his appointment as Chief Executive Officer, Mr. Trevisan replaced Mr. Steinert as the Company's Principal Executive Officer. As Chief Executive Officer, Mr. Trevisan will be responsible for overseeing the Company's overall strategic direction, planning and execution.

In connection with his appointment as Chief Financial Officer, Mr. Fredo replaced Mr. Trevisan as the Company's Principal Financial Officer.

In connection with Mr. Trevisan's appointment as the Company's Chief Executive Officer and Principal Executive Officer, Yann Gellot, the Company's Vice President, Finance & Accounting, replaced Mr. Trevisan as the Company's Principal Accounting Officer.

Item 9. Changes in and Disagreements with Accountants on Accounting and Financial Disclosure.

None.

Item 9A. Controls and Procedures.

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a- 15(e) and 15d- 15(e) under the Securities Exchange Act of 1934, as amended, as of the end of the period covered by this Annual Report on Form 10-K. Based on such evaluation, our principal executive officer and principal financial officer have concluded that as of December 31, 2020, our disclosure controls and procedures were effective.

Management's Annual Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting as defined in Rule 13a-15(f) or 15d-15(f) of the Exchange Act. Internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles, and includes those policies and procedures that:

(i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of our assets;

(ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that our receipts and expenditures are being made only in accordance with authorizations of our management and directors; and

(iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use or disposition of our assets that could have a material effect on our financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

Our management assessed the effectiveness of our internal control over financial reporting as of December 31, 2020, using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in its Internal Control-Integrated Framework (2013). Based on this assessment and those criteria, management concluded that our internal control over financial reporting was effective as of December 31, 2020.

The effectiveness of our internal control over financial reporting as of December 31, 2020, has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report which is included herein.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the fourth quarter ended December 31, 2020 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Report of Independent Registered Public Accounting Firm

To the Stockholders and the Board of Directors of CarGurus, Inc.

Opinion on Internal Control Over Financial Reporting

We have audited CarGurus, Inc.'s internal control over financial reporting as of December 31, 2020, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, CarGurus, Inc. (the Company) maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the 2020 consolidated financial statements of the Company and our report dated February 11, 2021 expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young LLP

Boston, Massachusetts
February 11, 2021

Item 9B. Other Information.

None.

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

The information required by this Item is incorporated herein by reference from the information in our Proxy Statement for our 2021 Annual Meeting of Stockholders, which we will file with the SEC within 120 days of the end of the fiscal year to which this Annual Report on Form 10-K relates.

Item 11. Executive Compensation.

The information required by this Item is incorporated herein by reference from the information in our Proxy Statement for our 2021 Annual Meeting of Stockholders, which we will file with the SEC within 120 days of the end of the fiscal year to which this Annual Report on Form 10-K relates.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

The information required by this Item is incorporated herein by reference from the information in our Proxy Statement for our 2021 Annual Meeting of Stockholders, which we will file with the SEC within 120 days of the end of the fiscal year to which this Annual Report on Form 10-K relates.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by this Item is incorporated herein by reference from the information in our Proxy Statement for our 2021 Annual Meeting of Stockholders, which we will file with the SEC within 120 days of the end of the fiscal year to which this Annual Report on Form 10-K relates.

Item 14. Principal Accountant Fees and Services.

The information required by this Item is incorporated herein by reference from the information in our Proxy Statement for our 2021 Annual Meeting of Stockholders, which we will file with the SEC within 120 days of the end of the fiscal year to which this Annual Report on Form 10-K relates.

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a) Documents filed as a part of this Report:

(1) Financial Statements

The financial statements of CarGurus, Inc. are included in Item 8 of this Annual Report on Form 10-K.

(2) Financial Statement Schedules

All financial statements schedules are omitted as they are either not required or the information is otherwise included in the consolidated financial statements and related notes.

(3) Index to Exhibits

The documents listed in the Exhibit Index immediately preceding the signature page of this Annual Report on Form 10-K are incorporated by reference or are filed or furnished with this Annual Report on Form 10-K, in each case as indicated therein (numbered in accordance with Item 601 of Regulation S-K).

Item 16. Form 10-K Summary.

Not applicable.

EXHIBIT INDEX

Exhibit Number	Exhibit Description	Incorporated by Reference: Form	File Number	Filing Date	Exhibit Number	Filed Herewith
2.1	Membership Interest Purchase Agreement dated as of December 9, 2020, as amended, by and among the Registrant, CarOffer, LLC, CarOffer Investors Holding, LLC ("TopCo"), the Members of TopCo and Bruce T. Thompson.					X
3.1	Amended and Restated Certificate of Incorporation of the Registrant.	8-K	001-38233	October 16, 2017	3.1	
3.2	Amended and Restated Bylaws of the Registrant.	8-K	001-38233	October 16, 2017	3.2	
4.1	Specimen Class A common stock certificate of the Registrant.	S-1/A	333-220495	September 29, 2017	4.1	
4.2	Amended and Restated Investors' Rights Agreement, dated August 23, 2016, by and among the Registrant and certain of its stockholders.	S-1	333-220495	September 15, 2017	4.2	
4.3	Description of the Registrant's Securities Registered Under Section 12 of the Securities Exchange Act of 1934.	10-K	001-38233	February 14, 2020	4.3	
10.1	Form of Indemnification Agreement between the Registrant and each of its directors and officers.	S-1	333-220495	September 15, 2017	10.1	
10.2#	Amended and Restated 2006 Equity Incentive Plan.	S-1	333-220495	September 15, 2017	10.2	
10.3#	Amended and Restated 2015 Equity Incentive Plan and forms of agreements thereunder.	S-1/A	333-220495	September 29, 2017	10.3	
10.4#	Omnibus Incentive Compensation Plan and forms of agreements thereunder.					X
10.4.1#	Form of Executive Nonqualified Stock Option Grant Agreement.					X
10.4.2#	Form of Executive Time-Based Restricted Stock Unit Agreement.	10-Q	001-38233	May 3, 2018	10.3	
10.4.3#	Form of Executive Performance-Based Restricted Stock Unit Agreement.					X
10.4.4#	Form of Non-Employee Director Restricted Stock Unit Agreement.	8-K	001-38233	March 26, 2018	10.1	
10.5#	Offer Letter, dated March 17, 2006, by and between the Registrant and Langley Steinert.	S-1	333-220495	September 15, 2017	10.5	
10.6#	Offer Letter, dated August 10, 2015, by and between the Registrant and Jason Trevisan.	S-1	333-220495	September 15, 2017	10.6	
10.7#	Offer Letter, dated October 24, 2014, by and between the Registrant and Samuel Zales.	S-1	333-220495	September 15, 2017	10.7	
10.8#	Offer Letter, dated November 18, 2016, by and between the Registrant and Thomas Caputo.	10-K	001-38233	February 28, 2019	10.8	
10.9#	Offer Letter, dated August 2, 2017, by and between the Registrant and Kathleen Patton.	10-K	001-38233	February 28, 2019	10.9	
10.10#	Offer Letter, dated December 4, 2015, by and between the Registrant and Scot Fredo.					X
10.11#	Offer Letter, dated March 7, 2008, by and between the Registrant and Kyle Lomeli.	10-Q	001-38233	August 6, 2020	10.1	
10.12#	Offer Letter, dated December 29, 2015, by and between the Registrant and Sarah Welch.	10-Q	001-38233	August 6, 2020	10.2	

Exhibit Number	Exhibit Description	Incorporated by Reference Form	File Number	Filing Date	Exhibit Number	Filed Herewith
10.13	Lease, dated as of October 8, 2014, by and between the Registrant and BCSP Cambridge Two Property LLC.	S-1	333-220495	September 15, 2017	10.8	
10.14	Office Lease Agreement, dated as of March 11, 2016, by and between 55 Cambridge Parkway, LLC and the Registrant.	S-1	333-220495	September 15, 2017	10.9	
10.15	First Amendment to Lease, dated as of July 30, 2016 by and between 55 Cambridge Parkway, LLC and the Registrant.	S-1	333-220495	September 15, 2017	10.10	
10.16#	CarGurus, Inc. Annual Incentive Plan.	8-K/A	001-38233	April 6, 2018	10.1	
10.17	Lease Agreement, dated as of June 19, 2018, by and between US Parcel A, LLC and the Registrant.	8-K	001-38233	June 20, 2018	10.1	
10.18	Second Amendment to Lease, dated as of August 30, 2019 by and between 55 Cambridge Parkway, LLC and the Registrant.	10-Q	001-38233	November 5, 2019	10.1	
10.19	Indenture of Lease between S&A P-12 Property LLC and the Registrant, dated as of December 19, 2019.	8-K	001-38233	December 20, 2019	10.1	
10.20	First Amendment to Lease between S&A P-12 Property LLC and the Registrant, dated as of June 12, 2020.	10-Q	001-38233	August 6, 2020	10.3	
10.21	Third Amendment to Lease, dated as of July 1, 2020, between 55 Cambridge Parkway, LLC and the Registrant.	10-Q	001-38233	November 5, 2020	10.1	
10.22	First Amendment to Lease, dated as of October 27, 2015, between BCSP Cambridge Two Property, LLC and the Registrant.	10-Q	001-38233	November 5, 2020	10.2	
10.23	Second Amendment to Lease, dated as of September 28, 2020, between Two Canal Park Massachusetts, LLC, as successor-in-interest to BCSP Cambridge Two Property, LLC, and the Registrant.	10-Q	001-38233	November 5, 2020	10.3	
10.24#	Separation Agreement, dated November 13, 2020, by and between the Registrant and Kyle Lomeli.	8-K	001-38233	November 17, 2020	10.1	
10.25#	Consulting Agreement, dated November 13, 2020, by and between the Registrant and Kyle Lomeli.	8-K	001-38233	November 17, 2020	10.2	
10.26	Second Amended and Restated Limited Liability Company Agreement, dated December 9, 2020, by and among the Registrant, TopCo, the Members of TopCo, and CarOffer MidCo, LLC.	8-K	001-38233	December 10, 2020	10.1	
21.1	List of Subsidiaries of the Registrant.					X
23.1	Consent of Ernst & Young LLP, Independent Registered Public Accounting Firm.					X
31.1	Certification of Principal Executive Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X

Exhibit Number	Exhibit Description	Incorporated by Reference Form	File Number	Filing Date	Exhibit Number	Filed Herewith
31.2	Certification of Principal Financial Officer Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.					X
32.1*	Certification of Principal Executive Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
32.2*	Certification of Principal Financial Officer Pursuant to 18 U.S.C. Section 1350, as Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.					X
101.INS	Inline XBRL Instance Document- the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.					X
101.SCH	Inline XBRL Taxonomy Extension Schema Document.					X
101.CAL	Inline XBRL Taxonomy Extension Calculation Linkbase Document.					X
101.DEF	Inline XBRL Taxonomy Extension Definition Linkbase Document.					X
101.LAB	Inline XBRL Taxonomy Extension Label Linkbase Document.					X
101.PRE	Inline XBRL Taxonomy Extension Presentation Linkbase Document.					X
104	The cover page from the Company's Annual Report on Form 10-K for the year ended December 31, 2020 has been formatted in Inline XBRL.					X

\# Indicates a management contract or compensatory plan.

* The certifications furnished in Exhibit 32.1 and Exhibit 32.2 hereto are deemed to accompany this Annual Report on Form 10-K and will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that the Registrant specifically incorporates it by reference.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, as amended, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

CarGurus, Inc.

Date: February 11, 2021

By: /s/ Jason Trevisan
Jason Trevisan
Chief Executive Officer

POWER OF ATTORNEY

Each person whose individual signature appears below hereby constitutes and appoints Jason Trevisan and Scot Fredo, and each of them, with full power of substitution and resubstitution and full power to act without the other, as his or her true and lawful attorney-in-fact and agent to act in his or her name, place and stead and to execute in the name and on behalf of each person, individually and in each capacity stated below, and to file any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto, and other documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing, ratifying and confirming all that said attorneys-in-fact and agents or any of them or their or his substitute or substitutes may lawfully do or cause to be done by virtue thereof.

Pursuant to the requirements of the Securities Exchange Act of 1934, as amended, this report has been signed below by the following persons on behalf of the registrant in the capacities and on the dates indicated.

Name	Title	Date
/s/ Jason Trevisan Jason Trevisan	Chief Executive Officer and Director *(Principal Executive Officer)*	February 11, 2021
/s/ Scot Fredo Scot Fredo	Chief Financial Officer *(Principal Financial Officer)*	February 11, 2021
/s/ Yann Gellot Yann Gellot	Vice President, Finance & Accounting *(Principal Accounting Officer)*	February 11, 2021
/s/ Langley Steinert Langley Steinert	Executive Chairman and Chairman of the Board of Directors	February 11, 2021
/s/ Steven Conine Steven Conine	Director	February 11, 2021
/s/ Lori Hickok Lori Hickok	Director	February 11, 2021
/s/ Stephen Kaufer Stephen Kaufer	Director	February 11, 2021
/s/ Anastasios Parafestas Anastasios Parafestas	Director	February 11, 2021
/s/ Greg Schwartz Greg Schwartz	Director	February 11, 2021
/s/ Ian Smith Ian Smith	Director	February 11, 2021

CORPORATE INFORMATION

Board of Directors

- Langley Steinert, *Founder, Executive Chairman and Chairman of the Board*
- Steven Conine, *Co-Founder and Co-Chairman of Wayfair Inc.*
- Lori Hickok, *former Executive Vice President, Chief Financial and Development Officer of Scripps Networks Interactive, Inc.*
- Stephen Kaufer, *Co-Founder, President and Chief Executive Officer of TripAdvisor, Inc.*
- Anastasios Parafestas, *Founder, President and Managing Member of The Bollard Group LLC and its private equity arm, Spinnaker Capital LLC*
- Greg Schwartz, *Co-Founder, Chief Executive Officer and Chairman of Tomo Networks Inc.*
- Ian Smith, *Managing Director at Allen & Company LLC*
- Jason Trevisan, *Chief Executive Officer*

Executive Officers

- Langley Steinert, *Executive Chairman and Chairman of the Board*
- Jason Trevisan, *Chief Executive Officer*
- Samuel Zales, *Chief Operating Officer and President*
- Thomas Caputo, *Chief Product Officer*
- Andrea Eldridge, *Chief People Officer*
- Scot Fredo, *Chief Financial Officer and Treasurer*
- Kyle Lomeli, *Chief Technology Officer*
- Kathleen Patton, *General Counsel and Secretary*
- Sarah Welch, *Chief Marketing Officer*

Corporate Headquarters

- 2 Canal Park, 4th Floor, Cambridge, MA 02141, USA

2021 Annual Meeting of Stockholders

- Our annual meeting is being held virtually on Wednesday, June 2, 2021 at 1:00 p.m., Eastern Time, conducted via live audio webcast at www.virtualshareholdermeeting.com/CARG2021.

Requests for Reports and Other Stockholder Inquiries

- Our quarterly and annual reports, including Forms 10-Q and 10-K, are available on the investor relations section of our website: https://investors.cargurus.com. Requests for additional copies and other stockholder inquiries should be directed to: CarGurus, Inc., Attn: Investor Relations, 2 Canal Park, 4th Floor, Cambridge, MA 02141, USA.

Stock Exchange Listing

- Our Class A common stock is listed on the Nasdaq Global Select Market under the symbol "CARG".

Stock Transfer Agent

- Broadridge Financial Solutions, Inc., Edgewood, NY, USA

Independent Registered Public Accounting Firm

- Ernst & Young LLP, Cambridge, MA, USA

This Annual Report includes forward-looking statements about our future results of operations, our mission, business strategies and plans, business environment and future growth. These statements are subject to risks and uncertainties (including those identified in the "Risk Factors" section of the Form 10-K included in this Annual Report), and our actual results could be materially different. Forward-looking statements represent our beliefs and assumptions only as of the date of this Annual Report and we have no obligation to update them.

2 Canal Park
Cambridge, MA 02141
USA

© 2021 CarGurus, Inc.