

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, 2022

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)

2 Canal Park, 4th Floor
Cambridge, Massachusetts
(Address of principal executive offices)

04-3843478
(I.R.S. Employer
Identification No.)

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.

If securities are registered pursuant to Section 12(b) of the Act, indicate by check mark whether the financial statements of the registrant included in the filing reflect the correction of an error to previously issued financial statements.

Indicate by check mark whether any of those error corrections are restatements that required a recovery analysis of incentive-based compensation received by any of the registrant's executive officers during the relevant recovery period pursuant to §240.10D-1(b).

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, 2022 was \$2,177,687,560. Shares of voting and non-voting stock held by executive officers, directors and holders of more than 10% of the outstanding stock as of such date 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 21, 2023, the registrant had 98,869,235 shares of Class A common stock, and 15,999,173 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 2023 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.

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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,” “goal,” “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 any growth;
- the value proposition of our product offerings for dealers and consumers;
- the ability of our combined suite of offerings to increase a dealer’s return on investment, add scale to our marketplace network, drive powerful network effects, create powerful synergies for dealers, transform the end-to-end car shopping journey for both consumers and dealers and become the marketplace for all steps of the vehicle acquisition and sale process;
- our evolution to becoming a transaction-enabled platform where consumers can shop, finance, buy, and sell and dealers can source, market, and sell vehicles;
- 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;
- the value proposition of the CarOffer online wholesale platform, including our belief that as dealer enrollments increase, dealers will see a corresponding increase in inventory on the platform, further enabling liquidity, selection, choice and business efficiencies;
- our expectations regarding future share issuances and the exercise of put and call rights in connection with potentially acquiring additional equity interests in CarOffer, LLC, or CarOffer, as well as the associated valuation of redeemable noncontrolling interests;
- our ability to deliver quality leads at a high volume for our dealer customers and to provide the highest return on a dealer’s investment;
- our ability to maintain and acquire new customers;
- our ability to maintain and build our brand;
- our efforts to continue to enhance our diversity, equity, inclusion and belonging initiatives;
- our ability to realize benefits from our acquisitions and successfully implement the integration strategies in connection therewith;
- our expectations for CarGurus Instant Max Cash Offer, as well as our digital retail offerings and continued investments;
- our belief that our partnerships with automotive lending companies provide more transparency to car shoppers and deliver highly qualified car shopper leads to participating dealers;
- our belief that our Area Boost offering promotes participating dealers’ delivery capabilities and increases non-local VDP views;
- 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;
- global and domestic economic conditions affecting us or our customers;
- our ability to overcome challenges facing the automotive industry ecosystem, including inventory supply problems, global supply chain challenges, changes to trade policies and other macroeconomic issues;
- our ability 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;
- the impact of our expense reduction efforts during the second quarter of 2020;
- our outlook for our Restricted Listings product;
- our expectations regarding future fee reductions for customers; and
- the ongoing 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 or joint ventures in which we may be involved, 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 statement 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.

Overview

CarGurus, Inc. is a multinational, online automotive platform for buying and selling vehicles that is building upon its industry-leading listings marketplace with both digital retail solutions and the CarOffer digital wholesale platform. The CarGurus platform gives consumers the confidence to buy and/or sell a vehicle either online or in-person, and it gives dealerships the power to accurately price, instantly acquire, effectively market, and quickly sell vehicles, all with a nationwide reach. We use proprietary technology, search algorithms and data analytics to bring trust, transparency and competitive pricing to the automotive shopping experience. In addition to the United States, we operate online marketplaces under the CarGurus brand in Canada and the United Kingdom. In the United States and United Kingdom, we also operate the Autolist and PistonHeads online marketplaces, respectively, as independent brands.

In 2006, Langley Steinert founded CarGurus on the premise of bringing trust and transparency to the automotive marketplace. Our online marketplace platform provides ease of access to prices of vehicles and dealer ratings both of which are imperative to a consumer's vehicle purchase. By providing car-shoppers with the tools and insights necessary for their automotive journey, CarGurus has garnered a large and engaged user base with whom our dealers can transact. Our ready-to-shop audience of 29.1 million average monthly visitors in the U.S. has attracted 24,567 paying dealers to list inventory on our U.S. online marketplace as of December 31, 2022. Over time, we have seen an evolution of dealer and consumer wants and needs as we enter a more digitally-enabled world. To best meet our customers' needs, we evolved our Listings business to a transaction-enabled platform by introducing products that allow consumers to not only embark on a convenient self-selective purchasing journey with a seamless online to in-store transition but also to efficiently sell their car online from the comfort of their home. Dealers now have the ability to reach customers outside of their immediate geographic footprint and source inventory nationwide from both consumers and other dealers. This expanded suite of offerings can help increase our dealers' return on investment, or ROI, adding even more scale to our marketplace network. While, we have evolved to an end-to-end transaction-enabled platform where consumers can shop, finance, buy, and sell, and dealers can source, market, and sell vehicles, our ultimate goal remains the same: to empower our customers by giving them all the tools and information they need to buy or sell any car, anywhere, at the right price and in the right way for them. At CarGurus, *we give people the power to reach their destination.*

Prior to the first quarter of 2022, we had two reportable segments – United States and International. Effective as of the first quarter of 2022, we revised our segment reporting from two reportable segments to one reportable segment. Effective as of the fourth quarter of 2022, we revised our segment reporting from one reportable segment to two reportable segments – U.S. Marketplace and Digital Wholesale. The U.S. Marketplace segment derives revenues from marketplace services for customers within the United States. The Digital Wholesale segment derives revenues from our Dealer-to-Dealer and Instant Max Cash Offer, or IMCO, services and products sold on our CarOffer platform. See Note 13 to our consolidated financial statements appearing elsewhere in this Annual Report on Form 10-K for further segment reporting and geographical information.

Consumers' CarGurus Journey

Shop: A car purchase is a milestone in a consumer's life – whether it is the first set of keys or parting from a memory-filled vehicle. However, shopping for a vehicle can be frustrating instead of empowering. Enter CarGurus, where we provide trust and transparency to the process for consumers. As the consumer moves to purchase a vehicle, 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 recently sold in the same region. 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 appropriate 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 with information that historically has not been widely available, such as Price History, Time on Site, and Vehicle History.

Finance & Buy: Once a consumer has found a listing they intend to pursue, we provide an omni-channel approach to the purchase of a vehicle partially or principally online. Our digital retail products such as Digital Deal provide the consumer with a self-selected car-buying journey to tailor their experience to their specific needs. Consumers can build a near penny-perfect deal with either dealer or vehicle specific finance and insurance products, and then place a deposit on their vehicle of choice, and/or take delivery of the vehicle all while experiencing a seamless online to in-store experience. We believe this approach throughout the end-to-end consumer experience brings greater trust, transparency, and efficiency to a consumer's entire car shopping experience, leading to highly-engaged, more confident and satisfied shoppers.

Sell: According to recent consumer research, almost 70% of car-buying shoppers will trade in or sell a vehicle during their car-shopping journey. Our acquisition of 51% interest in CarOffer, LLC, or CarOffer, in January 2021, with the ability to buy the remaining equity interest in the company in the second half of 2024, enabled the launch of CarGurus Instant Max Cash Offer, or IMCO. IMCO provides the consumer with the ability to complete this part of the process entirely online through a trusted and transparent experience. Consumers who are trading-in or selling vehicles receive the most competitive offer sourced from our in-network dealers. Consumers benefit from the volume of participating dealerships in the CarGurus/CarOffer network, as well as the 24/7 automated matching provided by CarOffer's proprietary matrix technology, or the Buying Matrix, which enables a hands-off approach to find the consumer the best deal at any time. Once the customer has accepted their offer, they can further customize their intake experience by arranging a pick-up either at their home or a drop-off location of their choice within participating states. With an expansive dealer network, consumers can have the confidence that they are truly finding the best deal for their vehicle instantly.

Dealers' CarGurus Journey

Source: Made possible by the acquisition of CarOffer, we entered the digital wholesale space enabling dealers to acquire inventory in a convenient and efficient manner. CarOffer is an automated instant wholesale vehicle trade platform that is disrupting the traditional wholesale auction model. CarOffer's technology enables dealers to bid, transact, inspect and transport vehicles seamlessly and efficiently without geographic limitations. Any dealer, including those who are customers of the CarGurus website, can enroll on the CarOffer platform at no additional cost. The Buying Matrix allows dealers on the platform to buy and sell vehicles using limit orders, saving dealers the time and expense of going to an auction to acquire vehicles via the traditional in-person physical auction model. Through inspections on sales, dealers can be confident their purchase meets their expectations while they reap the benefits of focusing their resources and attention on other elements of their businesses. As CarOffer continues to activate more dealers, we expect dealers will see a corresponding increase of inventory on the platform, further enabling liquidity, selection, and business efficiencies. Additionally, the CarOffer platform enabled us to launch IMCO nationwide, which we expect over time will provide dealers with access to a fresh source of consumer trade-in inventory and will provide even further liquidity on the CarOffer platform. Similar to a dealer-to-dealer purchase, CarOffer handles inspections, transportation, titles, and payments in one bill of sale from the consumer. CarOffer's platform provides a solution for a dealer looking to minimize reliance on in-person or online auctions to source their vehicle inventory while assuring they are paying a fair price, which has led to rapid growth and adoption within the dealer community.

Market: Dealers can list their inventory on CarGurus' 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 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 quality high-intent 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. We define 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. 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 dealership. Paying dealers also have access to tools on the Dealer Dashboard as well as other digital retail add-on product offerings which enable dealers to expand their geographic footprint to reach a larger consumer audience while gaining efficiencies by streamlining the car sales process. Through our ready-to-purchase consumer audience, our paying dealers ultimately have a consistent and compelling ROI through our variety of product offerings.

Sell: By presenting consumers with data such as our Deal Ratings, Price History, Time on Site, Vehicle History and financing options 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 access to an efficient customer acquisition channel with the highest-intent shoppers generating the highest ROI. Further, as consumer needs evolve to customizing aspects of their vehicle purchase, we provide dealers, through a variety of digital offerings, the means to cater to consumers on a personalized level. Consumers can choose to complete their self-selected car-shopping journey with Digital Deal and other digital offerings that we provide through our partnership with dealers, enabling an individualized shopping experience from financing options to placing a deposit. 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. With CarOffer, we have also integrated insights regarding wholesale pricing among the dealer community. The ability to compare wholesale pricing with retail pricing ultimately allows dealers to price a car with more accuracy, winning loyal consumers with trust and transparency. These combined offerings allow dealers to efficiently drive their business to success from all aspects of sourcing, marketing, and selling. Our success in our partnership with dealers is evidenced by the number of paying dealers – 24,567 paying dealers as of December 31, 2022 – in our marketplace in the U.S.

CarGurus Value Proposition

With the majority of dealers in the United States listing inventory on our platform and our consumer-friendly deal ratings, we have built the most visited online automotive marketplace in the United States (Source: SimilarWeb, Traffic Report, Q4 2022, USA) and we believe that our scale creates powerful network effects that reinforce the competitive strength of our business model. This powerful network has only strengthened since our acquisition of CarOffer. The combination of Digital Retail, Digital Wholesale and Listings creates powerful synergies for our dealer customers. Dealers can leverage this one-stop shop to acquire inventory from both consumers and dealers, list the vehicle on our marketplace and sell it utilizing our digital retail capabilities. CarGurus' industry-leading inventory selection from our U.S. dealers attracts a large and engaged consumer audience – 29.1 million average monthly U.S. unique users in 2022. The robust connections from our high-intent consumer audience drive greater value and a higher return on investment for our paying dealer. 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 quality of our user experience, the quality of our partnership with dealers to provide innovative digital offerings and much more. As we continue to innovate and progress our offerings to meet both consumer and dealer needs, we strive to uphold and improve the quality of the connections between consumers and dealers and become the preferred platform for all steps of the vehicle acquisition and sale process, ultimately giving dealers and consumers the power to reach their destination.

Consumers' Challenges

As consumers complete the end-to-end car shopping journey, the key questions they ask are:

- Am I getting a fair price for my trade-in?
- Should I purchase a vehicle with my trade-in?
- 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?
- What if this dealer is not local to my area?

In answering these questions, consumers historically had limited access to transparent information on specific vehicles, car pricing, and dealer reputation. Further, consumers who wanted to trade in their vehicle or wanted to complete select elements of their car shopping journey online typically had very limited options. Every car-shopping journey is a unique experience, and so for consumers embarking on this journey, there is a difficulty in the absence of consistent information on pricing for both selling and purchasing vehicles. Selling a vehicle was time-consuming and exhausting for consumers as they traveled dealer to dealer to ensure they were receiving a fair and accurate price for their vehicle. Selecting the right dealer was also challenging for consumers as dealer reputations were historically based primarily on word-of-mouth. The lack of clear, 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, following the height of the COVID-19 pandemic, consumers are also increasingly interested in understanding which aspects of their buying journey they can complete online and are looking for ways to customize their journey to incorporate both online and in-person components.

Dealers' Challenges

Dealers have had to face a new set of challenges over the past few years as a result of the COVID-19 pandemic and the subsequent semiconductor chip shortage impacting auto manufacturers' production levels. The shortage of both used and new car inventory and rapidly evolving wholesale prices caused dealers to invest in additional methods to source wholesale vehicles all while dealers have been adapting to the shift from physical to digital marketplaces as consumer needs and wants continue to evolve and competition from online-retailers increases. Dealers need to remain competitive in their offers for consumer trade-ins, as consumers have increasing means to source multiple offers in this highly competitive and digitally-enabled market. 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. Dealers additionally need to be strategic about selling vehicles before they are "aged inventory." Traditional marketing channels that dealers utilize, including television, radio, and newspaper, can target locally but are inefficient in targeting the narrow percentage of high-intent consumers who are ready to purchase and potentially trade-in a vehicle both locally and outside a dealership's immediate geographic footprint. In addition, with used car pricing being fluid due to rapidly shifting supply and demand dynamics, dealers need to find ways to manage constantly changing inventory and adjust pricing and purchasing strategies to adapt to frequently changing market conditions as evidenced by the past few years.

Our Strengths

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

Trusted Marketplace for Consumers. We provide consumers with transparent information, intuitive search results, and other tools that aid them in their car-shopping journey. Furthermore, consumers can have confidence in finding a fair value in the vehicles they search for in our marketplaces since less than one-third of eligible vehicle listings on CarGurus.com earn a Great Deal or Good Deal rating. We also enable bids on vehicle trade-ins and sales from the thousands of dealers in the CarGurus/CarOffer network, assuring consumers that they are receiving the best offer on their vehicle. 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 to bring them great deals from top-rated dealers. In 2022, we experienced over 77.7 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, on-site 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.

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. 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. With our acquisition of CarOffer in 2021, we have extended our proprietary search algorithms and data analytics to include the Buying Matrix, providing unique insights to dealers regarding their purchases in the wholesale space as well as up-to-date pricing information for the consumers they are servicing. 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, IMV technology features on the Dealer Dashboard and new products for our dealers. These enhancements enable more informed consumers and dealers from the start of their car journey to the end.

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. With the acquisition of CarOffer, we increased efficiencies for dealers to source vehicles from both consumers and dealers with the 24/7 online Buying Matrix. We provide our dealer base with connections to prospective car buyers; most of these connections have historically been for used cars, and to prospective car sellers. The primary objective of our traffic acquisition and site improvements is to generate high quality 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. Dealers are able to leverage our large consumer audience, our digital retail offerings and consumer trade-in services to provide more quality leads to their dealership, providing the highest return on their investment. We provide all dealers with tools that are informed by real-time market conditions that help them acquire inventory, merchandise, and sell their cars, and our paying dealers get access to additional valuable information from our Pricing and Market Analysis tools. Additionally, with digital retail offerings we help level the online offering playing field for our dealer partners who are unable to provide these solutions to consumers on their own and/or wish to utilize our largest consumer audience to sell additional inventory with CarGurus' digital retail offerings. Our strong value proposition to the dealer community is evidenced by our 4% growth in quarterly average revenue per subscribing dealer, or QARSD, in the United States in the fourth quarter of 2022 compared to the fourth quarter of 2021.

Attractive Financial Model. We have a strong track record of revenue growth, profitability, and capital efficiency. We generated revenue of \$1,655.0 million in 2022 compared to \$951.4 million in 2021, representing a year-over-year increase of 74%. 37% of our revenue generated in 2022 was attributable to the U.S. Marketplace segment compared to 62% in 2021. 60% of our revenue generated in 2022 was attributable to the Digital Wholesale segment compared to 33% in 2021. A significant portion of our revenue is recurring due to the subscription nature of our products, including from our Listings packages, our Real-time Performance Marketing, or RPM, and our digital advertising suite. At the same time, our revenue is highly diversified due to the subscription nature of our listings business, transactional nature of our digital wholesale business and our diverse dealer base. We also have been able to grow and invest in our future growth as a result of our highly profitable foundational Listings business. The profitability of the Listings business and the liquidity of our balance sheet, helps drive growth and innovation as we build out our vision of creating an end-to-end transaction-enabled automotive platform. We ended 2022 with \$469.5 million of cash on hand up from \$231.9 million in 2021.

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.

Our Products and Services

U.S. Marketplace and Other

Our product offerings described below are available for the U.S. CarGurus marketplace; their availability on our other marketplaces varies. We also offer paid listings subscriptions for dealers and dealer advertising products for the PistonHeads website, as well as paid listings subscriptions for dealers for the Autolist website.

Consumer Experience

We provide consumers with an online automotive marketplace where they can search for new and used car listings from our dealers and sell their cars to dealers and other consumers. A user accesses our marketplace through our websites or by using our mobile applications. Most users specify whether they are searching for a used, certified pre-owned, or new car and then provide their desired vehicle make and model and their postal code.

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. The IMV 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 has 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 both our peer-to-peer and consumer-to-dealer marketplaces in the United States. Our peer-to-peer offering, Sell My Car, 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 a consumer lists a vehicle on the peer-to-peer marketplace. See "— Digital Wholesale" below for a description of our consumer-to-dealer offering, IMCO.

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 vehicles 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 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. Paying U.K. dealers who list on the CarGurus platform automatically have their inventory added to the PistonHeads site for greater consumer reach.

Dealer Offerings

Listings

Our marketplace connects dealers to a large audience of informed and engaged consumers. We offer multiple types of marketplace Listings subscriptions to dealers for the CarGurus marketplace in the U.S. (availability varies on our other marketplaces): Restricted Listings, which is free, and various levels of Listings packages, each of which requires a paid subscription.

- *Restricted Listings.* We allow non-paying dealers to list their inventory in our marketplace as Restricted 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.
- *Paid Listings 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 used inventory as well as their new 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. Dealers in the Featured and Featured Priority package also receive premium branding in the ad slots on their own VDPs.

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.
- *Dealer Mobile App.* Allows dealers to access core Dealer Dashboard functionality via an iOS and Android mobile app. Includes reporting on leads, access to several tools, and mobile app notifications that can be customized by the dealer.

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.
- *LeadAI.* Helps dealers to identify the highest intent users who have submitted leads on their inventory. LeadAI evaluates onsite user behavior to identify, score, and label "Hot" and "Warm" leads within the Dealer Dashboard Leads Report. This feature is available to all dealers subscribing to Enhanced, Featured, and Featured Priority 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 digital advertising suite. With RPM, dealers can reach our large and engaged automotive shopping audience, on other sites on the internet and/or on high-converting social media platforms. 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 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

We offer our Listings product suite through a tiered set of packages. Listings are priced on a monthly, quarterly, semiannual, or annual subscription basis based on the dealer's inventory size, region, and our assessment of the ROI we expect to deliver. 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 sold as a subscription, and priced as a percentage of Listings while accounting for factors such as dealership characteristics and performance expectations.

Digital Retail

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 processes online. We are focused on addressing the needs of both consumers and dealers in this growing segment of automotive digital retail.

Finance in Advance

Through our partnerships with automotive lending companies, we allow eligible consumers on our U.S. marketplace 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 Deal

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, selecting finance and insurance products, and placing a reservation deposit. Digital Deal generates revenue by charging fees to dealerships to enroll in the program and from partnerships based on the number of funded loans from consumers.

Area Boost

We offer the ability for dealerships to expand their VDP geographic footprint to non-local customers via dealer home delivery services. Revenue is generated through fees charged to the dealership to enable listings beyond the default geographical radius. We believe this program provides additional vehicle options to car shoppers open to home delivery services while promoting participating dealers' delivery capabilities and increasing non-local VDP views. As a prerequisite to enrolling in Area Boost, new dealerships are required to sign up for Digital Deal.

Auto Manufacturer and Other Advertiser Products

Our platform offers auto manufacturers and others the ability to purchase advertising on both our sites and third-party websites, including social media platforms, to execute targeted marketing strategies:

- *Brand Reinforcement.* We allow auto manufacturers to buy advertising on both our sites and third-party websites, including social media platforms, to target consumers based on the make, model, and location 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.

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.

Digital Wholesale

Dealer-to-Dealer

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 industry continues to see an increase in online transactions that are easier, faster, and reduce the effect of geographic constraints.

In January 2021, we completed our acquisition of a 51% ownership interest in CarOffer, a modern-day automotive inventory transaction platform that allows dealers and dealer groups to buy, sell, and trade online with automation and ease. The acquisition added wholesale vehicle acquisition and selling capabilities to our portfolio of dealer offerings, creating a powerful digital solution for dealers to sell and acquire vehicles at both retail and wholesale. Unlike traditional vehicle auctions which require manual bidding and vehicle evaluation, the Buying Matrix enables buying dealers to create standing buy orders and provides instant offers to selling dealers.

IMCO

In 2021, we launched a new consumer offering, IMCO, which allows consumers to sell their vehicles to dealers entirely online. This offering, which is now available to approximately 93% of the U.S. population, provides dealers with access to a fresh source of trade-in inventory and helps ensure liquidity amongst CarOffer's platform. Through IMCO, consumers who are trading-in or selling vehicles enter easy-to-answer questions regarding their vehicle and are instantly presented with the most competitive offer sourced from in-network dealers. Once the customer has saved their offer, they can further customize their experience by arranging a location of their choice to have the vehicle picked-up and transported. In this model, CarOffer processes the transaction directly and collects transaction and other fees from the dealer.

In 2022 we continued to optimize and evolve our consumer-to-dealer offering to improve the consumer experience and performance. We launched online pickup scheduling, which allows consumers to schedule their vehicle pickup through our simple online tool. We ran a pilot of drop-off locations where consumers could opt to drop their vehicle off rather than have it picked up at their home. We optimized the consumer experience with more data and information to help consumers make confident decisions, and integrated a virtual inspection process to allow consumers to pre-inspect their vehicle in order to streamline the pickup process. We ended 2022 with a consumer NPS of 88 for sellers who completed a transaction.

Marketing and Brand

Consumer Marketing

CarGurus continues to be the most visited online automotive marketplace in the United States, with more than 77.7 million and 29.1 million average monthly sessions and unique users, respectively in 2022. We have built our engaged audience on the strength of our user experience, leveraging the power of technology and data to bring trust and transparency to the automotive platform. Our intuitive search experience, combined with the largest inventory of any major U.S. online automotive marketplace and relevant content, updates, and transaction-enabled tools, provide unparalleled transparency and decision-support to consumers during their car search to help them shop, buy, finance and sell with confidence and ease. The strength of our consumer experience is one of our most powerful marketing tools, with 95% of sellers stating they would recommend CarGurus to a friend and 90% of sellers stating they would recommend starting their purchase online with CarGurus. CarGurus also attracts free website traffic from high-intent car shoppers through search engines.

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 engine performance marketing, social media, and other digital marketing channels and has tested over one billion keywords on various search engines as well as sophisticated, personalized re-marketing, to nurture high-intent consumers interested in auto-shopping. We continuously integrate new efficient channels and advance the sophistication of our data-driven algorithmic traffic acquisition, with an ongoing focus on increasingly value-driven campaigns that produce 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; this includes email and app notifications, to help consumers find the right car for them, connect with a dealer to make a purchase or sell their car online. 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 is intended to create 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 are primarily comprised of (i) investments in media, including television, online video and digital social, (ii) expressing our unique brand value proposition throughout our core site experience, app and organic social channels, and (iii) an always on public relations program that allows us to gain significant, high credibility earned media coverage. Despite a shorter tenure, lower investment in brand marketing than our primary competitors, and a hyper competitive industry, we have grown and maintained our brand awareness since launching brand marketing in 2017. We 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 continue to drive brand awareness and consideration, we see significant opportunity to drive reach with new consumers leveraging new channels and tactics, and a deeper 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 product adoption and usage from our paying dealers. Our dealer marketing efforts aim to:

- *Educate Dealers on the End-to-End Inventory Solutions We Offer, the Quality of Our Audience and Products, and Attractive ROI.* We educate dealers on the increased breadth of solutions we offer, including wholesale buying and selling of inventory, marketing via our core Listings products and other tools, and our growing suite of retailing solutions. We promote the quality of our audience by touting our industry-leading audience, 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 Industry Trends.* We generate content on market trends and best practices in digital advertising that is 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 to continue to share our insights and help build our brand among dealerships. Since the height of the COVID-19 pandemic, we have also helped address their ever changing challenges by sharing the latest research and data-driven insights on how shopper behavior continues to evolve.
- *Provide Best Practices to Assist Dealers in Becoming More Successful.* 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, as well as broader guidance on marketing, sales, operations, and other aspects of running a more profitable dealership. We maintain consistent communication with dealers via email, events and our Dealer Dashboard to ensure awareness of account performance and recent product updates, and we empower our sales and account management teams with resources to directly provide education and assistance to our dealer partners.
- *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 automated, personalized marketing about how dealers can improve 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.

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.com and Vroom.com;
- sites operated by individual automobile dealers;
- internet search engines;
- social media marketplaces;
- peer-to-peer marketplaces, such as Craigslist.com; and

- vehicle auction companies, including digital wholesale platforms: ACVauctions.com, Karglobal.com and E.inc.

Competition for Consumers and Dealers

We compete for consumer visits with other online automotive marketplaces, free listing services, general search engines, online dealerships and dealers' websites. We compete for consumers primarily on the basis of the quality of the consumer experience and the breadth of offerings that we are able to provide. 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, online dealerships and vehicle auction companies that attract consumers and dealers searching for vehicles, as applicable. We compete primarily on the basis of the ROI that our marketplace offers and the synergies provided by the combination of our foundational listings business with digital wholesale and digital retail offerings. 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.

Seasonality

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. Additionally, the volume of wholesale vehicle sales can fluctuate from quarter to quarter caused by several factors, including the timing of used vehicles available for sale from selling customers, the seasonality of the retail market for used vehicles and/or inventory challenges in the automotive industry, which affect the demand side of the wholesale industry. Macroeconomic conditions, such as slower growth or recession, higher interest rates, high unemployment, consumer confidence in the economy, consumer debt levels, the ongoing military conflict between Russia and Ukraine, foreign currency exchange rate fluctuations and other matters that influence consumer spending and preferences, can also impact the volume of wholesale vehicle sales, as was evidenced by the global semiconductor chip shortage. The Digital Wholesale segment operating results have reflected the general seasonality of the wholesale vehicle sales market and macroeconomic conditions of the automotive industry. The U.S. Marketplace segment operating results have reflected the macroeconomic conditions of the automotive industry. However, to date, the U.S. Marketplace segment operating results have not been materially impacted by the general seasonality of the automotive industry. This could possibly change once our business and markets mature.

Sales

Our sales team is responsible for bringing dealers onto our marketplace, converting non-paying dealers to paid subscriptions and increasing dealer participation in new products that CarGurus is bringing to market. We have built an efficient sales and service team of approximately 320 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 an Account Manager to paying Listings dealers to develop strong relationships and customer satisfaction. The designated Account Manager spends time educating dealers at every stage of their lifecycle as a paying customer. They advise dealers on a range of topics, including how to effectively use their CarGurus products and merchandise their inventory, track sales, measure ROI for their marketing spend and identify ways to grow their profits. We believe our active communication with our dealers fosters customer satisfaction and increases customer retention.

CarOffer also has a team of approximately 149 sales and service employees based in Texas, which is dedicated to driving transactions for the business as well as enrolling new dealers on the CarOffer platform.

People and Talent

Our investment in our greatest asset – our people – is integral to our core values, evidenced by our inclusion of employee engagement and cultural efforts as components of our 2022 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 mitigate risks.

As of December 31, 2022, we had 1,403 full-time employees, 87 of whom were based outside the United States and 348 of whom were employed through CarOffer. None of our employees are 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, Equity, 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, Equity, Inclusion and Belonging Advisory Team, we seek to foster diversity, equity, inclusion and belonging, and to build a workplace where everyone can thrive. Our commitment to these efforts helps us attract and retain the best talent, enables employees to realize their full potential and drives high performance through innovation and collaboration. In 2022, based on data from U.S. CarGurus employees who chose to self-identify (87.3%), we increased representation among women and non-binary employees (35.1% to 37.4%) and traditionally marginalized racial/ethnic groups (30.1% to 34.4%) within our U.S. workforce. We also saw year-over-year increases in the U.S. among women and non-binary employees in technical (25.9% to 26.2%) and among traditionally marginalized racial/ethnic groups in technical roles (45.7% to 49.4%) and management-level roles (19.4% to 21.6%).

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 hybrid work schedules or remote work on a case-by-case basis, employee assistance programs, short term and long-term disability insurance and term life insurance, as well as company paid access to certain wellness and family care resources.

Employee Engagement

Each year, we conduct an employee engagement survey to help our management team gain insight into and gauge employees' feelings, attitudes, and behaviors around working at CarGurus. Our latest survey, completed in September 2022, had a participation rate of approximately 90% of our eligible employees worldwide. The survey results indicated that we excelled in areas like manager empathy and support, as well as key indicators of belonging – including fairly considering each other's ideas and feeling respected as a member of our community. Based on employee feedback, we also identified several company-wide opportunity areas to improve engagement and drive long-term success. Our culture and commitment to building a workplace where we can all thrive has been recognized externally with the following awards: *Built In Boston's* "Best Places to Work" in 2019, 2020, 2021, 2022 and 2023; *Boston Business Journal's* "Best Places to Work" in 2015, 2016, 2017, 2018, 2019, 2021, and 2022; *Boston Globe's* "Top Place to Work" in 2014, 2015, 2016, 2018, and 2022; and multiple awards from *Comparably including* "Best Perks & Benefits" in 2021 and 2022, "Best Work-Life Balance" in 2021 and 2022, and "Best Company Culture" in 2022.

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 our team with a wide range of development opportunities, including mandatory quarterly compliance training courses as well as one-on-one, virtual, social and self-directed learning, mentoring, coaching, and external development. In 2022, nearly 100% of our employees participated in learning and development activities.

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 a third-party data centers in the U.S. near Dallas, Texas, 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.

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, one pending U.S. patent application, and two pending international patent applications. 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. Additionally, CarOffer has a number of registered and unregistered trademarks, including “CarOffer” and the CarOffer logo, and related marks, which CarOffer has registered as trademarks in the U.S. CarOffer pursues additional trademark registrations to the extent it believes doing so would be beneficial to its competitive position. Our and CarOffer’s registered trademarks remain enforceable in the countries in which they are registered for as long as we and CarOffer, as applicable, 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, birddog, consumer protection, or advertising laws or regulations.

Our wholesale operations through CarOffer are regulated by the states in which we operate and by the U.S. federal government. These activities may also be subject to state and local licensing requirements. Additionally, we may be subject to regulation by individual state dealer licensing authorities and state consumer protection agencies.

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 products marketed under our RPM digital advertising 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, Current Reports on Form 8-K, Proxy Statements for our annual meetings of stockholders and any amendments to those reports or statements. 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 audited 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 is substantially dependent on our relationships with dealers. If a significant number of dealers terminate their subscription agreements with us, and/or dealer closures or consolidations occur that reduce demand for our products, our business and financial results would be materially and adversely affected.

A significant source of our 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 prior to the commencement of the applicable renewal 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. A dealer may be influenced by several factors to cancel its subscription with us, 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, dealers could share this belief 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.

Additionally, in the past, the number of United States dealers has declined due to dealership closures and consolidations as a result of industry dynamics and macroeconomic issues. 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 and financial results could 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 canceled their subscriptions with us (including, in some cases, with our permission prior to the end of the applicable contract term and notice period), and it is possible that such dealers will not re-subscribe and that additional dealers will cancel their subscriptions in the future for a variety of reasons, including as a result of the continuing effects of the COVID-19 pandemic and other macroeconomic issues, such as increased interest rates and other matters that influence consumer spending. 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 prior to the commencement of the applicable renewal 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. 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 paying and non-paying dealers to receive fewer leads and connections, which may make it more difficult for us to convert non-paying dealers to paying dealers or maintain or expand our base of 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.

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. 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 ongoing effects of the COVID-19 pandemic, the cost of energy and gasoline; the availability and cost of credit; increased 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 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 has been and may continue to be negatively affected by challenges to the larger automotive industry ecosystem, including global supply chain challenges, the effects of the global semiconductor chip shortage, 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 and increased interest rates. Increasing global inflation rates have spurred a cycle of monetary policy tightening, including through central bank increases to key short-term lending rates. Both the availability and cost of credit are factors affecting consumer confidence, which is a critical driver of vehicle sales for our consumers and dealers. Additionally, vehicle affordability for our consumers is becoming more challenging due to a combination of factors, including elevated vehicle pricing resulting from inflationary cost increases and vehicle production constraints, and increasing vehicle finance costs due to increased interest rates. These factors could have a material adverse effect on our business, revenue, results of operations, and financial condition.

If the CarOffer business and/or our combined offerings do not continue to grow, our revenue and business would be significantly harmed.

A significant amount of our revenue is now derived from the wholesale sale of automobiles and IMCO. Continued achievement of our transaction synergies and our ability to continue to grow the CarOffer business and the revenue associated with it depends on a number of factors, including, but not limited to, our ability to continue to: expand the number of dealers engaging on the CarOffer platform; retain existing customers and increase the share of wholesale transactions which they complete on the CarOffer platform; attract prospective customers who have historically purchased or sold vehicles through physical auctions and may choose not to transact online; and successfully compete with competitors, including other online vehicle auction companies and large, national offline vehicle auction companies that are expanding into the online channel and have launched online auctions in connection with their physical auctions. Additionally, our ability to continue to grow IMCO and the revenue associated with it also depends on a number of factors, including, but not limited to, our ability to continue to: effectively scale and market IMCO; attract prospective consumers to sell their vehicles online through IMCO; and successfully compete with competitors, including online dealerships. If our anticipated transaction synergies do not fully materialize, or the CarOffer business and/or IMCO fail to continue to grow at the rate we expect, our revenue and business would be significantly harmed.

Industry conditions such as a significant change in retail vehicle prices or a decline in the used vehicle inventory supply coming to the wholesale market could also adversely impact CarOffer's business and growth. For example, if retail prices for used vehicles rise relative to retail prices for new vehicles, it could make buying a new vehicle more attractive to consumers than buying a used vehicle, which could result in reduced used vehicle wholesale sales on the CarOffer platform. Used vehicle dealers may also decide to retail more of their vehicles on their own, which could adversely impact the volume of vehicles offered for sale on the CarOffer platform. We also face inventory risk in connection with vehicles acquired by CarOffer via arbitration, including the risk of inventory obsolescence, a decline in values, and significant inventory write-downs or write-offs. Such inventory risk would be higher if arbitrations increase, which is more likely to occur in connection with declining wholesale market conditions.

Furthermore, activity on the CarOffer platform has in the past fluctuated, and may again in the future fluctuate, from period to period based on macroeconomic conditions and changing demand requirements, which could adversely impact our revenue, results of operations, and financial condition for such period(s). Macroeconomic issues, including increased interest rates and lower consumer confidence, could also adversely impact dealer demand for sourcing inventory and therefore lead to a reduction in the number of vehicle wholesale sales on the CarOffer platform and/or transacted via IMCO, which would adversely impact CarOffer's business and financial results. Additionally, inventory challenges in the automotive industry, including for reasons attributable to the COVID-19 pandemic, have contributed and could continue to contribute to a decrease in the supply of vehicles coming to the wholesale market and reduce the number of vehicles sold on the CarOffer platform and/or transacted via IMCO. An inability by CarOffer to retain customers and/or increase or find alternative sources of vehicle supply would adversely impact our revenue and business.

If dealers or other advertisers reduce their spending with us, our advertising revenue and business would be harmed.

A portion of our revenue is derived from advertising revenues generated primarily through short-term advertising sales, including on-site 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.

As a result of the effects of the COVID-19 pandemic, some advertisers canceled or reduced their advertising with us and it is possible that advertising customers will cancel or reduce their advertising with us in the future for a variety of reasons, including the effects of the COVID-19 pandemic and other macroeconomic issues, such as increased interest rates and other matters that influence consumer spending. In addition, the year-over-year decline in the number of consumer visits to our sites as a result of the COVID-19

pandemic or otherwise resulted in the delivery of fewer impressions for our advertising customers than anticipated year-over-year for the year ended December 31, 2022, 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 offerings 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 experience to consumers on our platform, 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. 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.

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. For example, during 2022 we scaled IMCO in furtherance of our evolution to a transaction-enabled platform. We also continue to develop digital retail offerings, including those that expand a dealer's geographic footprint and others that bring additional elements of the car buying experience online through our websites. A failure by us to capture the benefits that we expect from our rollout of IMCO and these digital retail investments could have an adverse effect on our business and financial results.

We also anticipate that over time our investments in our current products may become less productive and the growth of our revenue will require more focus on developing new products. 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 to improve the attractiveness of our marketplaces. Our ability to engage in these activities may decline as a result of macroeconomic effects and any cost-savings initiatives on our business. These product, technology, and development expenses may include costs of hiring additional personnel and retaining our current employees, engaging third-party service providers and conducting other research and development activities. There can be no assurance that innovations to our products like IMCO, or the development of future products, will increase consumer or dealer engagement, achieve market acceptance, create additional revenue or become profitable. 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 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 and/or introduce competing products 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, as they have done from time to time, or if our efforts to improve our search engine optimization are unsuccessful or

less successful than our competitors' efforts, our ability to attract a large consumer audience could diminish, traffic to our marketplaces could decline and the number of leads that we send to our dealers could be adversely impacted. Additionally, competing products from internet search engine providers, such as those that provide dealer and vehicle pricing and other information directly in search results, could also adversely impact traffic to our websites and the number of leads that we are able to send to our dealers. Our business would also be adversely affected if internet search engine providers choose to align with our competitors. 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.

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 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, and increased fees we may be charged by data providers. 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, we have reduced our brand spend in comparison to our pre-COVID-19 pandemic levels, and it is possible that we may in the future decide to further suppress such spend depending on macroeconomic conditions. 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, third party content and conduct on our websites 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.

Our recent, rapid growth is not indicative of our future growth, and our revenue growth rate in the future is uncertain, including due to potential macroeconomic effects.

Our revenue increased to \$1,655.0 million for the year ended December 31, 2022 from \$951.4 million for the year ended December 31, 2021, representing a 74% increase between such periods. Our revenue in the future may not grow at such a rate and could potentially be impacted by macroeconomic issues, such as declining wholesale vehicle prices, the war in Ukraine and Russian sanctions, increased interest rates, lower consumer confidence, consumer debt levels and other matters that influence consumer spending and preferences. 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; attract new consumers to sell their vehicles online through IMCO; maintain and expand the number of dealers that subscribe to our marketplaces and maintain and increase the fees that they are paying; expand the number of dealers engaging on the CarOffer platform and increase the share of wholesale transactions which they complete on such platform; 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 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 continuing effects of the COVID-19 pandemic and other macroeconomic issues 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, in addition to our revolving credit facility associated with the Credit Agreement (as defined below) (the "2022 Revolver"). However, additional funds may not be available when we need them on terms that are acceptable to us or at all. Volatility in the equity and credit markets may also have an adverse effect on our ability to obtain equity or debt financing. An inability to obtain adequate financing or financing on terms satisfactory to us when we require it could significantly limit our ability to continue to pursue our business objectives and to respond to business opportunities, challenges, or unforeseen circumstances, and may adversely affect our business, operating results, financial condition, and prospects.

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

In addition to the United States, we 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 have incurred losses in prior periods in the United Kingdom and Canada and may incur losses there again in the future. We also face various other challenges in those jurisdictions. For example, our competitors may be more established or otherwise better positioned than we are to succeed in the United Kingdom and Canada. 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. Any of these barriers could impede our operations in our international markets, which could affect our business and potential growth.

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: adapting our websites and mobile applications to conform to local consumer behavior; increased competition from local providers 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; the enforceability of our intellectual property rights; credit risk and higher levels of payment fraud; compliance with anti-bribery laws, including compliance with currency exchange rate fluctuations; adverse changes in trade relationships among foreign countries and/or between the United States and such countries; 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.

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 our continuing ability to attract, develop, motivate, and retain highly qualified and skilled employees. Since the onset of the COVID-19 pandemic, we have encountered increased rates of turnover of our employee base and encountered intense competition for retaining and attracting qualified and skilled employees. Accordingly, we have incurred, and we may continue to incur, significant costs to attract new employees and retain existing ones, and we may in the future become less competitive in attracting and retaining employees as a result of any expense reduction efforts that we may initiate.

In addition, any unplanned turnover, reduced involvement, 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, 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. For example, effective on October 3, 2022 and December 2, 2022, respectively, Scot Fredo, our former Chief Financial Officer, and Yann Gellot, our former Senior Vice President, Finance and Principal Accounting Officer, resigned. If we do not succeed in attracting well-qualified employees or retaining and motivating existing employees, our business could be materially and adversely affected. Additionally, we may face risks related to the transitions that recently occurred in our senior management team, such as the departures of Messrs. Fredo and Gellot, and other future transitions in our leadership, 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 platform and dealers using our CarOffer platform 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 sites declines significantly, or if the number of automotive sales declines significantly or used car sales prices become volatile, whether as a result of macroeconomic effects 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' confidence in, or 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. 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. 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 dealer licensing, 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 Telephone Consumer Protection Act, or the TCPA, as interpreted and implemented by the United States Federal Communications Commission, or 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 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 unlawful or anticompetitive activity 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.

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; our data providers for inventory and vehicle information; and our partners for vehicle transportation, inspection and other logistics associated with our CarOffer business and IMCO. 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 macroeconomic conditions or otherwise, we could suffer increased costs and we may be unable to provide similar services until an equivalent provider could be found or we could develop replacement technology or operations. For example, primarily in connection with our Dealer-to-Dealer transactions, we utilize a third-party payment processor that collects customer payments on our behalf and remits them to us, as well as provides payments in advance for certain selling dealers. If our relationship with this third-party payment processor were to deteriorate or terminate, we would have to identify a succeeding payment processor or assume in-house facilitation of these services, which could disrupt our business and adversely affect our revenue, results of operations, and financial condition. Furthermore, 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.

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 could affect the security or availability of our marketplaces, 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 have resulted, and may in the future 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 Eastern region of the United States, and internationally near each of London, England, Dublin, Ireland and Frankfurt, Germany. These facilities include hosting through Amazon Web Services, a provider of cloud infrastructure services. Although we can host our U.S. CarGurus'

marketplace from two alternative locations 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. Any disruptions or other operational performance problems with these facilities or problems faced by their operators, including our cloud infrastructure service provider, could result in material interruptions in our services, adversely affect our reputation and results of operations, and subject us to liability. 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 has caused, and may in the future 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 breaches, cyber-attacks, phishing attempts, errors by employees, 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.

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 fixing or replacing any affected systems or hardware 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, and our third-party service providers, collect, process, store, transfer, share, disclose, and use consumer information and other data, and our actual or perceived failure, or the actual or perceived failure of our third-party service providers, to protect such information and data or respect users' privacy could expose us to liability and adversely affect our reputation and brands and 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, credit applications and other financial data, 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, and we employ third-party service providers, such as payment processing providers, who also regularly have access to customer and consumer data. Some of this information may be private, and security breaches against us or our third-party service providers 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, and we also rely on our third-party service providers to use sufficient security measures to protect such information. Despite all of our efforts to protect this information and data, none of our security measures or those of our third-party service providers provide absolute security, and they may not be effective in preventing a future failure of our systems. Like all information systems and technology, our websites, mobile applications, and information systems, and those of our third-party service providers, 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 or our third-party service providers' 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 or our third-party service providers experience compromises to data 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 disaster recovery 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 reduce or stop the 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. Although we carry privacy, data breach and network security liability insurance, we cannot be certain that our coverage will be adequate for liabilities actually incurred or sufficient to compensate us for the potentially significant losses, or that insurance will continue to be available to us on economically reasonable terms or at all.

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, which we refer to collectively as the Privacy Regulations. The Privacy Regulations include, but are not limited to, the EU's General Data Protection Regulation and the California Consumer Privacy Act. Certain of the Privacy Regulations have already required, and certain others 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, which effectively invalidated the EU-U.S. Privacy Shield Framework, 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 Privacy Regulations and other statutory 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 data, 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; 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 or content on our websites 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. 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, 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 regarding 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 asserted against us by owners of other registered or unregistered trademarks logos or slogans, for our use of registered or unregistered trademarks, logos or slogans, or third-party 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. Additionally, CarOffer has a number of registered and unregistered trademarks, including "CarOffer" and the CarOffer logo, and related marks, which CarOffer has registered as trademarks in the U.S.

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. We may be unable to detect and remedy all such activities in a timely and adequate manner. 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. This seasonality has not been immediately apparent historically due to the overall growth of other operating expenses. In addition, any reduction of our marketing spend in response to COVID-19 or other macroeconomic-related expense management or otherwise, and shifts in demand from dealers and consumers could impact the efficiency of our marketing spend. 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. In addition, the volume of wholesale vehicle sales fluctuates from quarter to quarter as a result of macroeconomic issues, which may have a corresponding impact on our results of operations. This variability is caused by several factors including the timing of used vehicles available for sale from selling customers, the seasonality of the retail market for used vehicles and/or inventory challenges in the automotive industry, which affect the demand side of the wholesale industry. This variability has affected our Digital Wholesale segment in the past, and may continue to in the future.

Failure to deal effectively with fraud or other illegal activity could harm our business.

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 now or in the future. 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 growth prospects.

We have identified a material weakness in our internal control over financial reporting. If we are unable to remediate this material weakness, we may not be able to accurately or timely report our financial condition or results of operations, which may adversely affect our business and the market price of our common stock.

We have identified a material weakness in our internal control over financial reporting. If we are unable to remediate this material weakness, we may not be able to accurately or timely report our financial condition or results of operations, which may adversely affect our business and the market price of our Class A common stock. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim financial statements will not be prevented or detected on a timely basis. We have identified deficiencies in controls at our CarOffer subsidiary. These deficiencies include controls over (i) certain IT general controls for systems that are relevant to the preparation of our financial statements and (ii) our financial statement close process, which in the aggregate constitute a material weakness. While this material weakness did not result in a material misstatement of our financial statements, it could impact the effectiveness of our segregation of duties controls, as well as the effectiveness of IT-dependent controls, which could result in misstatement(s) impacting financial statement accounts and disclosures, resulting in a material misstatement of our annual or interim financial statements that we would have failed to prevent or detect. As a result of this material weakness, our management concluded that our disclosure controls and procedures were not effective as of December 31, 2022.

We are in the process of implementing a remediation plan designed to improve our internal control over financial reporting to remediate this material weakness. This remediation plan includes implementation of additional controls and procedures, including timely performance of user access and change management reviews, as well as an effective review of journal entries and accounts reconciliations. We cannot assure you that the measures we have taken to date, and actions we may take in the future, will be sufficient to remediate the control deficiencies that led to the material weakness in our internal control over financial reporting or that they will prevent or avoid potential future material weaknesses. If we are unable to successfully remediate the material weakness in our internal control over financial reporting, the accuracy and timing of our financial reporting may be adversely affected, investors could lose confidence in the accuracy and completeness of our financial reports, the market price of our Class A common stock could decline, we could be subject to sanctions or investigations by Nasdaq, the SEC or other regulatory authorities, and our ability to access the capital markets could be limited.

Our 2022 Revolver contains certain covenants and other restrictions on our actions that may limit our operational flexibility or otherwise adversely affect our results of operations.

The terms of our 2022 Revolver include a number of covenants that limit our ability to, among other things, grant or incur liens, incur additional indebtedness, make certain restricted investments or payments, enter into certain mergers and acquisitions or engage in certain asset sales, subject in each case to certain exceptions. In addition, our 2022 Revolver also subjects us to financial covenants in respect of minimum liquidity and requires that we maintain a net leverage ratio. The terms of our 2022 Revolver may restrict our current and future operations and could adversely affect our ability to finance our future operations or capital needs. Complying with these covenants may make it more difficult for us to successfully execute our business strategy and compete against companies which are not subject to such restrictions. Further, interest rate fluctuations may materially adversely affect our results of operations and financial conditions due to the variable interest rate on our 2022 Revolver, in the event that we draw down funds thereunder.

A failure by us to comply with the covenants or payment requirements specified in our 2022 Revolver could result in an event of default, which would give the lenders the right to terminate their commitments to provide loans under our 2022 Revolver and to declare any borrowings outstanding, together with any accrued and unpaid interest and fees, to be immediately due and payable. If any debt under our 2022 Revolver were to be accelerated, we may not have sufficient cash or be able to borrow sufficient funds to refinance the debt or sell sufficient assets to repay the debt, which could immediately adversely affect our business, cash flows, results of operations, and financial condition. Even if we were able to obtain new financing, it may not be on commercially reasonable terms or on terms that are acceptable to us. As of December 31, 2022, there were no amounts outstanding under our 2022 Revolver.

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 position 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 capitalized terms are defined in our amended and restated certificate of incorporation attached to this Annual Report on Form 10-K as Exhibit 3.1), 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. Additionally, transfers by holders of Class B common stock will generally result in those transferred 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.

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.

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 covering securities analysts; 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; the COVID-19 pandemic; and general economic conditions.

We cannot guarantee that our share repurchase program will be fully implemented or that it will enhance stockholder value, and share repurchases could affect the price of our Class A common stock.

In December 2022, our board of directors authorized a share repurchase program (the "Share Repurchase Program") pursuant to which we may, from time to time, purchase shares of our Class A common stock for an aggregate purchase price not to exceed \$250 million, with an expiration date of December 31, 2023. Repurchases under the program may be made through a variety of methods, including but not limited to open market purchases, privately negotiated transactions and transactions that may be effected pursuant to one or more plans under Rule 10b5-1 and/or Rule 10b-18 of the Exchange Act, and are subject to market and business conditions, levels of available liquidity, cash requirements for other purposes, regulatory, and other relevant factors. The timing, pricing, and size of share repurchases will depend on a number of factors, including, but not limited to, price, corporate and regulatory requirements, and general market and economic conditions. The repurchase program does not obligate us to repurchase any dollar amount or number of shares, and the program may be suspended or discontinued at any time, which may result in a decrease in the price of our Class A common stock.

Repurchases under our Share Repurchase Program will decrease the number of outstanding shares of our Class A common stock and therefore could affect the price of our Class A common stock and increase its volatility. The existence of our Share Repurchase Program could also cause the price of our Class A common stock to be higher than it would be in the absence of such a program and could reduce the market liquidity for our Class A common stock. Additionally, repurchases under our Share Repurchase Program will diminish our cash reserves, which could impact our ability to further develop our business and service our indebtedness. There can be no assurance that any share repurchases will enhance stockholder value because the market price of our Class A common stock may decline below the levels at which we repurchased such shares. Any failure to repurchase shares after we have announced our intention to do so may negatively impact our reputation and investor confidence in us and may negatively impact our Class A common stock price. Although our Share Repurchase Program is intended to enhance long-term stockholder value, short-term price fluctuations could reduce the program's effectiveness.

General Risk Factors

We are unable to predict the extent to which the ongoing global COVID-19 pandemic may adversely impact our business operations, financial performance and results of operations.

For the past three years the COVID-19 pandemic and efforts to control its spread have resulted in, and may continue to or at a later time result in, significant disruptions to the global economy as well as businesses and capital markets around the world. Our operations have been and may continue to be materially adversely affected by a range of factors related to the COVID-19 pandemic that are not within our control, including the various restrictions imposed by cities, counties, states and countries on our employees, customers, partners and suppliers designed to limit the spread of COVID-19. The ultimate extent of the impact of the pandemic will depend on future developments that remain highly uncertain and cannot currently be predicted, including outbreaks of new variants and the availability and effectiveness of vaccines.

Our operations have been and may continue to be materially adversely affected by a range of factors related to the COVID-19 pandemic, including periodic changes in restrictions that vary from region to region in which we operate and may require rapid response to new or reinstated orders. Many of these orders resulted in, and, to the extent reinstated, may in the future result in changes to our on-site work policies and staffing and 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.

These effects from the COVID-19 pandemic on our revenue caused us to implement certain cost-savings measures across our business, which previously disrupted our business and operations. Any future cost-savings measures implemented by us due to macroeconomic issues, may affect our future business and operations and yield unintended consequences, such as loss of key employees, increased costs in hiring new employees, undesired attrition, and the risk that we may not achieve 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.

We continue to monitor and assess the ongoing effects of the COVID-19 pandemic on our commercial operations, including the impact on our revenue. We cannot at this time accurately predict what effects these conditions will ultimately have on our operations or 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.

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, wholesale, and digital car-buying and -selling services designed to help consumers and dealers shop for cars and to enable dealers to reach these consumers. Our competitors include: online automotive marketplaces and websites; internet search engines; peer-to-peer marketplaces; social media marketplaces; sites operated by automobile dealers; online dealerships; and vehicle auction companies. 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 and wholesale industries 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. Furthermore, 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 must maintain proper and effective internal control 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, such as those described above. 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 the material weakness described above and/or any future material weaknesses that may be identified, 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. Failure to remedy the material weakness described above and/or any future material weaknesses that may be identified, or to implement or maintain other effective control systems required of public companies, could also restrict our future access to the capital markets.

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 continued effects of the COVID-19 pandemic and other macroeconomic issues, such as increased interest rates. Our results may vary as a result of fluctuations in the number of dealers subscribing to our marketplaces, the size and seasonal variability of our advertisers' marketing budgets, and the impact of vehicle arbitrations in a given period in connection with our IMCO product and the wholesale sale of automobiles. 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 covering analysts, 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 recent U.S. Supreme Court and Massachusetts Supreme Court decisions, which could precipitate reactions 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. Any adverse development or outcome in connection with any such 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.

The Russian invasion of Ukraine and the retaliatory measures imposed by the U.S., U.K., European Union and other countries and the responses of Russia to such measures have caused significant disruptions to domestic and foreign economies.

The Russia and Ukraine conflict had an immediate impact on the global economy resulting in higher prices for oil and other commodities, including vehicle components. Economic sanctions and bans, together with Russia's own retaliatory measures have disrupted supply chains and economic markets. The global impact of these measures is continually evolving and the future impact cannot be predicted with certainty. In particular, the Russia and Ukraine conflict has further impacted the ability of certain manufacturers to produce new vehicles and new vehicle parts, which may result in continued disruptions to the supply of new and used vehicles. Further, there is no assurance that when the Russia and Ukraine conflict ends, countries will not continue to impose sanctions and bans.

While these events have not materially interrupted our operations, these or future developments resulting from the Russia and Ukraine conflict, such as a cyberattack on the U.S. or our suppliers, could disrupt our operations, our customers' operations, or the activity of consumers on our websites.

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 with lease terms through 2033. We also lease office space in Addison, Texas, Dublin, Ireland, and San Francisco, California for our CarOffer, European and Autolist operations, respectively. We sublease two of our leased office spaces for part of the remaining terms of the leases. Our U.S. Marketplace segment utilizes the offices in Cambridge Massachusetts and San Francisco, California. Our Digital Wholesale segment utilizes the office in Addison, Texas. The Other category of segment reporting utilizes the office in Dublin, Ireland. 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 2019, we entered into a lease for office space at 1001 Boylston Street in Boston, Massachusetts, which we expect to occupy in 2024.

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, would individually, or taken together, 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 28, 2023, the last reported sale price of our Class A common stock on the Nasdaq Global Select Market was \$17.05 per share.

Holders

As of February 21, 2023, we had six record holders 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 record holders does not include stockholders whose shares may be held in trust by other entities.

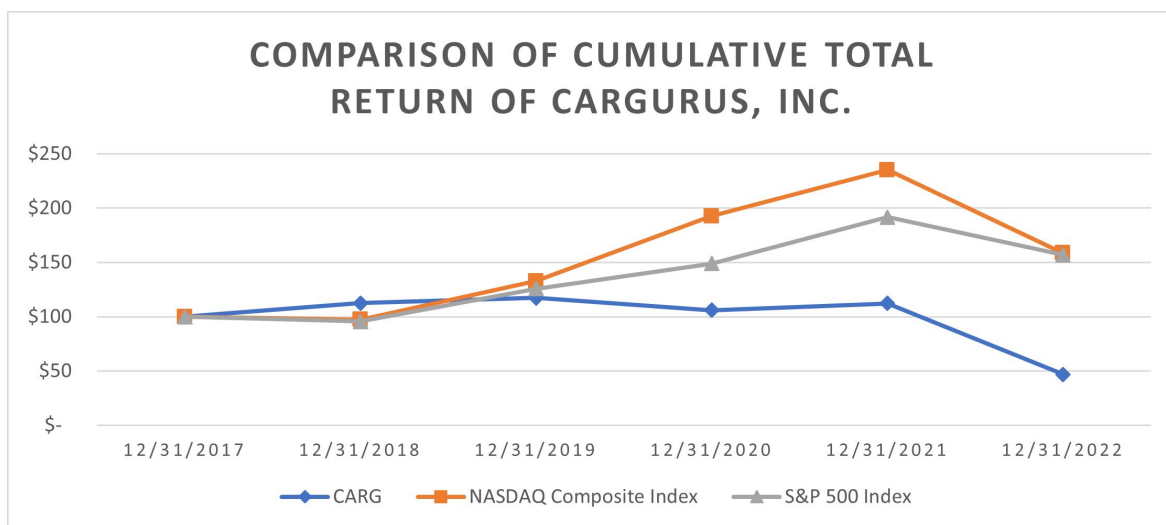
Dividends

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 December 31, 2017 through December 31, 2022 of the cumulative total return for our Class A common stock, the Nasdaq Composite Index and the S&P 500 Index. On December 31, 2017, the last reported sale price of our Class A common stock on the Nasdaq Global Select Market was \$29.98 per share. 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.



	12/31/2017	12/31/2018	12/31/2019	12/31/2020	12/31/2021	12/31/2022
CARG	100	113	117	106	112	47
S&P 500 Index	100	96	126	149	192	157
Nasdaq Composite Index	100	97	133	192	235	159

Recent Sales of Unregistered Securities

None.

Purchases of Equity Securities

The following table summarizes information about our purchases of our equity securities for each of the months during the year ended December 31, 2022:

Period	Total Number of Shares of Common Stock Purchased	Weighted Average Price Paid per Share of Common Stock ⁽¹⁾	Total Number of Shares of Common Stock Purchased as Part of Publicly Announced Plans or Programs ⁽²⁾⁽³⁾	Maximum Approximate Dollar Value of Shares of Common Stock that May Yet be Purchased Under the Plans or Programs ⁽²⁾ (in thousands) ⁽²⁾
December 1, 2022 through December 31, 2022	1,350,473	\$ 13.84	1,350,473	\$ 231,309
Total	1,350,473	\$ 13.84	1,350,473	

(1) The weighted average price paid per share of common stock does not include cost of commissions.

(2) On December 8, 2022, we announced that our Board of Directors authorized the Share Repurchase Program, pursuant to which we may, from time to time, purchase shares of our Class A common stock for an aggregate purchase price not to exceed \$250 million. Share repurchases under the Share Repurchase Program may be made through a variety of methods, including but not limited to open market purchases, privately negotiated transactions and transactions that may be effected pursuant to one or more plans under Rule 10b5-1 and/or Rule 10b-18 of the Exchange Act. The Share Repurchase Program does not obligate us to repurchase any minimum dollar amount or number of shares. The Share Repurchase Program has an expiration date of December 31, 2023, and prior to its expiration may be modified, suspended, or discontinued by our Board of Directors at any time without prior notice. All repurchased shares will be retired. We expect to fund share repurchases through cash on hand and cash generated from operations.

(3) The total number of shares of common stock purchased as part of our Share Repurchase Program was inclusive of shares purchased but not settled as of December 31, 2022.

Item 6. Reserved.

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 Annual Report on Form 10-K, 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 2022 and 2021 items and year-to-year comparisons between 2022 and 2021. This section of this Annual Report on Form 10-K also discusses 2021 and 2020 segment revenue and segment operating income (loss) from operations and year-to-year comparisons between 2021 and 2020 segment revenue and segment operating income (loss) from operations. Discussions of all other 2020 items and year-to-year comparisons between 2021 and 2020 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, 2021. The period-to-period comparison of financial results is not necessarily indicative of future results.

Company Overview

CarGurus, Inc. is a multinational, online automotive platform for buying and selling vehicles that is building upon its industry-leading listings marketplace with both digital retail solutions and the CarOffer digital wholesale platform. The CarGurus platform gives consumers the confidence to buy and/or sell a vehicle either online or in-person, and it gives dealerships the power to accurately price, instantly acquire, effectively market, and quickly sell vehicles, all with a nationwide reach. We use proprietary technology, search algorithms and data analytics to bring trust, transparency and competitive pricing to the automotive shopping experience.

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 the United States, we also operate as independent brands the Autolist online marketplace, which we wholly own, and CarOffer digital wholesale marketplace, in which we hold a 51% equity interest. In addition to the United States, we operate online marketplaces under the CarGurus brand in Canada and the United Kingdom. In the United Kingdom, we also operate as an independent brand the PistonHeads online marketplace, which we wholly own.

We have subsidiaries in the United States, Canada, Ireland, and the United Kingdom and, prior to the first quarter of 2022, we had two reportable segments – United States and International. Effective as of the first quarter of 2022, we revised our segment reporting from two reportable segments to one reportable segment. Effective as of the fourth quarter of 2022, we revised our segment reporting from one reportable segment to two reportable segments – U.S. Marketplace and Digital Wholesale. See Note 13 of the consolidated financial statements included elsewhere in this Annual Report on Form 10-K for further segment reporting and geographical information.

We derive our revenue from marketplace revenue, wholesale revenue, and product revenue. Marketplace revenue is included in the U.S. Marketplace segment and Other category of segment reporting. Wholesale revenue and product revenue are included in the Digital Wholesale segment. We generate marketplace revenue primarily from (i) dealer subscriptions to our Listings packages, Real-time Performance Marketing, or RPM, digital advertising suite, and Digital Retail, (ii) advertising revenue from auto manufacturers and other auto-related brand advertisers, and (iii) revenue from partnerships with financing services companies. We generate wholesale revenue primarily from (i) transaction fees earned from facilitating the purchase and sale of vehicles between dealers, or Dealer-to-Dealer transactions, (ii) transaction fees earned from sale of vehicles to dealers that we acquire at other marketplaces, and (iii) transaction fees earned from performing inspection and transportation services, inclusive of Dealer-to-Dealer transactions, other marketplace to dealer transactions, and IMCO transactions (as defined below). We generate product revenue primarily from (i) aggregate proceeds received from the sale of vehicles to dealers that were acquired directly from customers, or CarGurus Instant Max Cash Offer, or IMCO transactions, and (ii) proceeds received from the sale of vehicles that were acquired through arbitration.

For the year ended December 31, 2022, we generated revenue of \$1,655.0 million, a 74% increase from \$951.4 million of revenue for the year ended December 31, 2021.

For the year ended December 31, 2022, we generated consolidated net income of \$79.0 million and Consolidated Adjusted EBITDA of \$187.7 million, compared to consolidated net income of \$110.4 million and Consolidated Adjusted EBITDA of \$270.3 million for the year ended December 31, 2021.

See “Consolidated Adjusted EBITDA, Adjusted EBITDA, and Adjusted EBITDA attributable to redeemable noncontrolling interest” below for more information regarding our use of Adjusted EBITDA, a non-GAAP financial measure, and a reconciliation of Adjusted EBITDA to our consolidated net income.

COVID-19 Update

For the past three years, the COVID-19 pandemic and efforts to control its spread have resulted in significant disruptions to the global economy as well as businesses and capital markets around the world. The ultimate extent of the impact of the pandemic will depend on future developments that remain highly uncertain and cannot currently be predicted, including outbreaks of new variants and the availability and effectiveness of vaccines.

Our operations have been affected by a range of factors related to the COVID-19 pandemic, including periodic changes in restrictions that vary from region to region in which we operate and may require rapid response to new or reinstated orders. Many of these orders resulted in changes to our on-site work policies and staffing and 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. These effects from the COVID-19 pandemic on our revenue caused us to implement certain cost-savings measures across our business, which previously disrupted our business and operations.

We continue to monitor and assess the ongoing effects of the COVID-19 pandemic on our commercial operations, including the impact on our revenue. 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 geographic regions. The International region derives revenues from marketplace revenue 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 (excluding the CarOffer website), 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, each such visit is counted as a separate unique user. 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 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,	
	2022	2021
	(in thousands)	
United States	29,083	31,646
International	6,645	7,495
Total	35,728	39,141

Monthly Sessions

We define monthly sessions as the number of distinct visits to our websites (excluding the CarOffer website) 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, and (iii) Greenwich Mean Time for our U.K. websites. 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,	
	2022	2021
	(in thousands)	
United States	77,724	79,316
International	15,219	17,309
Total	92,943	96,625

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.

Number of Paying Dealers	As of December 31,	
	2022	2021
United States	24,567	23,860
International	6,740	6,770
Total	31,307	30,630

Transactions

We define Transactions within the Digital Wholesale segment as the number of vehicles processed from car dealers, consumers, and other marketplaces through the CarOffer website within the applicable period. Transactions consists of each unique vehicle (based on vehicle identification number) that reaches "sold and invoiced" status on the CarOffer website within the applicable period, including vehicles sold to car dealers, vehicles sold at third-party auctions, vehicles ultimately sold to a different buyer, and vehicles that are returned to their owners without completion of a sale transaction. We exclude vehicles processed within CarOffer's intra-group trading solution (Group Trade) from the definition of Transactions, and we only count any unique vehicle once even if it reaches sold status multiple times. Digital Wholesale includes Dealer-to-Dealer Transactions and IMCO Transactions. We view Transactions as a key business metric, and we believe it provides useful information to investors, because it provides insight into growth and revenue for the Digital Wholesale segment. Transactions drive a significant portion of Digital Wholesale segment revenue. We believe growth in Transactions demonstrates consumer and dealer utilization and our market share penetration in the Digital Wholesale segment.

Transactions	Year Ended December 31,	
	2022	2021
Transactions	190,594	157,062

Quarterly Average Revenue per Subscribing Dealer (QARSD)

We define QARSD, which is measured at the end of a fiscal quarter, as the marketplace revenue primarily from subscriptions to our Listings packages and RPM digital advertising suite 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.

Quarterly Average Revenue per Subscribing Dealer (QARSD)	As of December 31,	
	2022	2021
United States	\$ 5,842	\$ 5,633
International	\$ 1,522	\$ 1,546
Consolidated	\$ 4,921	\$ 4,731

Consolidated Adjusted EBITDA, Adjusted EBITDA, and Adjusted EBITDA attributable to redeemable noncontrolling interest

To provide investors with additional information regarding our financial results, we have presented within this Annual Report, Consolidated Adjusted EBITDA, Adjusted EBITDA, and Adjusted EBITDA attributable to redeemable noncontrolling interest, each of which is a non-GAAP financial measure. These non-GAAP financial measures are not based on any standardized methodology prescribed by United States generally accepted accounting principles, or GAAP, and are not necessarily comparable to any similarly titled measures presented by other companies.

We define Consolidated Adjusted EBITDA as consolidated net income, adjusted to exclude: depreciation and amortization, impairment of long-lived assets, stock-based compensation expense, acquisition-related expenses, other income, net, and provision for income taxes.

We define Adjusted EBITDA as Consolidated Adjusted EBITDA adjusted to exclude Adjusted EBITDA attributable to redeemable noncontrolling interest.

We define Adjusted EBITDA attributable to redeemable noncontrolling interest as net (loss) income attributable to redeemable noncontrolling interest, adjusted to exclude: depreciation and amortization, impairment of long-lived assets, stock-based compensation expense, other expense (income), net, and provision for income taxes. These exclusions are adjusted for redeemable noncontrolling interest of 38% by taking the noncontrolling interest's full financial results and multiplying each line item in the reconciliation by 38%. We note that we use 38%, versus 49%, to allocate the share of income (loss) because it represents the portion attributable to the redeemable noncontrolling interest. The 38% is exclusive of CO Incentive Units, Subject Units, and 2021 Incentive Units (as each term is defined in Note 2 to our consolidated financial statements appearing elsewhere in this Annual Report on Form 10-K) liability classified awards which do not participate in the share of income/(loss).

We have presented Consolidated Adjusted EBITDA and Adjusted EBITDA within this Annual Report, because they are key measures 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 Consolidated Adjusted EBITDA and Adjusted EBITDA can produce a useful measure for period-to-period comparisons of our business. We have presented Adjusted EBITDA attributable to redeemable noncontrolling interest because it is used by our management to reconcile Consolidated Adjusted EBITDA to Adjusted EBITDA. It represents the portion of Consolidated Adjusted EBITDA that is attributable to our noncontrolling interest. Adjusted EBITDA attributable to redeemable noncontrolling interest is not intended to be reviewed on its own.

We use Consolidated Adjusted EBITDA and Adjusted EBITDA to evaluate our operating performance and trends and make planning decisions. We believe Consolidated Adjusted EBITDA and Adjusted EBITDA help identify underlying trends in our business that could otherwise be masked by the effect of the expenses that we exclude. Accordingly, we believe that Consolidated Adjusted EBITDA and Adjusted EBITDA provide 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. We use Adjusted EBITDA attributable to redeemable noncontrolling interest to reconcile Consolidated Adjusted EBITDA to Adjusted EBITDA. It enables an investor to gain a clearer understanding of the portion of Consolidated Adjusted EBITDA that is attributable to our noncontrolling interest.

Our Consolidated Adjusted EBITDA, Adjusted EBITDA, and Adjusted EBITDA attributable to redeemable noncontrolling interest, are 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 Consolidated Adjusted EBITDA, Adjusted EBITDA, and Adjusted EBITDA attributable to redeemable noncontrolling interest rather than consolidated net income and net (loss) income attributable to redeemable noncontrolling interest, respectively, which are the most directly comparable GAAP equivalents. Some of these limitations are:

- Consolidated Adjusted EBITDA, Adjusted EBITDA, and Adjusted EBITDA attributable to redeemable noncontrolling interest, exclude depreciation and amortization expense and, although these are non-cash expenses, the assets being depreciated may have to be replaced in the future;
- Consolidated Adjusted EBITDA, Adjusted EBITDA, and Adjusted EBITDA attributable to redeemable noncontrolling interest exclude impairment of long-lived assets and, although these are non-cash adjustments, the assets being impaired may have to be replaced in the future;
- Consolidated Adjusted EBITDA, Adjusted EBITDA, and Adjusted EBITDA attributable to redeemable noncontrolling interest, exclude 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;
- Consolidated Adjusted EBITDA and Adjusted EBITDA exclude transaction 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;
- Consolidated Adjusted EBITDA, Adjusted EBITDA, and Adjusted EBITDA attributable to redeemable noncontrolling interest exclude other (income) expense, net which consists primarily of interest income earned on our cash, cash equivalents and investments, foreign exchange gains and losses and interest expense;
- Consolidated Adjusted EBITDA, Adjusted EBITDA, and Adjusted EBITDA attributable to redeemable noncontrolling interest, exclude the provision for income taxes;
- Adjusted EBITDA excludes Adjusted EBITDA attributable to redeemable noncontrolling interest, which is calculated as the net (loss) income attributable to redeemable noncontrolling interest, adjusted for all exclusions used to calculate Consolidated Adjusted EBITDA as described above; and
- other companies, including companies in our industry, may calculate Consolidated Adjusted EBITDA, Adjusted EBITDA, and Adjusted EBITDA attributable to redeemable noncontrolling interest differently, which reduces their usefulness as a comparative measure.

- Because of these limitations, we consider, and you should consider, Consolidated Adjusted EBITDA, Adjusted EBITDA, and Adjusted EBITDA attributable to redeemable noncontrolling interest together with other operating and financial performance measures presented in accordance with GAAP.

For the years ended December 31, 2022 and 2021, the following table presents a reconciliation of Consolidated Adjusted EBITDA and Adjusted EBITDA to consolidated net income, the most directly comparable measure calculated in accordance with GAAP for each of the periods presented.

	Year Ended December 31,	
	2022	2021
	(in thousands)	
Reconciliation of Consolidated Adjusted EBITDA and Adjusted EBITDA:		
Consolidated net income	\$ 78,954	\$ 110,373
Depreciation and amortization	45,334	40,476
Impairment of long-lived assets	165	3,128
Stock-based compensation expense	33,682	77,710
Acquisition-related expenses	—	709
Other income, net	(2,884)	(1,092)
Provision for income taxes	32,408	38,987
Consolidated Adjusted EBITDA	<u>187,659</u>	<u>270,291</u>
Adjusted EBITDA attributable to redeemable noncontrolling interest	1,006	20,784
Adjusted EBITDA	<u>\$ 186,653</u>	<u>\$ 249,507</u>

For the years ended December 31, 2022 and 2021, the following table presents a reconciliation of Adjusted EBITDA attributable to redeemable noncontrolling interest to net (loss) income attributable to redeemable noncontrolling interest, the most directly comparable measure calculated in accordance with GAAP, for each of the periods presented.

	Year Ended December 31,	
	2022	2021
	(in thousands)	
Reconciliation of Adjusted EBITDA attributable to redeemable noncontrolling interest:		
Net (loss) income attributable to redeemable noncontrolling interest	\$ (5,433)	\$ 1,129
Depreciation and amortization ⁽¹⁾	11,702	10,827
Impairment of long-lived assets ⁽¹⁾	63	—
Stock-based compensation expense ⁽¹⁾	(7,312)	8,410
Other expense, net ⁽¹⁾	2,007	231
(Benefit from) provision for income taxes ⁽¹⁾	(21)	187
Adjusted EBITDA attributable to redeemable noncontrolling interest	<u>\$ 1,006</u>	<u>\$ 20,784</u>

(1) These exclusions are adjusted to reflect the noncontrolling interest of 38%.

Components of Consolidated Income Statements

Revenue

We derive our revenue from marketplace revenue, wholesale revenue, and product revenue. Marketplace revenue is included in the U.S. Marketplace segment and Other category of segment reporting. Wholesale revenue and product revenue are included in the Digital Wholesale segment. We generate marketplace revenue primarily from (i) dealer subscriptions to our Listings packages, RPM, digital advertising suite, and Digital Retail, (ii) advertising revenue from auto manufacturers and other auto-related brand advertisers, and (iii) revenue from partnerships with financing services companies. We generate wholesale revenue primarily from (i) transaction fees earned from Dealer-to-Dealer transactions, (ii) transaction fees earned from sale of vehicles to dealers that we acquire at other marketplaces, and (iii) transaction fees earned from performing inspection and transportation services, inclusive of Dealer-to-Dealer transactions, other marketplace to dealer transactions, and IMCO transactions. We generate product revenue primarily from (i) aggregate proceeds received from the sale of vehicles that were acquired through IMCO transactions, and (ii) proceeds received from the sale of vehicles that were acquired through arbitration.

Marketplace Revenue

We offer multiple types of marketplace Listings packages to our dealers for our CarGurus U.S. platform (availability varies on our other marketplaces): Restricted 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 prior to the commencement of the applicable renewal term. Subscription pricing is determined based on a dealer's inventory size, region, and our assessment of the connections and return on investment ("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 the 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 have access to the Pricing Tool, Market Analysis tool and IMV Scan tool.

We offer paid Listings packages for the Autolist and PistonHeads websites.

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 marketed under our RPM digital advertising suite. Through RPM, dealers can buy advertising that appears in our marketplace, on other sites on the internet, and/or on high-converting social media platforms. Such advertisements can be targeted by the user's geography, search history, CarGurus website activity 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 dealer advertising products for the PistonHeads website.

We also offer dealers subscribing to certain of our Listings packages other subscription advertising and customer acquisition products and enhancements such as Digital Retail, which allows shoppers to complete much of the vehicle-purchase process online through the Dealers' Listings page. Digital Retail is comprised of (i) the Digital Deal Platform, which gives dealers higher quality leads through upfront consumer-provided information, (ii) Area Boost/Geo Expansion, which expands the visibility of a dealer's inventory in the search results beyond its local market, and (iii) Hard Pull Financing, which provides loan information.

Marketplace revenue also consists of non-dealer 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, or CPC basis. Pricing is primarily based on advertisement size and position on our websites and mobile applications. 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. Advertising is also sold indirectly through revenue sharing arrangements with advertising exchange partners.

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

Marketplace 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.

Wholesale Revenue

The Buying Matrix on the CarOffer platform enables buying dealers to create standing buy orders and provides instant offers to selling dealers. Wholesale revenue includes transaction fees earned from Dealer-to-Dealer transactions, where we collect fees from both the buying and selling dealers. We also sell vehicles to dealers that we acquire at other marketplaces, where we collect a transaction fee from the buying dealers.

Wholesale revenue also includes fees earned from performing inspection and transportation services, where we collect fees from the buying dealer. Inspection and transportation service revenue is inclusive of Dealer-to-Dealer transactions, other marketplace to dealer transactions, and IMCO transactions.

Wholesale revenue also includes arbitration in which the vehicle is rematched to a new buyer and not acquired by us. Arbitration is the process by which we investigate and resolve claims from buying dealers.

Wholesale revenue also includes fees earned from certain guarantees offered to dealers (which include 45-Day Guarantee and OfferGuard products), where we collect fees from the buying dealer or selling dealer, as applicable.

Product Revenue

The Buying Matrix on the CarOffer platform enables consumers who are selling vehicles to be instantly presented with an offer. Product revenue includes the aggregate proceeds received from the sale of vehicles through IMCO transactions, including vehicle sale price and transaction fees collected from the buying dealers. Product revenue also includes proceeds received from the sale of vehicles acquired through arbitration, including vehicle sale price and transaction fees collected from buying dealers. Arbitration is the process by which we investigate and resolve claims from buying dealers. We control the vehicle in these transactions and therefore act as the principal.

Cost of Revenue

Marketplace Cost of Revenue

Marketplace cost of revenue includes expenses related to supporting and hosting marketplace service offerings. These expenses include personnel and related expenses for our customer support team, including salaries, benefits, incentive compensation, and stock-based compensation; third-party service provider expenses such as advertising, data center and networking expenses; amortization of developed technology; amortization of capitalized website development; amortization of hosting arrangements; and allocated overhead expenses. We allocate overhead expenses, such as rent and facility expenses, information technology expense, and employee benefit expense, to all departments based on headcount. As such, general overhead expenses are reflected in cost of revenue and each operating expense category.

Wholesale Cost of Revenue

Wholesale cost of revenue includes expenses related to supporting and hosting wholesale service offerings, including Dealer-to-Dealer transactions and vehicles sold to dealers acquired at other marketplaces, on the Buying Matrix on the CarOffer platform. These expenses include vehicle transportation and inspection expenses; net losses on vehicles related to guarantees offered to dealers through Dealer-to-Dealer transactions; personnel and related expenses for employees directly involved in the fulfillment and support of transactions, including salaries, benefits, incentive compensation and stock-based compensation; third-party service provider expenses; amortization of developed technology; amortization of capitalized website development; and allocated overhead expenses. We allocate overhead expenses, such as rent and facility expenses, information technology expense, and employee benefit expense, to all departments based on headcount. As such, general overhead expenses are reflected in cost of revenue and each operating expense category.

Product Cost of Revenue

Product cost of revenue includes expenses related to vehicles sold to dealers through IMCO transactions and vehicles sold to dealers acquired through arbitration. These costs include the cost of the vehicle and transportation expenses.

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, and stock-based compensation; expenses associated with consumer marketing, such as traffic acquisition, brand building, and public relations activities; expenses associated with dealer marketing, such as content marketing, customer and promotional events, and industry events; consulting services; software subscription expenses; travel expenses; amortization of hosting arrangements; and allocated overhead expenses. A portion of our commissions that are related to obtaining a new contract are capitalized and amortized over the estimated benefit period of customer relationships. All other sales and marketing expenses are expensed as incurred. We expect sales and marketing expenses to fluctuate from quarter to quarter as we respond to changes in the macroeconomic and competitive landscapes affecting our existing dealers, consumer audience and brand awareness, which will impact our results of operations.

Product, Technology, and Development

Product, technology, and development expenses, consist primarily of personnel and related expenses for our research and development team, including salaries, benefits, incentive compensation, and stock-based compensation; software subscription expenses; consulting services; and allocated overhead expenses. Other than website development, internal-use software, and hosting arrangement expenses, research and development expenses are expensed as incurred. 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; expenses associated with professional fees for audit, tax, external legal, and consulting services; payment processing and billing expenses; insurance expenses; software subscription expenses; and allocated overhead expenses. General and administrative expenses are expensed as incurred. 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 and internal-use software.

Other Income, Net

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

Provision for Income Taxes

We are subject to federal and state income taxes in the United States and taxes in foreign jurisdictions in which we operate. For the years ended December 31, 2022 and 2021, a provision for income taxes was recognized as a result of the consolidated taxable income position.

We recognize deferred tax assets and liabilities based on temporary differences between the financial reporting and income tax bases of assets and liabilities using enacted tax rates in effect for the year in which the temporary differences are expected to be recovered or settled.

We regularly assess the need to recognize 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. As of December 31, 2022 and 2021, valuation allowances were immaterial.

We assess our income tax positions and recognize an income tax benefit or expense based upon our evaluation of the facts, circumstances, and information available at the reporting date. For the year ended December 31, 2022, income tax expense and liability related to uncertain tax positions, exclusive of immaterial interest or penalties related to uncertain tax provisions, was \$0.6 million, which would favorably affect our effective tax rate, if recognized. For the year ended December 31, 2021, no income tax expense and liability related to uncertain tax positions was recognized.

Results of Operations

For the years ended December 31, 2022 and 2021, our consolidated income statements are as follows:

	Year Ended December 31,	
	2022	2021
	(dollars in thousands)	
Revenue:		
Marketplace	\$ 658,771	\$ 636,942
Wholesale	237,635	195,127
Product	758,629	119,304
Total revenue	<u>1,655,035</u>	<u>951,373</u>
Cost of revenue:		
Marketplace	56,040	47,689
Wholesale	176,446	127,679
Product	764,996	118,647
Total cost of revenue	<u>997,482</u>	<u>294,015</u>
Gross profit	657,553	657,358
Operating expenses:		
Sales and marketing	336,708	290,574
Product, technology, and development	123,768	106,423
General and administrative	73,117	97,678
Depreciation and amortization	15,482	14,415
Total operating expenses	<u>549,075</u>	<u>509,090</u>
Income from operations	108,478	148,268
Other income, net:		
Interest income	3,845	120
Other (expense) income, net	(961)	972
Total other income, net	2,884	1,092
Income before income taxes	111,362	149,360
Provision for income taxes	32,408	38,987
Consolidated net income	78,954	110,373
Net (loss) income attributable to redeemable noncontrolling interest	(5,433)	1,129
Net income attributable to CarGurus, Inc.	<u>\$ 84,387</u>	<u>\$ 109,244</u>

For the years ended December 31, 2022 and 2021, our segment revenue and our segment income (loss) from operations are as follows:

	Year Ended December 31,	
	2022	2021
	(dollars in thousands)	
Segment Revenue		
U.S. Marketplace	\$ 614,136	\$ 594,602
Digital Wholesale	996,264	314,431
Other	44,635	42,340
Total	<u>\$ 1,655,035</u>	<u>\$ 951,373</u>
Segment Income (loss) from Operations		
U.S. Marketplace	\$ 125,796	\$ 151,343
Digital Wholesale	(9,174)	7,189
Other	(8,144)	(10,264)
Total	<u>\$ 108,478</u>	<u>\$ 148,268</u>

For the years ended December 31, 2022 and 2021, our consolidated income statements as a percentage of total revenue are as follows (amounts in the table may not sum due to rounding):

	Year Ended December 31,	
	2022	2021
Revenue:		
Marketplace	40 %	67 %
Wholesale	14	21
Product	46	13
Total revenue	100	100
Cost of revenue:		
Marketplace	3	5
Wholesale	11	13
Product	46	12
Total cost of revenue	60	31
Gross profit	40	69
Operating expenses:		
Sales and marketing	20	31
Product, technology, and development	7	11
General and administrative	4	10
Depreciation and amortization	1	2
Total operating expenses	33	54
Income from operations	7	16
Other income, net:		
Interest income	0	0
Other (expense) income, net	(0)	0
Total other income, net	0	0
Income before income taxes	7	16
Provision for income taxes	2	4
Consolidated net income	5	12
Net (loss) income attributable to redeemable noncontrolling interest	(0)	0
Net income attributable to CarGurus, Inc.	5	11

For the years ended December 31, 2022 and 2021, our segment revenue as a percentage of total revenue and our segment income (loss) from operations as a percentage of segment revenue are as follows (amounts in the table may not sum due to rounding):

	Year Ended December 31,	
	2022	2021
Segment Revenue		
U.S. Marketplace	37 %	62 %
Digital Wholesale	60	33
Other	3	4
Total	100 %	100 %
Segment Income (loss) from Operations		
U.S. Marketplace	20 %	25 %
Digital Wholesale	(1)	2
Other	(18)	(24)
Total	7 %	16 %

Year Ended December 31, 2022 Compared to Year Ended December 31, 2021

Revenue

Revenue by Source

	Year Ended December 31,		Change	
	2022	2021	Amount	%
(dollars in thousands)				
Revenue				
Marketplace	\$ 658,771	\$ 636,942	\$ 21,829	3%
Wholesale	237,635	195,127	42,508	22
Product	758,629	119,304	639,325	536
Total	<u>\$ 1,655,035</u>	<u>\$ 951,373</u>	<u>\$ 703,662</u>	<u>74%</u>
Percentage of total revenue:				
Marketplace	40%	67%		
Wholesale	14	21		
Product	46	13		
Total	<u>100%</u>	<u>100%</u>		

Overall revenue increased \$703.7 million, or 74%, in the year ended December 31, 2022 compared to the year ended December 31, 2021.

Marketplace revenue increased \$21.8 million, or 3%, in the year ended December 31, 2022 compared to the year ended December 31, 2021 and represented 40% of total revenue for the year ended December 31, 2022 and 67% of total revenue for the year ended December 31, 2021. The increase was due primarily to a \$30.9 million increase in Listings revenue, as a result of a 4% growth in our QARSD for paying dealers to \$4,921 for the three months ended December 31, 2022 from \$4,731 for the three months ended December 31, 2021. The increase in QARSD was due primarily to signing on new dealers with higher average monthly recurring revenue and revenue expansion through product upgrades for existing dealers. The increase in marketplace revenue was offset in part by a \$9.3 million decrease in advertising revenue as a result of economic conditions and lower spend by our advertisers.

Wholesale revenue increased \$42.5 million, or 22%, in the year ended December 31, 2022 compared to the year ended December 31, 2021 and represented 14% of total revenue for the year ended December 31, 2022 and 21% of total revenue for the year ended December 31, 2021. The increase was due primarily to a 21% increase in Transactions to 190,594 for the year ended December 31, 2022 from 157,062 for the year ended December 31, 2021. The increase in Transactions resulted in an increase in transaction fee revenue as well as an increase in transportation revenue, inspection revenue, and guarantee revenue. Fee increases also contributed to the increase in transportation revenue.

Product revenue increased \$639.3 million, or 536%, in the year ended December 31, 2022 compared to the year ended December 31, 2021 and represented 46% of the total revenue for the year ended December 31, 2022 and 13% of total revenue for the year ended December 31, 2021. The increase was due primarily to a \$546.4 million increase in proceeds received from the sale of vehicles through IMCO transactions, including vehicle sale price and transaction fees, as a result of the IMCO offering becoming available to approximately 93% of the U.S. population. The increase in product revenue was also due in part to a \$92.9 million increase in proceeds received from the sale of vehicles acquired through arbitration, including vehicle sale price and transaction fees, as a result of increased arbitration claims due primarily to increased volume.

Segment Revenue

	Year Ended December 31,		Change	
	2022	2021	Amount	%
(dollars in thousands)				
Revenue				
U.S. Marketplace	\$ 614,136	\$ 594,602	\$ 19,534	3 %
Digital Wholesale	996,264	314,431	681,833	217
Other	44,635	42,340	2,295	5
Total	<u>\$ 1,655,035</u>	<u>\$ 951,373</u>	<u>\$ 703,662</u>	<u>74 %</u>
Percentage of total revenue:				
U.S. Marketplace	37%	62%		
Digital Wholesale	60	33		
Other	3	4		
Total	<u>100 %</u>	<u>100 %</u>		

U.S. Marketplace segment revenue increased \$19.5 million, or 3%, in the year ended December 31, 2022 compared to the year ended December 31, 2021 and represented 37% of total revenue for the year ended December 31, 2022 and 62% of total revenue for the year ended December 31, 2021. This increase was due primarily to a \$28.6 million increase in Listings revenue, as a result of a 4% growth in our U.S. QARSD for paying dealers to \$5,842 at December 31, 2022 from \$5,633 at December 31, 2021. The increase in U.S. QARSD was due primarily to signing on new dealers with higher average monthly recurring revenue and revenue expansion through product upgrades for existing dealers. The increase in U.S. Marketplace segment revenue was offset in part by a \$9.7 million decrease in advertising revenue as a result of economic conditions and lower spend by our advertisers.

Digital Wholesale segment revenue, which is comprised of wholesale revenue and product revenue, increased \$681.8 million, or 217%, in the year ended December 31, 2022 compared to the year ended December 31, 2021 and represented 60% of total revenue for the year ended December 31, 2022 and 33% of total revenue for the year ended December 31, 2021. Wholesale revenue increased \$42.5 million in the year ended December 31, 2022, compared to the year ended December 31, 2021. The increase in wholesale revenue was due primarily to a 21% increase in Transactions to 190,594 for the year ended December 31, 2022 from 157,062 for the year ended December 31, 2021. The increase in Transactions resulted in an increase in transaction fee revenue as well as an increase in transportation revenue, inspection revenue, and guarantee revenue. Fee increases also contributed to the increase in transportation revenue. Product revenue increased \$639.3 million in the year ended December 31, 2022 compared to the year ended December 31, 2021. The increase in product revenue was due primarily to a \$546.4 million increase in proceeds received from the sale of vehicles through IMCO transactions, including vehicle sale price and transaction fees, as a result of the IMCO offering becoming available to approximately 93% of the U.S. population. The increase in product revenue was also due in part to a \$92.9 million increase in proceeds received from the sale of vehicles acquired through arbitration, including vehicle sale price and transaction fees, as a result of increased arbitration claims due primarily to increased volume.

Cost of Revenue

	Year Ended December 31,		Change	
	2022	2021	Amount	%
(dollars in thousands)				
Cost of revenue				
Marketplace	\$ 56,040	\$ 47,689	\$ 8,351	18 %
Wholesale	176,446	127,679	48,767	38
Product	764,996	118,647	646,349	545
Total	<u>\$ 997,482</u>	<u>\$ 294,015</u>	<u>\$ 703,467</u>	<u>239 %</u>
Percentage of total revenue:				
Marketplace	3 %	5 %		
Wholesale	11	13		
Product	46	12		
Total	<u>60 %</u>	<u>31 %</u>		

Overall cost of revenue increased \$703.5 million, or 239%, in the year ended December 31, 2022 compared to the year ended December 31, 2021.

Marketplace cost of revenue increased \$8.4 million, or 18%, in the year ended December 31, 2022 compared to the year ended December 31, 2021 and represented 3% of total revenue for the year ended December 31, 2022 and 5% of total revenue for the year ended December 31, 2021. The increase was due primarily to a \$4.6 million increase in fees related to provisioning advertising campaigns on our websites from changing to more effective but slightly higher cost service providers and a \$3.4 million increase in data and hosting costs.

Wholesale cost of revenue increased \$48.8 million, or 38%, in the year ended December 31, 2022 compared to the year ended December 31, 2021 and represented 11% of total revenue for the year ended December 31, 2022 and 13% of total revenue for the year ended December 31, 2021. The increase was due primarily to an increase in Dealer-to-Dealer transactions which resulted an increase in transportation expenses, inspection expenses, third-party service provider expenses, and guarantee expenses. Cost increases also contributed to the increase in transportation expenses. The increase in wholesale cost of revenue was also driven by an increase in amortization of capitalized website development.

Product cost of revenue increased \$646.3 million, or 545%, in the year ended December 31, 2022 compared to the year ended December 31, 2021 and represented 46% of the total revenue for the year ended December 31, 2022 and 12% of total revenue for the year ended December 31, 2021. The increase was due primarily to a \$535.5 million increase in expenses related to vehicles sold to dealers through IMCO transactions as a result of an increase in IMCO transactions. The increase in IMCO transactions was due primarily to the offering becoming available to approximately 93% of the U.S. population. The increase in product cost of revenue was also due in part to a \$110.8 million increase in expenses related to vehicles sold to dealers acquired through arbitration as a result of increased arbitration claims due primarily to increased volume.

Operating Expenses

Sales and Marketing Expenses

	Year Ended December 31,		Change	
	2022	2021	Amount	%
	(dollars in thousands)			
Sales and marketing	\$ 336,708	\$ 290,574	\$ 46,134	16%
Percentage of total revenue	20%		31%	

Sales and marketing expenses increased \$46.1 million, or 16%, in the year ended December 31, 2022 compared to the year ended December 31, 2021. The increase was due primarily to a \$38.8 million increase in marketing expenses, primarily related to the marketing of IMCO in the first three quarters of 2022, search engine performance marketing as part of our efforts to increase site traffic due to a result of increased dealer inventory compared to the year ended December 31, 2021, and creative expenses for future marketing campaigns. The increase was also due in part to a \$19.8 million increase in salaries and employee-related expense, exclusive of stock-based compensation expense and commissions expenses, which decreased \$5.1 million and \$2.1 million, respectively. The increase in salaries and employee-related expense was due primarily to a 21% increase in headcount. The decrease in stock-based compensation was due primarily to the revaluation of liability-based stock awards. The decrease in commissions expense was due primarily to higher capitalization on commissions as a result of compensation plan changes, net of sales growth. The increase in sales and marketing expenses was also due in part to a \$1.7 million increase in software subscription expenses, inclusive of amortization of hosting arrangements, a \$1.2 million increase in allocated insurance and legal expenses, a \$1.1 million increase in travel expenses, and a \$0.8 million increase in employee expenses associated with the return to office. The increase in sales and marketing expense was offset in part by a \$10.8 million decrease in brand awareness advertising costs due to decreased spend as a result of a change in advertising strategy toward the end of 2022.

Product, Technology, and Development Expenses

	Year Ended December 31,		Change	
	2022	2021	Amount	%
	(dollars in thousands)			
Product, technology, and development	\$ 123,768	\$ 106,423	\$ 17,345	16%
Percentage of total revenue	7%		11%	

Product, technology, and development expenses increased \$17.3 million, or 16%, in the year ended December 31, 2022 compared to the year ended December 31, 2021. The increase was due primarily to a \$20.4 million increase in salaries and employee-related expenses, exclusive of stock-based compensation, which decreased \$2.7 million. The increase in salaries and employee-related expenses was due primarily to a 16% increase in headcount. The decrease in stock-based compensation was due primarily to the revaluation of liability-based stock awards. The increase in product, technology, and development expenses was also due in part to a \$3.7 million increase in consulting expenses, a \$1.6 million increase in software subscription expenses, a \$0.6 million increase in employee expenses associated with the return to office and a \$0.5 million increase in travel expenses. The increase in product, technology, and development expenses was offset in part by a \$7.9 million decrease resulting from increased capitalized projects and a prior year impairment of website development costs.

General and Administrative Expenses

	Year Ended December 31,		Change	
	2022	2021	Amount	%
	(dollars in thousands)			
General and administrative	\$ 73,117	\$ 97,678	\$ (24,561)	(25)%
Percentage of total revenue	4%	10%		

General and administrative expenses decreased \$24.6 million, or 25%, in the year ended December 31, 2022 compared to the year ended December 31, 2021. The decrease was due primarily to a \$37.0 million decrease in stock-based compensation. The decrease in stock-based compensation was due to the revaluation of liability-based stock awards. The decrease in general and administrative expenses was offset in part by a \$6.0 million increase in salaries and employee-related expenses, exclusive of stock-based compensation. The increase in salaries and employee-related expenses was due primarily to a 23% increase in headcount. The decrease was also offset in part by a \$2.2 million increase in audit, tax, legal and consulting expenses, a \$1.1 million increase in software subscription expenses, a \$0.8 million increase in indirect tax expenses, a \$0.6 million increase in bad debt expense, and a \$0.5 million increase in payment processing and billing expense.

Depreciation and Amortization Expenses

	Year Ended December 31,		Change	
	2022	2021	Amount	%
	(dollars in thousands)			
Depreciation and amortization	\$ 15,482	\$ 14,415	\$ 1,067	7%
Percentage of total revenue	1%	2%		

Depreciation and amortization expenses increased \$1.1 million, or 7%, in the year ended December 31, 2022 compared to the year ended December 31, 2021. The increase was due primarily to internal-use software projects that went into service during the year ended December 31, 2022.

Other Income, net

	Year Ended December 31,		Change	
	2022	2021	Amount	%
	(dollars in thousands)			
Other income, net				
Interest income	\$ 3,845	\$ 120	\$ 3,725	3104%
Other (expense) income	(961)	972	(1,933)	(199)
Total other income, net	\$ 2,884	\$ 1,092	\$ 1,792	164%
Percentage of total revenue:				
Interest income	0%	0%		
Other (expense) income	(0)	0		
Total other income, net	0%	0%		

Other income, net increased \$1.8 million, or 164%, in the year ended December 31, 2022 compared to the year ended December 31, 2021. The \$3.7 million increase in interest income was due primarily to the investment in new money market accounts as a result of interest rate increases during the year ended December 31, 2022. The \$1.9 million decrease in other (expense) income was due primarily to \$1.5 million increase in realized and unrealized loss associated with the strengthening of the dollar against certain foreign currencies.

Provision for Income Taxes

	Year Ended December 31,		Change	
	2022	2021	Amount	%
	(dollars in thousands)			
Provision for income taxes	\$ 32,408	\$ 38,987	\$ (6,579)	(17)%
Percentage of total revenue	2%	4%		

Provision for income taxes decreased \$6.6 million, or 17% in year ended December 31, 2022 compared to the year ended December 31, 2021. The decrease in provision for income taxes recognized during the year ended December 31, 2021 was due primarily to decreased profitability. This was offset by a \$1.5 million tax expense related to excess stock-based compensation deductions recognized during 2022, compared to \$0.4 million tax expense recognized during 2021. Furthermore, a \$3.9 million tax expense was recognized during 2022 in connection with the Section 162(m) excess officer compensation limitation, compared to \$2.0 million tax expense recognized during 2021.

Segment Income (loss) from Operations

	Year Ended December 31,		Change	
	2022	2021	Amount	%
	(dollars in thousands)			
Segment Income (loss) from Operations				
U.S. Marketplace	\$ 125,796	\$ 151,343	\$ (25,547)	(17)%
Digital Wholesale	(9,174)	7,189	(16,363)	(228)
Other	(8,144)	(10,264)	2,120	21
Total	\$ 108,478	\$ 148,268	\$ (39,790)	(27)%
Percentage of segment revenue:				
U.S. Marketplace	20%	25%		
Digital Wholesale	(1)	2		
Other	(18)	(24)		
Total	7%	16%		

U.S. Marketplace segment income from operations decreased \$25.5 million, or 17%, in the year ended December 31, 2022 compared to the year ended December 31, 2021 and represented 20% of U.S. Marketplace segment revenue for the year ended December 31, 2022 and 25% of U.S. Marketplace segment revenue for the year ended December 31, 2021. The decrease was due to increases in revenue of \$19.5 million, offset by increases in cost of revenue of \$10.1 million and increases in operating expenses of \$34.9 million.

Digital Wholesale segment income from operations decreased \$16.4 million, or 228%, in the year ended December 31, 2022 compared to the year ended December 31, 2021 and represented 1% of Digital Wholesale segment revenue for the year ended December 31, 2022 and 2% of Digital Wholesale segment revenue for the year ended December 31, 2021. The decrease was due to increases in revenue of \$681.8 million, offset by increases in cost of revenue of \$692.5 million and increases in operating expenses of \$5.7 million.

Year Ended December 31, 2021 Compared to Year Ended December 31, 2020

Revenue

Segment Revenue

	Year Ended December 31,		Change	
	2021	2020	Amount	%
(dollars in thousands)				
Segment Revenue				
U.S. Marketplace	\$ 594,602	\$ 519,835	\$ 74,767	14 %
Digital Wholesale	314,431	—	314,431	NM ⁽¹⁾
Other	42,340	31,616	10,724	34
Total	<u>\$ 951,373</u>	<u>\$ 551,451</u>	<u>\$ 399,922</u>	<u>73 %</u>
Percentage of segment revenue:				
U.S. Marketplace	62 %	94 %		
Digital Wholesale	33	NM ⁽¹⁾		
Other	4	6		
Total	<u>100 %</u>	<u>100 %</u>		

(1) NM - Not meaningful

U.S. Marketplace segment revenue increased \$74.8 million, or 14%, in the year ended December 31, 2021 compared to the year ended December 31, 2020 and represented 62% of segment revenue for the year ended December 31, 2021 and 94% of total revenue for the year ended December 31, 2020. The increase was due to approximately \$44 million in revenue reductions during the second quarter of 2020 as a result of the impact of fee reductions that we provided to our United States paying dealers during such quarter in response to the COVID-19 pandemic. The increase was also due in part to product upgrades for existing dealers and signing on new dealers with higher average monthly recurring revenue.

Digital Wholesale segment revenue increased \$314.4 million in the year ended December 31, 2021 compared to the year ended December 31, 2020 and represented 33% of segment revenue for the year ended December 31, 2021. The increase was primarily due to our acquisition of a 51% interest in CarOffer and launch of our IMCO offering in 2021.

Segment Income (loss) from Operations

	Year Ended December 31,		Change	
	2021	2020	Amount	%
(dollars in thousands)				
Segment Income (loss) from Operations				
U.S. Marketplace	\$ 151,343	\$ 120,836	\$ 30,507	25 %
Digital Wholesale	7,189	—	7,189	NM ⁽¹⁾
Other	(10,264)	(23,080)	12,816	56
Total	<u>\$ 148,268</u>	<u>\$ 97,756</u>	<u>\$ 50,512</u>	<u>52 %</u>
Percentage of segment revenue:				
U.S. Marketplace	25 %	23 %		
Digital Wholesale	2	NM ⁽¹⁾		
Other	(24)	(73)		
Total	<u>16 %</u>	<u>18 %</u>		

(1) NM - Not meaningful

U.S. Marketplace segment income from operations increased \$30.5 million, or 25%, in the year ended December 31, 2021 compared to the year ended December 31, 2020 and represented 25% of U.S. Marketplace segment revenue for the year ended December 31, 2021 and 23% of U.S. Marketplace segment revenue for the year ended December 31, 2020. The increase was due to increases in revenue of \$74.8 million, offset by increases in cost of revenue of \$7.4 million and increases in operating expenses of \$36.9 million.

Digital Wholesale segment income from operations increased \$7.2 million in the year ended December 31, 2021 compared to the year ended December 31, 2020 and represented 2% of Digital Wholesale segment revenue for the year ended December 31, 2021. The increase was primarily due to our acquisition of a 51% interest in CarOffer and launch of our IMCO offering in 2021.

Liquidity and Capital Resources

Cash, Cash Equivalents and Investments

As of December 31, 2022, our principal sources of liquidity were cash and cash equivalents of \$469.5 million. As of December 31, 2021, our principal sources of liquidity were cash and cash equivalents of \$231.9 million and investments in certificates of deposit with terms of greater than 90 days but less than one year of \$90.0 million.

Sources and Uses of Cash

During the years ended December 31, 2022 and 2021, our cash flows from operating, investing, and financing activities, as reflected in the consolidated statements of cash flows, are as follows:

	Year Ended December 31,	
	2022	2021
	(in thousands)	
Net cash provided by operating activities	\$ 256,106	\$ 98,292
Net cash provided by (used in) investing activities	72,730	(68,149)
Net cash (used in) provided by financing activities	(92,620)	17,808
Impact of foreign currency on cash	(364)	(597)
Net increase in cash, cash equivalents, and restricted cash	<u>\$ 235,852</u>	<u>\$ 47,354</u>

Our operations have been financed primarily from operating activities. During the years ended December 31, 2022 and 2021, we generated cash from operating activities of \$256.1 million and \$98.3 million, respectively.

We believe that our existing sources of liquidity, including access to our 2022 Revolver, 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. Our future capital requirements will depend on many factors, including, but not limited to: the further impact of the COVID-19 pandemic; our revenue; expenses associated with our sales and marketing activities and the support of our product, technology, and development efforts; expenses associated with our facilities build-out under our 1001 Boylston Street lease that do not qualify for landlord reimbursement; payments received in advance from a third-party payment processor; activity under our Share Repurchase Program; and our investments in international markets. Our long-term future capital requirements will depend on many factors, including the future cash requirements described above, as well as the potential exercise of a call right to acquire all, and not less than all, of the remaining equity interests in CarOffer and the representative of the holders of the remaining equity will have a put right to sell to us, all, and not less than all, of the remaining equity interests of CarOffer. Details of this acquisition are more fully described in Note 2 to these consolidated financial statements. Cash from operations could also be affected by various risks and uncertainties, including, but not limited to, macroeconomic effects and other risks detailed in the "Risk Factors" section of this Annual Report on Form 10-K.

On September 26, 2022, we entered into a Credit Agreement with PNC Bank, National Association, as administrative agent and collateral agent and an L/C Issuer (as defined in the Credit Agreement), and the other lenders, L/C Issuers and parties thereto from time to time, or the Credit Agreement. The Credit Agreement consists of a revolving credit facility, or the 2022 Revolver, which allows us to borrow up to \$400.0 million, \$50.0 million of which may be comprised of a letter of credit sub-facility. The borrowing capacity under the Credit Agreement may be increased in accordance with the terms and subject to the adjustments as set forth in the Credit Agreement. For example, the borrowing capacity may be increased by an amount up to the greater of \$250.0 million or 100% of Four Quarter Consolidated EBITDA (as defined in the Credit Agreement) if certain criteria are met and subject to certain restrictions. Any such increase requires lender approval. Proceeds of any borrowings may be used for general corporate purposes. The 2022 Revolver is scheduled to mature on September 26, 2027. As of December 31, 2022, there were no borrowings and no letters of credit outstanding under the 2022 Revolver.

On December 8, 2022, we announced that our Board of Directors authorized the Share Repurchase Program, pursuant to which we may, from time to time, purchase shares of our Class A common stock for an aggregate purchase price not to exceed \$250 million. Share repurchases under the Share Repurchase Program may be made through a variety of methods, including but not limited to open market purchases, privately negotiated transactions and transactions that may be effected pursuant to one or more plans under Rule 10b5-1 and/or Rule 10b-18 of the Exchange Act. The Share Repurchase Program does not obligate us to repurchase any minimum dollar amount or number of shares. The Share Repurchase Program has an expiration date of December 31, 2023, and prior to its expiration may be modified, suspended, or discontinued by our Board of Directors at any time without prior notice. All repurchased shares under the Share Repurchase Program will be retired. We expect to fund share repurchases through cash on hand and cash generated from operations. During the year ended December 31, 2022, we repurchased and retired 1,350,473 shares for \$18,691, at an average cost of \$13.84 per share under this authorization. As of December 31, 2022, we had remaining authorization to purchase up to \$231,309 of our common stock under the Share Repurchase Program.

To the extent that existing cash, cash equivalents, and our borrowing capacity under the 2022 Revolver 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. See *“Risk Factors—Risks Related to Our Business and Industry— 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.”*

Operating Activities

Cash provided by operating activities of \$256.1 million during the year ended December 31, 2022 was due primarily to consolidated net income of \$79.0 million, adjusted for \$54.8 million of stock-based compensation expense, \$45.3 million of depreciation and amortization, \$11.1 million of amortization of deferred contract costs, and \$1.8 million of provision for doubtful accounts, offset in part by \$22.1 million of deferred taxes. Cash provided by operating activities was also attributable to a \$153.0 million decrease in accounts receivable and a \$14.4 million decrease in inventory. The increases in cash flow from operations were partially offset by a \$35.4 million decrease in accounts payable, a \$25.1 million decrease in accrued expenses, accrued income taxes, and other liabilities, a \$13.7 million increase in deferred contract costs, a \$6.6 million increase in prepaid expenses, prepaid income taxes, and other assets, a \$0.5 million decrease in lease obligations, and a \$0.5 million decrease in deferred revenue.

Cash provided by operating activities of \$98.3 million during the year ended December 31, 2021 was due primarily to consolidated net income of \$110.4 million, adjusted for \$53.5 million of stock-based compensation expense, \$40.5 million of depreciation and amortization, \$12.7 million of amortization of deferred contract costs, \$6.2 million of deferred taxes, \$3.1 million of impairment of long-lived assets, and \$1.0 million of provision for doubtful accounts. Cash provided by operating activities was also attributable to a \$35.8 million increase in accrued expenses, accrued income taxes, and other liabilities, a \$35.4 million increase in accounts payable, a \$3.7 million increase in deferred revenue, and a \$1.0 million increase in lease obligations. The increases in cash flow from operations were partially offset by a \$174.8 million increase in accounts receivable due primarily to the acquisition of a 51% interest in CarOffer, a \$17.3 million increase in inventory, a \$7.7 million increase in gross deferred contract costs, and a \$5.1 million increase in prepaid expenses, prepaid income taxes, and other assets.

Investing Activities

Cash provided by investing activities of \$72.7 million during the year ended December 31, 2022 was due to \$90 million of maturities in certificates of deposit, offset in part by \$11.3 million of capitalization of website development costs and \$5.9 million of purchases of property and equipment.

Cash used in investing activities of \$68.1 million during the year ended December 31, 2021 was due to \$64.3 million of acquisition cash payments, net of cash acquired, \$7.7 million of purchases of property and equipment, and \$6.2 million related to the capitalization of website development costs, offset in part by \$130.0 million of maturities in certificates of deposit, net of investments in certificates of deposit of \$120.0 million.

Financing Activities

Cash used in financing activities of \$92.6 million during the year ended December 31, 2022 was due primarily to a \$40.3 million decrease in gross advance payments received from third-party payment processor, \$19.9 million of payment of tax distributions to redeemable noncontrolling interest holders, \$16.0 million of payment of withholding taxes on net share settlements of restricted stock units, \$14.4 million of payment for the repurchase of our Class A common stock under the Share Repurchase Program, and \$2.6 million of payment of deferred financing costs, partially offset by \$0.7 million of proceeds from the issuance of common stock upon exercise of stock options.

Cash provided by financing activities of \$17.8 million during the year ended December 31, 2021 was due primarily to \$46.8 million increase in gross advance payments received from third-party payment processor and \$0.7 million related to the proceeds from the issuance of common stock upon exercise of stock options, partially offset by payment of withholding taxes on net share settlements of restricted stock units, of \$15.4 million and CarOffer's repayment of a line of credit of \$14.3 million

Contractual Obligations and Known Future Cash Requirements

Refer to Note 9 of our consolidated financial statements appearing elsewhere in this Annual Report on Form 10-K for our contractual obligations and commitments.

Seasonality

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. Additionally, the volume of wholesale vehicle sales can fluctuate from quarter to quarter caused by several factors, including the timing of used vehicles available for sale from selling customers, the seasonality of the retail market for used vehicles and/or inventory challenges in the automotive industry, which affect the demand side of the wholesale industry.

Macroeconomic conditions, such as slower growth or recession, higher interest rates, high unemployment, consumer confidence in the economy, consumer debt levels, the ongoing military conflict between Russia and Ukraine, foreign currency exchange rate fluctuations and other matters that influence consumer spending and preferences, can also impact the volume of wholesale vehicle sales, as was evidenced by the global semiconductor chip shortage.

The Digital Wholesale segment operating results have reflected the general seasonality of the wholesale vehicle sales market and macroeconomic conditions of the automotive industry. The U.S. Marketplace segment operating results have reflected the macroeconomic conditions of the automotive industry. However, to date, the U.S. Marketplace segment operating results have not been materially impacted by the general seasonality of the automotive industry. This could possibly change once our business and markets mature.

As a result, revenue and cost of revenue related to volume will fluctuate accordingly on a quarterly basis. Typical seasonality trends may not be observed in periods where other external factors more significantly impact the wholesale industry.

Off-Balance Sheet Arrangements

As of December 31, 2022 and 2021, we did not have any off-balance sheet arrangements, other than leases signed but not commenced, or material 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 Estimates

The preparation of the 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 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 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 recognized in the period in which they become known.

Critical 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 impairment of long-lived assets, the capitalization of product, technology, and development costs for website development, internal-use software and hosting arrangements, the valuation of acquired assets and liabilities, the valuation and recoverability of intangible assets and goodwill, the valuation of redeemable noncontrolling interest, the recoverability of our net deferred tax assets and related valuation allowance, the valuation of inventory, and the valuation of equity and liability-classified compensation awards. Accordingly, we consider these to be our critical accounting estimates, and believe that of our significant accounting policies, these involve the greatest degree of judgment and complexity.

Revenue Recognition – Sales Allowance and Variable Consideration

Our accounting policy relating to revenue recognition reflects the impact of the adoption of Accounting Standards Codification 606, Revenue from Contracts with Customers, or ASC 606, which is discussed further in the Notes to the Consolidated Financial Statements. As prescribed by ASC 606, we recognize revenue based on a five-step approach. We derive our revenue from marketplace revenue, wholesale revenue, and product revenue. Marketplace revenue is included in the U.S. Marketplace segment and Other category of segment reporting. Wholesale revenue and product revenue are included in the Digital Wholesale segment. We generate marketplace revenue primarily from (i) dealer subscriptions to our Listings packages, RPM, digital advertising suite, and Digital Retail, (ii) advertising revenue from auto manufacturers and other auto-related brand advertisers, and (iii) revenue from partnerships with financing services companies. We generate wholesale revenue primarily from (i) transaction fees earned from Dealer-to-Dealer transactions, (ii) transaction fees earned from sale of vehicles to dealers that we acquire at other marketplaces, and (iii) transaction fees earned from performing inspection and transportation services, inclusive of Dealer-to-Dealer transactions, other marketplace to dealer transactions, and IMCO transactions. We generate product revenue primarily from (i) aggregate proceeds received from the sale of vehicles that were acquired through IMCO transactions, and (ii) proceeds received from the sale of vehicles that were acquired through arbitration. Critical accounting estimates associated with each of the three revenue sources are outlined below.

Total consideration for marketplace 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. Dealer customers do not have the right to take possession of our software. 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 circumstances 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.

Advertising contracts state the transaction price within the agreement with payment generally 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 and is allocated to the period in which the service was rendered. 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. Although these credits have not been material and have not changed significantly over the historical period, estimated sales adjustments credits and losses may vary from actual results which could lead to material adjustments to the financial statements.

Other marketplace 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, primarily related to our partnerships with financing services companies, 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.

Within wholesale transactions, there are typically no contractual cash refund rights, but credits may be issued to a customer at our sole discretion and refunds may be required by law in the case of a vehicle defect. At the portfolio level, there is also variable consideration that needs to be included in the transaction price. Variable consideration consists of sales allowances 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 or arbitration. 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. Upon recognizing a sales transaction, we estimate the amount of transaction price that will be reversed in a subsequent period and record a reserve for returns and cancellations in other current liabilities in the consolidated income statements. Estimated sales adjustments, credits and losses may vary from actual results which could lead to material adjustments to the financial statements.

Within product transactions, there are typically 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 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 or arbitration. 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. Upon recognizing a sales transaction, we estimate the amount of transaction price that will be reversed in a subsequent period and record a reserve for returns and cancellations in other current liabilities in the consolidated income statements. Estimated sales adjustments, credits and losses may vary from actual results which could lead to material adjustments to the financial statements.

Accounts Receivable – 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 economic trends and conditions, and reasonable and supportable forecasts of economic conditions. If circumstances relating to specific customers change, or unanticipated changes occur in the general business environment, particularly as it affects auto dealers, our estimates of the recoverability of receivables could be further adjusted.

Long-Lived Assets – Impairment

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.

Website Development and Internal-Use Software Costs – Capitalization

Capitalized website development and capitalized internal-use software costs are amortized on a straight-line basis over their estimated useful life of three years beginning with the time when the product is ready for intended use.

We evaluate the useful lives of these assets when each asset is ready for its intended use, and at least annually thereafter to ensure three years remains appropriate. We also test for impairment at least annually and whenever events or changes in circumstances occur that could impact the recoverability of these assets. Impairment is evaluated as discussed in the "Long-Lived Assets - Impairment" section above.

Hosting Arrangements – Capitalization

Capitalized implementation costs for hosting arrangements 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.

We evaluate the useful lives of these assets when each asset is ready for its intended use, and at least annually thereafter to ensure the selected useful life remains appropriate. We also test for impairment at least annually and whenever events or changes in circumstances occur that could impact the recoverability of these assets. Impairment is evaluated as discussed in the “Long-Lived Assets - Impairment” section above.

Business Combinations

Acquired Assets and Liabilities – Valuation

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.

Intangible Assets – Valuation and Recoverability

Intangible assets are recognized at their estimated fair value at the date of acquisition. Fair value is determined based on inputs and assumptions such as discount rates, rates of return on assets, and long-term sales growth rates.

We amortize intangible assets over their estimated useful lives on a straight-line basis. Useful lives are established based on analysis of all pertinent factors such as: the expected use of the asset, expected useful lives of related assets, provisions that may limit the useful life, historical experience with similar arrangements, effects of economic factors, demand, competition, obsolescence, and maintenance required to maintain the future cash flows.

We evaluate the useful lives of these assets as of the acquisition date and at least annually thereafter to ensure the selected useful life remains appropriate.

We monitor our long-lived assets for impairment indicators on an ongoing basis in accordance with GAAP, and test for impairment at least annually and whenever events or changes in circumstances occur that could impact the recoverability of these assets. Impairment is evaluated as discussed in the “Long-Lived Assets - Impairment” section above.

Goodwill – Valuation and Recoverability

Goodwill is recognized 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 evaluate impairment annually on October 1 by comparing the estimated fair value of each reporting unit to its carrying value. For the first three quarters of fiscal year 2022, we determined that we had two reporting units: Marketplace and CarOffer. We elected to bypass the optional qualitative test for impairment and proceed to Step 1, which is a quantitative impairment test. We estimate fair value using a market approach, based on market multiples derived from public companies that we identify as peers. As of October 1, 2022, we estimated forecasted revenue and gross margin for fiscal year 2022, and estimated revenue and gross margin market multiples using publicly available information for each of our reporting units. Developing these assumptions required the use of judgment and estimates. Actual results may differ from these forecasts.

Subsequent to our evaluation of impairment on October 1, 2022, we revised our reporting units from two reporting units, Marketplace and CarOffer, to four reporting units, U.S. Marketplace, Digital Wholesale, United Kingdom Marketplace, and Canada Marketplace. Because of the change in reporting units, we performed an additional goodwill impairment evaluation as of December 31. A consistent methodology was utilized, calculating the fair value of our reporting units using the market approach described previously. Revenue and gross margin actuals were utilized for the year ended December 31, 2022, and estimated revenue and gross margin market multiples were utilized based upon publicly available information for each of the reporting units. Developing these assumptions required the use of judgment and estimates. Actual results may differ from these forecasts.

Redeemable Noncontrolling Interest – Valuation

In connection with our acquisition of a 51% interest in CarOffer on January 14, 2021, redeemable noncontrolling interest was recognized at fair value computed using the Least Square Monte Carlo Simulation approach. Significant inputs to the model included market price of risk, volatility, correlation and risk-free rate.

Subsequent to our acquisition of the 51% interest on January 14, 2021, the redeemable noncontrolling interest is measured at the greater of the amount that would be paid if settlement occurred as of the balance sheet date based on the contractually defined redemption value and its carrying amount adjusted for net income (loss) attributable to the noncontrolling interest and tax distributions to redeemable noncontrolling interest holders.

Income Taxes – Recoverability of Deferred Tax Assets and Related Valuation Allowance

We are subject to federal and state income taxes in the United States and taxes in foreign jurisdictions in which we operate. Judgment is required in determining our worldwide income tax provision. In the ordinary course of a global business, there are many transactions and calculations where the ultimate outcome is uncertain. Although we believe our estimates are reasonable, there is no assurance that the final outcome of these matters will not be different from that which is reflected in our historical income tax provisions and accruals. Such differences could have a material impact on our income tax provision and net income in the period in which such determination is made.

Significant judgment is also involved regarding the application of income tax laws and regulations to estimate the effective income tax rates. As a result, our actual annual effective income tax rates and related income tax liabilities may differ materially from our interim estimated effective tax rates and related income tax liabilities. Any resulting differences are recognized in the period they become known.

We account for income taxes in accordance with the asset and 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 enacted tax rates in effect for the year in which the temporary differences are expected to be recovered or settled.

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. In performing this analysis, we consider future taxable income and ongoing prudent and feasible tax planning strategies to assess realizability. Actual results may differ from these forecasts. Valuation allowances are reassessed periodically to determine whether it is more likely than not that the tax benefits will be realized in the future and if any existing valuation allowance should be released.

We account for uncertain tax positions 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. We assess our income tax positions based upon management's evaluation of the facts, circumstances, and information available at the reporting date. The tax position is measured as the largest amount of benefit or expense that is greater than 50% likely of being realized upon ultimate settlement with the taxing authority during examination. The ultimate resolution of these tax positions may be greater or less than the liabilities recognized.

Inventory – Valuation

Inventory is valued at the lower of cost or net realizable value. Cost is determined based on specific identification. In recording inventory at the lower of cost or net realizable value, we estimate potential future losses on inventory on hand based on historical losses and market trends. Estimated potential future losses on inventory may vary from actual results which could lead to material adjustments to the financial statements.

Stock-Based Compensation – Valuation

For RSUs granted subject to market-based vesting conditions, the fair value is determined on the date of grant using the Monte Carlo simulation lattice model. The determination of the fair value using this model is affected by our stock price performance relative to the companies listed on the S&P 500, and a number of assumptions including volatility, correlation coefficient, risk-free interest rate and expected dividends. RSUs previously granted subject to market-based vesting conditions vest upon achievement of specified levels of market conditions. During the year ended December 31, 2022, we modified our market-based performance awards to contain only service-based vesting conditions in line with our other restricted stock unit awards. As a result, there are no market-based RSUs outstanding as of December 31, 2022.

For stock options granted, the fair value is determined on the date of grant using the Black-Scholes option-pricing model. The determination of the fair value is affected by our stock price and a number of assumptions including expected dividend yield, expected volatility, risk-free interest rate and expected term. For expected volatility, we use a blended volatility to combine the historical volatility of trading with the volatility for a peer group of companies as we do not have historical stock prices for a period that is at least equal to the expected term. Stock options granted generally have a term of ten years from the date of grant and generally vest over a four-year requisite service period.

For liability-classified awards, the fair value was determined on the date of issuance using a Least Square Monte Carlo simulation model. Liability-classified awards are remeasured to fair value each period until settlement. Until March 31, 2022, the Least Square Monte Carlo simulation model was used for remeasurement. During the three months ended June 30, 2022, we refined our model for determining the fair value of liability-classified awards as a result of obtaining gross profit actuals through the trailing twelve-months ended June 30, 2022 measurement period for the first call option. Since March 31, 2022, the fair value has typically been determined using a Monte Carlo simulation model. During the year ended December 31, 2022, we determined not to exercise our call right to acquire up to an additional 25% of the fully diluted capitalization of CarOffer. The valuation of these liability awards is now derived from our 2024 call right and CarOffer's 2024 put right. The determination of the fair value is affected by CarOffer's equity value, EBITDA, and Excess Parent Capital (as defined in the CarOffer Operating Agreement, included as Exhibit 10.27 to the Annual Report on Form 10-K as of December 31, 2021 filed on February 25, 2022) that drive the exercise price of future call/put rights, as well as a number of assumptions including market price of risk, volatility, correlation, and risk-free interest rate. As a result of the EBITDA and Excess Parent Capital projections for CarOffer as of December 31, 2022, a Monte Carlo simulation model was not required as of December 31, 2022. We will continue to assess our valuation approach quarterly.

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

As of December 31, 2022, our exposure to market risk associated with changes in interest rates relates primarily to our 2022 Revolver, which allows us to borrow up to \$400.0 million. The applicable interest rate is, at our option, based on a number of different benchmark rates and applicable spreads, as determined by the Consolidated Secured Net Leverage Ratio. A fluctuation in interest rates does not have an impact on interest expense unless the 2022 Revolver is drawn upon. Such impact would also be dependent on the amount of the draw. As of December 31, 2022, there were no borrowings and no letters of credit outstanding under the 2022 Revolver.

As of December 31, 2021, we did not have any long-term borrowings.

As of December 31, 2022, we had cash and cash equivalents \$469.5 million, which consisted of bank deposits and money market funds. As of December 31, 2021, we had cash, cash equivalents, and investments of \$321.9 million, which consisted 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 variable returns from our cash equivalents for the foreseeable future. To date, fluctuations resulting from changes in the interest rate environment 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, 2022 and 2021, we had foreign currency exposures in the British pound, the Euro and the Canadian dollar, although such exposure was immaterial.

Our foreign subsidiaries have intercompany transactions that are eliminated upon consolidation, and these transactions expose us to foreign currency exchange rate fluctuations. Exchange rate fluctuations on short-term intercompany transactions are recognized within other (expense) income, net in the consolidated income statements. Exchange rate fluctuations on long-term intercompany transactions are recognized within accumulated other comprehensive (loss) income in the consolidated balance sheets.

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.

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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, 2022 and 2021, the related consolidated statements of income, comprehensive income, redeemable noncontrolling interest and stockholders' equity and cash flows for each of the three years in the period ended December 31, 2022, 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, 2022 and 2021, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2022, 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, 2022, 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 March 1, 2023 expressed an adverse 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, 2022, the Company recognized revenue of \$1.66 billion. 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.

Auditing 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 certain of 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, 2022, 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.

Fair Value Measurement of Liability-Classified Awards

Description of the Matter

As described in Note 2 and Note 10 to the consolidated financial statements CarOffer has issued incentive units that are liability-classified awards because the awards can be put to the Company at a contractually defined formulaic purchase price such that the holders do not bear the risks and rewards associated with equity ownership.

Auditing the Company's accounting for these liability-classified awards was complex due to the significant estimation uncertainty in the Company's determination of the change in fair value of the awards of \$21.1 million for the year ended December 31, 2022. The significant estimation uncertainty was primarily due to the complexity of the valuation models prepared by management to measure the fair value of the awards and the sensitivity of the respective fair values to the significant underlying assumptions. The significant assumptions used to estimate the fair value of the liability classified awards include certain assumptions that form the basis of the CarOffer equity value (e.g., EBITDA). 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 these liability-classified awards. This included testing controls over the Company's estimation process supporting the recognition and measurement of liability-classified awards, 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 included, among others, evaluating the Company's valuation methodology used to estimate the fair value of the liability-classified awards. We involved our valuation professionals to assist with our evaluation of the methodology used by the Company. For example, our valuation professionals evaluated the model used by the Company and performed independent calculations to estimate the fair value of the liability classified awards. Additionally, we evaluated the significant assumptions used by the Company, primarily consisting of projected financial information of the acquired entity (e.g., EBITDA), and evaluated the completeness and accuracy of the underlying data supporting the significant assumptions and estimates. Specifically, when evaluating the assumptions related to the forecasted results and changes in the business that would drive these results, we compared the assumptions to historical results of the acquired entity and current industry and economic trends. We also performed a sensitivity analysis of the significant assumptions to evaluate the change in the fair values that would result from changes in the assumptions.

/s/ Ernst & Young LLP

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

Boston, Massachusetts

March 1, 2023

Consolidated Balance Sheets

(in thousands, except share and per share data)

	As of December 31,	
	2022	2021
Assets		
Current assets:		
Cash and cash equivalents	\$ 469,517	\$ 231,944
Investments	—	90,000
Accounts receivable, net of allowance for doubtful accounts of \$1,809 and \$420, respectively	46,817	189,324
Inventory	5,282	19,656
Prepaid expenses, prepaid income taxes and other current assets	21,972	16,430
Deferred contract costs	8,541	9,045
Restricted cash	5,237	6,709
Total current assets	557,366	563,108
Property and equipment, net	40,128	32,210
Intangible assets, net	53,054	83,915
Goodwill	157,467	158,287
Operating lease right-of-use assets	56,869	60,609
Restricted cash	9,378	9,627
Deferred tax assets	35,488	13,378
Deferred contract costs, net of current portion	8,853	5,867
Other non-current assets	8,499	4,573
Total assets	\$ 927,102	\$ 931,574
Liabilities, redeemable noncontrolling interest and stockholders' equity		
Current liabilities:		
Accounts payable	\$ 32,529	\$ 66,153
Accrued expenses, accrued income taxes and other current liabilities	39,193	78,586
Deferred revenue	12,249	12,784
Operating lease liabilities	14,762	13,186
Total current liabilities	98,733	170,709
Operating lease liabilities	51,656	57,519
Deferred tax liabilities	54	58
Other non-current liabilities	5,301	23,639
Total liabilities	155,744	251,925
Commitments and contingencies (Note 9)		
Redeemable noncontrolling interest	36,749	162,808
Stockholders' equity:		
Preferred stock, \$0.001 par value per share; 10,000,000 shares authorized; no shares issued and outstanding	—	—
Class A common stock, \$0.001 par value per share; 500,000,000 shares authorized; 101,636,649 and 101,773,034 shares issued and outstanding at December 31, 2022 and 2021, respectively	102	102
Class B common stock, \$0.001 par value per share; 100,000,000 shares authorized; 15,999,173 and 15,999,173 shares issued and outstanding at December 31, 2022 and 2021, respectively	16	16
Additional paid-in capital	413,092	387,868
Retained earnings	323,043	129,258
Accumulated other comprehensive loss	(1,644)	(403)
Total stockholders' equity	734,609	516,841
Total liabilities, redeemable noncontrolling interest and stockholders' equity	\$ 927,102	\$ 931,574

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

Consolidated Income Statements

(in thousands, except share and per share data)

	Year Ended December 31,		
	2022	2021	2020
Revenue			
Marketplace	\$ 658,771	\$ 636,942	\$ 551,451
Wholesale	237,635	195,127	—
Product	758,629	119,304	—
Total revenue	1,655,035	951,373	551,451
Cost of revenue ⁽¹⁾			
Marketplace	56,040	47,689	42,706
Wholesale	176,446	127,679	—
Product	764,996	118,647	—
Total cost of revenue	997,482	294,015	42,706
Gross profit	657,553	657,358	508,745
Operating expenses:			
Sales and marketing	336,708	290,574	256,979
Product, technology, and development	123,768	106,423	85,726
General and administrative	73,117	97,678	62,166
Depreciation and amortization	15,482	14,415	6,118
Total operating expenses	549,075	509,090	410,989
Income from operations	108,478	148,268	97,756
Other income, net:			
Interest income	3,845	120	1,075
Other (expense) income, net	(961)	972	279
Total other income, net	2,884	1,092	1,354
Income before income taxes	111,362	149,360	99,110
Provision for income taxes	32,408	38,987	21,557
Consolidated net income	78,954	110,373	77,553
Net (loss) income attributable to redeemable noncontrolling interest	(5,433)	1,129	—
Net income attributable to CarGurus, Inc.	\$ 84,387	\$ 109,244	\$ 77,553
Accretion of redeemable noncontrolling interest to redemption value	(109,398)	109,398	—
Net income (loss) attributable to common stockholders	\$ 193,785	\$ (154)	\$ 77,553
Net income (loss) per share attributable to common stockholders: (Note 11)			
Basic	\$ 1.64	\$ (0.00)	\$ 0.69
Diluted	\$ 0.62	\$ (0.00)	\$ 0.68
Weighted-average number of shares of common stock used in computing net income (loss) per share attributable to common stockholders:			
Basic	118,474,991	117,142,062	112,854,524
Diluted	128,150,974	117,142,062	113,849,815

⁽¹⁾ Includes depreciation and amortization expense for the years ended December 31, 2022, 2021, and 2020 of \$29,852, \$26,061, and \$5,224, 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,		
	2022	2021	2020
Consolidated net income	\$ 78,954	\$ 110,373	\$ 77,553
Other comprehensive income:			
Foreign currency translation adjustment	(1,241)	(2,283)	2,230
Consolidated comprehensive income	77,713	108,090	79,783
Comprehensive (loss) income attributable to redeemable noncontrolling interests	(5,433)	1,129	—
Comprehensive income attributable to CarGurus, Inc.	<u>\$ 83,146</u>	<u>\$ 106,961</u>	<u>\$ 79,783</u>

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

Consolidated Statements of Redeemable Noncontrolling Interest and Stockholders' Equity

(in thousands, except share data)

	Redeemable Noncontrolling Interest	Class A Common Stock		Class B Common Stock		Additional Paid-in Capital	Retained Earnings	Accumulate d Other Comprehens ive Income (Loss)	Total Stockholders' Equity
		Shares	Amount	Shares	Amount				
Balance as of 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 on net share settlements of restricted stock units	—	(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 as of December 31, 2020	—	94,310,309	\$ 94	19,076,500	\$ 19	242,181	129,412	1,880	373,586
Net income	1,129	—	—	—	—	—	109,244	—	109,244
Stock-based compensation expense	—	—	—	—	—	56,772	—	—	56,772
Issuance of common stock upon exercise of stock options	—	222,147	—	—	—	663	—	—	663
Issuance of common stock upon vesting of restricted stock units	—	1,575,206	2	—	—	(2)	—	—	—
Payment of withholding taxes on net share settlements of restricted stock units	—	(527,237)	—	—	—	(15,388)	—	—	(15,388)
Conversion of common stock	—	3,077,327	3	(3,077,327)	(3)	—	—	—	—
Issuance of common stock upon for acquisition	—	3,115,282	3	—	—	103,642	—	—	103,645
Acquisition of a 51% interest in CarOffer, LLC	60,982	—	—	—	—	—	—	—	—
Accretion of redeemable noncontrolling interest to redemption value	109,398	—	—	—	—	—	(109,398)	—	(109,398)
Tax distributions to redeemable noncontrolling interest holders	(8,701)	—	—	—	—	—	—	—	—
Foreign currency translation adjustment	—	—	—	—	—	—	—	(2,283)	(2,283)
Balance as of December 31, 2021	162,808	101,773,034	\$ 102	15,999,173	\$ 16	387,868	129,258	(403)	516,841
Net (loss) income	(5,433)	—	—	—	—	—	84,387	—	84,387
Stock-based compensation expense	—	—	—	—	—	59,245	—	—	59,245
Issuance of common stock upon exercise of stock options	—	131,061	—	—	—	721	—	—	721
Issuance of common stock upon vesting of restricted stock units	—	1,649,294	1	—	—	(1)	—	—	—
Payment of withholding taxes on net share settlements of restricted stock units	—	(566,267)	—	—	—	(16,025)	—	—	(16,025)
Repurchase of common stock	—	(1,350,473)	(1)	—	—	(18,716)	—	—	(18,717)
Accretion of redeemable noncontrolling interest to redemption value	(109,398)	—	—	—	—	—	109,398	—	109,398
Tax distributions to redeemable noncontrolling interest holders	(11,228)	—	—	—	—	—	—	—	—
Foreign currency translation adjustment	—	—	—	—	—	—	—	(1,241)	(1,241)
Balance as of December 31, 2022	\$ 36,749	101,636,649	\$ 102	15,999,173	\$ 16	\$ 413,092	\$ 323,043	\$ (1,644)	\$ 734,609

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,		
	2022	2021	2020
Operating Activities			
Consolidated net income	\$ 78,954	\$ 110,373	\$ 77,553
Adjustments to reconcile consolidated net income to net cash provided by operating activities:			
Depreciation and amortization	45,334	40,476	10,191
Currency loss (gain) on foreign denominated transactions	155	(70)	23
Deferred taxes	(22,114)	6,163	22,235
Provision for doubtful accounts	1,769	999	1,930
Stock-based compensation expense	54,777	53,525	45,090
Amortization of deferred financing costs	136	—	—
Amortization of deferred contract costs	11,067	12,653	11,605
Impairment of long-lived assets	165	3,128	1,151
Changes in operating assets and liabilities:			
Accounts receivable	152,954	(174,771)	3,889
Inventory	14,374	(17,318)	—
Prepaid expenses, prepaid income taxes, and other assets	(6,573)	(5,068)	3,484
Deferred contract costs	(13,697)	(7,714)	(11,378)
Accounts payable	(35,047)	35,397	(15,077)
Accrued expenses, accrued income taxes, and other liabilities	(25,077)	35,817	7,450
Deferred revenue	(525)	3,661	(861)
Lease obligations	(546)	1,041	(542)
Net cash provided by operating activities	256,106	98,292	156,743
Investing Activities			
Purchases of property and equipment	(5,924)	(7,713)	(2,952)
Capitalization of website development costs	(11,346)	(6,163)	(4,579)
Cash paid for acquisitions, net of cash acquired	—	(64,273)	(21,056)
Investments in certificates of deposit	—	(120,000)	(100,000)
Maturities of certificates of deposit	90,000	130,000	111,692
Net cash provided by (used in) investing activities	72,730	(68,149)	(16,895)
Financing Activities			
Proceeds from issuance of common stock upon exercise of stock options	721	663	1,136
Payment of finance lease obligations	(68)	(39)	(37)
Payment of withholding taxes on net share settlements of restricted stock units	(16,022)	(15,388)	(11,184)
Repurchase of common stock	(14,428)	—	—
Repayment of line of credit	—	(14,250)	—
Payment of deferred financing costs	(2,578)	—	—
Payment of tax distributions to redeemable noncontrolling interest holders	(19,913)	—	—
Change in gross advance payments received from third-party payment processor	(40,332)	46,822	—
Net cash (used in) provided by financing activities	(92,620)	17,808	(10,085)
Impact of foreign currency on cash, cash equivalents, and restricted cash	(364)	(597)	440
Net increase in cash, cash equivalents, and restricted cash	235,852	47,354	130,203
Cash, cash equivalents, and restricted cash at beginning of period	248,280	200,926	70,723
Cash, cash equivalents, and restricted cash at end of period	\$ 484,132	\$ 248,280	\$ 200,926
Supplemental disclosure of cash flow information:			
Cash paid for income taxes	\$ 61,001	\$ 27,520	\$ 2,831
Cash paid for operating lease liabilities	\$ 17,548	\$ 16,168	\$ 14,941
Cash paid for interest	\$ 64	\$ —	\$ —
Supplemental noncash disclosure of cash flow information:			
Unpaid purchases of property and equipment, capitalized website development, capitalized internal-use software and capitalized hosting arrangements	\$ 1,927	\$ 478	\$ 136
Unpaid repurchases of common stock	\$ 4,289	\$ —	\$ —
Capitalized stock-based compensation expense in website development and internal-use software costs and hosting arrangements	\$ 4,468	\$ 3,247	\$ 1,906
Obtaining a right-of-use asset in exchange for a finance lease liability	\$ —	\$ 664	\$ —
Obtaining a right-of-use asset in exchange for an operating lease liability	\$ 9,845	\$ 12,336	\$ —
Issuance of stock for acquisition	\$ —	\$ 103,645	\$ —
Accretion of redeemable noncontrolling interest to redemption value	\$ (109,398)	\$ 109,398	\$ —
Accrued tax distributions to redeemable noncontrolling interest holders	\$ 16	\$ 8,701	\$ —

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

Notes to Consolidated Financial Statements

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

1. Organization and Business Description

CarGurus, Inc. (the "Company") is a multinational, online automotive platform for buying and selling vehicles that is building upon its industry-leading listings marketplace with both digital retail solutions and the CarOffer digital wholesale platform. The CarGurus platform gives consumers the confidence to buy and/or sell a vehicle either online or in-person, and it gives dealerships the power to accurately price, instantly acquire, effectively market, and quickly sell vehicles, all with a nationwide reach. The Company uses proprietary technology, search algorithms and data analytics to bring trust, transparency and competitive pricing to the automotive shopping experience.

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 the United States, it also operates as independent brands the Autolist online marketplace, which it wholly owns, and the CarOffer, LLC ("CarOffer") digital wholesale marketplace, in which it holds a 51% equity interest. In addition to the United States, the Company operates online marketplaces under the CarGurus brand in Canada and the United Kingdom. In the United Kingdom, it also operates as an independent brand the PistonHeads online marketplace, which it wholly owns. 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.

The Company has subsidiaries in the United States, Canada, Ireland, and the United Kingdom and, prior to the first quarter of 2022, had two reportable segments – United States and International. Effective as of the first quarter of 2022, the Company revised its segment reporting from two reportable segments to one reportable segment. Effective as of the fourth quarter of 2022, the Company revised its segment reporting from one reportable segment to two reportable segments – U.S. Marketplace and Digital Wholesale. See Note 13 of these consolidated financial statements for further 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").

While the Company disclosed total revenue in the consolidated income statements in the Company's Annual Report on Form 10-K for the year ended December 31, 2020, filed with the SEC on February 12, 2021, the accompanying consolidated income statements for the year ended December 31, 2020 present revenues disaggregated into marketplace, wholesale, and product revenues to conform to the prior and current year presentation, as a result of the acquisition of a 51% interest in CarOffer.

While the Company disclosed impairment of long-lived assets within depreciation and amortization in the consolidated statements of cash flows in the Company's Annual Report on Form 10-K for the year ended December 31, 2020 filed with the SEC on February 12, 2021, the accompanying consolidated statements of cash flows for the year ended December 31, 2020 present impairment of long-lived assets separately to conform to the prior and current year presentation, as impairments of long-lived assets were material for the year ended December 31, 2021.

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.

Use of Estimates

The preparation of the 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 recognized in the period in which they become known.

Critical estimates relied upon in preparing the consolidated financial statements include the determination of sales allowance and variable consideration in the Company's revenue recognition, allowance for doubtful accounts, the impairment of long-lived assets, the capitalization of product, technology, and development costs for website development, internal-use software and hosting arrangements, the valuation of acquired assets and liabilities, the valuation and recoverability of intangible assets and goodwill, the valuation of redeemable noncontrolling interest, the recoverability of the Company's net deferred tax assets and related valuation allowance, the valuation of inventory, and the valuation of equity and liability-classified compensation awards. Accordingly, the Company considers these to be its critical accounting estimates, and believes that of the Company's significant accounting policies, these involve the greatest 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.

The Company routinely assesses the creditworthiness of its customers and does not require collateral. The Company generally has not experienced any material losses related to receivables from individual customers, or groups of customers. The majority of the Company's accounts receivable results from wholesale and product revenue transactions. The Company has had no material losses related to wholesale and product receivables as it does not release title to the vehicle until successfully collecting funds from the buying dealer. Titling is handled by the Company's payment processor and is held in escrow until it collects funds from the buying dealer (i.e., title is legally transferred from the selling party to the buying party upon signing of bill of sale, but title is held in escrow by the payment processor until payment is received). 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.

As of December 31, 2022, one customer accounted for 13% of net accounts receivable. As of December 31, 2021, two customers accounted for 47% and 18% of net accounts receivable, respectively. The remainder of the accounts receivable was dispersed among more than 1,000 customers. The customers who account for greater than 10% of net accounts receivable are related to wholesale and product receivables. The collection risk associated with these customers is mitigated because, as discussed above, the Company does not release title on vehicles until funds are successfully collected. Furthermore, there is no significant credit risk with respect to accounts receivable because, other than the receivables associated with these customers, credit risk with respect to accounts receivable is dispersed due to the large number of customers.

For the years ended December 31, 2022, 2021, and 2020, no individual customer accounted for more than 10% of total revenue.

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. Investments are carried at cost, which approximates their fair market value.

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, 2022, the Company held no investments.

As of December 31, 2021, 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, as of December 31, 2021, investments were recognized at amortized cost. 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, 2021 and 2020, the Company did not have any premiums or discounts. Realized gains and losses from sales of the Company's investments are recognized within other (expense) income, net in the consolidated income statements. For the years ended December 31, 2021 and 2020, there were no realized gains or losses on investments.

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. For the years ended December 31, 2021 and 2020, the Company determined that no other-than-temporary impairments were required to be recognized in the consolidated income statements.

Restricted Cash

As of December 31, 2022 and 2021, restricted cash was \$14,615 and \$16,336, 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 and pass-through payments from customers related to the Company's wholesale business. As of December 31, 2022 and 2021, portions of restricted cash were classified as short-term assets and long-term assets, as disclosed in the consolidated balance sheets.

Accounts Receivable and Allowance for Doubtful Accounts

Accounts receivable are recorded based on the amount due from the customer and a third-party payment processor. Accounts receivable do not bear interest.

The Company is exposed to credit losses primarily through its trade accounts receivable, which includes receivables in transit from a third-party payment processor. The third-party payment processor collects customer payments on the Company's behalf and remits them to the Company. Customer payments received by the third-party payment processor, but not remitted to the Company as of period end are deemed to be receivables in transit. Additionally, the third-party payment processor provides payments in advance for certain selling dealers. If the third-party payment processor does not receive buying dealer payments associated with the transaction paid in advance, the Company would guarantee losses incurred by the third-party payment processor and the balance would be deducted from future remittances to the Company. To date, losses associated with these guarantees have not been material. Payments received in advance are presented as cash flows from financing activities in the consolidated statements of cash flows.

The Company offsets gross trade accounts receivables in transit from the third-party payment processor with payments received in advance from the third-party payment processor as it has the right of offset. At any point in time, the Company could have amounts due from the third-party payment processor for funds the third-party payment processor has collected from buying dealers and has not yet remitted to the Company (i.e. receivables in transit), as well as amounts paid by the third-party payment processor to the Company in advance of collecting payments from buying dealers (i.e. payments received in advance). Therefore, as the Company has the right to offset, the Company can either have a net receivable balance due from the third-party payment processor which is recognized within accounts receivable, or the Company can have a net liability which is recognized within accrued expenses if the advance payments exceed the receivable position from the third-party payment processor as of the balance sheet date.

As of December 31, 2022, gross trade accounts receivable from receivables in transit from the third-party payment processor was \$7,122, offset by payments received in advance of \$6,490, which resulted in a net receivable of \$632 recognized within accounts receivable, net in the consolidated balance sheets. As of December 31, 2021, gross trade accounts receivable from receivables in transit from the third-party payment processor was \$18,747, offset by payments received in advance of \$46,822, which resulted in a net liability of \$28,075 recognized within accrued expenses, accrued income taxes and other current liabilities in the consolidated balance sheets.

The Company also 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 economic trends and conditions, and reasonable and supportable forecasts of economic conditions. If circumstances relating to specific customers change, or unanticipated changes occur in the general business environment, particularly as it affects auto dealers, the Company's estimates of the recoverability of receivables could be further adjusted.

Provisions for allowances for doubtful accounts are recognized within general and administrative expense in the consolidated income statements. 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. Unbilled accounts receivable generally relate to services rendered in the current period, but not invoiced until the subsequent period.

As of December 31, 2022 and 2021, changes in the Company's allowance for doubtful accounts are as follows:

	<u>Balance at Beginning of Period</u>	<u>Provision</u>	<u>Write-offs, net of recoveries</u>	<u>Balance at End of Period</u>
Year ended December 31, 2022	\$ 420	\$ 1,769	\$ (380)	\$ 1,809
Year ended December 31, 2021	616	999	(1,195)	420

As of December 31, 2022 and 2021, \$7,150 and \$7,356, respectively was included in net accounts receivable, representing unbilled accounts receivable relating primarily to advertising customers invoiced in the period subsequent to services rendered.

Inventory

The Company's inventory consists of inventory acquired through IMCO transactions, at other marketplaces, or in certain situations across all transactions, during arbitrations. The inventory is recognized in the consolidated balance sheets and is valued at the lower of cost or net realizable value. Cost is determined based on specific identification. In recording inventory at the lower of cost or net realizable value, the Company estimates potential future losses on inventory on hand based on historical losses and market trends. Estimated potential future losses on inventory may vary from actual results which could lead to material adjustments to the financial statements.

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 and right-of-use assets are amortized over the lease term, or the estimated useful life of the related asset, if shorter. The estimated useful lives of the Company's property and equipment are as follows:

	Estimated Useful Life (In Years)
Capitalized equipment	3
Capitalized internal-use software	3
Capitalized website development	3
Furniture and fixtures	3 to 5
Right-of-use assets	Lease term, or asset life if shorter
Leasehold improvements	Lease term, or asset life if shorter

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, 2022, the Company wrote off \$165 of Digital Wholesale segment capitalized website development costs within wholesale cost of revenue in the consolidated income statements related to certain developed technology in which the Company has decided to cease investment. For the year ended December 31, 2021, the Company wrote off \$2,481 of U.S. Marketplace segment capitalized website development costs within operating expense in the consolidated income statements and \$647 of U.S. Marketplace segment intangible assets within marketplace cost of revenue in the consolidated income statements related to certain developed technology in which the Company has decided to cease investment. For the year ended December 31, 2020, the Company wrote off \$1,151 of capitalized website development costs, which are included in the Other category of segment reporting, of which \$844 related to the exit of certain international markets in connection with the cost-savings initiative by the Company during the second quarter of 2020 (the "Expense Reduction Plan").

Capitalized Website Development and Capitalized Internal-Use Software Costs

The Company capitalizes certain costs associated with the development of its websites and internal-use software after the preliminary project stage is complete and until the website development or 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 project with the required authority, it is probable the project will be completed, the website development or 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 its website development or software 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 development and capitalized internal-use software costs are recognized within property and equipment, net in the consolidated balance sheets.

Capitalized website development and capitalized internal-use software costs are amortized on a straight-line basis over their estimated useful life of three years beginning with the time when the product is ready for intended use. Amortization expenses related to capitalized website development costs are recognized within cost of revenue in the consolidated income statements. Amortization expenses related to capitalized internal-use software costs are recognized within the operating expense caption for depreciation and amortization in the consolidated income statements. The Company evaluates the useful lives of these assets when each asset is ready for its intended use, and at least annually thereafter to ensure three years remains appropriate. The Company also tests for impairment at least annually and whenever events or changes in circumstances occur that could impact the recoverability of these assets. Impairment is evaluated as discussed in the "Impairment of Long-lived Assets" section above.

During the years ended December 31, 2022 and 2021, capitalized website development costs were \$14,496 and \$8,190, respectively. During the years ended December 31, 2022 and 2021, capitalized internal-use software costs were \$4,388 and \$2,892, respectively.

For the year ended December 31, 2022, 2021, and 2020, amortization expense associated with capitalized website development costs were \$7,637, \$3,705 and \$3,324, respectively. For the year ended December 31, 2022 and 2021, amortization expense associated with capitalized internal-use software costs was \$1,286 and \$272, respectively. For the year ended December 31, 2020, no amortization expense associated with its capitalized internal-use software costs was recognized.

Capitalized Hosting Arrangements

Capitalized implementation costs for hosting arrangements costs are recognized within prepaid expenses, prepaid income taxes and other current assets and within other non-current assets, as applicable, in the consolidated balance sheets.

Capitalized implementation costs for hosting arrangements 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. Amortization expenses related to hosting arrangements costs are recognized within the same line item in the consolidated income statements as the expense for fees for the associated hosting arrangement. The Company evaluates the useful lives of these assets when each asset is ready for its intended use, and at least annually thereafter to ensure the selected useful life remains appropriate. The Company also tests for impairment at least annually and whenever events or changes in circumstances occur that could impact the recoverability of these assets. Impairment is evaluated as discussed in the "Impairment of Long-lived Assets" section above.

During the years ended December 31, 2022, 2021, 2020, and 2019, the Company launched separate initiatives designed to enhance its hosting arrangements related to its enterprise applications. During the years ended December 31, 2022 and 2021, capitalized implementation costs were \$3,196 and \$3,842, respectively, and recognized within other non-current assets and within prepaid expenses, prepaid income taxes and other current assets, respectively, in the consolidated balance sheets.

For the years ended December 31, 2022, 2021, and 2020, amortization expense associated with hosting arrangements was \$2,117, \$1,761, and \$690, respectively, and recognized within operating expense and cost of revenue in the consolidated income statements.

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 reassesses 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 recognized within goodwill.

Intangible Assets

Intangible assets are recognized at their estimated fair value at the date of acquisition. Fair value is determined based on inputs and assumptions such as discount rates, rates of return on assets, and long-term sales growth rates.

The Company amortizes intangible assets over their estimated useful lives on a straight-line basis. Useful lives are established based on analysis of all pertinent factors such as: the expected use of the asset, expected useful lives of related assets, provisions that may limit the useful life, historical experience with similar arrangements, effects of economic factors, demand, competition, obsolescence, and maintenance required to maintain the future cash flows. Amortization is recognized over the relevant estimated useful lives ranging from three to eleven years.

The Company evaluates the useful lives of these assets as of the acquisition date and at least annually thereafter to ensure the selected useful life remains appropriate. 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.

The Company monitors its long-lived assets for impairment indicators on an ongoing basis in accordance with GAAP, and tests for impairment at least annually and whenever events or changes in circumstances occur that could impact the recoverability of these assets. If impairment indicators exist, the Company performs the required impairment analysis by comparing the undiscounted cash flows expected to be generated from the long-lived assets to the related net book values. Impairment is evaluated as discussed in the "Impairment of Long-Lived Assets" section above.

Goodwill

Goodwill is recognized 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 the Company's stock price for a sustained period or a reduction of its market capitalization relative to net book value.

The Company evaluates impairment annually on October 1 by comparing the estimated fair value of each reporting unit to its carrying value. For the first three quarters of fiscal year 2022, the Company determined that it had two reporting units: Marketplace and CarOffer. The Company elected to bypass the optional qualitative test for impairment and proceed to Step 1, which is a quantitative impairment test. The Company estimates fair value using a market approach, based on market multiples derived from public companies that are identified as peers. As of October 1, 2022, the Company estimated forecasted revenue and gross margin for fiscal year 2022, and estimated revenue and gross margin market multiples using publicly available information for each of its reporting units. Developing these assumptions required the use of judgment and estimates. Actual results may differ from these forecasts.

Subsequent to the Company's evaluation of impairment on October 1, 2022, the Company revised its reporting units from two reporting units, Marketplace and CarOffer, to four reporting units, U.S. Marketplace, Digital Wholesale, United Kingdom Marketplace and Canada Marketplace. Because of the change in reporting units, the Company performed an additional goodwill impairment evaluation as of December 31. A consistent methodology was utilized, calculating the fair value of the reporting units using the market approach described previously. Revenue and gross margin actuals were utilized for the year ended December 31, 2022, and estimated revenue and gross margin market multiples were utilized based upon publicly available information for each of the reporting units. Developing these assumptions required the use of judgment and estimates. Actual results may differ from these forecasts.

For the years ended December 31, 2022, 2021, and 2020 the Company did not identify any impairment of its goodwill.

Redeemable Noncontrolling Interest

In connection with the Company's acquisition of a 51% interest in CarOffer on January 14, 2021, the Company became a party with the noncontrolling equity holders of CarOffer to the CarOffer Operating Agreement (as defined in "Stock-Based Compensation" below), which, among other matters, sets forth certain put and call rights described in "Stock-Based Compensation" below. The CarOffer Operating Agreement provides the Company with the right to purchase, and the noncontrolling equity holders with the right to sell to the Company, the noncontrolling CarOffer equity holders' equity interests in CarOffer at a contractually defined formulaic purchase price, which is based on a multiple of earnings. As the purchase is contingently redeemable at the option of the noncontrolling equity holders, the Company classifies the carrying amount of the redeemable noncontrolling interests within the mezzanine section in the consolidated balance sheet, which is presented above the equity section and below the liabilities section. As of the date of Closing (as defined in "Stock-Based Compensation" below), the noncontrolling interest was recognized at fair value computed using the Least Square Monte Carlo Simulation approach. Significant inputs to the model included market price of risk, volatility, correlation and risk-free rate.

Subsequent to the Company's acquisition of the 51% interest on January 14, 2021, the redeemable noncontrolling interest is measured at the greater of the amount that would be paid if settlement occurred as of the balance sheet date based on the contractually defined redemption value and its carrying amount adjusted for net income (loss) attributable to the noncontrolling interest and tax distributions to redeemable noncontrolling interest holders. Adjustments to the carrying value of the redeemable noncontrolling interest resulting from changes in the redemption value are recognized within retained earnings in the consolidated balance sheets.

Leases

The Company recognizes 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 reviews all material contracts for embedded leases to determine if they have a right-of-use asset. The Company made an accounting policy election to apply the practical expedient under ASC Topic 842, Leases, to not separate lease components from non-lease components for all leases.

The Company recognizes rent expense on a straight-line basis over the lease period. The depreciable life of assets and leasehold improvements 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 in 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 to become probable.

The Company recognizes sublease income on a straight-line basis over the sublease period. The Company recognizes sublease income as an offset to rent expense within operating expenses in the consolidated income statements as subleasing is not a primary business activity of the Company and is meant to offset occupancy costs. For the year ended December 31, 2022, the Company recognized sublease income of \$1,809. For the year ended December 31, 2021, there was no sublease income. For the year ended December 31, 2020, the Company recognized sublease income within other (expense) income, net in the consolidated income statements for an immaterial amount.

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 can be reasonably estimated. 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 recognized 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, if material.

Income Taxes

The Company is subject to federal and state income taxes in the United States and taxes in foreign jurisdictions in which it operates. For the years ended December 31, 2022 and 2021, a provision for income taxes was recognized as a result of the consolidated taxable income position.

The Company accounts for income taxes in accordance with the asset and 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 enacted tax rates in effect for the year in which the temporary differences are expected to be recovered or settled.

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. In performing this analysis, the Company considers future taxable income and ongoing prudent and feasible tax planning strategies to assess realizability. Actual results may differ from these forecasts. Valuation allowances are reassessed periodically to determine whether it is more likely than not that the tax benefits will be realized in the future and if any existing valuation allowance should be released. As of December 31, 2022 and 2021, valuation allowances were immaterial.

The Company accounts for uncertain tax positions 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. The Company assesses its income tax positions and recognizes an income tax benefit or expense within the provision for income taxes in the consolidated income statements based upon management's evaluation of the facts, circumstances, and information available at the reporting date. The tax position is measured as the largest amount of benefit or expense that is greater than 50% likely of being realized upon ultimate settlement with the taxing authority during examination. The Company recognizes interest and penalties, if applicable, related to uncertain tax positions as income tax expense within other (expense) income, net in the consolidated income statements. The Company recognizes liabilities related to uncertain tax positions within accrued expenses, accrued income taxes and other current liabilities and other non-current liabilities in the consolidated balance sheets, as applicable depending on if the uncertainty is expected to be resolved within one year or more. The ultimate resolution of these tax positions may be greater or less than the liabilities recognized.

For the year ended December 31, 2022, income tax expense and liability related to uncertain tax positions, exclusive of immaterial interest or penalties related to uncertain tax provisions was \$598, which would favorably affect the Company's effective tax rate, if recognized. For the year ended December 31, 2021, no income tax expense or liability related to uncertain tax positions was recognized.

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.

The US Inflation Reduction Act of 2022 (the "IRA") was passed into law on August 16, 2022. The provisions of the IRA will be effective beginning with fiscal year 2023, with certain exceptions. The IRA has several new provisions including a 15% corporate alternative minimum tax ("CAMT") for certain large corporations that have at least an average of \$1.0 billion of adjusted financial statement income over a consecutive three-tax-year period. The IRA also introduced a 1% excise tax imposed on certain stock repurchases by publicly traded U.S. corporations made after December 31, 2022. Based on the Company's initial evaluation, the Company does not believe the IRA will have a material impact on its income tax provision and cash taxes.

Under the UK Finance Act 2022 that was granted on February 24, 2022, UK corporation tax rate will be increased from 19% to 25% effective April 1, 2023. The Company has evaluated the rate change impact and recognized immaterial deferred tax expense on its UK deferred tax assets and liabilities.

The Company will continue to monitor the changes in tax laws and regulations to evaluate their potential impact on its business.

Fair Value of Financial Instruments

The Company measures eligible assets and liabilities at fair value with changes in value recognized in earnings. 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. During the years ended December 31, 2022 and 2021, 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.

ASC Topic 820, Fair Value Measurements and Disclosures ("ASC 820"), 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.

As of December 31, 2022 and 2021, 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 due to the short-term nature of these instruments.

Debt

The Company may obtain access to capital via credit facilities. The amount of borrowings outstanding on credit facilities are recognized within other current liabilities or other non-current liabilities in the consolidated balance sheets, depending on the borrowing base. Costs for unutilized revolving commitments and interest for outstanding borrowings are recognized as interest expense within other (expense) income, net in the consolidated income statements. Interest payments are recognized within operating activities in the consolidated statement of cash flows, and repayments of principle amounts are recognized within financing activities in the consolidated statement of cash flows.

As of December 31, 2022, there were no borrowings and no letters of credit outstanding under the 2022 Revolver (as defined in Note 7 to these consolidated financial statements).

As of December 31, 2022, commitment fees under the 2022 Revolver were immaterial (as defined in Note 7 to these consolidated financial statements).

Deferred Financing Costs

The Company capitalizes certain legal and other third-party fees that are directly associated with obtaining access to capital via credit facilities. Deferred financing costs incurred in connection with obtaining access to capital are recognized within other non-current assets in the consolidated balance sheets and within financing activities in the consolidated statement of cash flows. These costs are amortized on a straight-line basis over the term of the applicable credit facility and recognized as interest expense within other (expense) income, net in the consolidated income statements and as an adjustment to consolidated net income in the consolidated statement of cash flows.

As of December 31, 2022, deferred financing costs were \$2,442. As of December 31, 2021, no deferred financing costs were recognized.

For the year ended December 31, 2022, amortization expense associated with deferred financing costs was \$136. For the year ended December 31, 2021 and 2020, no amortization expense associated with deferred financing costs was recognized.

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: (i) asset and liability accounts at period-end rates; (ii) income statement accounts at weighted-average exchange rates for the period; and (iii) stockholders' equity accounts at historical exchange rates. The resulting translation adjustments are excluded from consolidated net income and are recognized within accumulated other comprehensive (loss) income in the consolidated balance sheets.

Foreign currency transaction gains and losses are included in consolidated net income for the period. The Company's foreign subsidiaries have intercompany transactions that are eliminated upon consolidation, and these transactions expose the Company to foreign currency exchange rate fluctuations. Exchange rate fluctuations on short-term intercompany transactions are recognized in other (expense) income, net in the consolidated income statements. Exchange rate fluctuations on long-term intercompany transactions are recognized within accumulated other comprehensive loss in the consolidated balance sheets.

Revenue Recognition

Sources of Revenue

The Company derives its revenue from marketplace revenue, wholesale revenue, and product revenue. Marketplace revenue is included in the U.S. Marketplace segment and Other category of segment reporting. Wholesale revenue and product revenue are included in the Digital Wholesale segment. The Company generates marketplace revenue primarily from (i) dealer subscriptions to the Company's Listings packages, Real-time Performance Marketing, or RPM, digital advertising suite, and Digital Retail, (ii) advertising revenue from auto manufacturers and other auto-related brand advertisers, and (iii) revenue from partnerships with financing services companies. The Company generates wholesale revenue primarily from (i) transaction fees earned from facilitating the purchase and sale of vehicles between dealers, or Dealer-to-Dealer transactions, (ii) transaction fees earned from sale of vehicles to dealers that it acquires at other marketplaces, and (iii) transaction fees earned from performing inspection and transportation services, inclusive of Dealer-to-Dealer transactions, other marketplace to dealer transactions, and IMCO transactions (as defined below). The Company generates product revenue primarily from (i) aggregate proceeds received from the sale of vehicles to dealers that were acquired directly from customers, or CarGurus Instant Max Cash Offer, or IMCO transactions, and (ii) proceeds received from the sale of vehicles that were acquired through arbitration.

Revenue Recognition

ASC Topic 606, Revenue from Contracts with Customers ("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 Revenue - Description

The Company offers multiple types of marketplace Listings packages to its dealers for its CarGurus U.S. platform (availability varies on the Company's other marketplaces): Restricted 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 prior to the commencement of the applicable renewal term. Subscription pricing is determined based on a dealer's inventory size, region, and the Company's assessment of the connections and return on investment ("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 have access to the Pricing Tool, Market Analysis tool and IMV Scan tool.

The Company offers paid Listings packages for the Autolist and PistonHeads websites.

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 marketed under the Company's RPM digital advertising suite. Through RPM, dealers can buy advertising that appears in the Company's marketplace, on other sites on the internet, and/or on high-converting social media platforms. Such advertisements can be targeted by the user's geography, search history, CarGurus website activity and a number of other targeting factors, allowing dealers to increase their visibility with in-market consumers and drive qualified traffic for dealers.

The Company also offers dealer advertising products for the PistonHeads website.

The Company also offers dealers subscribing to certain of its Listings packages other subscription advertising and customer acquisition products and enhancements such as Digital Retail, which allows shoppers to complete much of the vehicle-purchase process online through the Dealers' Listings page. Digital Retail is comprised of (i) the Digital Deal Platform, which gives dealers higher quality leads through upfront consumer-provided information, (ii) Area Boost/Geo Expansion, which expands the visibility of a dealer's inventory in the search results beyond its local market, and (iii) Hard Pull Financing, which provides loan information.

Marketplace revenue also consists of non-dealer 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, or CPC basis. Pricing is primarily based on advertisement size and position on the Company's websites and mobile applications. 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. Advertising is also sold indirectly through revenue sharing arrangements with advertising exchange partners.

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

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

Marketplace Revenue - Revenue Recognition

For Listings, Digital Retail, and RPM, 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 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 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. Dealer customers do not have the right to take possession of the Company's software. 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 circumstances 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 recognized 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. Customers are billed in advance on the first day of each calendar month with payment terms generally thirty to sixty days from the date invoiced. Billings are recognized as accounts receivable or short-term deferred revenue when payment is received in advance of services being delivered to the customers.

For non-dealer advertising revenue from auto manufacturers and other auto-related brand advertisers, 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 generally 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 and is allocated to the period in which the service was rendered. 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. Although these credits have not been material and have not changed significantly over the historical period, estimated sales adjustments credits and losses may vary from actual results which could lead to material adjustments to the financial statements.

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 because the Company is the principal in the arrangement as it controls the ad placement and timing of the campaign, establishes the selling price and is directly responsible for the fulfillment of the contractual terms including any remedy for issues with such fulfillment. Revenue from advertising sold by partners is recognized based on the net amount of revenue received from the content partners because the Company is the agent in the arrangement as 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. 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. Revenue is presented net of any taxes collected from customers. Customers are billed monthly in arrears with payment terms generally thirty to sixty days from the date invoiced. Unbilled accounts receivable generally relate to services rendered in the current period, but not invoiced until the subsequent period.

Other marketplace 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, primarily related to the Company's partnerships with financing services companies, 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.

Wholesale Revenue - Description

The Buying Matrix on the CarOffer platform enables buying dealers to create standing buy orders and provides instant offers to selling dealers. Wholesale revenue includes transaction fees earned from Dealer-to-Dealer transactions, where the Company collects fees from both the buying and selling dealers. The Company also sells vehicles to dealers that it acquires at other marketplaces, where it collects a transaction fee from the buying dealers.

Wholesale revenue also includes fees earned from performing inspection and transportation services, where it collects fees from the buying dealer. Inspection and transportation service revenue is inclusive of Dealer-to-Dealer transactions, other marketplace to dealer transactions, and IMCO transactions.

Wholesale revenue also includes arbitration in which the vehicle is rematched to a new buyer and not acquired by the Company. Arbitration is the process by which the Company investigates and resolves claims from buying dealers.

Wholesale revenue also includes fees earned from certain guarantees offered to dealers (which include 45-Day Guarantee and OfferGuard products), where the Company collects fees from the buying dealer or selling dealer, as applicable. Guarantee revenue is not accounted for under ASC 606 and is accounted for under ASC 460 as discussed further in Note 2 of these consolidated financial statements.

Wholesale Revenue - Revenue Recognition

When facilitating Dealer-to-Dealer transactions and for vehicles sold to dealers that are acquired at other marketplaces, the Company does not control the vehicle and therefore acts as an agent in the transaction. Revenue earned from the fees for facilitating these transactions is recognized at a point in time when the vehicle is sold on a net basis.

For inspection and transportation services, the Company leverages a network of third-party inspection service providers and transportation carriers. The Company controls both inspection and transportation services as it is primarily responsible for fulfillment and therefore acts as a principal in the transaction. Revenue from fees for inspection services is recognized at the point in time when the inspection is performed and revenue from fees for transportation services is recognized over time as delivery is completed. Revenue from both inspection and transportation services is recognized on a gross basis. Unearned revenue related to unsatisfied performance obligations is recognized as deferred revenue.

Wholesale revenue also includes arbitration in which the vehicle is rematched to a new buyer and not acquired by the Company. Arbitration is the process by which the Company investigates and resolves claims from buying dealers. In these situations, the Company does not control the vehicle and therefore acts as an agent in the transaction.

Within wholesale transactions, there are typically no contractual cash refund rights, but credits may be issued to a customer at the sole discretion of the Company and refunds may be required by law in the case of a vehicle defect. At the portfolio level, there is also variable consideration that needs to be included in the transaction price. Variable consideration consists of sales allowances 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 or arbitration. 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. Upon recognizing a sales transaction, the Company estimates the amount of transaction price that will be reversed in a subsequent period and records a reserve for returns and cancellations in other current liabilities in the consolidated income 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 recognized as a reduction to revenue in the consolidated income statements and an increase to other current assets and other current liabilities in the consolidated balance sheet. Wholesale revenue is also offset by concessions.

Wholesale revenue is presented net of any taxes collected from customers.

Product Revenue - Description

The Buying Matrix on the CarOffer platform enables consumers who are selling vehicles to be instantly presented with an offer. Product revenue includes the aggregate proceeds received from the sale of vehicles through IMCO transactions, including vehicle sale price and transaction fees collected from the buying dealers. Product revenue also includes proceeds received from the sale of vehicles acquired through arbitration, including vehicle sale price and transaction fees collected from buying dealers. Arbitration is the process by which the Company investigates and resolves claims from buying dealers. The Company controls the vehicle in these transactions and therefore acts as the principal.

Product - Revenue Recognition

For vehicles sold to dealers that are acquired through IMCO transactions, the Company controls the vehicle and therefore acts as a principal in the transaction. Revenue earned from proceeds received on the sale of vehicles through IMCO transactions, including vehicle sale price and transaction fees collected from the buying dealers, is recognized at a point in time when the vehicle is sold on a gross basis.

In certain situations across all transactions, during an arbitration process, the Company acquires vehicles in transactions in which it controls the vehicle and therefore acts as a principal in the transaction. Revenue earned from the sale of the vehicle in these transactions is recognized at a point in time on a gross basis.

Within product transactions, there are typically 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 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 or arbitration. 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. Upon recognizing a sales transaction, the Company estimates the amount of transaction price that will be reversed in a subsequent period and records a reserve for returns and cancellations in other current liabilities in the consolidated income 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 recognized as a reduction to revenue and cost of revenue in the consolidated income statements and an increase to other current assets and other current liabilities in the consolidated balance sheet. Product revenue is also offset by concessions.

Product revenue presented net of any taxes collected from customers.

Contracts with Multiple Performance Obligations

The Company periodically enters into arrangements that include Listings and/or dealer advertising product subscriptions within marketplace 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/or dealer advertising product subscriptions, the performance obligations were satisfied over a consistent period of time and therefore the allocations did not impact the revenue recognized.

For wholesale and product arrangements that include multiple performance obligations, the Company allocates revenue based on fair value. Vehicle and inspection revenues are recognized at a point in time and transportation revenue is recognized over time.

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 and wholesale and product transactions 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. 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.

As of December 31, 2022 and 2021, assets associated with costs to obtain a contract were \$17,394 and \$14,912, respectively. For the years ended December 31, 2022, 2021, and 2020, amortization expense associated with costs to obtain a contract was \$11,067, \$12,653 and \$11,605, 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 recognized as current deferred revenue and the remaining portion is recognized as noncurrent in the consolidated balance sheets. All deferred revenue was recognized as current for all periods presented.

Marketplace Cost of Revenue

Marketplace cost of revenue includes expenses related to supporting and hosting marketplace service offerings. These expenses include personnel and related expenses for the Company's customer support team, including salaries, benefits, incentive compensation, and stock-based compensation; third-party service provider expenses such as advertising, data center and networking expenses; amortization of developed technology; amortization of capitalized website development; amortization of hosting arrangements; and allocated overhead expenses. The Company allocates overhead expenses, such as rent and facility expenses, information technology expense, and employee benefit expense, to all departments based on headcount. As such, general overhead expenses are reflected in cost of revenue and each operating expense category.

Wholesale Cost of Revenue

Wholesale cost of revenue includes expenses related to supporting and hosting wholesale service offerings, including Dealer-to-Dealer transactions and vehicles sold to dealers acquired at other marketplaces, on the Buying Matrix on the CarOffer platform. These expenses include vehicle transportation and inspection expenses; net losses on vehicles related to guarantees offered to dealers through Dealer-to-Dealer transactions; personnel and related expenses for employees directly involved in the fulfillment and support of transactions, including salaries, benefits, incentive compensation and stock-based compensation; third-party service provider expenses; amortization of developed technology; amortization of capitalized website development; and allocated overhead expenses. The Company allocates overhead expenses, such as rent and facility expenses, information technology expense, and employee benefit expense, to all departments based on headcount. As such, general overhead expenses are reflected in cost of revenue and each operating expense category.

Product Cost of Revenue

Product cost of revenue includes expenses related to vehicles sold to dealers through IMCO transactions and vehicles sold to dealers acquired through arbitration. These costs include the cost of the vehicle and transportation expenses.

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, guarantees, indemnification, and other common provisions.

The Company provides certain guarantees to dealers through products such as its 45-Day Guarantee and OfferGuard service offerings on the CarOffer platform, which are accounted for under ASC Topic 460, *Guarantees*.

45-Day Guarantee is an arrangement through which a selling dealer lists a car on the CarOffer platform, and the Company provides an offer to purchase the vehicle listed at a specified price at any time over a 45-day period. This provides the seller with a put option, where they have the right, but not the obligation, to require the Company to purchase the vehicle during this window. OfferGuard is an arrangement through which a buying dealer purchases a car on the CarOffer platform, and the Company provides an offer to purchase the vehicle at a specified price between days 1 and 3, and days 42 and 45 if the dealer is not able to sell the vehicle after 42 days.

A guarantee liability is initially measured using the amount of consideration received from the dealer for the purchase of the guarantee. The initial liability is released, and guarantee income is recognized, upon the earliest of the following: the vehicle sells during the guarantee period, the seller exercises its put option during the guarantee period, or the option expires unexercised at the end of the guarantee period. Guarantee income is recognized within wholesale revenue in the consolidated income statements. When it is probable and reasonably estimable that the Company will incur a loss on a vehicle that it is required to purchase, a liability, and a corresponding charge to wholesale cost of revenue is recognized for the amount of the loss in the consolidated balance sheets and the consolidated income statements. Gains and losses resulting from the dealers exercise of guarantees are recognized within wholesale cost of revenue, as appropriate, in the consolidated income statements.

For the years ended December 31, 2022 and 2021, income for guarantees purchased by dealers was \$10,026 and \$5,537, respectively. For the year ended December 31, 2022, the loss, net of gains recognized within cost of revenue in the consolidated income statements resulting from the dealer's exercise of guarantees was \$4,568. For the year ended December 31, 2021, the net loss resulting from the dealer's exercise of guarantees was immaterial.

As of December 31, 2022, the maximum potential amount of future payments that the Company could be required to make under these guarantees was \$31,056. Of the maximum potential amount of future payments, the losses that are probable are not material. As such, as of December 31, 2022, the Company had no material contingent loss liabilities.

As of December 31, 2021, the maximum potential amount of future payments that the Company could be required to make under these guarantees was \$76,075. Of the maximum potential amount of future payments, none were considered probable. The exercise of guarantees has historically been infrequent and even when such exercises did occur, the losses were immaterial. As such, as of December 31, 2021, the Company had no contingent loss liabilities.

As of December 31, 2020, the Company did not have any guarantees.

Stock-Based Compensation

For stock-based awards granted under the Company's stock-based compensation plans, the fair value of each award is determined on the date of grant.

For restricted stock units ("RSUs") granted subject to service-based vesting conditions, the fair value is determined on the date of grant using the closing price of the Company's Class A common stock, par value \$0.001 per share (the "Class A common stock"), as reported on the Nasdaq Global Select Market. RSUs granted subject to service-based vesting conditions generally vest over a four-year requisite service period.

For RSUs granted subject to market-based vesting conditions, the fair value is determined on the date of grant using the Monte Carlo simulation lattice model. The determination of the fair value using this model is affected by the Company's stock price performance relative to the companies listed on the S&P 500 as of December 31, 2021 and 2020 and a number of assumptions including volatility, correlation coefficient, risk-free interest rate and expected dividends. RSUs granted subject to market-based vesting conditions vest upon achievement of specified levels of market conditions. During the year ended December 31, 2022, the Company modified its market-based performance awards to contain only service-based vesting conditions in line with the Company's other restricted stock unit awards. As a result, there are no market-based RSUs outstanding as of December 31, 2022.

For stock options granted, the fair value is determined on the date of grant using the Black-Scholes option-pricing model. The determination of the fair value is affected by the Company's stock price and a number of assumptions including expected dividend yield, expected volatility, risk-free interest rate and expected term. For expected volatility, the Company uses a blended volatility to combine the historical volatility of trading with the volatility for a peer group of companies as the Company does not have historical stock prices for a period that is at least equal to the expected term. Stock options granted generally have a term of ten years from the date of grant and generally vest over a four-year requisite service period.

The weighted average assumptions utilized to determine the fair value of options granted during the year ended December 31, 2022 and 2021 are as follows:

	Year Ended December 31,	
	2022	2021
Expected dividend yield	—	—
Expected volatility	48.03 %	50.95 %
Risk-free interest rate	1.47 %	0.69 %
Expected term (in years)	6.11	6.06

During the year ended December 31, 2020, no options were granted.

On January 14, 2021, the Company acquired a 51% interest in CarOffer which provides an automated instant vehicle trade platform and is based in Addison, 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”). This acquisition (the “CarOffer Acquisition”) has, and is intended to continue 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 \$173,155 (the “Total Consideration”), such Total Consideration consisting of (a) shares of Class A common stock in the aggregate amount of \$103,645 (the “Stock Consideration”) and (b) \$69,510 in cash (the “Cash Consideration”). The number of shares of 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 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 retained by the then-current equity holders of CarOffer and subject to certain call and put arrangements discussed below.

Pursuant to the Purchase Agreement, the Company established a retention pool in an aggregate amount of \$8,000 in the form of RSUs to be issued pursuant to the Company’s standard form of RSU agreement under the 2017 Plan, (i) \$6,000 of which was granted to certain CarOffer employees following the Closing in accordance with the terms of the Purchase Agreement and (ii) \$2,000 of which is available for issuance to future CarOffer employees in accordance with the terms of the Purchase Agreement. RSUs issued from the retention pool will be subject to vesting based on rendering of future services.

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 as of 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. On November 23, 2021, the CarOffer Operating Agreement was amended and restated for administrative purposes, including principally to recapitalize certain of the membership units thereunder without changing overall consideration payable by the Company thereunder.

In the second half of 2022, the Company had 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, included as Exhibit 10.27 to the Annual Report on Form 10-K as of December 31, 2021 filed on February 25, 2022). During the year ended December 31, 2022, the Company determined not to exercise its call right to acquire up to an additional 25% of the fully diluted capitalization of CarOffer.

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 Class A common stock, as determined by the Company in its sole discretion.

The foregoing summary of the Purchase Agreement, the CarOffer Operating Agreement and the transactions contemplated thereby does not purport to be complete and is subject to, and qualified in their entirety by, the full text of the Purchase Agreement and the CarOffer Operating Agreement, which are included as Exhibit 2.1 to the Annual Report on Form 10-K as of December 31, 2020 filed on February 21, 2021 and Exhibit 10.27 to the Annual Report on Form 10-K as of December 31, 2021 filed on February 25, 2022, respectively.

In connection with the Company’s acquisition of a 51% interest in CarOffer, the then-outstanding unvested incentive units (“CO Incentive Units”) of CarOffer and unvested Class CO CarOffer units (the “Subject Units”) remained outstanding and will vest over the requisite service periods as discussed below.

Grants of the CO Incentive Units are subject to the CarOffer 2020 Equity Incentive Plan, adopted effective November 24, 2020 (the “2020 CO Plan”), the applicable award agreement, and the CarOffer Operating Agreement. Following the Company’s acquisition of the 51% interest in CarOffer on January 14, 2021, remaining unvested CO Incentive Units will vest over a period of three (3) years, with one third having vested on January 14, 2022 and one third vesting on each of January 14, 2023 and January 14, 2024, provided that a grantee’s continuous service to CarOffer has not terminated on the applicable vesting date. Under the terms of the grants, vesting of unvested CO Incentive Units is accelerated in the event of (i) a change of control of CarOffer (which, for the avoidance of doubt, does not include the Company’s acquisition of the 51% interest on January 14, 2021), (ii) the death or disability of the grantee, (iii) termination of the grantee’s employment with CarOffer without cause, or (iv) termination of grantee’s employment by the grantee for good reason. Upon termination of a grantee’s continuous service to CarOffer voluntarily by the grantee (other than for good reason) or by CarOffer for cause, all of such grantee’s unvested CO Incentive Units are forfeited. In addition, if a grantee’s continuous service terminates, then CarOffer has the option to repurchase any outstanding CO Incentive Units from the grantee.

In addition to the 2020 CO Plan, on December 9, 2020 CarOffer entered into a Vesting Agreement (the “Vesting Agreement”) regarding the vesting of Subject Units beneficially owned by Bruce Thompson, the founder and CEO of CarOffer, and certain affiliated persons (collectively, the “T5 Holders”) in connection with the Company’s then-anticipated acquisition of a 51% interest in CarOffer. Pursuant to the Vesting Agreement, 432,592 Subject Units beneficially owned by the T5 Holders vest in three (3) approximately equal installments, with one third having vested on January 14, 2022 and one third vesting on each of January 14, 2023 and January 14, 2024, subject to the terms of the Vesting Agreement. As more particularly described in the Vesting Agreement, unvested Subject Units are subject to forfeiture in the event that Mr. Thompson’s relationship with CarOffer terminates other than in the event of a termination without cause (as defined in the Vesting Agreement) or due to Mr. Thompson’s death or disability. The Vesting Agreement also provides for acceleration of any unvested Subject Units in the event of the termination of Mr. Thompson’s employment with CarOffer without cause, Mr. Thompson’s death or disability, or the consummation of an eligible liquidity event (as defined in the Vesting Agreement).

In connection with the Closing, CarOffer reserved 228,571 incentive units (the "2021 Incentive Units") for purposes of establishing an employee incentive equity plan. Thereafter, CarOffer formed CarOffer Incentive Equity, LLC ("CIE"), a Delaware manager-managed limited liability company managed by the Company, and established the CIE 2021 Equity Incentive Plan (the "2021 CO Plan"). The 2021 CO Plan and related documentation, including the applicable award agreement, a vesting agreement between CarOffer and CIE, and the CarOffer Operating Agreement, provide for an incentive equity grant structure whereby 2021 Incentive Units will be granted to CIE and 2021 CO Plan grantees will receive an associated equity interest in CIE (the "CIE Interest"), with back-to-back vesting between the 2021 Incentive Units and the associated CIE Interest. Subject to any modifications as may be approved by the CarOffer Board of Managers in its discretion, grants under the 2021 CO Plan will vest over a period of three (3) years from the grant date, one third each on the first, second, and third anniversaries of the applicable grant date, provided that a grantee's continuous service to CarOffer has not terminated on the applicable grant date. Upon termination of a grantee's continuous service to CarOffer, all of such grantee's unvested 2021 Incentive Units are forfeited. As of December 31, 2022 and 2021, there had not been any grants of 2021 Incentive Units under the 2021 CO Plan.

CO Incentive Units, Subject Units and 2021 Incentive Units are liability-classified awards because the awards can be put to the Company at a formula price such that the holders do not bear the risks and rewards associated with equity ownership. For liability-classified awards, the fair value was determined on the date of issuance using a Least Square Monte Carlo simulation model. Liability-classified awards are remeasured to fair value each period until settlement. Until March 31, 2022, the Least Square Monte Carlo simulation model was used for remeasurement. During the three months ended June 30, 2022, the Company refined its model for determining the fair value of liability-classified awards as a result of obtaining gross profit actuals through the trailing twelve-months ended June 30, 2022 measurement period for the first call option. Since March 31, 2022, the fair value has typically been determined using a Monte Carlo simulation model. During the year ended December 31, 2022, the Company determined not to exercise the Company's call right to acquire up to an additional 25% of the fully diluted capitalization of CarOffer. The valuation of these liability awards is now derived from the Company's 2024 call right and CarOffer's 2024 put right. The determination of the fair value is affected by CarOffer's equity value, EBITDA, and Excess Parent Capital (as defined in the CarOffer Operating Agreement, included as Exhibit 10.27 to the Annual Report on Form 10-K as of December 31, 2021 filed on February 25, 2022) that drive the exercise price of future call/put rights, as well as a number of assumptions including market price of risk, volatility, correlation, and risk-free interest rate. As a result of the EBITDA and Excess Parent Capital projections for CarOffer as of December 31, 2022, a Monte Carlo simulation model was not required as of December 31, 2022. The Company will continue to assess its valuation approach quarterly. The Company recognizes stock compensation expense on a cumulative catch-up basis based on the fair value of the liability awards at each reporting period.

The Company issues shares of Class A common stock upon the vesting of RSUs and the exercise of stock options out of its shares available for issuance. The Company issues CO Incentive Units and Subject Units out of CarOffer's units available for issuance. The Company accounts for forfeitures when they occur.

The Company recognizes compensation expense on a straight-line basis over the requisite service period.

The tax effect of differences between tax deductions related to stock compensation and the corresponding financial statement expense compensation are recognized as an income tax benefit or expense within the provision for income taxes in the consolidated income statements. The permanent differences, including excess tax benefits and expenses, are recognized within accrued expenses, accrued income taxes, and other current liabilities in the consolidated balance sheets and classified as an operating activity in the consolidated statements of cash flows. The temporary differences are recognized within deferred tax assets in the consolidated balance sheets.

For the year ended December 31, 2022 and 2021, the income tax expense related to stock-based compensation was \$4,181 and \$1,179, respectively. For the year ended December 31, 2020, income tax expense related to stock-based compensation was immaterial.

As of December 31, 2022, 2021, and 2020, the income tax benefit from stock-based compensation expense, recognized through the Company's deferred tax asset in the consolidated balance sheets, was \$5,441, \$5,301, and \$4,796, respectively.

See Note 10 of these consolidated financial statements for a summary of the stock option, RSU and CO Incentive Unit activity for the year ended December 31, 2022.

Common Stock Share Repurchases

Repurchases of the Company's common stock are recognized as a reduction to common stock at par value and the remainder is recognized as a reduction to additional paid-in capital in the consolidated balance sheets. Repurchases in excess of the par value are recognized as a reduction to retained earnings in the consolidated balance sheets in the event that additional paid-in capital is reduced to zero.

If there is a difference between the trade date and the settlement date for shares repurchased as of period end, a liability is recognized within accrued expenses, accrued income taxes and other current liabilities in the consolidated balance sheets.

As a result of the US Inflation Reduction Act of 2022 (the "IRA"), effective on January 1, 2023, the Company will be required to pay a 1% excise tax on certain stock repurchases. Based on the Company's initial evaluation, the Company does not believe the IRA will have a material impact on its income tax provision and cash taxes. The excise tax is considered a direct and incremental cost of the share repurchase and will be recognized as a reduction to additional paid-in capital in the consolidated balance sheets. Other direct and incremental costs, such as commissions and legal expenses, are recognized as a reduction to additional paid-in capital in the consolidated balance sheets.

Advertising Costs

Advertising costs are expensed as incurred and recognized within sales and marketing expense in the consolidated income statements. For the years ended December 31, 2022, 2021, and 2020, advertising expense was \$156,128, \$151,457, and \$155,580, 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 consolidated net income and other comprehensive income (loss), which includes certain changes in equity that are excluded from consolidated net income. Specifically, cumulative foreign currency translation adjustments are included in accumulated other comprehensive (loss) income. As of December 31, 2022 and 2021, accumulated other comprehensive (loss) income is presented separately in the consolidated balance sheets and consists entirely of cumulative foreign currency translation adjustments.

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. As of December 31, 2022, there are no new accounting pronouncements that the Company is considering adopting.

3. Revenue Recognition

The following table summarizes revenue from contracts with customers by services and products for the year ended December 31, 2022, 2021, and 2020:

	Year Ended December 31,		
	2022	2021	2020
Marketplace	\$ 658,771	\$ 636,942	\$ 551,451
Dealer-to-Dealer	320,119	224,831	—
IMCO	676,145	89,600	—
Total	<u>\$ 1,655,035</u>	<u>\$ 951,373</u>	<u>\$ 551,451</u>

The Company provides disaggregation of revenue by services and products, by income statement presentation, by segment, and by geographical region.

Revenue by services and products is disaggregated by (i) marketplace services, (ii) Dealer-to-Dealer services and products, and (iii) IMCO services and products as disclosed above.

Revenue by income statement presentation is disaggregated by (i) marketplace, (ii) wholesale, and (iii) product revenue sources as disclosed in the consolidated income statements. Marketplace services are included within marketplace revenue in the consolidated income statements. The Dealer-to-Dealer and IMCO services and products are included within both wholesale revenue and product revenue in the consolidated income statements.

Revenue by segment is disaggregated by (i) U.S. Marketplace and (ii) Digital Wholesale segments as disclosed in Note 13 of these consolidated financial statements. Marketplace services are included in the U.S. Marketplace segment and in the Other category of segment reporting. The Dealer-to-Dealer and IMCO services and products are included in the Digital Wholesale segment.

Revenue by geographic region is disaggregated by (i) United States and (ii) International regions as disclosed in Note 13 of these consolidated financial statements.

The Company believes these categories best depict how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors.

ASC Topic 606, Revenue from Contracts with Customers (“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 of 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, 2022 was approximately \$7.2 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, 2022. For performance obligations not satisfied as of December 31, 2022, 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, 2022.

For the year ended December 31, 2022 and 2021, revenue recognized from amounts included in deferred revenue at the beginning of the period was \$12,784 and \$9,137, 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 revenue. These fee reductions did not impact revenue for the year ended December 31, 2022. These fee reductions did not materially impact revenue for the year ended December 31, 2021. 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 are included in the Company’s variable consideration assessment. These fee reductions did not impact revenue for the years ended December 31, 2022. These fee reductions did not materially impact revenue for the years ended December 31, 2021 and 2020.

4. Fair Value of Financial Instruments

As of December 31, 2022 and 2021, assets measured at fair value on a recurring basis consist of the following:

	As of December 31, 2022			
	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	\$ 175,486	\$ —	\$ —	\$ 175,486
Total	\$ 175,486	\$ —	\$ —	\$ 175,486

	As of December 31, 2021			
	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	\$ 157,525	\$ —	\$ —	\$ 157,525
Investments:				
Certificates of deposit	—	90,000	—	90,000
Total	\$ 157,525	\$ 90,000	\$ —	\$ 247,525

As of December 31, 2022, the Company did not hold any investments. As of December 31, 2021, investments consist of the following:

	As of December 31, 2021			
	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Investments:				
Certificates of deposit due in one year or less	\$ 90,000	\$ —	\$ —	\$ 90,000
Total	\$ 90,000	\$ —	\$ —	\$ 90,000

5. Property and Equipment, Net

As of December 31, 2022 and 2021, property and equipment, net consist of the following:

	As of December 31,	
	2022	2021
Capitalized equipment	\$ 7,877	\$ 8,349
Capitalized internal-use software	7,429	3,041
Capitalized website development	36,369	22,037
Furniture and fixtures	8,615	8,615
Leasehold improvements	24,225	24,082
Construction in progress	4,161	854
Finance lease right-of-use assets	420	556
	89,096	67,534
Less accumulated depreciation and amortization	(48,968)	(35,324)
Total	\$ 40,128	\$ 32,210

For the year ended December 31, 2022, 2021, and 2020, depreciation and amortization expense, excluding amortization of intangible assets, amortization of capitalized hosting arrangements, and write offs, was \$14,618, \$10,324 and \$8,198, respectively.

For the year ended December 31, 2022, the Company wrote off \$165 of Digital Wholesale segment capitalized website development costs within wholesale cost of revenue in the consolidated income statements related to certain developed technology in which the Company has decided to cease investment. For the year ended December 31, 2021, the Company wrote off \$2,481 of U.S. Marketplace segment of capitalized website development costs within operating expense in the consolidated income statements related to certain developed technology in which the Company has decided to cease investment. For the year ended December 31, 2020, the Company wrote off \$1,151 of capitalized website development costs, which are included in the Other category of segment reporting, of which \$844 related to the exit of certain international markets in connection with the Expense Reduction Plan.

As of December 31, 2022, capitalized website development costs increased \$14,332 due to continued investment in the Company's product offerings. Capitalized internal-use software costs increased \$4,388 due to additions related to internal engineering and development tools. Construction in progress increased \$3,307 due to the development of the Company's future headquarters at 1001 Boylston, as discussed in Note 9 to these consolidated financial statements.

6. Goodwill and Other Intangible Assets

Goodwill

As of December 31, 2022, changes in the carrying value of goodwill are as follows:

	U.S. Marketplace	Digital Wholesale	Other	Total
Balance as of December 31, 2021	\$ 12,477	\$ 130,451	\$ 15,359	\$ 158,287
Foreign currency translation adjustment	—	—	(820)	(820)
Balance as of December 31, 2022	\$ 12,477	\$ 130,451	\$ 14,539	\$ 157,467

The Company assessed its goodwill for impairment and did not identify any impairment as of December 31, 2022.

Other Intangible Assets

As of December 31, 2022 and 2021, intangible assets consist of the following:

	As of December 31, 2022				
	Weighted Average Remaining Useful Life (years)	Gross Carrying Amount	Accumulated Amortization	Accumulated Impairment	Net Carrying Amount
Brand	8.4	\$ 32,129	\$ 7,227	\$ —	\$ 24,902
Customer relationships	1.0	19,870	13,609	—	6,261
Developed technology	1.0	65,212	42,674	647	21,891
Total		\$ 117,211	\$ 63,510	\$ 647	\$ 53,054

	As of December 31, 2021				
	Weighted Average Remaining Useful Life (years)	Gross Carrying Amount	Accumulated Amortization	Accumulated Impairment	Net Carrying Amount
Brand	9.4	\$ 32,274	\$ 4,206	\$ —	\$ 28,068
Customer relationships	2.0	19,870	7,314	—	12,556
Developed technology	2.0	65,212	21,274	647	43,291
Total		\$ 117,356	\$ 32,794	\$ 647	\$ 83,915

For the year ended December 31, 2022, 2021, and 2020, amortization of intangible assets was \$30,716, \$30,152, and \$1,993, respectively.

For the year ended December 31, 2021, the Company wrote off \$647 of U.S. Marketplace segment intangible assets within marketplace cost of revenue in the consolidated income statements related to certain developed technology which the Company has decided to cease investment.

As of December 31, 2022, estimated amortization expense of intangible assets for future periods is as follows:

Year Ending December 31,	Amortization Expense
2023	30,141
2024	4,066
2025	3,028
2026	3,028
2027	3,028
Thereafter	9,763
Total	<u>\$ 53,054</u>

7. Accrued Expenses, Accrued Income Taxes and Other Current Liabilities and Other Non-Current Liabilities

As of December 31, 2022 and 2021, accrued expenses, accrued income taxes and other current liabilities consist of the following:

	As of December 31,	
	2022	2021
Accrued bonus	\$ 11,007	\$ 11,777
Accrued tax distributions to redeemable noncontrolling interest holders	16	8,701
Receivables in transit, net of payments received in advance from the third-party payment processor	—	28,075
Other accrued expenses and other current liabilities	28,170	30,033
Total	<u>\$ 39,193</u>	<u>\$ 78,586</u>

The decrease of \$28,075 in the receivables in transit, net of payments received in advance from third-party payment processors is due to the timing of payments remitted by the third-party.

The decrease of \$8,685 in the accrued tax distributions to redeemable noncontrolling interest holders is due to cash settlement of the balance as of December 31, 2021 during the year ended December 31, 2022.

As of December 31, 2022 and 2021, other non-current liabilities consist of the following:

	As of December 31,	
	2022	2021
CO Incentive Unit and Subject Unit liability-classified awards	\$ —	\$ 21,095
Other non-current liabilities	5,301	2,544
Total	<u>\$ 5,301</u>	<u>\$ 23,639</u>

In connection with the Company's acquisition of a 51% interest in CarOffer, the then-outstanding unvested CO Incentive Units and unvested Subject Units remained outstanding. The decrease of \$21,095 related to CO Incentive Unit and Subject Unit liability-classified awards is due to a decrease in the valuation of the awards to zero, following the mark to market valuation adjustments.

8. Debt

As of December 31, 2022 and 2021, the Company had no long-term debt outstanding.

Revolving Credit Facility

On September 26, 2022, the Company entered into a Credit Agreement (the “Credit Agreement”) by and among the Company, PNC Bank, National Association, as administrative agent and collateral agent and an L/C Issuer (as defined in the Credit Agreement), and the other lenders, L/C Issuers and parties thereto from time to time. The Credit Agreement consists of the 2022 Revolver, which allows the Company to borrow up to \$400.0 million, \$50.0 million of which may be comprised of a letter of credit sub-facility. The borrowing capacity under the Credit Agreement may be increased in accordance with the terms and subject to the adjustments as set forth in the Credit Agreement. For example, the borrowing capacity may be increased by an amount up to the greater of \$250.0 million or 100% of Four Quarter Consolidated EBITDA (as defined in the Credit Agreement) if certain criteria are met and subject to certain restrictions. Any such increase requires lender approval. Proceeds of any borrowings may be used for general corporate purposes. The 2022 Revolver is scheduled to mature on September 26, 2027.

The applicable interest rate is, at the Company's option, based on a number of different benchmark rates and applicable spreads, based on the ratio of the outstanding principal amount of the Company's secured indebtedness to the trailing four quarters of consolidated EBITDA (as determined under the Credit Agreement, the “Consolidated Secured Net Leverage Ratio”). The Credit Agreement also requires the Company to pay a commitment fee to the lenders with respect of the unutilized revolving commitments at a rate ranging from 0.125% to 0.175% per annum based on the Consolidated Secured Net Leverage Ratio, as determined on a quarterly basis.

The 2022 Revolver is secured by a first priority lien on substantially all tangible and intangible property of the Company and its subsidiary, Auto List, Inc., as well as any future guarantors, and pledges of the equity of CarOffer and certain wholly-owned subsidiaries, in each case subject to certain exceptions, limitations and exclusions from the collateral. The Credit Agreement includes customary events of default and requires the Company to comply with customary affirmative and negative covenants, including a financial covenant requiring that the Company not exceed certain Consolidated Secured Net Leverage Ratio ranges at the end of each fiscal quarter. The Company was in compliance with all covenants as of December 31, 2022.

As of December 31, 2022, there were no borrowings and no letters of credit outstanding under the 2022 Revolver.

As of December 31, 2022, commitment fees under the 2022 Revolver were immaterial.

9. Commitments and Contingencies

Contractual Obligations and Commitments

As of December 31, 2022, all of the Company's property, equipment, and externally sourced internal-use software have been purchased with cash with the exception of amounts related to unpaid property and equipment, capitalized website development, capitalized internal-use software and capitalized hosting arrangements and amounts related to obligations under finance leases as disclosed in the consolidated statements of cash flows. The Company has no material long-term purchase obligations outstanding with any vendors or third parties.

Leases

The Company's lease obligations consist of various leases for office space in: Boston, Massachusetts; Cambridge, Massachusetts; San Francisco, California; Addison, Texas; Plano, Texas; Detroit, Michigan; Raleigh, North Carolina; and Dublin, Ireland. The Company's leases in Plano, Texas, Detroit, Michigan, and Raleigh, North Carolina are immaterial.

The Company has non-cancellable lease terms through 2033 for its various commenced operating leases, certain of which include the option to extend the lease term up to two additional periods of five years. Additionally, certain leases provide for annual rent increases through the terms of the leases, leasehold improvement incentives, and variable payments related to operating expenses, taxes, utilities, insurance, and maintenance expenses. Certain leases also contain non-lease components in the contract. Non-lease components relate to operating expenses, parking, utilities, and maintenance expenses.

The Company has non-cancellable lease terms through 2025 for its various operating subleases, certain of which include the option to extend the sublease term up to one additional period of three years. Additionally, certain subleases provide for annual rent increases through the terms of the leases. Certain subleases also contain both lease and non-lease components in the contract. Non-lease components relate to operating expenses, parking, utilities, and maintenance expenses.

The Company's operating lease agreement in Boston, Massachusetts at 1001 Boylston Street has been signed, but the lease term has not commenced. 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 and contains options to extend the lease term for two additional periods of five years. The lease provides for annual rent increases through the term of the lease, leasehold improvement incentives, and variable payments related to operating expenses, management fees, taxes, utilities, insurance, and maintenance expenses. The lease also contains both lease and non-lease components in the contract. Non-lease components relate to operating expenses, parking, utilities, and maintenance expenses. As the lease has been signed but the lease term has not commenced as of December 31, 2022, there is no impact to the consolidated financial statements as of December 31, 2022. The lease commenced in February 2023 as the Company has been granted access to begin its build out. The Company is expecting to move into the office space in 2024.

The Company's operating lease agreement in Detroit, Michigan has also been signed, but the lease term has not commenced as of December 31, 2022. As the lease has been signed but the lease term has not commenced as of December 31, 2022, there is no impact to the consolidated financial statements as of December 31, 2022. The lease commenced in February 2023. The lease terms are consistent with that of its commenced operating leases.

The Company's financing lease obligations, which consist of a lease for furniture and office equipment, are immaterial.

The Company's leases in Boston, Massachusetts, Cambridge, Massachusetts and San Francisco, California have associated letters of credit, which are recognized within restricted cash in the consolidated balance sheets. As of December 31, 2022 and 2021, restricted cash was \$14,615 and \$16,336, 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 and pass-through payments from customers related to the Company's wholesale business. As December 31, 2022 and 2021, portions of restricted cash were classified as a short-term asset and long-term asset, as disclosed in the consolidated balance sheets.

For the years ended December 31, 2022, 2021, and 2020, the Company recognized \$16,732, \$15,844, and \$14,157, respectively, of lease costs for leases that have commenced.

For the year ended December 31, 2022, the Company recognized \$1,809 of sublease income. There was no sublease income for the year ended December 31, 2021. For the year ended December 31, 2020, the Company recognized immaterial sublease income.

As of December 31, 2022 and 2021, for leases that have commenced the weighted average remaining lease term was 7.1 years and 7.6 years, respectively, and the weighted average discount rate was 4.9% and 5.3%, 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.

As of December 31, 2022, future minimum lease payments are as follows:

Year Ending December 31,	Operating Lease Commitments
2023	\$ 17,841
2024	15,499
2025	7,154
2026	6,344
2027	6,463
Thereafter	29,058
Total lease payments	82,359
Less imputed interest	(15,941)
Total	\$ 66,418

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, 2022. As of December 31, 2022, total estimated future minimum lease payments for leases signed but not yet commenced are estimated to be \$246,492.

As of December 31, 2022, known contractual obligations that are fixed and determinable, including leases signed but not yet commenced based on expected contractual commencement date, are as follows:

	Total	Less than 1 year	1 to 3 years (in thousands)	3 to 5 years	More than 5 years
Operating lease obligations	\$ 328,851	\$ 17,960	\$ 34,645	\$ 45,076	\$ 231,170
Total contractual obligations	\$ 328,851	\$ 17,960	\$ 34,645	\$ 45,076	\$ 231,170

As of December 31, 2022, future minimum sublease income payments are as follows:

Year Ending December 31,	Sublease Income Payments
2023	\$ 2,167
2024	1,947
2025	1,023
2026	—
2027	—
Thereafter	—
Total	\$ 5,137

Acquisitions

On January 14, 2021 the Company completed the acquisition of a 51% interest in CarOffer, an automated instant vehicle trade platform based in Addison, Texas, with the option to acquire portions of the remaining equity in the future. During the year ended December 31, 2022, the Company determined not to exercise its call right to acquire up to an additional 25% of the fully diluted capitalization of CarOffer. In the second half of 2024, the Company will have a call right to acquire all, and not less than all, of the remaining equity interests in CarOffer and the representative of the holders of the remaining equity will have a put right to sell to the Company, all, and not less than all, of the remaining equity interests in CarOffer. Details of this acquisition are more fully described in Note 2 to these consolidated financial statements.

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. However, litigation is inherently unpredictable and the future outcome of legal proceedings and other contingencies may be unexpected or differ from the Company's estimated liabilities, which could have a material adverse effect on the Company's future 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, guarantees, indemnification, and other common provisions.

The Company provides certain guarantees to dealers through products such as its 45-Day Guarantee and OfferGuard service offerings on the CarOffer platform, which are accounted for under ASC Topic 460, *Guarantees*.

45-Day Guarantee is an arrangement through which a selling dealer lists a car on the CarOffer platform, and the Company provides an offer to purchase the vehicle listed at a specified price at any time over a 45-day period. This provides the seller with a put option, where they have the right, but not the obligation, to require the Company to purchase the vehicle during this window. OfferGuard is an arrangement through which a buying dealer purchases a car on the CarOffer platform, and the Company provides an offer to purchase the vehicle at a specified price between days 1 and 3, and days 42 and 45 if the dealer is not able to sell the vehicle after 42 days.

A guarantee liability is initially measured using the amount of consideration received from the dealer for the purchase of the guarantee. The initial liability is released, and guarantee income is recognized, upon the earliest of the following: the vehicle sells during the guarantee period, the seller exercises its put option during the guarantee period, or the option expires unexercised at the end of the guarantee period. Guarantee income is recognized within wholesale revenue in the consolidated income statements. When it is probable and reasonably estimable that the Company will incur a loss on a vehicle that it is required to purchase, a liability, and a corresponding charge to wholesale cost of revenue is recognized for the amount of the loss in the consolidated balance sheets and the consolidated income statements. Gains and losses resulting from the dealers exercise of guarantees are recognized within wholesale cost of revenue, as appropriate, in the consolidated income statements.

For the years ended December 31, 2022 and 2021 income for guarantees purchased by dealers was \$10,026 and \$5,537, respectively. For the year ended December 31, 2022, the loss, net of gains recognized within cost of revenue in the consolidated income statements resulting from the dealer's exercise of guarantees was \$4,568. For the year ended December 31, 2021, the net loss resulting from the dealer's exercise of guarantees was immaterial.

As of December 31, 2022, the maximum potential amount of future payments that the Company could be required to make under these guarantees was \$31,056. Of the maximum potential amount of future payments, the losses that are probable are not material. As such, as of December 31, 2022, the Company had no material contingent loss liabilities.

As of December 31, 2021, the maximum potential amount of future payments that the Company could be required to make under these guarantees was \$76,075. Of the maximum potential amount of future payments, none were considered probable. The exercise of guarantees has historically been infrequent and even when such exercises did occur, the losses were immaterial. As such, as of December 31, 2021, the Company had no contingent loss liabilities.

As of December 31, 2020, the Company did not have any guarantees.

10. Stock-based Compensation

CarGurus 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 canceled 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 Company's initial public offering ("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 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 canceled, 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 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. On January 3, 2022, an additional 4,070,921 shares of the Company's Class A Common Stock was authorized to be issued or transferred under the 2017 Plan pursuant to the Evergreen Increase. On January 3, 2023, an additional 4,065,466 shares of the Company's Class A Common Stock was authorized to be issued or transferred under the 2017 Plan pursuant to the Evergreen Increase. 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.

As of December 31, 2022, 4,939,416 shares of Class A common stock were available for issuance under the 2017 Plan.

CarOffer Equity Incentive Plans

The 2020 CO Plan provides for the issuance of CO Incentive Units to CarOffer's employees, officers, managers, and consultants. The 2020 CO Plan authorized up to an aggregate of 485,714 CO Incentive Units for such issuances, all of which were issued prior to the close of the CarOffer Acquisition. At the time of close, 142,857 CO Incentive Units were accelerated and redeemed. The compensation relating to these CO Incentive Units was deemed to be outside of consideration transferred. Therefore, for the year ended December 31, 2021, the Company recognized an additional \$1,229 of stock-based compensation expense. As of December 31, 2022 and 2021, 342,857 and 342,857 CO Incentive Units were unvested, respectively. During the year ended December 31, 2022, no CO Incentive Units were granted, vested or were forfeited. As of December 31, 2022, there is no unrecognized stock-based compensation expense related to the unvested CO Incentive Units, as a result of the revaluation of the awards. These CO Incentive Units are accounted for within other non-current liabilities in the consolidated balance sheets.

As of December 31, 2022, there were no CO Incentive Units available for issuance under the 2020 CO Plan.

The Vesting Agreement provides for the vesting of the Subject Units beneficially owned by the T5 Holders, which vest in accordance with the terms described in Note 2 of these consolidated financial statements. As of December 31, 2022 and 2021, 288,395 and 432,592 Subject Units issued and unvested, respectively. During the year ended December 31, 2022, no Subject Units were granted, 144,197 Subject Units vested and no Subject Units were forfeited. As of December 31, 2022, there is no unrecognized stock-based compensation expense related to the unvested Subject Units as a result of the revaluation of the awards. These Subject Units are accounted for within other non-current liabilities in the consolidated balance sheets.

As of December 31, 2022, there were no Subject Units available for issuance under the Vesting Agreement.

The 2021 CO Plan provides for an incentive equity grant structure whereby 2021 Incentive Units will be granted to CIE and 2021 CO Plan grantees will receive an associated CIE Interest, with back-to-back vesting between the 2021 Incentive Units and the associated CIE Interest. The 2021 CO Plan authorized up to an aggregate of 228,571 2021 Incentive Units for such issuances.

As of December 31, 2022, 228,571 2021 Incentive Units were available for issuance under the 2021 CO Plan.

Stock Options

During the year ended December 31, 2022, stock option activity is as follows:

	Common Stock	Weighted- Average Exercise Price for Equity	Weighted- Average Remaining Contractual Life (In Years)	Aggregate Intrinsic Value ⁽¹⁾
Outstanding, December 31, 2021	949,307	\$ 22.42	6.7	\$ 11,877
Granted	30,266	35.00		
Exercised	(131,061)	5.51		3,774
Forfeited or Expired	(21,903)	35.61		
Outstanding, December 31, 2022	826,609	\$ 25.22	6.2	\$ 3,172
Exercisable as of December 31, 2022	485,092	\$ 17.81	4.8	\$ 3,172

⁽¹⁾ As of December 31, 2022 and 2021, the aggregate intrinsic value was calculated based on the positive difference, if any, between the estimated fair value of common stock on December 31, 2022 and 2021, respectively, or the date of exercise, as appropriate, and the exercise price of the underlying options.

During the year ended December 31, 2021, there were 619,618 options granted. During the year ended December 31, 2020, there were no options granted.

During the years ended December 31, 2021 and 2020, the aggregate intrinsic value for options exercised was \$6,027 and \$8,401, respectively.

As of December 31, 2022, there was \$5,173 unrecognized stock-based compensation expense related to unvested stock options that is expected to be recognized over a weighted-average period of 2.2 years.

Restricted Stock Units

During the year ended December 31, 2022, RSU activity is as follows:

	Number of Shares	Weighted- Average Grant Date Fair Value	Aggregate Intrinsic Value
Unvested outstanding, December 31, 2021	3,834,322	\$ 33.02	\$ 128,987
Granted	2,784,845	28.94	
Vested	(1,649,294)	33.43	
Forfeited	(485,582)	32.71	
Unvested outstanding, December 31, 2022	4,484,291	\$ 29.36	\$ 62,825

During the years ended December 31, 2021 and 2020, the weighted-average grant-date fair value of RSUs granted was \$33.83 and \$28.47 per share, respectively.

During the years ended December 31, 2021 and 2020, RSUs that vested and settled totaled 1,575,206 and 1,347,464 respectively.

During the years ended December 31, 2021 and 2020, the total fair value of RSUs vested was \$52,423 and \$40,613 respectively.

As of December 31, 2022, there was \$110,444 of unrecognized stock-based compensation expense related to unvested RSUs that is expected to be recognized over a weighted-average period of 2.7 years.

Stock-based Compensation Expense

For the year ended December 31, 2022, 2021, and 2020, stock-based compensation expense by award type and where the stock-based compensation expense was recognized in the Company's consolidated income statements is as follows:

	Year Ended December 31,		
	2022	2021	2020
Options	\$ 2,553	\$ 2,471	\$ 17
Restricted Stock Units	52,224	52,916	45,304
CO Incentive Units and Subject Units	(21,095)	22,323	—
Total	<u>\$ 33,682</u>	<u>\$ 77,710</u>	<u>\$ 45,321</u>

The decrease of \$43,418 for the year ended December 31, 2022 compared to the year ended December 31, 2021 in CO Incentive Units and Subject Units stock-based compensation expense was due to a decrease in the valuation of the awards to zero, following the mark to market valuation adjustments.

	Year Ended December 31,		
	2022	2021	2020
Cost of revenue	\$ 475	\$ 417	\$ 293
Sales and marketing expense	7,733	12,801	10,564
Product, technology, and development expense	20,266	22,289	20,741
General and administrative expense	5,208	42,203	13,723
Total	<u>\$ 33,682</u>	<u>\$ 77,710</u>	<u>\$ 45,321</u>

For the years ended December 31, 2022, 2021, and 2020, excluded from stock-based compensation expense was \$4,468, \$3,247, and \$1,906, respectively, of capitalized website development costs, capitalized internal-use software costs, and capitalized hosting arrangements.

For the years ended December 31, 2022, 2021, and 2020, the income tax benefit from stock-based compensation expense, recognized through the Company's deferred tax asset in the consolidated balance sheets was \$5,441, \$5,301, and \$4,796, respectively.

During the years ended December 31, 2022, 2021, and 2020, the Company withheld 566,267, 527,237, and 447,160 shares of Class A common stock, respectively, to satisfy employee tax withholding requirements for net share settlements of restricted stock units. The shares withheld return to the authorized, but unissued, pool under the Company's 2017 Plan and can be reissued by the Company. For the years ended December 31, 2022, 2021, and 2020, total payments to satisfy employee tax withholding requirements for net share settlements of restricted stock units, were \$16,022, \$15,388, and \$11,184 respectively, and are reflected as a financing activity in the consolidated statements of cash flows.

Common Stock Reserved for Future Issuance

As of December 31, 2022, the Company had reserved the following shares of Class A common stock for future issuance:

Common stock options outstanding	826,609
Unvested restricted stock units outstanding	4,484,291
Shares available for issuance under the 2017 Plan	<u>4,939,416</u>
Total shares of authorized common stock reserved for future issuance	<u>10,250,316</u>

Common Stock Share Repurchases

On December 8, 2022, the Company announced that its Board of Directors authorized a new share repurchase program (the “Share Repurchase Program”), pursuant to which the Company may, from time to time, purchase shares of its Class A common stock for an aggregate purchase price not to exceed \$250 million. Share repurchases under the Share Repurchase Program may be made through a variety of methods, including but not limited to open market purchases, privately negotiated transactions and transactions that may be effected pursuant to one or more plans under Rule 10b5-1 and/or Rule 10b-18 of the Exchange Act. The Share Repurchase Program does not obligate the Company to repurchase any minimum dollar amount or number of shares. The Share Repurchase Program has an expiration date of December 31, 2023, and prior to its expiration may be modified, suspended, or discontinued by the Company’s Board of Directors at any time without prior notice. All repurchased shares will be retired. The Company expects to fund share repurchases through cash on hand and cash generated from operations.

During the year ended December 31, 2022, the Company repurchased and retired 1,350,473 shares for \$18,691, at an average cost of \$13.84 per share, under this authorization. As of December 31, 2022, the Company had remaining authorization to purchase up to \$231,309 of the Company's common stock under the Share Repurchase Program.

11. Earnings Per Share

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, 2022, holders of Class B common stock converted no shares of Class B common stock to Class A common stock. During the years ended December 31, 2021, and 2020, holders of Class B common stock converted 3,077,327 shares and 1,238,144 shares, respectively, of Class B common stock to Class A common stock.

Basic net income per share (“Basic EPS”) is computed by dividing consolidated net income adjusted for net (loss) income attributable to redeemable noncontrolling interest and changes in the redemption value of redeemable noncontrolling interest, if applicable, 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 plus the weighted-average of any additional shares issued and outstanding during the reporting period, less the weighted-average of any shares repurchased during the period.

Diluted net income per share (“Diluted EPS”) gives effect to all potentially dilutive securities. Diluted EPS is computed by dividing consolidated net income adjusted for net (loss) income attributable to redeemable noncontrolling interest and changes in the redemption value of redeemable noncontrolling interest, if applicable and dilutive, by the weighted-average number of common shares outstanding during the reporting period using (i) the number of shares of common stock used in the Basic EPS calculation as indicated above, (ii) if dilutive, the incremental weighted-average common stock that the Company would issue upon the exercise of stock options and the vesting of RSUs, (iii) if dilutive, market-based performance awards based on the number of shares that would be issuable as of the end of the reporting period assuming the end of the reporting period was also the end of the contingency period. The dilutive effect of these common stock equivalents is reflected in diluted earnings per share by application of the treasury stock method. The if-converted method is used to calculate the number of shares issuable upon exercise of the 2024 Put Right (as defined in Note 2 to these consolidated financial statements), inclusive of CarOffer noncontrolling interest and incentive and subject units, that would be issuable as of the end of the reporting period assuming the end of the reporting period was also the end of the contingency period.

For the years ended December 31, 2022, 2021, and 2020, a reconciliation of the numerator and denominator used in the calculation of basic and diluted net income per share is as follows:

	Year Ended December 31,		
	2022	2021	2020
Numerator:			
Consolidated net income	\$ 78,954	\$ 110,373	\$ 77,553
Net (loss) income attributable to redeemable noncontrolling interest	(5,433)	1,129	—
Accretion of redeemable noncontrolling interest to redemption value	(109,398)	109,398	—
Net income (loss) attributable to common stockholders — basic	<u>\$ 193,785</u>	<u>\$ (154)</u>	<u>\$ 77,553</u>
Net (loss) income attributable to redeemable noncontrolling interest	(5,433)	—	—
Accretion of redeemable noncontrolling interest to redemption value	(109,398)	—	—
Net income (loss) attributable to common stockholders — diluted	<u>\$ 78,954</u>	<u>\$ (154)</u>	<u>\$ 77,553</u>
Denominator:			
Weighted-average number of shares of common stock used in computing net income (loss) per share attributable to common stockholders — basic	118,474,991	117,142,062	112,854,524
Dilutive effect of share equivalents resulting from stock options	275,330	—	674,018
Dilutive effect of share equivalents resulting from unvested restricted stock units	366,258	—	321,273
Dilutive effect of share equivalents resulting from CarOffer incentive units and noncontrolling interest	<u>9,034,395</u>	<u>—</u>	<u>—</u>
Weighted-average number of shares of common stock used in computing net income (loss) per share attributable to common stockholders — diluted	128,150,974	117,142,062	113,849,815
Net income (loss) per share attributable to common stockholders:			
Basic	<u>\$ 1.64</u>	<u>\$ (0.00)</u>	<u>\$ 0.69</u>
Diluted	<u>\$ 0.62</u>	<u>\$ (0.00)</u>	<u>\$ 0.68</u>

For the years ended December 31, 2022, 2021, and 2020, potentially dilutive common stock equivalents that have been excluded from the calculation of diluted weighted-average shares outstanding as their effect would have been anti-dilutive are as follows:

	Year Ended December 31,		
	2022	2021	2020
Stock options outstanding	587,494	617,504	—
Restricted stock units outstanding	2,634,463	2,867,330	2,722,226
CO Incentive Units, Subject Units and noncontrolling interest	—	1,509,750	—

For the year ended December 31, 2021, shares of Class A common stock potentially issuable under market-based performance awards of approximately 14,682 RSUs were excluded from the calculation of weighted average shares used to compute Diluted EPS as the market-based vesting conditions had not been achieved as of the reporting period end date and as such there were zero contingently issuable shares. During the year ended December 31, 2022, the Company modified its market-based performance awards to contain only service-based vesting conditions in line with the Company's other restricted stock unit awards. As a result, there are no market-based RSUs outstanding as of December 31, 2022.

12. Income Taxes

For the years ended December 31, 2022, 2021, and 2020, the domestic and foreign components of income before income taxes are as follows:

	Year Ended December 31,		
	2022	2021	2020
United States	\$ 110,213	\$ 148,037	\$ 97,120
Foreign	1,149	1,323	1,990
Income before income taxes	<u>\$ 111,362</u>	<u>\$ 149,360</u>	<u>\$ 99,110</u>

For the years ended December 31, 2022, 2021, and 2020, the components of the provision for (benefit from) income taxes are as follows:

	Year Ended December 31,		
	2022	2021	2020
Current provision (benefit):			
Federal	\$ 43,207	\$ 22,133	\$ (3,733)
State	11,140	10,438	2,288
Foreign	175	253	767
	<u>54,522</u>	<u>32,824</u>	<u>(678)</u>
Deferred provision (benefit):			
Federal	(20,278)	5,698	19,539
State	(1,789)	669	2,734
Foreign	(47)	(204)	(38)
	<u>(22,114)</u>	<u>6,163</u>	<u>22,235</u>
Income tax provision	<u>\$ 32,408</u>	<u>\$ 38,987</u>	<u>\$ 21,557</u>

For the year ended December 31, 2022, 2021, and 2020, the components of the effective tax rate are as follows:

	Year Ended December 31,		
	2022	2021	2020
U.S. federal taxes at statutory rate	21.0%	21.0%	21.0%
State taxes, net of federal benefit	7.7	7.5	6.2
Nondeductible expenses	0.5	0.3	0.4
Stock compensation	2.8	0.3	0.2
Foreign rate differential	(0.1)	(0.2)	(0.2)
Federal and state credits	(4.7)	(2.6)	(3.2)
CARES Act	—	—	(2.4)
Disallowed officer compensation	0.8	1.0	—
Investment in partnership	1.0	(0.3)	—
Federal, state, and foreign provision to return differences	(0.8)	(0.7)	—
Uncertain tax provision	0.5	—	—
Other	(0.0)	(0.2)	(0.2)
Consolidated effective tax rate	<u>28.7%</u>	<u>26.1%</u>	<u>21.8%</u>
Effective tax rate attributable to redeemable noncontrolling interest	(1.0)	0.2	—
Effective tax rate attributable to CarGurus, Inc.	<u>27.7%</u>	<u>26.3%</u>	<u>21.8%</u>

For the year ended December 31, 2022, the effective tax rate attributable to CarGurus, Inc. was 27.7%, which is greater than the U.S. federal statutory rate primarily due to state and local income taxes, the exclusion of loss from investment in partnership, shortfalls on the taxable compensation of share-based awards and the Section 162(m) excess officer compensation limitation, partially offset by federal and state research and development tax credits.

For the year ended December 31, 2021, the effective tax rate attributable to CarGurus, Inc. was 26.3%, which is greater than the U.S. federal statutory rate primarily due to state and local income taxes, shortfalls on the taxable compensation of share-based awards and the Section 162(m) excess officer compensation limitation, which became applicable in May 2021 upon the expiration of the transition period permitted following the IPO, partially offset by federal and state research and development tax credits.

For the year ended December 31, 2020, the effective tax rate attributable to CarGurus, Inc. was 21.8%, which 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").

As of December 31, 2022 and 2021, the approximate income tax effect of each type of temporary difference and carryforward is as follows:

	As of December 31,	
	2022	2021
Deferred tax assets:		
Net operating loss carryforwards	\$ 461	\$ 1,429
Credit carryforwards	928	4,241
Stock-based compensation	5,441	5,301
Lease liability	13,557	15,640
Investment in partnership	8,325	6,709
Accruals and reserves	3,770	5,942
Capitalized research and development	25,342	—
	<u>57,824</u>	<u>39,262</u>
Valuation Allowance	(258)	(229)
	<u>57,566</u>	<u>39,033</u>
Deferred tax liabilities:		
Prepaid expenses	(2,466)	(1,850)
Deferred commissions	(4,200)	(3,508)
Right of use assets	(11,237)	(12,955)
Intangible assets	(733)	(1,111)
Property and equipment	(3,496)	(6,289)
	<u>(22,132)</u>	<u>(25,713)</u>
Net deferred tax assets	<u>\$ 35,434</u>	<u>\$ 13,320</u>

As of December 31, 2022 and 2021, valuation allowances were immaterial. Based upon the level of historical U.S. earnings and future projections over the period in which the net deferred tax assets are deductible, the Company believes it is more likely than not that it will realize the benefits of these deductible differences, with the exception of the deferred tax asset related to intangible assets in Ireland. For the years ended December 31, 2022 and 2021, the change in the valuation allowance was \$29 and \$71, respectively.

As of December 31, 2022, the Company had federal and state net operating loss (“NOL”) carryforwards of \$821 and \$4,051, respectively. The federal NOL carryforward, subject to an annual limitation of 80% of taxable income, does not expire. The state NOL carryforwards expire at various dates through 2040. As of December 31, 2022, the Company had federal and state tax credit carryforwards of \$673 and \$322, respectively, available to reduce future tax liabilities. The federal tax credit carryforward expires in 2040. The state tax credit carryforwards indefinitely as it is related to California. 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 5% stockholders in the stock of a corporation by more than 50% in the aggregate over a three-year period.

As of December 31, 2022 and 2021, changes in the gross uncertain tax position (excluding interest and penalties) are as follows:

	As of December 31,	
	2022	2021
Balance as of December 31, 2021	\$ —	\$ —
Increase related to current year tax provision	198	—
Increase related to prior year tax provision	400	—
Balance as of December 31, 2022	\$ 598	\$ —

For the year ended December 31, 2022, income tax expense and liability related to uncertain tax positions, exclusive of immaterial interest or penalties related to uncertain tax provisions, was \$598, which would favorably affect the Company's effective tax rate, if recognized. For the year ended December 31, 2021, no income tax expense and liability related to uncertain tax positions was recognized.

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, 2022 and December 31, 2021, the amount of unrecognized deferred U.S. taxes on these earnings was immaterial.

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 for the tax years of 2018 and prior as a result of applicable statute of limitations of the Internal Revenue Service (“IRS”) and a majority of applicable state jurisdictions. The Company is currently not subject to examination in its foreign jurisdictions for tax years 2016 and prior.

13. Segment and Geographic Information

Effective the first quarter of 2022, the Company revised its segment reporting from two reportable segments, United States and International, to one reportable segment. The Company concluded the change in segment reporting was not a triggering event for goodwill impairment. The change in segment reporting was made to align with changes made in the manner the Company's chief operating decision maker (the “CODM”) reviews the Company's operating results in assessing performance and allocating resources. The Company's Chief Executive Officer is the CODM.

Effective the first quarter of 2022, the CODM assessed the Company's performance on a consolidated basis rather than by geographical location as a result of the international segment becoming less significant relative to the overall business. The CODM reviews revenue and operating income as a proxy for the operating performance of the Company's operations.

Effective the fourth quarter of 2022, the Company revised its segment reporting from one reportable segment to two reportable segments, U.S. Marketplace and Digital Wholesale. The change in segment reporting was a triggering event for an evaluation of goodwill impairment. As such, the Company evaluated for goodwill impairment on December 31, 2022 and did not identify any impairment to its goodwill. The change in segment reporting was made to align with financial reporting results regularly provided to the Company's CODM to assess the business. The CODM reviews segment revenue and segment income (loss) from operations as a proxy for the performance of the Company's operations.

The U.S. Marketplace segment derives revenues from marketplace services from customers within the United States. The Digital Wholesale segment derives revenues from Dealer-to-Dealer and IMCO services and products which are sold on the CarOffer platform. The Company also has two operating segments which are individually immaterial and therefore aggregated into the Other category to reconcile reportable segments to the consolidated income statements. The Other category derives revenues from marketplace services from customers outside of the United States.

Revenue and costs discretely incurred by reportable segments, including depreciation and amortization, are included in the calculation of reportable income (loss) from operations. Digital Wholesale segment income (loss) from operations does not reflect certain IMCO related capitalized website development amortization incurred by the U.S. Marketplace segment. Digital Wholesale segment income (loss) from operations does reflect certain IMCO marketing and lead generation fees allocated from the U.S. Marketplace segment. Asset information by reportable segment is not provided to the CODM as asset information is assessed and reviewed on a consolidated basis.

For the years December 31, 2022, 2021, and 2020, segment revenue, segment income (loss) from operations and segment depreciation and amortization are as follows:

	Year Ended December 31,		
	2022	2021	2020
<i>Segment Revenue</i>			
U.S. Marketplace	\$ 614,136	\$ 594,602	\$ 519,835
Digital Wholesale	996,264	314,431	—
Other	44,635	42,340	31,616
Total	<u>\$ 1,655,035</u>	<u>\$ 951,373</u>	<u>\$ 551,451</u>

	Year Ended December 31,		
	2022	2021	2020
<i>Segment Income (Loss) from Operations:</i>			
U.S. Marketplace	\$ 125,796	\$ 151,343	\$ 120,836
Digital Wholesale	(9,174)	7,189	—
Other	(8,144)	(10,264)	(23,080)
Total	<u>\$ 108,478</u>	<u>\$ 148,268</u>	<u>\$ 97,756</u>

	Year Ended December 31,		
	2022	2021	2020
<i>Segment Depreciation and Amortization:</i>			
U.S. Marketplace	\$ 14,214	\$ 11,313	\$ 9,456
Digital Wholesale	30,690	28,394	—
Other	430	769	1,886
Total	<u>\$ 45,334</u>	<u>\$ 40,476</u>	<u>\$ 11,342</u>

For the years December 31, 2022, 2021, and 2020, a reconciliation between segment income from operations to consolidated income before income taxes is as follows:

	Year Ended December 31,		
	2022	2021	2020
Total segment income from operations	\$ 108,478	\$ 148,268	\$ 97,756
Other income, net	2,884	1,092	1,354
Consolidated income before income taxes	<u>\$ 111,362</u>	<u>\$ 149,360</u>	<u>\$ 99,110</u>

As of December 31, 2022, 2021, and 2020, segment assets are as follows:

	Year Ended December 31,		
	2022	2021	2020
<i>Segment Assets:</i>			
U.S. Marketplace	\$ 531,118	\$ 453,837	\$ 470,286
Digital Wholesale	352,274	442,216	—
Other	43,710	35,521	32,012
Total	<u>\$ 927,102</u>	<u>\$ 931,574</u>	<u>\$ 502,298</u>

For the years ended December 31, 2022, 2021, and 2020, revenue by geographical region is as follows:

	Year Ended December 31,		
	2022	2021	2020
<i>Revenue by Geographic Region:</i>			
United States	\$ 1,610,400	\$ 909,033	\$ 519,835
International	44,635	42,340	31,616
Total	<u>\$ 1,655,035</u>	<u>\$ 951,373</u>	<u>\$ 551,451</u>

As of December 31, 2022, 2021, and 2020, long-lived assets outside of the United States were immaterial.

14. Employee Benefit Plans

The Company maintains a defined contribution savings plan for all eligible U.S. employees under Section 401(k) of the Internal Revenue Code. Effective January 1, 2022, the Company updated its matching policy, under which the Company matches 50% of an employee's annual contributions to the 401(k) plan, up to a maximum of 8% of the employee's base salary, bonus and commissions paid during the year. For the years ended December 31, 2021 and 2020, the Company matched 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.

The Company's subsidiary, CarOffer, maintains its own defined contribution savings plan for all eligible U.S. employees under Section 401(k) of the Internal Revenue Code. For the year ended December 31, 2022, CarOffer matched 50% of a CarOffer employee's annual contributions to the 401(k) plan, up to a maximum of the lesser of (i) 6% of the CarOffer employee's base salary, bonus and commissions paid during the year or (ii) \$5,000. Matching contributions are subject to vesting based on the CarOffer employee's start date and length of service. CarOffer employees can designate the investment of their 401(k) accounts into several mutual funds. For the years ended December 31, 2021 and 2020, CarOffer did not have a defined contribution savings plan.

For the years ended December 31, 2022, 2021, and 2020, total employer contributions to the 401(k) plan were \$5,498, \$2,960, and \$2,675, respectively.

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, or the Exchange Act), as of the end of the period covered by this Annual Report on Form 10-K.

The term “disclosure controls and procedures,” as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act, means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the Securities and Exchange Commission’s rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company’s management, including its principal executive and principal financial officers, or persons performing similar functions, as appropriate to allow timely decisions regarding required disclosure.

Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives and our management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures.

As described below, based on the evaluation of our disclosure controls and procedures as of the end of the period covered by this Annual Report, management identified a material weakness in our internal control over financial reporting. As a result of the material weakness, our Principal Executive Officer has concluded that, as of such date, our disclosure controls and procedures were not effective to provide reasonable assurance that information required to be disclosed in the reports we file and submit under the Exchange Act is recorded, processed, summarized, and reported as and when required.

Notwithstanding this material weakness noted above, our management, including our Principal Executive Officer, has concluded that our financial statements included in this Annual Report on Form 10-K present fairly, in all material respects, our financial position, results of operations, and cash flows for the periods presented in accordance with accounting principles generally accepted in the United States of America.

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, 2022, 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 not effective as of December 31, 2022 due to the material weakness described below.

A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of a company's annual or interim financial statements will not be prevented or detected on a timely basis.

The control deficiencies which, in the aggregate, were assessed as a material weakness during the second quarter ended June 30, 2022 have not yet been fully remediated. The previously identified CarGurus control deficiencies in logical access and change management have been remediated as of year-end. Additionally, as of the fourth quarter ended December 31, 2022, management identified additional deficiencies in controls at our CarOffer subsidiary. In the aggregate, management has concluded that the previously identified unremediated control deficiencies at the CarOffer subsidiary, along with the deficiencies identified in the fourth quarter of 2022, constitute a material weakness.

We have concluded that this material weakness exists at our CarOffer subsidiary, as CarOffer does not have the necessary business and IT processes, personnel, and related internal controls to operate in a manner to satisfy the accounting and financial reporting requirements of a public company.

The deficiencies at our CarOffer subsidiary were the result of both design and operating deficiencies related to certain controls over information technology systems that are relevant to the preparation of our financial statements, and business controls over our financial statement close processes. The deficiencies were primarily the result of (i) insufficient evidence of management review and performance of control procedures, (ii) the inability to rely on information produced from IT systems and an absence of compensating procedures, (iii) controls not designed to require proper authorization of certain transactions, and (iv) controls not designed or operating effectively related to logical access and change management of IT systems.

Specifically, we did not have sufficient knowledgeable personnel or processes in place which resulted in:

- Ineffective controls related to user access reviews designed to adequately restrict privileged and end-user access to certain financial applications, programs, and data to appropriate company personnel, including consideration to segregation of incompatible duties;
- Ineffective change management review controls for certain financial applications to ensure that IT program and data changes affecting financial IT applications and underlying accounting records are identified, tested, authorized, and implemented appropriately; and
- Ineffective controls over the financial statement close processes, including those related to the review of CarOffer journal entries, reconciliations, management review controls, and analyses of transactions and accounts.

This material weakness did not result in a known material misstatement to our financial statements. However, the material weakness could have resulted in material misstatements in our interim or annual financial statements and disclosures which then may not have been prevented or detected. The material weakness also impacts the effectiveness of segregation of duties, the effectiveness of financial controls which rely on information from relevant financial systems and increases the reliance on corporate accounting personnel to identify errors at the CarOffer subsidiary level.

Remediation Plan

We and our board of directors are committed to maintaining a strong internal control environment. Management, with the oversight of the audit committee of our board of directors, evaluated the material weakness identified during the second quarter of 2022, and implemented a remediation plan to address the material weakness and enhance our control environment. Management subsequently evaluated the additional control deficiencies, status of remediation, and the material weakness which exists as of December 31, 2022, and enhanced the previous remediation plan. The updated remediation plan addresses the additional deficiencies identified through the annual assessment of the effectiveness of our internal control over financial reporting. Our remediation measures are ongoing and include the following:

- Implementing robust review controls over user access and change management for relevant financial systems;
- Implementing effective review of journal entries and account reconciliations, and other financial statement close analyses and processes;
- Implementing controls to address the inability to rely on information from the IT systems;
- Enhancing evidence retained which supports the operating effectiveness of controls;
- Engaging internal and external resources to assist with remediation ;
- Implementation of controls at the corporate level to reduce the risk of material misstatement related to CarOffer financial statements and disclosures;
- Hiring additional qualified SOX-focused personnel to provide additional capacity and expertise to enhance our IT control environment; and
- Leveraging CarGurus resources with significant public company experience to provide oversight of CarOffer IT and financial controls programs.

Management is committed to successfully implementing the remediation plan as promptly as possible. The material weakness will not be considered remediated until our management implements effective controls that operate for a sufficient period of time and our management has concluded through testing that these controls are effective. The elements of our remediation plan can only be accomplished over time, and we can offer no assurance that these initiatives will ultimately have the intended effects. See *“Risk Factors—Risks Related to Our Business and Industry— We have identified a material weakness in our internal control over financial reporting. If we are unable to remediate this material weakness, we may not be able to accurately or timely report our financial condition or results of operations, which may adversely affect our business and the market price of our common stock.”*

The effectiveness of our internal control over financial reporting as of December 31, 2022, 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

Except as noted in the preceding paragraphs, 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, 2022 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, 2022, 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, because of the effect of the material weakness described below on the achievement of the objectives of the control criteria, CarGurus, Inc. (the Company) has not maintained effective internal control over financial reporting as of December 31, 2022, based on the COSO criteria.

A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. The following material weakness has been identified and included in management's assessment. The deficiencies at the CarOffer subsidiary were the result of both design and operating deficiencies related to certain controls over information technology (IT) systems that are relevant to the preparation of our financial statements, and business controls over our financial statement close processes. The deficiencies were primarily the result of (i) insufficient evidence of management review and performance of control procedures, (ii) the inability to rely on information produced from IT systems and an absence of compensating procedures, (iii) controls not designed to require proper authorization of certain transactions, and (iv) controls not designed or operating effectively related to logical access and change management of IT systems.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the 2022 consolidated financial statements of the Company. This material weakness was considered in determining the nature, timing and extent of audit tests applied in our audit of the 2022 consolidated financial statements, and this report does not affect our report dated March 1, 2023, which 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

March 1, 2023

Item 9B. Other Information.

None.

Item 9C. Disclosure Regarding Foreign Jurisdictions That Prevent Inspections.

Not Applicable.

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 2023 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 2023 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 2023 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 2023 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 2023 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			Exhibit Number	Filed Herewith
		Form	File Number	Filing Date		
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.	10-K	001-38233	February 12, 2021	2.1	
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	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.	10-K	001-38233	February 12, 2021	10.4	
10.4.1#	Form of Executive Nonqualified Stock Option Grant Agreement.	10-K	001-38233	February 12, 2021	10.4.1	
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.	10-K	001-38233	February 12, 2021	10.4.3	
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 December 4, 2015, by and between the Registrant and Scot Fredo.	10-K	001-38233	February 12, 2021	10.10	
10.10#	Offer Letter, dated December 29, 2015, by and between the Registrant and Sarah Welch.	10-Q	001-38233	August 6, 2020	10.2	
10.11	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	
10.12	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	

10.13	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
10.14#	CarGurus, Inc. Annual Incentive Plan.	8-K/A	001-38233	April 6, 2018	10.1
10.15	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
10.16	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
10.17	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
10.18	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
10.19	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
10.20	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
10.21	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
10.22#	Separation Agreement, dated November 13, 2020, by and between the Registrant and Kyle Lomeli.	8-K	001-38233	November 17, 2020	10.1
10.23#	Amendment to Separation Agreement, dated May 4, 2021, by and between the Registrant and Kyle Lomeli.	10-Q	001-38233	May 7, 2021	10.4
10.24#	Consulting Agreement, dated November 13, 2020, by and between the Registrant and Kyle Lomeli.	8-K	001-38233	November 17, 2020	10.2
10.25	Third Amended and Restated Limited Liability Company Agreement, dated November 23, 2021, by and among the Registrant, TopCo, the Members of TopCo, and CarOffer MidCo, LLC.	10-K	001-38233	February 25, 2022	10.27
10.26	Corrective Amendment, dated May 6, 2022, to Third Amended and Restated Limited Liability Company Agreement of CarOffer, LLC, dated November 23, 2021, by and among the Registrant, CarOffer, LLC, TopCo, and CarOffer Midco, LLC	10-Q	001-38233	May 9, 2022	10.5
10.27#	Separation Agreement, dated November 16, 2021, by and between the Registrant and Sarah Welch.	10-K	001-38233	February 25, 2022	10.28 \
10.28	Sublease, dated October 6, 2021, by and between the Registrant and HubSpot, Inc.	10-K	001-38233	February 25, 2022	10.29
10.29	First Amendment to Sublease, dated July 31, 2022, by and between the Registrant and HubSpot, Inc.	10-Q	001-38233	November 8, 2022	10.2
10.30	Sublease, dated December 23, 2021, by and between the Registrant and Amylyx Pharmaceuticals, Inc.	10-K	001-38233	February 25, 2022	10.30

10.31	First Amendment to Sublease, dated March 23, 2022, by and between the Registrant and Amylyx Pharmaceuticals, Inc.	10-Q	001-38233	May 9, 2022	10.1	
10.32#	Form of Amendment to Performance Restricted Stock Unit Agreement.	10-K	001-38233	February 25, 2022	10.31	
10.33	Credit Agreement, dated September 26, 2022, by and among the Registrant, as borrower, PNC Bank, National Association, as administrative agent, collateral agent and an L/C Issuer, and the other lenders, L/C Issuers and other parties party thereto	8-K	001-38233	September 29, 2022	10.1	
10.34#	Offer Letter, dated January 17, 2020, by and between the Registrant and Andrea Eldridge	10-Q	001-38233	May 9, 2022	10.2#	
10.35#	Offer Letter, dated November 15, 2021, by and between the Registrant and Dafna Sarnoff	10-Q	001-38233	May 9, 2022	10.3#	
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 and 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 and 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, 2022 has been formatted in Inline XBRL.					X

Indicates a management contract or compensatory plan.

* The certifications furnished in Exhibit 32.1 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: March 1, 2023

By: /s/ Jason Trevisan

Jason Trevisan

Chief Executive Officer

(Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer)

POWER OF ATTORNEY

Each person whose individual signature appears below hereby constitutes and appoints Jason Trevisan, 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.

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Jason Trevisan</u> Jason Trevisan	Chief Executive Officer and Director <i>(Principal Executive Officer, Principal Financial Officer and Principal Accounting Officer)</i>	March 1, 2023
<u>/s/ Langley Steinert</u> Langley Steinert	Executive Chairman and Chairman of the Board of Directors	March 1, 2023
<u>/s/ Steven Conine</u> Steven Conine	Director	March 1, 2023
<u>/s/ Lori Hickok</u> Lori Hickok	Director	March 1, 2023
<u>/s/ Stephen Kaufer</u> Stephen Kaufer	Director	March 1, 2023
<u>/s/ Greg Schwartz</u> Greg Schwartz	Director	March 1, 2023
<u>/s/ Ian Smith</u> Ian Smith	Director	March 1, 2023

Subsidiaries of CarGurus, Inc.

Auto List, Inc., a Delaware corporation

CarGurus Canada, Inc., a company incorporated under the laws of the Province of British Columbia

CarGurus Ireland Limited, an Irish Private Company Limited by Shares

CarGurus Securities Corp., a Massachusetts corporation

CarGurus UK Limited, a U.K. Private Limited Company

CarOffer, LLC, a Texas limited liability company

Pistonheads Holdco Limited, a U.K. Private Limited Company¹

WPLE, Inc., a Delaware corporation

¹The Company is in the process of dissolving the Pistonheads Holdco Limited entity.

Consent of Independent Registered Public Accounting Firm

We consent to the incorporation by reference in the following Registration Statements:

- (1) Registration Statement (Form S-8 No. 333-221090) pertaining to the Omnibus Incentive Compensation Plan Amended and Restated 2015 Equity Incentive Plan of CarGurus, Inc., and
- (2) Registration Statement (Form S-8 No. 333-263031) pertaining to the Omnibus Incentive Compensation Plan of CarGurus, Inc.;

of our reports dated March 1, 2023, with respect to the consolidated financial statements of CarGurus, Inc. and the effectiveness of internal control over financial reporting of CarGurus, Inc. included in this Annual Report (Form 10-K) of CarGurus, Inc. for the year ended December 31, 2022.

/s/ Ernst & Young LLP

Boston, Massachusetts

March 1, 2023

**CERTIFICATION 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**

I, Jason Trevisan, certify that:

1. I have reviewed this Annual Report on Form 10-K of CarGurus, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 1, 2023

By: /s/ Jason Trevisan

Jason Trevisan

Chief Executive Officer

(Principal Executive Officer, Principal Financial Officer, and Principal Accounting Officer)

**CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report on Form 10-K of CarGurus, Inc. (the "Company") for the period ending December 31, 2022 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Jason Trevisan, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, based on my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
- (2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: March 1, 2023

By: /s/ Jason Trevisan
Jason Trevisan
Chief Executive Officer
(Principal Executive Officer, Principal Financial Officer, and Principal Accounting Officer)
