

A photograph of a modern living room with a large window, a fireplace, and a wooden ceiling. The room is furnished with a black leather sofa, a wooden armchair, and a patterned rug. A potted plant sits on a white pedestal near the window. The ceiling features exposed wooden beams and a series of horizontal wooden slats. The fireplace is a dark, angular structure with a fire burning inside. The window looks out onto a forested area.

2022

REDFIN
Annual Report

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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 **001-38160**

Redfin Corporation

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

74-3064240

(I.R.S. Employer Identification No.)

1099 Stewart Street Suite 600
Seattle WA

(Address of Principal Executive Offices)

98101

(Zip Code)

(206) 576-8610

Registrant's telephone number, including area code

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, \$0.001 par value per share	RDFN	The Nasdaq Stock Market, LLC

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, or a smaller reporting company. See the definitions of "large accelerated filer," "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	<input checked="" type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/>	Smaller reporting company	<input type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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 statement 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

As of the last business day of the registrant's most recently completed second fiscal quarter, the aggregate market value of the registrant's common stock held by its non-affiliates, computed by reference to the price at which the common stock was last sold, was \$864,727,436.

The registrant had 109,735,021 shares of common stock outstanding as of February 10, 2023.

DOCUMENTS INCORPORATED BY REFERENCE

The portions of the registrant's proxy statement to be filed in connection with the registrant's 2023 Annual Meeting of Stockholders that are responsive to the disclosure required by Part III of Form 10-K are incorporated by reference into Part III of this Form 10-K.

Redfin Corporation

Annual Report on Form 10-K
For the Year Ended December 31, 2022

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As used in this annual report, the terms "Redfin," "we," "us," and "our" refer to Redfin Corporation and its subsidiaries taken as a whole, unless otherwise noted or unless the context indicates otherwise. However, when referencing (i) the 2023 notes, the 2025 notes, and the 2027 notes, the terms "we," "us," and "our" refer only to Redfin Corporation and not to Redfin Corporation and its subsidiaries taken as a whole, (ii) the secured revolving credit facility with Goldman Sachs, the terms "we," "us," and "our" refer only to RedfinNow Borrower LLC, and (iii) each warehouse credit facility, the terms "we," "us," and "our" refer only to Redfin Mortgage, LLC or Bay Equity LLC, as the context dictates.

Note Regarding Forward-Looking Statements

This annual report contains forward-looking statements. All statements contained in this report other than statements of historical fact, including statements regarding our future operating results and financial position, our business strategy and plans, our market growth and trends, and our objectives for future operations, are forward-looking statements. The words "believe," "may," "will," "estimate," "continue," "anticipate," "intend," "expect," "could," "would," "project," "plan," "hope," "potentially," "preliminary," "likely," and similar expressions are intended to identify forward-looking statements. We have based these forward-looking statements largely on our current expectations and projections about future events and trends that we believe may affect our financial condition, results of operations, business strategy, short-term and long-term business operations and objectives, and financial needs. These forward-looking statements are subject to a number of risks, uncertainties, and assumptions, including those described under Item 1A. Moreover, we operate in a very competitive and rapidly changing environment. New risks emerge from time to time. It is not possible for our management to predict all risks, nor can we assess the effect of all factors on our business or the extent to which any factor, or combination of factors, may cause actual results to differ materially from those contained in any forward-looking statements we may make. In light of these risks, uncertainties, and assumptions, the future events and trends discussed in this report may not occur and actual results could differ materially and adversely from those anticipated or implied in the forward-looking statements. Accordingly, you should not rely on forward-looking statements as predictions of future events. Although we believe that the expectations reflected in the forward-looking statements are reasonable, we cannot guarantee that the future results, performance, or events and circumstances reflected in the forward-looking statements will be achieved or occur. We undertake no obligation to update any of these forward-looking statements for any reason after the date of this report or to conform these statements to actual results or revised expectations.

Note Regarding Industry and Market Data

This annual report contains information using industry publications that generally state that the information contained therein has been obtained from sources believed to be reliable, but such information may not be accurate or complete. While we are not aware of any misstatements regarding the information from these industry publications, we have not independently verified any of the data from third-party sources nor have we ascertained the underlying economic assumptions relied on therein.

PART I

Item 1. Business

Overview

We help people buy and sell homes. Representing customers in over 100 markets in the United States, we are a residential real estate brokerage. We pair our own agents with our own technology to create a service that is faster, better, and costs less. We meet customers through our listings-search website and mobile application.

We use the same combination of technology and local service to originate mortgage loans and offer title and settlement services. Beginning in April 2021, we also offer digital platforms to connect consumers with available apartments and houses for rent.

Our mission is to redefine real estate in the consumer's favor.

Representing Customers

Our brokerage efficiency results in savings that we share with our customers. We charge most home sellers a commission of 1% to 1.5%, compared to the 2.5% to 3% typically charged by traditional brokerages.

The results of our customer-first approach are clear. We:

- helped customers buy or sell more than 497,000 homes worth more than \$249 billion through 2022;
- saved customers more than \$1.5 billion, when compared to a 2.5% commission, since our launch in 2006;
- drew more than 49 million monthly average visitors to our website and mobile application in 2022, 5% more compared to 2021;
- had customers buy and sell the same home with us at a 32% higher rate than competing brokerages;
- sold Redfin-listed homes for nearly \$1,800 more on average than competing brokerages' similar listings in 2022, according to a study we commissioned; and
- had listings on the market for an average of less than 23 days in 2021 compared to the industry average of more than 26 days, according to a study we commissioned; and, according to the same study, approximately 97% of Redfin listings sold within 90 days versus the industry average of approximately 95%.

To serve customers when our own agents can't due to high demand or geographic limitations, we've developed partnerships with over 8,700 agents at other brokerages. Once we refer a customer to a partner agent, that agent, not us, represents the customer from the initial meeting through closing, at which point the agent pays us a portion of her commission as a referral fee.

Complete Customer Solution

Our long-term goal is to combine brokerage, rentals, mortgage, and title services into one solution, sharing information, coordinating deadlines, and streamlining processes so that a consumer's move is easier and often less costly. As we integrate these services more closely over time, we believe we can help consumers move much more efficiently than a combination of stand-alone companies ever could.

Bay Equity underwrites mortgage loans and, after originating each loan, Bay Equity sells most of the loans to third-party mortgage investors, retains a small amount of mortgage servicing rights, and services a small portfolio of loans. Bay Equity is licensed in 49 states and the District of Columbia. These markets accounted for 84% of our brokerage's buy-side transactions in 2022.

Title Forward offers title and settlement services. Title Forward has officially launched in 27 markets across eight states and the District of Columbia. These markets accounted for 45% of our brokerage's transactions in 2022.

RedfinNow bought homes directly from homeowners and resells them to homebuyers. In November 2022, we decided to wind-down RedfinNow and expect to complete the liquidation of our RedfinNow inventory in the second quarter of 2023.

Rent. offers an end-to-end digital marketing platform that connects consumers with available apartments and houses for rent across all 50 states and the District of Columbia.

Competition

The residential brokerage industry is highly fragmented, with numerous active licensed agents and brokerages, and is evolving rapidly in response to technological advancements, changing customer preferences, and new offerings. We compete primarily against other residential real estate brokerages, which include franchise operations affiliated with national or local brands, and small independent brokerages. We also compete with hybrid residential brokerages, which combine Internet technology and brokerage services, and a growing number of others that operate with non-traditional real estate business models. Competition is particularly intense in some of the densely populated metropolitan markets we serve, as they are dominated by entrenched real estate brokerages and are the primary markets for innovative and well-capitalized new entrants.

We believe we compete primarily based on:

- access to timely, accurate data about homes for sale;
- traffic to our website and mobile application, which themselves are subject to competition against real estate data websites that aggregate listings and sell advertising to traditional brokers;
- the speed and quality of our service, including agent responsiveness and local knowledge;
- our ability to hire and retain agents who deliver the best customer service;
- the costs of delivering our service and the price of our service to consumers;
- consumer awareness of our service and the effectiveness of our marketing efforts;
- technological innovation; and
- depth and breadth of local referral networks.

Bay Equity competes with numerous national and local multi-product banks as well as focused mortgage originators. We compete primarily on service, product selection, interest rates, and origination fees.

Title Forward competes with numerous national and local companies that typically focus solely on these services. We compete primarily on timeliness of service and fees.

Rent. competes with companies that provide an online marketplace for residential rental listings and related digital marketing solutions. We compete primarily on the scope and quality of listings we offer on our digital platforms, our value-added digital marketing solutions, traffic generated through our websites and mobile applications, and the breadth of our broader marketing services.

Seasonality

For the impact of seasonality on our business, see "Quarterly Results of Operations and Key Business Metrics" under Item 7.

Our Lead Agents

Our goal is to be the best employer in real estate. At the heart of this goal is an investment in the real estate agents who directly help our customers buy and sell homes. We refer to these agents as our lead agents. Unlike traditional real estate brokerages, where agents work as independent contractors, we employ our lead agents and pay them a salary, offer them an opportunity to earn additional cash and equity compensation, and provide them with health insurance and other benefits. As a result, our lead agents in 2022 earned a median income that was more than two times as much as agents at competing brokerages. Also in 2022, our lead agents were, on average, more than twice as productive as agents at competing brokerages. Our investment in our lead agents has resulted in a significant competitive advantage in agent retention. From 2020 to 2021, our lead agent retention was 77% compared with 66% for the industry, and from 2021 to 2022 (which was impacted by our layoffs) our retention was 66% compared with 61% for the industry. Our ability to attract, develop, and retain lead agents is critical to our success.

As of December 31, 2022, we had 5,572 employees. For 2022, our average number of lead agents was 2,426. See "Key Business Metrics - Average Number of Lead Agents" under Item 7.

Our Executive Officers

Below is information regarding our executive officers. Each executive officer holds office until his or her successor is duly elected and qualified or until the officer's earlier resignation, disqualification, or removal.

- Glenn Kelman, age 52, has served as our chief executive officer since September 2005 and one of our directors since March 2006.
- Bridget Frey, age 45, has been employed by us since June 2011 and has served as our chief technology officer since February 2015.
- Anthony Kappus, age 42, has been employed by us since March 2014 and has served as our chief legal officer since May 2021. Mr. Kappus previously served as our senior vice president - legal affairs from August 2018 to May 2021 and vice president - legal from September 2014 to August 2018.
- Chris Nielsen, age 56, has served as our chief financial officer since June 2013.
- Anna Stevens, age 49, has served as our chief human resources officer since August 2022. Prior to joining Redfin, Ms. Stevens served as the Chief People Officer of HD Supply, Inc., a North American industrial distributor.
- Christian Taubman, age 44, has served as our chief growth officer since April 2021. Mr. Taubman previously served as our chief product officer from October 2019 to April 2021. Prior to joining Redfin, Mr. Taubman served in several different roles with Amazon (a technology company) from April 2011 to October 2019. As Director - Smart Home Verticals from December 2017 to October 2019, Mr. Taubman led employees in product management, software engineering, and program management, with the mission of helping customers to connect more smart devices to Amazon's Alexa virtual assistant.
- Adam Wiener, age 44, has been employed by us since October 2007 and has served as our president of real estate operations since April 2021. Mr. Wiener previously served as our chief growth officer from July 2015 to April 2021.

Our Regulatory Environment

The residential real estate industry is heavily regulated by federal, state, and local governments in the United States. Because of our complete customer solution approach of combining brokerage, rentals, mortgage, title services, a customer may be able to receive more than one real estate-related service from us. Accordingly, some government regulations affect more than one of our operating segments and may impact our ability to offer multiple services to the same customer.

For example, the Real Estate Settlement Procedures Act of 1974 restricts, with some exceptions, kickbacks or referral fees that real estate settlement service providers, such as brokerages, mortgage originators, and title and closing service providers, may pay or receive in connection with the referral of settlement services. Furthermore, the Fair Housing Act of 1968 (the "FHA") prohibits discrimination in the purchase or sale of homes. The FHA applies to real estate agents, mortgage lenders, title companies, and home sellers, such as RedfinNow, as well as many forms of advertising and communications, including MLS listings and insights about home listings.

Additionally, our brokerage, mortgage, and title business each requires a license specific to its business from each state in which it operates, and the licensing requirements vary by state. Furthermore, some of our employees who provide services for these businesses must also hold individual licenses. These entity and individual licenses may be costly to obtain and maintain, which may adversely affect our company's earnings.

Our Website and Public Filings

Our website is www.redfin.com. Through this website, we make available, free of charge, our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K, and amendments to these reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as soon as reasonably practicable after we file such material with, or furnish it to, the U.S. Securities and Exchange Commission (the "SEC").

Item 1A. Risk Factors

You should carefully consider the risks described below, together with all other information in this annual report, before investing in any of our securities. The occurrence of any single risk or any combination of risks could materially and adversely affect our business, operating results, financial condition, liquidity, or competitive position, and consequently, the value of our securities. The material adverse effects include, but are not limited to, not growing our revenue or market share at the pace that they have grown historically or at all, our revenue and market share fluctuating on a quarterly and annual basis, an extension of our history of losses and a failure to become profitable, not achieving the revenue and net income (loss) guidance that we provide, and harm to our reputation and brand.

Risks Related to Our Business and Industry

Our business depends significantly on the health of the U.S. residential real estate industry and macroeconomic factors.

Our success depends largely on the health of the U.S. residential real estate industry. This industry, in turn, is affected by changes in general economic conditions, which are beyond our control. Any of the following factors could reduce the volume of residential real estate transactions, cause a decline in the prices at which homes are bought and sold, or otherwise adversely affect the industry and harm our business:

- seasonal or cyclical downturns in the U.S. residential real estate industry, which may be due to any single factor, or a combination of factors, listed below, or factors which are currently not known to us or that have not historically affected the industry;
- slow economic growth or recessionary conditions;
- increased unemployment rates or stagnant or declining wages;
- inflationary conditions;
- low consumer confidence in the economy or the U.S. residential real estate industry;
- adverse changes in local or regional economic conditions in the markets that we serve, particularly our top-10 markets and markets into which we are attempting to expand;
 - increased mortgage rates; reduced availability of mortgage financing; or increased down payment requirements;
 - low home inventory levels, which may result from zoning regulations, higher construction costs, and housing market uncertainty that discourages some home sellers, among other factors;
 - lack of affordably priced homes, which may result from home prices growing faster than wages, among other factors;
 - volatility and general declines in the stock market or lower yields on individuals' investment portfolios;
 - increased expenses associated with home ownership, including rising insurance costs that may result from more frequent and severe natural disasters and inclement weather;
- newly enacted and potential federal, state, and local legislative actions, as well as new judicial decisions, that would affect the residential real estate industry generally or in our top-10 markets, including (i) actions or decisions that would increase the tax liability arising from buying, selling, or owning real estate, (ii) actions or decisions that would change the way real estate brokerage commissions are negotiated, calculated, or paid, and (iii) actions or decisions that would discourage individuals from owning, or obtaining a mortgage on, more than one home, and (iv) potential reform relating to Fannie Mae, Freddie Mac, and other government sponsored entities that provide liquidity to the mortgage market;
- changes that cause U.S. real estate to be more expensive for foreign purchases, such as (i) increases in the exchange rate for the U.S. dollar compared to foreign currencies and (ii) foreign regulatory changes or capital controls that make it more difficult for foreign purchasers to withdraw capital from their home countries or purchase and hold U.S. real estate;
- changed generational views on homeownership and generally decreased financial resources available for purchasing homes; and

- war, terrorism, political uncertainty, natural disasters, inclement weather, health epidemics or pandemics, and acts of God, including the affect of COVID-19 on the residential real estate market in the United States.

Our real estate services segment, which is our largest segment by gross profit, is concentrated in certain geographic markets. Our failure to adapt to any substantial shift in the relative percentage of residential housing transactions from these markets to other markets in the United States could adversely affect our financial performance.

For the year ended December 31, 2022, our top-10 markets by real estate services revenue consisted of the metropolitan areas of Boston, Chicago, Denver (including Boulder and Colorado Springs), Los Angeles (including Santa Barbara), Maryland, Northern Virginia, Portland (including Bend), San Diego, San Francisco, and Seattle.

Local and regional conditions in these markets may differ significantly from prevailing conditions in the United States or other parts of the country. Accordingly, events may adversely and disproportionately affect demand for and sales prices of homes in these markets. Any overall or disproportionate downturn in demand or home prices in any of our largest markets, particularly if we are unable to increase revenue from our other markets, could adversely affect growth of our revenue and market share or otherwise harm our business.

Our top markets are primarily major metropolitan areas, where home prices and transaction volumes are generally higher than other markets. As a result, our real estate services revenue and gross margin are generally higher in these markets than in our smaller markets. To the extent there is a long-term net migration to cities outside of these markets, the relative percentage of residential housing transactions may shift away from the top markets where we have historically generated most of our revenue. Our inability to adapt to any shift, including failing to increase revenue from other markets, could adversely affect our financial performance and market share.

Competition in each of our lines of business is intense.

Many of our competitors across each of our businesses have substantial competitive advantages, such as longer operating histories, stronger brand recognition, greater financial resources, more management, sales, marketing and other resources, superior local referral networks, perceived local knowledge and expertise, and extensive relationships with participants in the residential real estate industry, including third-party data providers such as multiple listing services ("MLSs"). Consequently, these competitors may have an advantage in recruiting and retaining agents, attracting consumers, and growing their businesses. They may also be able to provide consumers with offerings that are different from or superior to those we provide. The success of our competitors could result in our loss of market share and harm our business.

We may be unable to maintain or improve our current technology offerings at a competitive level or develop new technology offerings that meet customer or agent expectations. Our technology offerings may also contain undetected errors or vulnerabilities.

Our technology offerings, including tools, features, and products, are key to our competitive plan for attracting potential customers and hiring and retaining lead agents. Maintaining or improving our current technology to meet evolving industry standards and customer and agent expectations, as well as developing commercially successful and innovative new technology, is challenging and expensive. For example, the nature of development cycles may result in delays between the time we incur expenses and the time we introduce new technology and generate revenue, if any, from those investments. Anticipated customer demand for a technology offering could also decrease after the development cycle has commenced, and we would not be able to recoup costs, which may be substantial, we incurred.

As standards and expectations evolve and new technology becomes available, we may be unable to identify, design, develop, and implement, in a timely and cost-effective manner, new technology offerings to meet those standards and expectations. As a result, we may be unable to compete effectively, and to the extent our competitors develop new technology offerings faster than us, they may render our offerings noncompetitive or obsolete. Additionally, even if we implemented new technology offerings in a timely manner, our customers and agents may not accept or be satisfied by the offerings.

Furthermore, our development and testing processes may not detect errors and vulnerabilities in our technology offerings prior to their implementation. Any inefficiencies, errors, technical problems, or vulnerabilities arising in our technology offerings after their release could reduce the quality of our services or interfere with our customers' and agents' access to and use of our technology and offerings.

We may be unable to obtain and provide comprehensive and accurate real estate listings quickly, or at all.

We believe that users of our website and mobile application come to us primarily because of the real estate listing data that we provide. Accordingly, if we were unable to obtain and provide comprehensive and accurate real estate listings data, our primary channels for meeting customers will be diminished. We get listings data primarily from MLSs in the markets we serve. We also source listings data from public records, other third-party listing providers, and individual homeowners and brokers. Many of our competitors and other real estate websites also have access to MLSs and other listings data, including proprietary data, and may be able to source listings data or other real estate information faster or more efficiently than we can. Since MLS participation is voluntary, brokers and homeowners may decline to post their listings data to their local MLS or may seek to change or limit the way that data is distributed. A competitor or another industry participant could also create an alternative listings data service, which may reduce the relevancy and comprehensive nature of the MLSs. If MLSs cease to be the predominant source of listings data in the markets that we serve, we may be unable to get access to comprehensive listings data on commercially reasonable terms, or at all, which may result in fewer people using our website and mobile application.

We rely on business data to make decisions and drive our machine-learning technology, and errors or inaccuracies in such data may adversely affect our business decisions and the customer experience.

We regularly analyze business data to evaluate growth trends, measure our performance, establish budgets, and make strategic decisions. While our business decisions are based on what we believe to be reasonable calculations for the applicable period of measurement, there are inherent challenges in measuring and interpreting the data, and we cannot be certain that the data are accurate. Errors or inaccuracies in the data could result in poor business decisions, resource allocation, or strategic initiatives. For example, if we overestimate traffic to our website and mobile application, we may not invest an adequate amount of resources in attracting new customers or we may hire more lead agents in a given market than necessary to meet customer demand.

We also use our business data and proprietary algorithms to inform our machine learning, such as in the calculation of our *Redfin Estimate*, which provides an estimate on the market value of individual homes. If customers disagree with us or if our *Redfin Estimate* fails to accurately reflect market pricing such that we are unable to attract homebuyers or help our customers sell their homes at satisfactory prices, or at all, customers may lose confidence in us.

We may be unable to attract homebuyers and home sellers to our website and mobile application in a cost-effective manner.

Our website and mobile application are our primary channels for meeting new customers. Accordingly, our success depends on our ability to attract homebuyers and home sellers to our website and mobile application in a cost-effective manner. To meet customers, we rely heavily on traffic generated from search engines and downloads of our mobile application from mobile application stores. We also rely on marketing methods such as targeted email campaigns, paid search advertising, social media marketing, and traditional media, including TV, radio, and billboards.

The number of visitors to our website and downloads of our mobile application depend in large part on how and where our website and mobile application rank in Internet search results and mobile application stores, respectively. While we use search engine optimization to help our website rank highly in search results, maintaining or improving our search result rankings is not within our control. Internet search engines frequently update and change their ranking algorithms, referral methodologies, or design layouts, which determine the placement and display of a user's search results. In some instances, Internet search engines may change these rankings, which may have the effect of promoting their own competing services or the services of one or more of our competitors. Similarly, mobile application stores can change how they display searches and how mobile applications are featured. For instance, editors at the Apple App Store can feature prominently editor-curated mobile applications and cause the mobile application to appear larger than other applications or more visibly on a featured list.

Additionally, our marketing efforts may fail to attract the desired number of customers for a variety of reasons, including the possibility that the creative treatment for our advertisements may be ineffective or new third-party email delivery policies may make it more difficult for us to execute targeted email campaigns.

If we are unable to deliver a rewarding experience on mobile devices, whether through our mobile website or mobile application, we may be unable to attract and retain customers.

Developing and supporting a mobile website and mobile application across multiple operating systems and devices requires substantial time and resources. We may not be able to consistently provide a rewarding customer experience on mobile devices and, as a result, customers we meet through our mobile website or mobile application may not choose to use our services at the same rate as customers we meet through our website.

As new mobile devices and mobile operating systems are released, we may encounter problems in developing or supporting our mobile website or mobile application for them. Developing or supporting our mobile website or mobile application for new devices and their operating systems may require substantial time and resources. The success of our mobile website and mobile application could also be harmed by factors outside of our control, such as:

- increased costs to develop, distribute, or maintain our mobile website or mobile application;
- changes to the terms of service or requirements of a mobile application store that requires us to change our mobile application development or features in an adverse manner; and
- changes in mobile operating systems, such as Apple's iOS and Google's Android, that disproportionately affect us, degrade the functionality of our mobile website or mobile application, require that we make costly upgrades to our technology offerings, or give preferential treatment to competitors' websites or mobile applications.

Our business model of employing lead agents subjects us to challenges not faced by our competitors. Our ability to hire and retain a sufficient number of lead agents is critical to our ability to maintain and grow our market share and to provide an adequate level of service to customers who want to work with our lead agents.

As a result of our business model of employing our lead agents, our lead agents generally earn less on a per transaction basis than traditional agents who work as independent contractors at traditional brokerages. Because our model is uncommon in our industry, agents considering working for us may not understand our compensation model or may not perceive it to be more attractive than the independent contractor, commission-driven compensation model used by most traditional brokerages. Additionally, due to the costs of employing our lead agents, lead agent turnover may be more costly to us than to traditional brokerages. If we are unable to attract, retain, effectively train, motivate, and utilize lead agents, we will be unable to offset the costs of employing them and grow our business. We may also be required to change our compensation model, which could significantly increase our lead agent compensation or other costs.

Also as a result of employing our lead agents, we incur costs that our brokerage competitors do not, such as base pay, employee benefits, expense reimbursement, training, and employee transactional support staff. Because of this, we have significant costs that, in the event of downturns in demand in the markets we serve, may result in us being unable to adjust as rapidly as some of our competitors. In turn, such downturns may impact us more than our competitors.

Conversely, in times of rapidly rising demand we may face a shortfall of lead agents. To the extent our customer demand increases from current levels, our ability to adequately serve the additional customers, and in turn grow our revenue and U.S. market share by value, depends, in part, on our ability to timely hire and retain additional lead agents. To the extent we are unable to hire, either timely or at all, or retain the required number of lead agents to serve our customer demand, we will be unable to maximize our revenue and market share growth. Although we are able to refer excess demand to our partner agents, historically our partner agents have closed transactions with customers they meet at a lower rate than our lead agents and have generated lower revenue per transaction.

Referring customers to our partner agents may harm our business.

We refer customers to third-party partner agents when we do not have a lead agent available due to high demand or geographic limitations. Our dependence on partner agents can be particularly heavy in certain new markets as we build our operations to scale in those markets or during times of rapidly rising demand for our services. Our partner agents are independent licensed agents affiliated with other brokerages, and we do not have any control over their actions. If our partner agents were to provide poor customer service, engage in malfeasance, or otherwise violate the laws and rules to which we are subject, we may be subject to legal claims and our reputation and business may be harmed.

Our arrangements with third parties may limit our growth and brand awareness. For example, referring customers to partner agents potentially redirects repeat and referral opportunities to the partner agents.

If we do not comply with the rules, terms of service, and policies of REALTOR® associations and MLSs, our access to and use of listings data may be restricted or terminated.

We must comply with the rules, terms of service, and policies of REALTOR® associations and MLSs to access and use MLSs' listings data. We belong to numerous REALTOR® associations and MLSs, and each has adopted its own rules, terms of service, and policies governing, among other things, how MLS data may be used and how listings data must be displayed on our website and mobile application. These rules typically do not contemplate multi-jurisdictional online brokerages like ours and vary widely among markets. They also are in some cases inconsistent with the rules of other REALTOR® associations and MLSs such that we are required to customize our website, mobile application, or service to accommodate differences between rules of REALTOR® associations and MLSs. Complying with the rules of each REALTOR® association and MLS requires significant investment, including personnel, technology and development resources, and the exercise of considerable judgment. If we are deemed to be noncompliant with a REALTOR® association or MLS's rules, we may face disciplinary sanctions in that association or MLS, which could include monetary fines, restricting or terminating our access to that MLS's data, or other disciplinary measures. The loss or degradation of this listings data could materially and adversely affect traffic to our website and mobile application, making us less relevant to consumers and restricting our ability to attract customers. It also could reduce agent and customer confidence in our services and harm our business.

If we fail to comply with the requirements governing the licensing of our brokerage, mortgage, and title businesses in the jurisdictions in which we operate, then our ability to operate those businesses in those jurisdictions may be revoked.

Redfin, as a brokerage, and our agents must comply with the requirements governing the licensing and conduct of real estate brokerage and brokerage-related businesses in the markets where we operate. Furthermore, we are also required to comply with the requirements governing the licensing and conduct of mortgage and title and settlement businesses in the markets where we operate. Due to the geographic scope of our operations, we and our agents may not be in compliance with all of the required licenses at all times. Additionally, if we enter into new markets, we may become subject to additional licensing requirements. If we or our agents fail to obtain or maintain the required licenses for conducting our brokerage, mortgage, and title businesses or fail to strictly adhere to associated regulations, the relevant government authorities may order us to suspend relevant operations or impose fines or other penalties.

Our wind-down plan for our RedfinNow operations may adversely impact our business, results of operations, financial performance, and reputation.

There are risks and uncertainties inherent to the wind-down of RedfinNow operations that could adversely impact our overall business, results of operations, financial performance, and reputation, including, but not limited to:

- Our ability to operate RedfinNow during the wind-down period, including our ability to successfully complete ongoing renovations of homes we've purchased, and to market and close on the sale of homes in inventory, may be adversely impacted by market conditions or other factors which could lead to longer hold times for homes in inventory, increased holding, renovation, and transactions costs, lower sales prices, and an overall decrease in profitability.
- Our financial projections and financial performance may be adversely impacted by, among other things, the accuracy of the estimates and assumptions related to the wind-down of RedfinNow operations on which our projections are based; other facts we discover that could require us to incur additional expense and record additional charges that may be materially different from our initial expectations about the financial performance of the business and the costs of the wind-down; and unanticipated changes to management's estimates (including, but not limited to, the accounting for the estimated net realizable value of inventory), reserves, or allowances and future costs we incur, such as those related to warranty or consumer claims.
- Our decision to wind-down our RedfinNow operations may have unintended impacts on our other business lines by, among other things, limiting our ability to meet new potential homebuyers and home sellers through marketing cash offers fulfilled by RedfinNow, limiting, and ultimately eliminating, the sale of RedfinNow-owned homes through our real estate services segment, and similarly impacting our title and settlement operations.
- RedfinNow may have overestimated the amount it should pay to purchase a home, and homes owned by it may significantly decline in value prior to being sold. As a result, we may be required to significantly write down the inventory value of homes and, to the extent we are able to resell homes at all, resell them at a price that is substantially less than our costs of acquiring and renovating the homes.

The extent to which the wind-down will impact our operations will depend on future developments, which are highly uncertain and cannot be predicted. Any of these risks could delay our wind-down of RedfinNow operations, increase costs and charges associated with the wind-down and disrupt the operations of our other businesses, any of which may adversely impact our business, results of operations, financial performance, and reputation.

It's possible that the net proceeds Bay Equity receives from the sale of mortgage loans it originates may not exceed the loan amount. Additionally, Bay Equity may also be unable to sell its originated loans at all. In that situation, Bay Equity will need to service the loans and potentially foreclose on the home by itself or through a third party, and either option could impose significant costs, time, and resources on Bay Equity. Bay Equity's inability to sell its originated loans could also expose us to adverse market conditions affecting mortgage loans.

Bay Equity intends to sell most of the mortgage loans that it originates to investors in the secondary mortgage market. Bay Equity's ability to sell its originated loans in the secondary market, and receive net proceeds from the sale that exceed the loan amount, depends largely on there being sufficient liquidity in the secondary market and its compliance with contracts with investors who have purchased the loans.

Demand in the secondary market for mortgage loans, and Bay Equity's ability to sell the mortgage loans that it originates on favorable terms and in a timely manner, can be hindered by many factors, including changes in regulatory requirements, the willingness of the agencies, aggregators, or other investors to provide funding for and purchase mortgage loans, and general economic conditions. If Bay Equity were unable to sell its originated loans, either initially or following a repurchase, then it may need to service the loans and we would be exposed to adverse market conditions affecting mortgage loans. For example, we may be required to write down the value of the loan, which reduces the amount of our current assets. Additionally, if Bay Equity borrowed under a warehouse credit facility for the loan, then it will be required to repay the borrowed amount, which reduces our cash on hand that is available for other corporate uses. Finally, if a homeowner were unable to make his or her mortgage payments, then we may be required to foreclose on the home securing the loan. Bay Equity may be unable to retain its subservicer on economically feasible terms to foreclose a home. Furthermore, any proceeds from selling a foreclosed home may be significantly less than the remaining amount of the loan due to Bay Equity.

The growth of Rent.'s business depends on its ability to attract property managers' advertising spending.

Rent.'s growth depends on advertising revenue generated primarily through property managers. Rent.'s ability to attract and retain advertisers may be adversely affected by any of the following factors:

- a prolonged period of high occupancy within rental properties;
- declining quantity and quality of renters leads it provides to property managers;
- its inability to keep pace with changes in technology and features expected by renters when visiting an online rental portal;
- its failure to offer an attractive return on investment to advertisers; and
- the inability of property managers to evict tenants for delinquent rent payments.

Rent. does not have long-term contracts with many of its advertisers, and these advertisers may choose to end their relationships with Rent. with little or no advance notice. As Rent.'s existing subscriptions for advertising terminate, it may not be successful in securing new subscriptions.

We may not realize the anticipated benefits from, and may incur substantial costs related to, our acquisitions of Rent. and Bay Equity.

We acquired Rent. on April 2, 2021 and Bay Equity on April 1, 2022. The anticipated benefits of each acquisition may not come to fruition. Integrating Rent. and Bay Equity will be challenging and time consuming, and may subject us to additional costs that we have not anticipated in evaluating the transaction. Furthermore, GAAP requires us to test the goodwill associated with these acquisitions at least annually and we review our goodwill and intangible assets for impairment when events change indicate that an impairment may be appropriate. Depending on the results of these reviews, we may be required to record a non-cash charge to our earnings in the period we determined impairment was appropriate, which may negatively impact our results of operations in that period.

Cybersecurity incidents could disrupt our business or result in the loss of critical and confidential information.

Cybersecurity incidents directed at us or our third-party service providers can range from uncoordinated individual attempts to gain unauthorized access to information technology systems to sophisticated and targeted measures known as advanced persistent threats. Cybersecurity incidents are also constantly evolving, increasing the difficulty of detecting and successfully defending against them. In the ordinary course of our business, we and our third-party service providers collect and store sensitive data, including our proprietary business information and intellectual property and that of our customers and employees, including personally identifiable information. Additionally, we rely on third-parties and their security procedures for the secure storage, processing, maintenance, and transmission of information that are critical to our operations. Despite measures designed to prevent, detect, address, and mitigate cybersecurity incidents, such incidents may occur to us or our third-party providers and, depending on their nature and scope, could potentially result in the misappropriation, destruction, corruption, or unavailability of critical data and confidential or proprietary information (our own or that of third parties, including personally identifiable information of our customers and employees) and the disruption of business operations. Any real or perceived compromises to our security, or that of our third-party providers, could cause customers to lose trust and confidence in us and stop using our website and mobile applications. In addition, we may incur significant costs for remediation that may include liability for stolen assets or information, repair of system damage, and compensation to customers, employees, and business partners. We may also be subject to government enforcement proceedings and legal claims by private parties.

We process, transmit, and store personal information, and unauthorized access to, or the unintended release of, this information could result in a claim for damages, regulatory action, loss of business, or unfavorable publicity.

We process, transmit, and store personal information to provide services to our customers and as an employer. As a result, we are subject to certain contractual terms, as well as federal, state, and foreign laws and regulations designed to protect personal information. While we take measures to protect the security and privacy of this information, it is possible that our security controls over personal data and other practices we follow may not prevent the unauthorized access to, or the unintended release of, personal information. If such unauthorized access or unintended release occurred, we could suffer significant damage to our brand and reputation, customers could lose confidence in the security and reliability of our services, and we could incur significant costs to address and fix these security incidents. These incidents could also lead to lawsuits and regulatory investigations and enforcement actions.

We rely on third-party licensed technology, and the inability to maintain these licenses or errors in the software we license could result in increased costs or reduced service levels.

We employ certain third-party software obtained under licenses from other companies in our technology. Our reliance on this third-party software may become costly if the licensor increases the price for the license or changes the terms of use and we cannot find commercially reasonable alternatives. Even if we were to find an alternative, integration of our technology with new third-party software may require substantial investment of our time and resources.

Any undetected errors or defects in the third-party software we license could prevent the deployment or impair the functionality of our technology, delay new service offerings, or result in a failure of our website or mobile application.

We use open source software in some aspects of our technology and may fail to comply with the terms of one or more of these open source licenses.

Our technology incorporates software covered by open source licenses. The terms of various open source licenses have not been interpreted by U.S. courts, and if they were interpreted, such licenses could be construed in a manner that imposes unanticipated restrictions on our technology. If portions of our proprietary software are determined to be subject to an open source license, we could be required to publicly release the affected portions of our source code, re-engineer all or a portion of our technologies, or otherwise be limited in our use of such software, each of which could reduce or eliminate the value of our technologies.

Moreover, our processes for controlling our use of open source software may not be effective. If we do not comply with the terms of an open source software license, we could be required to seek licenses from third parties to continue offering our services on terms that are not economically feasible, to re-engineer our technology to remove or replace the open source software, to discontinue the use of certain technology if re-engineering could not be accomplished on a timely basis, to pay monetary damages, to make generally available the source code for our proprietary technology, or to waive certain intellectual property rights.

We may be unable to secure intellectual property protection for all of our technology and methodologies, enforce our intellectual property rights, or protect our other proprietary business information.

Our success and ability to compete depends in part on our intellectual property and our other proprietary business information. To protect our proprietary rights, we rely on trademark, copyright, and patent law, trade-secret protection, and contractual provisions and restrictions. However, we may be unable to secure intellectual property protection for all of our technology and methodologies or the steps we take to enforce our intellectual property rights may be inadequate. Furthermore, we may also be unable to protect our proprietary business information from misappropriation.

If we are unable to secure intellectual property rights, our competitors could use our intellectual property to market offerings similar to ours and we would have no recourse to enjoin or stop their actions. Additionally, any of our intellectual property rights may be challenged by others and invalidated through administrative processes or litigation. Moreover, even if we secured our intellectual property rights, others may infringe on our intellectual property and we may be unable to successfully enforce our rights against the infringers because we may be unaware of the infringement or our legal actions may not be successful. Finally, others may misappropriate our proprietary business information, and we may be unaware of the misappropriation or unable to enforce our legal rights in a cost-effective manner. If any of these events were to occur, our ability to compete effectively would be impaired.

We may be unable to maintain and scale the technology underlying our offerings.

As the number of homebuyers and home sellers, renters, agents, and listings shared on our website and mobile application and the extent and types of data grow, our need for additional network capacity and computing power will also grow. Operating our underlying technology systems is expensive and complex, and we could experience operational failures. If we experience interruptions or failures in these systems for any reason, the security and availability of our services and technologies could be affected.

We are subject to a variety of federal, state and local laws, and our compliance with these laws, or the enforcement of our rights under these laws, may increase our expenses, require management's resources, or force us to change our business practices.

We are currently subject to a variety of, and may in the future become subject to additional, federal, state, and local laws. The laws include, but are not limited to, those relating to real estate, brokerage, title, mortgage, advertising, privacy and consumer protection, labor and employment, and intellectual property. These laws and their related regulations may evolve frequently and may be inconsistent from one jurisdiction to another. Additionally, certain of these laws and regulations were created for traditional real estate brokerages, and it is unclear how they may affect us given our business model that is unlike traditional brokerages or certain of our services that historically have not been offered by traditional brokerages.

These laws can be costly for us to comply with or enforce. Additionally, if we are unable to comply with and become liable for violations of these laws, or if courts or regulatory bodies provide unfavorable interpretations of existing regulations, our operations in affected markets may become prohibitively expensive, consume significant amounts of management's time, or need to be discontinued.

We are subject to costs associated with defending and resolving proceedings brought by government entities and claims brought by private parties.

We are from time to time involved in, and may in the future be subject to, government investigations or enforcement actions and private third-party claims arising from the laws to which we are subject or the contracts to which we are a party. Such investigations, actions, and claims include, but are not limited to, matters relating to employment law (including misclassification), intellectual property, privacy and consumer protection, website accessibility, the Real Estate Settlement Procedures Act of 1974, the Fair Housing Act of 1968 or other fair housing statutes, cybersecurity incidents, data breaches, commercial or contractual disputes, and exposure to COVID-19. They may also relate to ordinary-course brokerage disputes, including, but not limited to, failure to disclose property defects, failure to meet client legal obligations, commission disputes, personal injury or property damage claims, and vicarious liability based upon conduct of individuals or entities outside of our control, including partner agents and third-party contractor agents. See Note 8 to our consolidated financial statements for a discussion of pending third-party claims that we believe may be material to us.

Any such investigations, actions, or claims can be costly to defend or resolve, require significant time from management, or result in negative publicity. Furthermore, to the extent we are unsuccessful in defending an action or claim, we may be subject to civil or criminal penalties, including significant fines or damages, the loss of ability to operate in a jurisdiction, or the need to change certain business practices (including redesigning, or obtaining a license for, our technology or modifying or ceasing to offer certain services).

In August 2019, Devin Cook, a former associate agent, filed a complaint against us in a California state court alleging misclassification as an independent contractor. On May 23, 2022, we settled Ms. Cook's and a related case through global mediation for an aggregate of \$3.0 million. This amount is subject to adjustment if the actual number of our agents or their workweeks differ from the number we provided to the plaintiffs. The settlement is subject to court approval. If it does not get approved or a court finds against us on classification of our associate agents, we may have to pay significant additional damages and change our business practices, which may be costly and time-consuming. Changes could require us to reclassify associate agents as employees, thereby subjecting them to wage and hour laws, and resulting in related tax and employment liabilities. Agents may also opt out of our platform given the loss of flexibility under an employment model.

The real estate market may be negatively impacted by industry changes as the result of certain class action lawsuits.

The real estate industry faces significant antitrust pressure, both from several private lawsuits and from the Department of Justice (the "DOJ")'s related investigation. The National Association of Realtors ("NAR") and certain companies (Realty, HomeServices of America, RE/MAX, and Keller Williams) are defendants in class action complaints referred to as the "Moehrl-related suits" which allege violations of federal antitrust law. The DOJ also agreed to settle a suit with NAR in which NAR agreed to adopt certain rule changes, such as increased disclosure of commission offers from sellers' agents to buyers' agents, but the direct and indirect effects, if any, of the settlement upon the real estate industry are not yet entirely clear and the DOJ recently walked away from this settlement and reopened its investigation. Moreover, the Moehrl-related suits seek additional changes in real estate industry practices beyond the changes NAR agreed to in the DOJ settlement. Further, these lawsuits have prompted discussion of regulatory changes to rules established by local or state real estate boards or multiple listing services. Although the settlement between NAR and the DOJ does not require changes to agent and broker compensation, the resolution of the Moehrl-related suits and/or other regulatory changes may require changes to our or our brokers' business models, including changes in agent and broker compensation. Even if commission sharing remains the norm, it may no longer be mandated in places where it is currently mandated, leading to hourly or a la carte services. If buyers end up having to compensate buyer brokers, they may be more likely to contact listing agents directly, driving dual agent broker commissions down. These potential changes in agent and broker compensation in particular could reduce the fees we receive from our agents, which, in turn, could adversely affect our financial condition and results of operations.

Risks Related to Our Indebtedness

We may not have sufficient cash flow to make the payments required by our convertible senior notes, and a failure to make payments when due may result in the entire principal amount of the convertible senior notes becoming due prior to the notes' maturity, which may result in our bankruptcy.

We are required to pay interest on our 2023 notes and 2027 notes on a semi-annual basis. In addition, holders of our convertible senior notes have the right to require us to repurchase their notes upon the occurrence of a fundamental change at a repurchase price equal to 100% of the principal amount of the notes to be repurchased, plus any accrued and unpaid interest. Furthermore, holders of our notes have the right to convert their notes upon any of the conditions described below:

- during any calendar quarter, if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the conversion price of the notes on each applicable trading day;
- during the five business day period after any five consecutive trading day period in which the trading price per \$1,000 principal amount of the notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of our common stock and the conversion rate of the notes on each such trading day;
- if we call any or all of the notes for redemption, at any time prior to the close of business on the scheduled trading day prior to the redemption date; or
- upon the occurrence of specified corporate events.

If any of these conversion features under a tranche of our notes are triggered, then holders of such notes will be entitled to convert the notes at any time during specified periods at their option. Upon conversion, we will be required to make cash payments in respect of the notes being converted, unless we elect to deliver solely shares of our common stock to settle such conversion (other than paying cash in lieu of delivering any fractional share).

Our ability to make these payments depends on having sufficient cash on hand when the payments are due. Our cash availability, in turn, depends on our future performance, which is subject to the other risks described in this Item 1A. If we are unable to generate sufficient cash flow to make the payments when due, then we may be required to adopt one or more alternatives, such as selling assets, refinancing the notes, or raising additional capital. However, we may not be able to engage in any of these activities or engage in these activities on desirable terms.

Our failure to make payments when due may result in an event of default under the indentures governing our convertible senior notes and cause (i) with respect to our 2023 notes, the remaining \$23.5 million aggregate principal amount, which will mature on July 15, 2023; (ii) with respect to our 2025 notes, the remaining \$518.7 million aggregate principal amount, and (iii) with respect to our 2027 notes, the entire \$575.0 million aggregate principal amount, plus, in each case, any accrued and unpaid interest, to become due immediately and prior to the maturity date. Any such acceleration of the principal amount could result in our bankruptcy. In a bankruptcy, the holders of our convertible senior notes would have a claim to our assets that is senior to the claims of holders of our common stock.

A substantial portion of our mortgage business's assets are measured at fair value. If our estimates of fair value are inaccurate, we may be required to record a significant write down of our assets.

Bay Equity's mortgage servicing rights ("MSRs"), interest rate lock commitments ("IRLCs"), and mortgage loans held for sale are recorded at fair value on our balance sheet. Fair value determinations require many assumptions and complex analyses, and we cannot control many of the underlying factors. If our estimates are incorrect, we could be required to write down the value of these assets, which could adversely affect our financial condition and results of operations.

In particular, our estimates of the fair value of Bay Equity's MSRs are based on the cash flows projected to result from the servicing of the related mortgage loans and continually fluctuate due to a number of factors, including estimated discount rate, the cost of servicing, objective portfolio characteristics, contractual service fees, default rates, prepayment rates and other market conditions that affect the number of loans that ultimately become delinquent or are repaid or refinanced. These estimates are calculated by a third party using financial models that account for a high number of variables that drive cash flows associated with MSRs and anticipate changes in those variables over the life of the MSR. The accuracy of our estimates of the fair value of our MSRs are dependent on the reasonableness of the results of such models and the variables and assumptions that are built into them. If prepayment speeds or loan delinquencies are higher than anticipated, or other factors perform worse than modeled, the recorded value of certain of our MSRs may decrease, which could adversely affect our financial condition and results of operations.

Bay Equity relies on its warehouse credit facilities to fund the mortgage loans that it originates. If one or more of those facilities were to become unavailable, Bay Equity may be unable to find replacement financing on commercially reasonable terms, or at all, and this could adversely affect its ability to originate additional mortgage loans.

Bay Equity relies on borrowings from warehouse credit facilities to fund substantially all of the mortgage loans that it originates. To grow its business, Bay Equity depends, in part, on having sufficient borrowing capacity under its current facilities or obtaining additional borrowing capacity under new facilities. A current facility may become unavailable if Bay Equity fails to comply with its ongoing obligations under the facility, including failing to satisfy applicable financial covenants, or if it cannot agree with the lender on terms to renew the facility. New facilities may not be available on terms acceptable to us. If Bay Equity were unable to secure sufficient borrowing capacity through its warehouse credit facilities, then it may need to rely on our cash on hand to originate mortgage loans. If this cash were unavailable, then Bay Equity may be unable to maintain or increase the amount of mortgage loans that it originates, which will adversely affect its growth.

The cross-acceleration and cross-default provisions in the agreements governing our current indebtedness may result in an immediate obligation to repay all of either our 2025 and 2027 convertible senior notes or our warehouse credit facilities.

The indentures governing our 2025 and 2027 convertible senior notes contain cross-acceleration and cross-default provisions. These provisions could have the effect of creating an event of default under the indenture for either our 2025 or 2027 convertible senior notes, despite our compliance with that agreement, due solely to an event of default or failure to pay amounts owed under the indenture for the other tranche of convertible senior notes. Accordingly, all or a significant portion of our outstanding convertible senior notes could become immediately payable due solely to our failure to comply with the terms of a single agreement governing either our 2025 or 2027 convertible senior notes. Our warehouse credit facilities contain cross-acceleration and cross-default provisions. These provisions could have the effect of creating an event of default under the agreement for any such warehouse credit facility, despite our compliance with that agreement, due solely to an event of default or failure to pay amounts owed under the agreement for another warehouse credit facility. Accordingly, all or a significant portion of our outstanding warehouse indebtedness could become immediately payable due solely to our failure to comply with the terms of a single agreement governing one of our warehouse credit facilities. The cross-default provisions in our existing warehouse credit facilities do not pick up defaults under our convertible senior notes. Our existing warehouse credit facilities are also carved out of the cross-payment default provisions in our 2025 and 2027 senior notes given that they constitute non-recourse debt.

Risks Related to Our Convertible Preferred Stock

We may be required to make cash payments to our preferred stockholders before our preferred stock's final redemption date of November 30, 2024, and any cash payments may materially reduce our net working capital.

On November 30, 2024, we will be required to redeem all shares of our convertible preferred stock then outstanding and pay accrued dividends on those shares. A preferred stockholder has the option of receiving cash, shares of our common stock, or a combination of cash and shares for this redemption. However, before this redemption, we may be required to make cash payments to our preferred stockholders in the two situations described below, and any such cash payments will reduce our cash available for other corporate uses and may materially reduce our net working capital.

Dividends accrue on each \$1,000 of our outstanding convertible preferred stock at a rate of 5.5% per year and are payable quarterly. Assuming we satisfy the "equity conditions" (as defined in the certificate of designation governing our preferred stock), we will pay dividends in shares of our common stock. These conditions principally include (i) we have ensured the liquidity and transferability of our common stock held by the preferred stockholders, (ii) we have issued common stock and paid cash to the preferred stockholders, as required by the certificate of designation, (iii) we are not in bankruptcy or have had a bankruptcy proceeding instituted against us, and (iv) we have not breached an agreement that governs the preferred stockholders' rights with respect to the preferred stock and such breach materially and adversely impacts our business or a preferred stockholder's economic benefits under the agreement. However, if we fail to satisfy these "equity conditions," then we must pay cash dividends in amount equal to (i) the number of shares of our common stock that we would have issued as dividends, assuming we satisfied the conditions, multiplied by (ii) the volume-weighted-average closing price of our common stock for the ten trading days preceding the date the dividends are payable.

A preferred stockholder has the right to require us to redeem its preferred stock for cash following the occurrence of a "triggering event" (as defined in the certificate of designation governing our preferred stock). These events are similar in nature to the "equity conditions" described above. The cash payment, for each share of preferred stock, would equal the sum of (i) \$1,000, (ii) any accrued dividends on the preferred stock, and (iii) an amount equal to all scheduled dividend payments (excluding any accrued dividends) on the preferred stock for all remaining dividend periods from the date the preferred stockholder requests redemption through November 29, 2024.

Risks Relating to Ownership of Our Common Stock

Our restated certificate of incorporation designates the Court of Chancery of the State of Delaware and the U.S. federal district courts as the exclusive forums for certain types of actions that may be initiated by our stockholders. These provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, or employees, which may discourage lawsuits with respect to such claims.

Our restated certificate of incorporation provides that, unless we consent in writing to an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers, or employees to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, our restated certificate of incorporation, or our restated bylaws, (iv) any action to interpret, apply, enforce or determine the validity of our restated certificate of incorporation or our restated bylaws, or (iv) any action asserting a claim that is governed by the internal affairs doctrine. This exclusive forum provision does not apply to actions arising under the Securities Exchange Act of 1934, or, as described below, the Securities Act of 1933.

Our restated certificate of incorporation further provides that, unless we consent in writing to an alternative forum, the U.S. federal district courts will be the exclusive forum for any complaint asserting a cause of action arising under the Securities Act of 1933. Notwithstanding this provision, stockholders will not be deemed to have waived our compliance with the federal securities laws and the rules and regulations thereunder.

Item 1B. Unresolved Staff Comments

None.

Item 2. Properties

None.

Item 3. Legal Proceedings

See "Legal Proceedings" under Note 8 to our consolidated financial statements for a discussion of our material, pending legal proceedings.

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, Holders of Record, and Dividends**

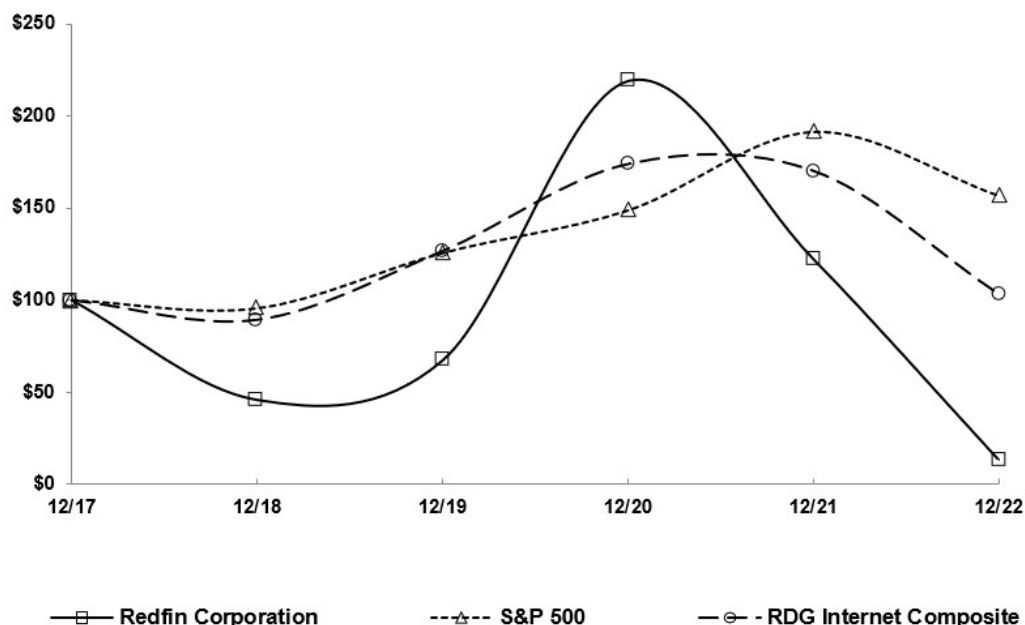
Our common stock is listed on The Nasdaq Global Select Market under the symbol "RDFN."

As of February 10, 2023, we had 60 holders of record of our common stock. Because many of our shares of common stock are held by brokers and other institutions on behalf of stockholders, we are unable to estimate the total number of beneficial owners of our common stock represented by these record holders.

The holders of our convertible preferred stock are entitled to dividends, which accrue daily based on a 360-day fiscal year at a rate of 5.5% per annum based on the issue price and are payable quarterly in arrears on the first business day following the end of each calendar quarter. Assuming we satisfy certain conditions, we will pay dividends in shares of common stock at a rate of the dividend payable divided by \$17.95. If we do not satisfy such conditions, we will pay dividends in a cash amount equal to (1) the dividend shares otherwise issuable on the dividends multiplied by (2) the volume-weighted average closing price of our common stock for the ten trading days preceding the date the dividends are payable. Except for the foregoing, we have no intention of paying cash dividends in the foreseeable future.

Stock Performance Graph

The graph below compares the cumulative total return of a \$100 investment in our common stock with the cumulative total return of the same investment in the S&P 500 Index and the RDG Composite Index. The period shown commences on December 31, 2017, which was the year in which our common stock first started trading after our initial public offering ("IPO"), and ends on December 31, 2022.



Unregistered Sales of Securities

During the period covered by this annual report, we did not sell any equity securities that were not registered under the Securities Act of 1933.

Purchases of Equity Securities

During the quarter ended December 31, 2022, there were no purchases of our common stock by or on behalf of us or any of our affiliated purchasers, as such term is defined in Rule 10b-18(a)(3) under the Securities Exchange Act of 1934.

Item 6. [Reserved]

Not applicable.

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

The following discussion and analysis of our financial condition and results of operations should be read together with our consolidated financial statements, the accompanying notes, and other information included in this annual report. In particular, the risk factors contained in Item 1A may reflect trends, demands, commitments, events, or uncertainties that could materially impact our results of operations and liquidity and capital resources.

The following discussion contains forward-looking statements, such as statements regarding our future operating results and financial position, our business strategy and plans, our market growth and trends, and our objectives for future operations. See "Note Regarding Forward-Looking Statements" for more information about relying on these forward-looking statements. The following discussion also contains information using industry publications. See "Note Regarding Industry and Market Data" for more information about relying on these industry publications.

When we use the term "basis points" in the following discussion, we refer to units of one-hundredth of one percent.

Overview

We help people buy and sell homes. Representing customers in over 100 markets in the United States, we are a residential real estate brokerage. We pair our own agents with our own technology to create a service that is faster, better, and costs less. We meet customers through our listings-search website and mobile application.

We use the same combination of technology and local service to originate mortgage loans and offer title and settlement services. Beginning in April 2021, we also offer digital platforms to connect consumers with available apartments and houses for rent.

Our mission is to redefine real estate in the consumer's favor.

Adverse Macroeconomic Conditions and Our Associated Actions

Beginning in the second quarter of 2022, a number of economic factors began to adversely impact the residential real estate market, including higher mortgage interest rates, lower consumer sentiment, increased inflation, and declining financial market conditions. This shift in the macroeconomic backdrop had an adverse impact on consumer demand for our services, as consumers weighed the financial implications of selling or purchasing a home and taking out a mortgage. Our real estate services transaction volume decreased by 27% in the third and fourth quarters of 2022, compared to the prior year. This stands in contrast to the 2% that our real estate services transaction volume decreased in the first and second quarters of 2022, compared to the prior year. Our newly acquired mortgage business, Bay Equity, also experienced significant declines in loan volumes beginning in the second quarter of 2022, particularly from refinancing prior mortgages.

In response to these macroeconomic and consumer demand developments, we took action to adjust our operations and manage our business towards longer-term profitability despite these adverse macroeconomic factors.

In June, we laid off 442 employees, which represented approximately eight percent of total employees. In November, we laid off an additional 862 employees, which represented 13% of total employees. From April 2022, after completing the acquisition of Bay Equity, through the end of the year, through involuntary reductions and attrition, we reduced our total number of employees by 28%, including a reduction in lead agents of 30%. These workforce reductions were intended to align the size of our operations with the level of consumer demand for our services at that time.

Also in November, we decided to wind-down RedfinNow. This was a strategic decision we made in order to focus our resources on our core business in the face of the rising cost of capital.

Key Business Metrics

In addition to the measures presented in our consolidated financial statements, we use the following key metrics to evaluate our business, develop financial forecasts, and make strategic decisions.

	Year Ended December 31,		
	2022	2021	2020
Monthly average visitors (in thousands)	49,654	47,113	42,862
Real estate services transactions			
Brokerage	66,554	76,680	60,510
Partner	13,649	17,899	15,290
Total	80,203	94,579	75,800
Real estate services revenue per transaction			
Brokerage	\$ 11,269	\$ 11,076	\$ 10,040
Partner	2,718	3,020	2,858
Aggregate	9,814	9,551	8,591
U.S. market share by units ⁽¹⁾	0.80 %	0.77 %	0.67 %
Revenue from top-10 markets as a percentage of real estate services revenue	58 %	62 %	63 %
Average number of lead agents	2,426	2,396	1,757
RedfinNow homes sold	2,044	1,451	453
Revenue per RedfinNow home sold	\$ 576,599	\$ 594,268	\$ 462,883
Mortgage originations by dollars (in millions)	\$ 4,317	\$ 988	\$ 685
Mortgage originations by units (in ones)	10,625	2,643	1,973

(1) Prior to the second quarter of 2022, we reported our U.S. market share based on the aggregate home value of our real estate services transactions, relative to the aggregate value of all U.S. home sales, which we computed based on the mean sale price of U.S. homes provided by the National Association of REALTORS® ("NAR"). Beginning in the second quarter of 2022, NAR (1) revised its methodology of computing the mean sale price, (2) restated its previously reported mean sale price beginning from January 2020 (and indicated that previously reported mean sale price prior to January 2020 is not comparable), and (3) discontinued publication of the mean sale price as part of its primary data set. Due to these changes, as of the second quarter of 2022, we report our U.S. market share based on the number of homes sold, rather than the dollar value of homes sold. Our market share by number of homes sold has historically been lower than our market share by dollar value of homes sold. We also stopped reporting the aggregate home value of our real estate services transactions.

Monthly Average Visitors

The number of, and growth in, visitors to our website and mobile application are important leading indicators of our business activity because these channels are the primary ways we meet customers. The number of visitors is influenced by, among other things, market conditions that affect interest in buying or selling homes, the level and success of our marketing programs, seasonality, and how our website appears in search results. We believe we can continue to increase visitors, which helps our growth.

Given the lengthy process to buy or sell a home, a visitor during one month may not convert to a revenue-generating customer until many months later, if at all.

When we refer to "monthly average visitors" for a particular period, we are referring to the average number of unique visitors to our website and our mobile applications for each of the months in that period, as measured by Google Analytics, a product that provides digital marketing intelligence. Google Analytics tracks visitors using cookies, with a unique cookie being assigned to each browser or mobile application on a device. For any given month, Google Analytics counts all of the unique cookies that visited our website and mobile applications during that month. Google Analytics considers each unique cookie as a unique visitor. Due to third-party technological limitations, user software settings, or user behavior, it is possible that Google Analytics may assign a unique cookie to different visits by the same person to our website or mobile application. In such instances, Google Analytics would count different visits by the same person as separate visits by unique visitors. Accordingly, reliance on the number of unique cookies counted by Google Analytics may overstate the actual number of unique persons who visit our website or our mobile applications for a given month.

Our monthly average visitors exclude visitors to Rent.'s websites and mobile applications.

Real Estate Services Transactions

We record a brokerage real estate services transaction when one of our lead agents represented the homebuyer or home seller in the purchase or sale, respectively, of a home. We record a partner real estate services transaction (i) when one of our partner agents represented the homebuyer or home seller in the purchase or sale, respectively, of a home or (ii) when a Redfin customer sold his or her home to a third-party institutional buyer following our introduction of that customer to the buyer. We include a single transaction twice when our lead agents or our partner agents serve both the homebuyer and the home seller of the transaction. Additionally, when one of our lead agents represents RedfinNow in its sale of a home, we include that transaction as a brokerage real estate services transaction.

Increasing the number of real estate services transactions is critical to increasing our revenue and, in turn, to achieving profitability. Real estate services transaction volume is influenced by, among other things, the pricing and quality of our services as well as market conditions that affect home sales, such as local inventory levels and mortgage interest rates. Real estate services transaction volume is also affected by seasonality and macroeconomic factors.

Real Estate Services Revenue per Transaction

Real estate services revenue per transaction, together with the number of real estate services transactions, is a factor in evaluating revenue growth. We also use this metric to evaluate pricing changes. Changes in real estate services revenue per transaction can be affected by, among other things, our pricing, the mix of transactions from homebuyers and home sellers, changes in the value of homes in the markets we serve, the geographic mix of our transactions, and the transactions we refer to partner agents and any third-party institutional buyer. We calculate real estate services revenue per transaction by dividing brokerage, partner, or aggregate revenue, as applicable, by the corresponding number of real estate services transactions in any period.

We generally generate more real estate services revenue per transaction from representing homebuyers than home sellers. However, we believe that representing home sellers has unique strategic value, including the marketing power of yard signs and other campaigns, and the market effect of controlling listing inventory.

Prior to July 2022, homebuyers who purchased their home using our brokerage services would receive a commission refund in a substantial majority of our markets. In July 2022, we began a pilot program in certain of those markets to eliminate our commission refund. Since this pilot was successful, we eliminated our commission refund in all markets in December 2022. The average refund per transaction for a homebuyer was \$1,336 in 2022, and \$852 in the fourth quarter of 2022. We expect that elimination of our commission refund in all markets will increase our real estate services revenue per transaction, although this metric is also impacted by the factors discussed above.

From 2021 to 2022, the percentage of brokerage transactions from home sellers was essentially unchanged at approximately 44%.

U.S. Market Share by Units

Increasing our U.S. market share by units is critical to our ability to grow our business and achieve profitability over the long term. We believe there is a significant opportunity to increase our share in the markets we currently serve.

We calculate our market share by aggregating the number of brokerage and partner real estate services transactions. We then divide that number by two times the aggregate number of U.S. home sales, in order to account for both the sell- and buy-side components of each home sale. We obtain the aggregate number of U.S. home sales from the National Association of REALTORS® ("NAR"). NAR data for the most recent period is preliminary and may subsequently be updated by NAR.

Revenue from Top-10 Markets as a Percentage of Real Estate Services Revenue

Our top-10 markets by real estate services revenue are the metropolitan areas of Boston, Chicago, Denver (including Boulder and Colorado Springs), Los Angeles (including Santa Barbara), Maryland, Northern Virginia, Portland (including Bend), San Diego, San Francisco, and Seattle. This metric is an indicator of the geographic concentration of our real estate services segment. We expect our revenue from top-10 markets to decline as a percentage of our total real estate services revenue over time.

Average Number of Lead Agents

The average number of lead agents, in combination with our other key metrics such as the number of brokerage transactions, is a basis for calculating agent productivity and is one indicator of the potential future growth of our business. We systematically evaluate traffic to our website and mobile application and customer activity to anticipate changes in customer demand, helping determine when and where to hire lead agents.

We calculate the average number of lead agents by taking the average of the number of lead agents at the end of each month included in the period.

RedfinNow Homes Sold

The number of homes sold by RedfinNow is an indicator for investors to understand the underlying transaction volume growth of our RedfinNow business. This number is influenced by, among other things, the level and quality of our homes available for sale inventory and market conditions that affect home sales, such as local inventory levels and mortgage interest rates.

Revenue per RedfinNow Home Sold

Revenue per RedfinNow home sold, together with the number of RedfinNow homes sold, is a factor in evaluating revenue growth. Changes in revenue per RedfinNow home sold can be affected by, among other things, the geographic mix of home sales, the types and sizes of homes that it had previously purchased, pricing of homes listed for sale, and changes in the value of homes in the markets it serves. For any period, we calculate revenue per RedfinNow home sold by dividing revenue from sales of homes by RedfinNow by the number of homes sold by RedfinNow during that period.

Mortgage Originations

Mortgage originations is the volume of mortgage loans originated by our mortgage business, measured by both dollar value of loans and number of loans. This volume is an indicator for the growth of our mortgage business. Mortgage originations is affected by mortgage interest rates, the ability of our mortgage loan officers to close loans, and the number of our homebuyer customers who use our mortgage business for a mortgage loan, among other factors.

Prior to April 1, 2022, our mortgage business consisted solely of Redfin Mortgage, LLC. From April 1, 2022 through June 30, 2022, our mortgage business consisted of both Bay Equity LLC and Redfin Mortgage, LLC. We dissolved Redfin Mortgage, LLC on June 30, 2022, and since that time, our mortgage business has consisted solely of Bay Equity LLC.

Components of Our Results of Operations

Revenue

We generate revenue primarily from commissions and fees charged on each real estate services transaction closed by our lead agents or partner agents, from the sale of homes, from subscription-based product offerings for our rentals business, and from the origination, sales, and servicing of mortgages.

Real Estate Services Revenue

Brokerage Revenue—Brokerage revenue includes our offer and listing services, where our lead agents represent homebuyers and home sellers. We recognize commission-based brokerage revenue upon closing of a brokerage transaction, less the amount of any commission refunds, closing-cost reductions, or promotional offers that may result in a material right. Brokerage revenue is affected by the number of brokerage transactions we close, the mix of brokerage transactions, home-sale prices, commission rates, and the amount we give to customers.

Partner Revenue—Partner revenue consists of fees paid to us from partner agents or under other referral agreements, less the amount of any payments we make to homebuyers and home sellers. We recognize these fees as revenue on the closing of a transaction. Partner revenue is affected by the number of partner transactions closed, home-sale prices, commission rates, and the amount we refund to customers. If the portion of customers we introduce to our own lead agents increases, we expect the portion of revenue closed by partner agents to decrease.

Properties Revenue

Properties Revenue—Properties revenue consists of revenue earned when we sell homes that we previously bought directly from homeowners. Properties revenue is recorded at closing on a gross basis, representing the sales price of the home.

Rentals Revenue

Rentals Revenue—Rentals revenue is primarily composed of subscription-based product offerings for internet listing services, as well as lead management and digital marketing solutions.

Mortgage Revenue

Mortgage Revenue—Mortgage revenue includes fees from the origination and subsequent sale of loans, loan servicing income, interest income on loans held for sale, origination of IRLCs, and the changes in fair value of our IRLCs, forward sales commitments, loans held for sale, and MSRs.

Other Revenue

Other Revenue—Other services revenue includes fees earned from title settlement services, Walk Score data services, and advertising. Substantially all fees and revenue from other services are recognized when the service is provided.

Intercompany Eliminations

Intercompany Eliminations—Revenue earned from transactions between operating segments are eliminated in consolidating our financial statements. Intercompany transactions primarily consist of services performed from our real estate services segment for our properties segment.

Cost of Revenue and Gross Margin

Cost of revenue consists primarily of personnel costs (including base pay, benefits, and stock-based compensation), transaction bonuses, home-touring and field expenses, listing expenses, home costs related to our properties segment, customer fulfillment costs related to our rentals segment, office and occupancy expenses, interest expense on our mortgage related warehouse facilities, and depreciation and amortization related to fixed assets and acquired intangible assets. Home costs related to our properties segment include home purchase costs, capitalized improvements, selling expenses directly attributable to the transaction, and home maintenance expenses.

Gross profit is revenue less cost of revenue. Gross margin is gross profit expressed as a percentage of revenue. Our gross margin has and will continue to be affected by a number of factors, but the most important are the mix of revenue from our relatively higher-gross-margin real estate services segment and our relatively lower-gross-margin properties segment, real estate services revenue per transaction, agent and support-staff productivity, personnel costs and transaction bonuses, and, for properties, the home purchase costs.

Operating Expenses

Technology and Development

Our primary technology and development expenses are building software for our customers, lead agents, and support staff to work together on a transaction, and building a website and mobile application to meet customers looking to move. These expenses primarily include personnel costs (including base pay, bonuses, benefits, and stock-based compensation), data licenses, software and equipment, and infrastructure such as for data centers and hosted services. The expenses also include amortization of capitalized internal-use software and website and mobile application development costs as well as amortization of acquired intangible assets. We expense research and development costs as incurred and record them in technology and development expenses.

Marketing

Marketing expenses consist primarily of media costs for online and offline advertising, as well as personnel costs (including base pay, benefits, and stock-based compensation).

General and Administrative

General and administrative expenses consist primarily of personnel costs (including base pay, benefits, and stock-based compensation), facilities costs and related expenses for our executive, finance, human resources, and legal organizations, depreciation related to our fixed assets, and fees for outside services. Outside services are principally composed of external legal, audit, and tax services. For our rentals business, personnel costs include employees in the sales department. These employees are responsible for attracting potential rental properties and agreeing to contract terms, but they are not responsible for delivering a service to the rental property.

Interest Income, Interest Expense, Income Tax (Expense) Benefit, Gain on Extinguishment of Convertible Senior Notes, and Other (Expense) Income, Net

Interest Income

Interest income consists primarily of interest earned on our cash, cash equivalents, and investments.

Interest Expense

Interest expense consists primarily of interest payable on our convertible senior notes and the amortization of debt discounts and issuance cost related to our convertible senior notes. See Note 15 to our consolidated financial statements for information regarding interest on our convertible senior notes.

Interest expense also includes interest on borrowings and the amortization of debt issuance costs related to our secured revolving credit facility. See Note 15 to our consolidated financial statements for information regarding interest for the facility, which we terminated on December 29, 2022.

Income Tax (Expense) Benefit

Income tax expense primarily relates to current state income taxes recorded for the year, partially offset by a deferred income tax benefit generated by the reduction to a deferred tax liability created through our April 2, 2021 acquisition of Rent..

Gain on Extinguishment of Convertible Senior Notes

Gain on extinguishment of convertible senior notes relates to gains recognized on the repurchase of our convertible senior notes.

Other (Expense) Income, Net

Other (expense) income, net consists primarily of realized and unrealized gains and losses on investments and other assets. See Note 4 to our consolidated financial statements for information regarding unrealized losses on our investments.

Results of Operations

The following tables set forth our results of operations for the periods presented and as a percentage of our revenue for those periods.

	Year Ended December 31,		
	2022	2021	2020
	(in thousands)		
Revenue	\$ 2,284,442	\$ 1,922,765	\$ 886,093
Cost of revenue ⁽¹⁾	1,998,389	1,518,945	653,983
Gross profit	286,053	403,820	232,110
Operating expenses:			
Technology and development ⁽¹⁾	196,250	156,718	84,297
Marketing ⁽¹⁾	158,071	138,740	54,881
General and administrative ⁽¹⁾	254,593	218,315	85,624
Restructuring and reorganization	40,469	—	6,516
Total operating expenses	649,383	513,773	231,318
(Loss) income from operations	(363,330)	(109,953)	792
Interest income	6,639	635	2,074
Interest expense	(17,745)	(11,762)	(19,495)
Income tax (expense) benefit	(126)	6,107	—
Gain on extinguishment of convertible senior notes	57,193	—	—
Other (expense) income, net	(3,774)	5,360	(1,898)
Net loss	\$ (321,143)	\$ (109,613)	\$ (18,527)

(1) Includes stock-based compensation as follows:

	Year Ended December 31,		
	2022	2021	2020
	(in thousands)		
Cost of revenue	\$ 15,950	\$ 13,614	\$ 8,844
Technology and development	29,608	23,275	16,564
Marketing	4,093	2,350	1,569
General and administrative	18,606	15,483	9,996
Total	\$ 68,257	\$ 54,722	\$ 36,973

	Year Ended December 31,		
	2022	2021	2020
	(as a percentage of revenue)		
Revenue	100.0 %	100.0 %	100.0 %
Cost of revenue ⁽¹⁾	87.5	79.0	73.8
Gross profit	12.5	21.0	26.2
Operating expenses:			
Technology and development ⁽¹⁾	8.6	8.2	9.5
Marketing ⁽¹⁾	6.9	7.2	6.2
General and administrative ⁽¹⁾	11.1	11.4	9.7
Restructuring and reorganization	1.8	0.0	0.7
Total operating expenses	28.4	26.8	26.1
(Loss) income from operations	(15.9)	(5.8)	0.1
Interest income	0.3	0.0	0.2
Interest expense	(0.8)	(0.6)	(2.2)
Income tax benefit	—	0.3	—
Gain on extinguishment of convertible senior notes	2.5	—	—
Other (expense) income, net	(0.2)	0.3	(0.2)
Net loss	(14.1)%	(5.8)%	(2.1)%

(1) Includes stock-based compensation as follows:

	Year Ended December 31,		
	2022	2021	2020
	(as a percentage of revenue)		
Cost of revenue	0.7 %	0.7 %	1.0 %
Technology and development	1.3	1.2	1.9
Marketing	0.2	0.1	0.2
General and administrative	0.8	0.8	1.1
Total	3.0 %	2.8 %	4.2 %

Comparison of the Years Ended December 31, 2022 and 2021

Revenue

	Year Ended December 31,		Change	
	2022	2021	Dollars	Percentage
	(in thousands, except percentages)			
Real estate services				
Brokerage	\$ 749,985	\$ 849,288	\$ (99,303)	(12) %
Partner	37,091	54,046	(16,955)	(31)
Total real estate services	787,076	903,334	(116,258)	(13)
Properties	1,202,651	880,653	321,998	37
Rentals	155,910	121,877	34,033	28
Mortgage	132,904	19,818	113,086	571
Other	23,684	13,609	10,075	74
Intercompany elimination	(17,783)	(16,526)	(1,257)	8
Total revenue	\$ 2,284,442	\$ 1,922,765	\$ 361,677	19
Percentage of revenue				
Real estate services				
Brokerage	32.8 %	44.2 %		
Partner	1.6	2.8		
Total real estate services	34.4	47.0		
Properties	52.6	45.8		
Rentals	6.8	6.3		
Mortgage	5.8	1.0		
Other	1.2	0.8		
Intercompany elimination	(0.8)	(0.9)		
Total revenue	100.0 %	100.0 %		

In 2022, revenue increased by \$361.7 million, or 19%, as compared with 2021. Included in the increase was \$155.9 million from our acquisition of Rent., and there was \$121.9 million of such revenue in 2021. Also included in the increase was \$130.2 million resulting from our acquisition of Bay Equity, and there was no such revenue in 2021. Excluding these revenues from Rent. and Bay Equity, this increase in revenue was primarily attributable to a \$322.0 million increase in properties revenue, which was partially offset by a \$116.3 million decrease in real estate services revenue. Properties revenue increased 37%, primarily driven by a 41% increase in RedfinNow homes sold and a 3% decrease in revenue per RedfinNow home sold. These increases are largely due to our properties business's expansion. Brokerage revenue decreased by \$99.3 million and partner revenue decreased by \$17.0 million. Brokerage revenue decreased 12% during the period, driven by a 13% decrease in brokerage transactions and partially offset by a 2% increase in brokerage revenue per transaction.

Cost of Revenue and Gross Margin

	Year Ended December 31,		Change	
	2022	2021	Dollars	Percentage
(in thousands, except percentages)				
Cost of revenue				
Real estate services	\$ 608,027	\$ 603,320	\$ 4,707	1 %
Properties	1,225,717	870,052	355,665	41
Rentals	33,416	21,739	11,677	54
Mortgage	126,552	26,096	100,456	385
Other	22,460	14,264	8,196	57
Intercompany elimination	(17,783)	(16,526)	(1,257)	8
Total cost of revenue	<u>\$ 1,998,389</u>	<u>\$ 1,518,945</u>	<u>\$ 479,444</u>	<u>32</u>
Gross profit				
Real estate services	\$ 179,049	\$ 300,014	\$ (120,965)	(40) %
Properties	(23,066)	10,601	(33,667)	(318)
Rentals	122,494	100,138	22,356	22
Mortgage	6,352	(6,278)	12,630	(201)
Other	1,224	(655)	1,879	(287)
Total gross profit	<u>\$ 286,053</u>	<u>\$ 403,820</u>	<u>\$ (117,767)</u>	<u>(29)</u>
Gross margin (percentage of revenue)				
Real estate services	22.7 %	33.2 %		
Properties	(1.9)	1.2		
Rentals	78.6	82.2		
Mortgage	4.8	(31.7)		
Other	5.2	(4.8)		
Total gross margin	12.5	21.0		

In 2022, total cost of revenue increased by \$479.4 million, or 32%, as compared with 2021. Included in the increase was \$33.4 million from our acquisition of Rent., and there were \$21.7 million of such expenses in 2021. Also included in the increase was \$118.1 million resulting from our acquisition of Bay Equity, and there were no such expenses in 2021. Excluding these expenses from Rent. and Bay Equity, this increase in cost of revenue was primarily attributable to a \$331.6 million increase in home purchase costs and related capitalized improvements by our properties business, due to more RedfinNow homes having been sold.

Total gross margin decreased 850 basis points as compared with 2021, driven primarily by the relative growth of our properties business compared to our real estate services and other businesses, and decreases in real estate services and properties gross margin. This was partially offset by the increases in mortgage and other gross margin.

In 2022, real estate services gross margin decreased 1,050 basis points as compared with 2021. This was primarily attributable to a 930 basis point increase in personnel costs and transaction bonuses as a percentage of revenue.

In 2022, properties gross margin decreased 310 basis points as compared with 2021. This was primarily attributable to a 370 basis point increase in home purchase costs and related capitalized improvements, including our lower of cost or net realizable value write-downs, as a percentage of revenue. This was partially offset by a 50 basis point decrease in personnel costs and transaction bonuses as a percentage of revenue.

In 2022, rentals gross margin decreased by 360 basis points. This was primarily attributable to a 210 basis point increase in marketing expenses and a 210 basis point increase in personnel costs, each as a percentage of revenue and due to expanded services. This was partially offset by a 90 basis point reduction in outside services costs as a percentage of revenue.

In 2022, mortgage gross margin increased by 3,650 basis points. This was primarily attributable to a 3,160 basis point decrease in personnel costs and transaction bonuses as a percentage of revenue.

In 2022, other gross margin increased by 1,000 basis points. This was primarily attributable to a 470 basis point decrease in personnel costs and transaction bonuses as a percentage of revenue.

Operating Expenses

	Year Ended December 31,		Change	
	2022	2021	Dollars	Percentage
(in thousands, except percentages)				
Technology and development	\$ 196,250	\$ 156,718	\$ 39,532	25 %
Marketing	158,071	138,740	19,331	14
General and administrative	254,593	218,315	36,278	17
Restructuring and reorganization	40,469	—	40,469	n/a
Total operating expenses	\$ 649,383	\$ 513,773	\$ 135,610	26
Percentage of revenue				
Technology and development	8.6 %	8.2 %		
Marketing	6.9	7.2		
General and administrative	11.1	11.4		
Restructuring and reorganization	1.8	0.0		
Total operating expenses	28.4 %	26.8 %		

In 2022, technology and development expenses increased by \$39.5 million, or 25%, as compared with 2021. Included in the increase was \$52.3 million resulting from our acquisition of Rent., and there were \$39.0 million such expenses in 2021. Also included in the increase was \$1.8 million resulting from our acquisition of Bay Equity, and there were no such expenses in 2021. Excluding these expenses from Rent. and Bay Equity, the increase was primarily attributable to a \$16.6 million increase in personnel costs.

In 2022, marketing expenses increased by \$19.3 million, or 14%, as compared with 2021. Included in the increase was \$51.1 million resulting from our acquisition of Rent., and there were \$36.1 million such expenses in 2021. Also included in the increase was \$4.7 million resulting from our acquisition of Bay Equity, and there were no such expenses in 2021. Excluding these expenses from Rent. and Bay Equity, marketing expenses decreased by \$0.4 million. The decrease was primarily attributable to a \$4.9 million decrease in marketing media costs. This was partially offset by a \$2.8 million increase in personnel costs.

In 2022, general and administrative expenses increased by \$36.3 million, or 17%, as compared with 2021. Included in the increase was \$90.8 million resulting from our acquisition of Rent., and there were \$71.5 million such expenses in 2021. Also included in the increase was \$22.8 million resulting from our acquisition of Bay Equity, and there were no such expenses in 2021. Excluding these expenses from Rent. and Bay Equity, general and administrative expenses decreased by \$5.9 million. The decrease was primarily attributable to a \$7.3 million decrease in advertising campaign and contractor expenses for recruiting employees, and a \$6.5 million decrease in acquisition transaction expenses. This was partially offset by a \$4.4 million increase in internet-based software services, and a \$4.0 million increase in personnel costs due to increased headcount.

In 2022, restructuring and reorganization expenses increased by \$40.5 million, and there were no such expenses in 2021. See Note 1 to our consolidated financial statements for more information on our restructuring and reorganization costs.

Interest Income, Interest Expense, Income Tax (Expense) Benefit, Gain on Extinguishment of Convertible Senior Notes, and Other (Expense) Income, Net

	Year Ended December 31,		Change	
	2022	2021	Dollars	Percentage
(in thousands, except percentages)				
Interest income	\$ 6,639	\$ 635	\$ 6,004	946 %
Interest expense	(17,745)	(11,762)	(5,983)	51
Income tax (expense) benefit	(126)	6,107	(6,233)	(102)
Gain on extinguishment of convertible senior notes	57,193	—	57,193	n/a
Other (expense) income, net	(3,774)	5,360	(9,134)	(170)
Interest income, interest expense, income tax (expense) benefit, gain on extinguishment of convertible senior notes, and other (expense) income, net	\$ 42,187	\$ 340	\$ 41,847	12,308
Percentage of revenue				
Interest income	0.3 %	0.0 %		
Interest expense	(0.8)	(0.6)		
Income tax (expense) benefit	0.0	0.3		
Gain on extinguishment of convertible senior notes	2.5	0.0		
Other (expense) income, net	(0.2)	0.3		
Interest income, interest expense, income tax (expense) benefit, gain on extinguishment of convertible senior notes, and other (expense) income, net	1.8 %	0.0 %		

In 2022, interest income, interest expense, income tax (expense) benefit, gain on extinguishment of convertible senior notes, and other (expense) income, net increased by \$41.8 million, as compared with 2021.

Interest income increased by \$6.0 million primarily due to higher interest rates on our cash, cash equivalents, and investments compared with 2021.

Interest expense increased by \$6.0 million primarily due to \$3.9 million in additional expense from increased interest rates related to our borrowings under the RedfinNow line of credit as well as \$0.7 million of accelerated amortization due to our early termination of that facility in association with our wind-down of RedfinNow. In addition, we had a full year of amortization for our 2027 notes as compared to a partial year in 2021, resulting in \$0.5 million in additional expense in 2022.

Income tax (expense) benefit decreased by \$6.2 million primarily due to a one-time income tax benefit from the Rent. acquisition in 2021, where no such benefit was recognized in 2022.

Gain on extinguishment of convertible senior notes increased by \$57.2 million, due to our paying down a portion of our 2025 notes at a discount, where there was no such activity in 2021. See Note 15 to our consolidated financial statements for further information on these transactions.

Other (expense) income, net increased by \$9.1 million primarily due to (1) the fair value of one of our investments being recorded in 2021, where we did not have this recording during 2022, and the subsequent sale of that investment at a loss, (2) impairment of leases, and (3) losses on various property and equipment disposals.

Comparison of the Years Ended December 31, 2021 and 2020
Revenue

	Year Ended December 31,		Change	
	2021	2020	Dollars	Percentage
(in thousands, except percentages)				
Real estate services				
Brokerage	\$ 849,288	\$ 607,513	\$ 241,775	40 %
Partner	54,046	43,695	10,351	24
Total real estate services	903,334	651,208	252,126	39
Properties	880,653	209,686	670,967	320
Rentals	121,877	—	121,877	n/a
Mortgage	19,818	15,835	3,983	25
Other	13,609	12,377	1,232	10
Intercompany elimination	(16,526)	(3,013)	(13,513)	448
Total revenue	\$ 1,922,765	\$ 886,093	\$ 1,036,672	117
Percentage of revenue				
Real estate services				
Brokerage	44.2 %	68.6 %		
Partner	2.8	4.9		
Total real estate services	47.0	73.5		
Properties	45.8	23.7		
Rentals	6.3	n/a		
Mortgage	1.0	1.8		
Other	0.8	1.4		
Intercompany elimination	(0.9)	(0.4)		
Total revenue	100.0 %	100.0 %		

In 2021, revenue increased by \$1,036.7 million, or 117%, as compared with 2020. Included in the increase was \$121.9 million resulting from our acquisition of Rent., where there were no such revenues in 2020. Excluding these revenues from Rent., this increase in revenue was primarily attributable to a \$671.0 million increase in properties revenue and a \$252.1 million increase in real estate services revenue. Properties revenue increased 320%, primarily driven by a 220% increase in RedfinNow homes sold and a 28% increase in revenue per RedfinNow home sold. These increases are largely due to our properties business's expansion, greater customer awareness of that business, and COVID-19's impacts on that business during the prior period. Brokerage revenue increased by \$241.8 million and partner revenue increased by \$10.4 million. Brokerage revenue increased 40% during the period, driven by a 27% increase in brokerage transactions and a 10% increase in brokerage revenue per transaction. We believe the increase in brokerage transactions was attributable to higher levels of customer awareness of Redfin and increasing customer demand, while the increase in brokerage revenue per transaction was driven primarily by increasing home values.

Cost of Revenue and Gross Margin

	Year Ended December 31,		Change	
	2021	2020	Dollars	Percentage
(in thousands, except percentages)				
Cost of revenue				
Real estate services	\$ 603,320	\$ 417,140	\$ 186,180	45 %
Properties	870,052	214,382	655,670	306
Rentals	21,739	—	21,739	n/a
Mortgage	26,096	15,627	10,469	67
Other	14,264	9,847	4,417	45
Intercompany elimination	(16,526)	(3,013)	(13,513)	448
Total cost of revenue	<u>\$ 1,518,945</u>	<u>\$ 653,983</u>	<u>\$ 864,962</u>	<u>132</u>
Gross profit				
Real estate services	\$ 300,014	\$ 234,068	\$ 65,946	28 %
Properties	10,601	(4,696)	15,297	(326)
Rentals	100,138	—	100,138	n/a
Mortgage	(6,278)	208	(6,486)	(3,118)
Other	(655)	2,530	(3,185)	(126)
Total gross profit	<u>\$ 403,820</u>	<u>\$ 232,110</u>	<u>\$ 171,710</u>	<u>74</u>
Gross margin (percentage of revenue)				
Real estate services	33.2 %	35.9 %		
Properties	1.2	(2.2)		
Rentals	82.2	n/a		
Mortgage	(31.7)	1.3		
Other	(4.8)	20.4		
Total gross margin	21.0	26.2		

In 2021, total cost of revenue increased by \$865.0 million, or 132%, as compared with 2020. Included in the increase was \$21.7 million resulting from our acquisition of Rent., and there were no such expenses in 2020. Excluding these expenses from Rent., this increase in cost of revenue was primarily attributable to (1) a \$590.6 million increase in home purchase costs and related capitalized improvements by our properties business, due to more RedfinNow homes having been sold, and (2) a \$168.7 million increase in personnel costs and transaction bonuses, due to increased headcount and increased brokerage transactions, respectively.

Total gross margin decreased 520 basis points as compared with 2020, driven primarily by the relative growth of our properties business compared to our real estate services and other businesses, and decreases in real estate services, mortgage, and other gross margin. This was partially offset by the increase in properties gross margin, and our acquisition of Rent., which comprises our rentals business.

In 2021, real estate services gross margin decreased 270 basis points as compared with 2020. This was primarily attributable to a 230 basis point increase in personnel costs and transaction bonuses and a 140 basis point increase in home-touring and field expenses, each as a percentage of revenue. This was partially offset by a 50 basis point decrease in listing expenses, and a 40 basis point reduction in occupancy and office expenses, each as a percentage of revenue.

In 2021, properties gross margin increased 340 basis points as compared with 2020. This was primarily attributable to a 210 basis point decrease in home purchase costs and related capitalized improvements, and a 120 basis point decrease in personnel costs and transaction bonuses, each as a percentage of revenue.

In 2021, mortgage gross margin decreased by 3,300 basis points. This was primarily attributable to a 2,690 basis point increase in personnel costs and transaction bonuses as a percentage of revenue.

In 2021, other gross margin decreased by 2,520 basis points. This was primarily attributable to a 2,620 basis point increase in personnel costs and transaction bonuses as a percentage of revenue.

Operating Expenses

	Year Ended December 31,		Change	
	2021	2020	Dollars	Percentage
(in thousands, except percentages)				
Technology and development	\$ 156,718	\$ 84,297	\$ 72,421	86 %
Marketing	138,740	54,881	83,859	153
General and administrative	218,315	85,624	132,691	155
Restructuring and reorganization	\$ —	\$ 6,516	\$ (6,516)	(100)
Total operating expenses	<u>\$ 513,773</u>	<u>\$ 231,318</u>	<u>\$ 282,455</u>	<u>122</u>
Percentage of revenue				
Technology and development	8.2 %	9.5 %		
Marketing	7.2	6.2		
General and administrative	11.4	9.7		
Restructuring and reorganization	0.0	0.7		
Total operating expenses	<u>26.8 %</u>	<u>26.1 %</u>		

In 2021, technology and development expenses increased by \$72.4 million, or 86%, as compared with 2020. Included in the increase was \$39.0 million resulting from our acquisition of Rent., and there were no such expenses in 2020. Excluding these expenses from Rent., the increase was primarily attributable to a \$26.4 million increase in personnel costs due to increased headcount.

In 2021, marketing expenses increased by \$83.9 million, or 153%, as compared with 2020. Included in the increase was \$36.1 million resulting from our acquisition of Rent., and there were no such expenses in 2020. Excluding these expenses from Rent., the increase was primarily attributable to a \$43.0 million increase in marketing media costs as we expanded advertising.

In 2021, general and administrative expenses increased by \$132.7 million, or 155%, as compared with 2020. Included in the increase was \$71.5 million resulting from our acquisition of Rent., and there were no such expenses in 2020. Excluding these expenses from Rent., the increase was primarily attributable to a \$30.0 million increase in personnel costs due to increased headcount, an \$8.9 million increase in transaction costs from our acquisition of Rent. and our proposed acquisition of Bay Equity, and a \$7.0 million increase in advertising campaign and contractor expenses for recruiting employees and independent contractors.

In 2021, restructuring and reorganization expenses decreased by \$6.5 million, or 100%, as compared with 2020. We had no such restructuring expenses in 2021.

Interest Income, Interest Expense, Income Tax Benefit, and Other Income (Expense), Net

	Year Ended December 31,		Change	
	2021	2020	Dollars	Percentage
(in thousands, except percentages)				
Interest income	\$ 635	\$ 2,074	\$ (1,439)	(69) %
Interest expense	(11,762)	(19,495)	7,733	40
Income tax benefit	6,107	—	6,107	n/a
Other income (expense), net	5,360	(1,898)	7,258	(382)
Interest income, interest expense, income tax benefit, and other income (expense), net	<u>\$ 340</u>	<u>\$ (19,319)</u>	<u>\$ 19,659</u>	<u>102</u>
Percentage of revenue				
Interest income	0.0 %	0.2 %		
Interest expense	(0.6)	(2.2)		
Income tax benefit	0.3	—		
Other income (expense), net	0.3	(0.2)		
Interest income, interest expense, income tax benefit, and other income (expense), net	<u>0.0 %</u>	<u>(2.2)%</u>		

In 2021, interest income, interest expense, income tax benefit, and other income (expense), net increased by \$19.7 million as compared to the same period in 2020.

Interest income decreased by \$1.4 million primarily due lower interest rates on our cash, cash equivalents, and investments compared to 2020.

Interest expense decreased by \$7.7 million due primarily to the implementation of ASU 2020-06, which eliminates the liability and equity separation models for convertible instruments. As a result, we did not incur an expense for the accretion of the equity portion of our convertible senior notes during 2021. See Note 15 to our consolidated financial statements for more information on our adoption of this accounting standard.

Income tax benefit increased by \$6.1 million primarily due to a deferred tax liability created through the Rent. acquisition, and such deferred tax liability was used to realize certain deferred tax assets against which we had previously recorded a full valuation allowance. We did not have any income tax benefit during 2020. See Note 14 to our consolidated financial statements.

Other income (expense), net increased by \$7.3 million primarily due to (1) recording the fair value of one of our investments during 2021, where we did not have this recording during 2020, and (2) writing down the fair value of another of our investments during 2020, where we did not have this write down during 2021. See Note 4 to our consolidated financial statements for more information on our fair value recording.

Quarterly Results of Operations and Key Business Metrics

The following tables set forth our unaudited quarterly statements of operations data for the most recent eight quarters, as well as the percentage that each line item represents of our revenue for each quarter presented. The information for each quarter has been prepared on a basis consistent with our consolidated financial statements and reflect, in the opinion of management, all adjustments of a normal, recurring nature that are necessary for a fair presentation of the financial information contained in those statements. The following quarterly financial data should be read in conjunction with our consolidated financial statements.

Quarterly Results

	Three Months Ended							
	Dec. 31, 2022	Sep. 30, 2022	Jun. 30, 2022	Mar. 31, 2022	Dec. 31, 2021	Sep. 30, 2021	Jun. 30, 2021	Mar. 31, 2021
Revenue	\$ 479,664	\$ 600,517	\$ 606,915	\$ 597,346	\$ 643,057	\$ 540,074	\$ 471,315	\$ 268,319
Cost of revenue ⁽¹⁾	442,229	542,440	488,912	524,808	535,033	412,772	345,179	225,961
Gross profit	37,435	58,077	118,003	72,538	108,024	127,302	126,136	42,358
Operating expenses:								
Technology and development ⁽¹⁾	47,041	48,063	51,506	49,640	43,894	43,658	41,488	27,678
Marketing ⁽¹⁾	24,238	33,748	56,743	43,342	22,397	49,143	55,398	11,802
General and administrative ⁽¹⁾	62,889	61,005	71,733	58,966	66,962	54,395	59,567	37,391
Restructuring and reorganization	21,798	284	12,677	5,710	—	—	—	—
Total	155,966	143,100	192,659	157,658	133,253	147,196	156,453	76,871
Loss from operations	(118,531)	(85,023)	(74,656)	(85,120)	(25,229)	(19,894)	(30,317)	(34,513)
Interest income	4,691	1,174	554	220	163	178	135	159
Interest expense	(4,905)	(5,359)	(3,620)	(3,861)	(3,939)	(3,672)	(2,813)	(1,338)
Income tax benefit (expense)	299	(132)	(159)	(134)	744	311	5,052	—
Gain on extinguishment of convertible senior notes	57,193	—	—	—	—	—	—	—
Other (expense) income, net	(693)	(905)	(265)	(1,911)	1,259	4,128	65	(92)
Net loss	\$ (61,946)	\$ (90,245)	\$ (78,146)	\$ (90,806)	\$ (27,002)	\$ (18,949)	\$ (27,878)	\$ (35,784)
Net loss attributable to common stock	\$ (62,090)	\$ (90,517)	\$ (78,496)	\$ (91,599)	\$ (28,396)	\$ (20,611)	\$ (29,756)	\$ (38,120)
Net loss per share—diluted	\$ (0.57)	\$ (0.83)	\$ (0.73)	\$ (0.86)	\$ (0.27)	\$ (0.20)	\$ (0.29)	\$ (0.37)

(1) Includes stock-based compensation as follows:

	Three Months Ended							
	Dec. 31, 2022	Sep. 30, 2022	Jun. 30, 2022	Mar. 31, 2022	Dec. 31, 2021	Sep. 30, 2021	Jun. 30, 2021	Mar. 31, 2021
Cost of revenue	\$ 4,307	\$ 4,387	\$ 3,879	\$ 3,377	\$ 3,595	\$ 3,283	\$ 3,758	\$ 2,978
Technology and development	6,572	7,371	7,700	7,965	6,288	5,455	5,771	5,761
Marketing	1,069	1,028	924	1,072	736	537	535	542
General and administrative	4,638	5,284	4,310	4,374	4,667	3,835	3,679	3,302
Total	\$ 16,586	\$ 18,070	\$ 16,813	\$ 16,788	\$ 15,286	\$ 13,110	\$ 13,743	\$ 12,583

	Three Months Ended							
	Dec. 31, 2022	Sep. 30, 2022	Jun. 30, 2022	Mar. 31, 2022	Dec. 31, 2021	Sep. 30, 2021	Jun. 30, 2021	Mar. 31, 2021
	(as a percentage of revenue)							
Revenue	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %	100.0 %
Cost of revenue ⁽¹⁾	92.2	90.3	80.6	87.9	83.2	76.4	73.2	84.2
Gross profit	7.8	9.7	19.4	12.1	16.8	23.6	26.8	15.8
Operating expenses								
Technology and development ⁽¹⁾	9.8	8.0	8.5	8.3	6.8	8.1	8.8	10.3
Marketing ⁽¹⁾	5.1	5.6	9.3	7.3	3.5	9.1	11.8	4.4
General and administrative ⁽¹⁾	13.1	10.2	11.8	9.9	10.3	10.1	12.6	13.9
Restructuring and reorganization	4.5	0.0	2.1	1.0	—	—	—	—
Total	32.5	23.8	31.7	26.4	20.6	27.3	33.2	28.6
Loss from operations	(24.7)	(14.2)	(12.3)	(14.2)	(3.8)	(3.7)	(6.4)	(12.8)
Interest income	1.0	0.2	0.1	—	—	—	—	0.1
Interest expense	(1.0)	(0.9)	(0.6)	(0.6)	(0.6)	(0.7)	(0.6)	(0.5)
Income tax benefit (expense)	0.1	—	—	—	0.1	0.1	1.1	—
Gain on extinguishment of convertible senior notes	11.9	—	—	—	—	—	—	—
Other (expense) income, net	(0.1)	(0.2)	—	(0.3)	0.2	0.8	—	—
Net loss	(12.8)%	(15.0)%	(12.9)%	(15.2)%	(4.1)%	(3.5)%	(5.9)%	(13.2)%

(1) Includes stock-based compensation as follows:

	Three Months Ended							
	Dec. 31, 2022	Sep. 30, 2022	Jun. 30, 2022	Mar. 31, 2022	Dec. 31, 2021	Sep. 30, 2021	Jun. 30, 2021	Mar. 31, 2021
	(as a percentage of revenue)							
Cost of revenue	0.9 %	0.7 %	0.6 %	0.6 %	0.6 %	0.6 %	0.8 %	1.1 %
Technology and development	1.4	1.2	1.3	1.3	1.0	1.0	1.2	2.2
Marketing	0.2	0.2	0.2	0.2	0.1	0.1	0.1	0.2
General and administrative	0.9	0.9	0.7	0.7	0.6	0.7	0.8	1.2
Total	3.4 %	3.0 %	2.8 %	2.8 %	2.3 %	2.4 %	2.9 %	4.7 %

Our revenue and cost of revenue have typically followed the seasonal pattern of the residential real estate industry. As such, revenue and cost of revenue increase sequentially from the first quarter to the second quarter and sequentially again during the third quarter. Fourth quarter revenue typically declines sequentially from the third quarter. Our 2022 revenue and cost of revenue were impacted by macroeconomic conditions; see “Adverse Macroeconomic Conditions and Our Associated Actions” under Item 7.

In 2021, revenue increased from the third quarter to the fourth quarter, largely due to our properties business's expansion and greater customer awareness of that business.

Two acquisitions also increased our quarterly revenue, cost of revenue and operating expenses in 2021 and 2022.

- We completed our acquisition of Rent. on April 2, 2021. The acquisition increased revenue, cost of revenue, and operating expenses in the second quarter, third quarter, and fourth quarter of 2022 over their seasonal pattern, because there were no such results in prior quarters.
- We completed our acquisition of Bay Equity on April 1, 2022. The acquisition increased revenue, cost of revenue, and operating expenses in the second quarter, third quarter, and fourth quarter of 2022 over their seasonal pattern, because there were no such results in prior quarters.

Quarterly Key Business Metrics

	Dec. 31, 2022	Sep. 30, 2022	Jun. 30, 2022	Mar. 31, 2022	Dec. 31, 2021	Sep. 30, 2021	Jun. 30, 2021	Mar. 31, 2021
Monthly average visitors (in thousands)	43,847	50,785	52,698	51,287	44,665	49,147	48,437	46,202
Real estate services transactions								
Brokerage	12,743	18,245	20,565	15,001	19,428	21,929	21,006	14,317
Partner	2,742	3,507	3,983	3,417	4,603	4,755	4,597	3,944
Total	15,485	21,752	24,548	18,418	24,031	26,684	25,603	18,261
Real estate services revenue per transaction								
Brokerage	\$ 10,914	\$ 11,103	\$ 11,692	\$ 11,191	\$ 10,900	\$ 11,107	\$ 11,307	\$ 10,927
Partner	2,611	2,556	2,851	2,814	2,819	2,990	3,195	3,084
Aggregate	9,444	9,725	10,258	9,637	9,352	9,661	9,850	9,233
U.S. market share by units ⁽¹⁾	0.76 %	0.80 %	0.82 %	0.79 %	0.78 %	0.78 %	0.77 %	0.75 %
Revenue from top-10 Redfin markets as a percentage of real estate services revenue	57 %	58 %	59 %	57 %	61 %	62 %	64 %	62 %
Average number of lead agents	2,022	2,293	2,640	2,750	2,485	2,370	2,456	2,277
RedfinNow homes sold	474	530	423	617	600	388	292	171
Revenue per RedfinNow home sold	\$ 538,788	\$ 550,903	\$ 604,120	\$ 608,851	\$ 622,519	\$ 599,963	\$ 571,670	\$ 525,765
Mortgage originations by dollars (in millions)	\$ 1,036	\$ 1,557	\$ 1,565	\$ 159	\$ 242	\$ 258	\$ 261	\$ 227
Mortgage originations by units (in ones)	2,631	3,720	3,860	414	591	671	749	632

(1) Prior to the second quarter of 2022, we reported our U.S. market share based on the aggregate home value of our real estate services transactions, relative to the aggregate value of all U.S. home sales, which we computed based on the mean sale price of U.S. homes provided by the National Association of REALTORS® ("NAR"). Beginning in the second quarter of 2022, NAR (1) revised its methodology of computing the mean sale price, (2) restated its previously reported mean sale price beginning from January 2020 (and indicated that previously reported mean sale price prior to January 2020 is not comparable), and (3) discontinued publication of the mean sale price as part of its primary data set. Due to these changes, as of the second quarter of 2022, we report our U.S. market share based on the number of homes sold, rather than the dollar value of homes sold. Our market share by number of homes sold has historically been lower than our market share by dollar value of homes sold. We also stopped reporting the aggregate home value of our real estate services transactions.

Similar to our revenue, monthly average visitors to our website and mobile application has typically followed the seasonal pattern of the residential real estate industry. Monthly average visitors in 2022 were impacted by adverse macroeconomic conditions. See section "Adverse Macroeconomic Conditions and Our Associated Actions" under Item 7.

Segment Financial Information

The tables below present, for each of our reportable and other segments, financial information on a GAAP basis and adjusted EBITDA, which is a non-GAAP financial measure, for the year ended December 31, 2022, 2021, and 2020.

See Note 3 to our consolidated financial statements for more information regarding our GAAP segment reporting.

To supplement our consolidated financial statements that are prepared and presented in accordance with GAAP, we also compute and present adjusted EBITDA, which is a non-GAAP financial measure. We believe adjusted EBITDA is useful for investors because it enhances period-to-period comparability of our financial statements on a consistent basis and provides investors with useful insight into the underlying trends of the business. The presentation of this financial measure is not intended to be considered in isolation or as a substitute of, or superior to, our financial information prepared and presented in accordance with GAAP. Our calculation of adjusted EBITDA may be different from adjusted EBITDA or similar non-GAAP financial measures used by other companies, limiting its usefulness for comparison purposes. Our adjusted EBITDA for the year ended December 31, 2022, 2021, and 2020 is presented below, along with a reconciliation of adjusted EBITDA to net loss.

Year ended December 31, 2022							
	Real estate services	Properties	Rentals	Mortgage	Other	Corporate Overhead and Intercompany Eliminations	Total
Revenue	\$ 787,076	\$ 1,202,651	\$ 155,910	\$ 132,904	\$ 23,684	\$ (17,783)	\$ 2,284,442
Cost of revenue	608,027	1,225,717	33,416	126,552	22,460	(17,783)	1,998,389
Gross profit	179,049	(23,066)	122,494	6,352	1,224	—	286,053
Operating expenses							
Technology and development	105,196	17,326	59,899	6,034	3,591	4,204	196,250
Marketing	98,673	2,762	51,064	4,889	199	484	158,071
General and administrative	88,171	11,203	92,728	25,680	3,307	33,504	254,593
Restructuring and reorganization	—	—	—	—	—	40,469	40,469
Total operating expenses	292,040	31,291	203,691	36,603	7,097	78,661	649,383
Loss from operations	(112,991)	(54,357)	(81,197)	(30,251)	(5,873)	(78,661)	(363,330)
Interest income, interest expense, income tax expense, gain on extinguishment of convertible senior notes, and other expense, net	(123)	(7,607)	1,389	(114)	140	48,502	42,187
Net loss	\$ (113,114)	\$ (61,964)	\$ (79,808)	\$ (30,365)	\$ (5,733)	\$ (30,159)	\$ (321,143)

Year ended December 31, 2022							
	Real estate services	Properties	Rentals	Mortgage	Other	Corporate Overhead and Intercompany Eliminations	Total
Net loss	\$ (113,114)	\$ (61,964)	\$ (79,808)	\$ (30,365)	\$ (5,733)	\$ (30,159)	\$ (321,143)
Interest income ⁽¹⁾	—	(1,266)	(24)	(10,499)	(143)	(5,181)	(17,113)
Interest expense ⁽²⁾	—	8,859	—	8,580	—	8,778	26,217
Income tax expense	—	10	(1,077)	—	—	1,193	126
Depreciation and amortization	17,526	2,335	38,683	3,438	1,089	1,836	64,907
Stock-based compensation ⁽³⁾	36,652	5,238	11,319	4,132	1,496	9,420	68,257
Acquisition-related costs ⁽⁴⁾	—	—	—	—	—	2,437	2,437
Restructuring and reorganization ⁽⁵⁾	—	—	—	—	—	40,469	40,469
Impairment ⁽⁶⁾	—	—	—	—	—	1,136	1,136
Gain on extinguishment of convertible senior notes	—	—	—	—	—	(57,193)	(57,193)
Adjusted EBITDA	\$ (58,936)	\$ (46,788)	\$ (30,907)	\$ (24,714)	\$ (3,291)	\$ (27,264)	\$ (191,900)

(1) Interest income includes \$10.5 million of interest income related to originated mortgage loans for the year ended December 31, 2022.

(2) Interest expense includes \$8.5 million of interest expense related to our warehouse credit facilities for the year ended December 31, 2022.

(3) Stock-based compensation consists of expenses related to stock options, restricted stock units, and our employee stock purchase program. See Note 12 to our consolidated financial statements for more information.

(4) Acquisition-related costs consist of fees for external advisory, legal, and other professional services incurred in connection with our acquisition of other companies.

(5) Restructuring and reorganization expenses primarily consist of personnel-related costs associated with employee terminations, furloughs, or retention due to the restructuring and reorganization activities from our acquisitions of Bay Equity and Rent., and from our June and October 2022 workforce reductions.

(6) Impairment consists of an impairment loss due to subleasing one of our operating leases.

Year ended December 31, 2021							
	Real estate services	Properties	Rentals	Mortgage	Other	Corporate Overhead and Intercompany Eliminations	Total
Revenue	\$ 903,334	\$ 880,653	\$ 121,877	\$ 19,818	\$ 13,609	\$ (16,526)	\$ 1,922,765
Cost of revenue	603,320	870,052	21,739	26,096	14,264	(16,526)	1,518,945
Gross profit	300,014	10,601	100,138	(6,278)	(655)	—	403,820
Operating expenses							
Technology and development	81,588	13,237	41,492	10,396	2,528	7,477	156,718
Marketing	98,746	1,889	36,174	561	209	1,161	138,740
General and administrative	84,655	9,593	71,943	8,306	2,288	41,530	218,315
Restructuring and reorganization	—	—	—	—	—	—	—
Total operating expenses	264,989	24,719	149,609	19,263	5,025	50,168	513,773
Loss from operations	35,025	(14,118)	(49,471)	(25,541)	(5,680)	(50,168)	(109,953)
Interest income, interest expense, income tax benefit, and other expense, net	(87)	(4,261)	3,301	3	2	1,382	340
Net income (loss)	\$ 34,938	\$ (18,379)	\$ (46,170)	\$ (25,538)	\$ (5,678)	\$ (48,786)	\$ (109,613)

Year ended December 31, 2021							
	Real estate services	Properties	Rentals	Mortgage	Other	Corporate Overhead and Intercompany Eliminations	Total
Net loss	\$ 34,938	\$ (18,379)	\$ (46,170)	\$ (25,538)	\$ (5,678)	\$ (48,786)	\$ (109,613)
Interest income ⁽¹⁾	—	(9)	—	(1,598)	(2)	(619)	(2,228)
Interest expense ⁽²⁾	—	4,271	—	1,666	—	7,490	13,427
Income tax expense	—	—	(2,699)	—	—	(3,408)	(6,107)
Depreciation and amortization	13,282	1,888	27,607	1,406	761	1,962	46,906
Stock-based compensation ⁽³⁾	34,662	5,177	1,311	2,985	856	9,731	54,722
Acquisition-related costs ⁽⁴⁾	—	—	—	—	—	7,925	7,925
Restructuring and reorganization ⁽⁵⁾	—	—	—	—	—	—	—
Adjusted EBITDA	\$ 82,882	\$ (7,052)	\$ (19,951)	\$ (21,079)	\$ (4,063)	\$ (25,705)	\$ 5,032

(1) Interest income includes \$1.6 million of interest income related to originated mortgage loans for the year ended December 31, 2021.

(2) Interest expense includes \$1.7 million of interest expense related to our warehouse credit facilities for the year ended December 31, 2021.

(3) Stock-based compensation consists of expenses related to stock options, restricted stock units, and our employee stock purchase program. See Note 12 to our consolidated financial statements for more information.

(4) Acquisition-related costs consist of fees for external advisory, legal, and other professional services incurred in connection with our acquisition of other companies.

(5) Restructuring and reorganization expenses primarily consist of personnel-related costs associated with employee terminations, furloughs, or retention due to the restructuring and reorganization activities from our acquisition of Rent.

Year ended December 31, 2020							
	Real estate services	Properties	Rentals	Mortgage	Other	Corporate Overhead and Intercompany Eliminations	Total
Revenue	\$ 651,208	\$ 209,686	\$ —	\$ 15,835	\$ 12,377	\$ (3,013)	\$ 886,093
Cost of revenue	417,140	214,382	—	15,627	9,847	(3,013)	653,983
Gross profit	234,068	(4,696)	—	208	2,530	—	232,110
Operating expenses							
Technology and development	66,389	5,986	—	5,914	1,288	4,720	84,297
Marketing	53,399	536	—	267	88	591	54,881
General and administrative	54,538	2,810	—	1,665	764	25,847	85,624
Restructuring and reorganization	—	—	—	—	—	6,516	6,516
Total operating expenses	174,326	9,332	—	7,846	2,140	37,674	231,318
Loss from operations	59,742	(14,028)	—	(7,638)	390	(37,674)	792
Interest income, interest expense, and other expense, net	—	(1,018)	—	73	30	(18,404)	(19,319)
Net income (loss)	\$ 59,742	\$ (15,046)	\$ —	\$ (7,565)	\$ 420	\$ (56,078)	\$ (18,527)

Year ended December 31, 2020							
	Real estate services	Properties	Rentals	Mortgage	Other	Corporate Overhead and Intercompany Eliminations	Total
Net loss	\$ 59,742	\$ (15,046)	\$ —	\$ (7,565)	\$ 420	\$ (56,078)	\$ (18,527)
Interest income ⁽¹⁾	—	(244)	—	(1,354)	(30)	(1,726)	(3,354)
Interest expense ⁽²⁾	—	1,262	—	1,394	—	13,599	16,255
Depreciation and amortization	11,070	971	—	728	618	1,177	14,564
Stock-based compensation ⁽³⁾	26,448	2,234	—	1,505	315	6,471	36,973
Restructuring and reorganization ⁽⁴⁾	—	—	—	—	—	6,516	6,516
Impairment ⁽⁵⁾	—	—	—	—	—	2,063	2,063
Loss on extinguishment of convertible senior notes	—	—	—	—	—	4,634	4,634
Adjusted EBITDA	\$ 97,260	\$ (10,823)	\$ —	\$ (5,292)	\$ 1,323	\$ (23,344)	\$ 59,124

(1) Interest income includes \$1.3 million of interest income related to originated mortgage loans for the year ended December 31, 2020.

(2) Interest expense includes \$1.4 million of interest expense related to our warehouse credit facilities for the year ended December 31, 2020.

(3) Stock-based compensation consists of expenses related to stock options, restricted stock units, and our employee stock purchase program. See Note 12 to our consolidated financial statements for more information.

(4) Restructuring and reorganization expenses primarily consist of direct and incremental costs related to COVID-19.

(5) Impairment primarily consists of an impairment cost related to our cost method investments.

Liquidity and Capital Resources

As of December 31, 2022, we had cash and cash equivalents of \$239.8 million and investments of \$151.7 million, which consist primarily of operating cash on deposit with financial institutions, money market instruments, U.S. treasury securities, and agency bonds.

Also, as of December 31, 2022, we had \$1,117.2 million aggregate principal amount of convertible senior notes outstanding across three issuances maturing between July 15, 2023 and April 1, 2027. See Note 15 to our consolidated financial statements for our obligations to pay semi-annual interest and to repay any outstanding amounts at the notes' maturity. Between November 13, 2022 and December 27, 2022, we repurchased and retired an aggregate amount of \$142.5 million of our 2025 convertible senior notes pursuant to the repurchase program authorized by our board of directors on October 17, 2022. As of December 31, 2022, \$166.4 million remained available for future repurchases pursuant to the foregoing repurchase program.

Also, as of December 31, 2022, we had 40,000 shares of convertible preferred stock outstanding. See Note 11 to our consolidated financial statements for our obligations to pay quarterly interest and to redeem any outstanding shares on November 30, 2024.

On November 2022, we announced that we were winding down RedfinNow. See Note 5 to our consolidated financial statements for more information on changes to inventory related to home purchases and home sales for our properties business during 2022. See Note 15 to our consolidated financial statements for more information regarding the secured revolving credit facility previously used to purchase RedfinNow homes, which we terminated on December 29, 2022.

Our mortgage business has significant cash requirements due to the period of time between its origination of a mortgage loan and the sale of that loan. We have relied on warehouse credit facilities with different lenders to fund substantially the entire portion of the mortgage loans that our mortgage business originates. Once our mortgage business sells a loan in the secondary mortgage market, we use the proceeds to reduce the outstanding balance under the related facility. See Note 15 to our consolidated financial statements for more information regarding our warehouse credit facilities.

We believe that our existing cash and cash equivalents and investments, together with cash we expect to generate from future operations, the cash we will generate from the wind-down of RedfinNow, and borrowings from our mortgage warehouse credit facilities, will provide sufficient liquidity to meet our operational needs and our growth, and fulfill our payment obligations with respect to our convertible senior notes and convertible preferred stock. However, our liquidity assumptions may change or prove to be incorrect, and we could exhaust our available financial resources sooner than we currently expect. As a result, we may seek new sources of credit financing or elect to raise additional funds through equity, equity-linked, or debt financing arrangements. We cannot assure you that any additional financing will be available to us on acceptable terms or at all.

Our title and settlement business holds cash in escrow that we do not record in our consolidated balance sheets. See Note 8 to our consolidated financial statements for more information regarding these amounts.

Cash Flows

The following table summarizes our cash flows for the periods indicated:

	Year Ended December 31,		
	2022	2021	2020
	(in thousands)		
Net cash provided by (used in) operating activities	\$ 40,491	\$ (301,568)	\$ 61,267
Net cash used in investing activities	(184,338)	(576,306)	(57,119)
Net cash (used in) provided by financing activities	(332,094)	650,341	694,227

Net Cash Provided By (Used In) Operating Activities

Our operating cash flows result primarily from cash generated by commissions paid to us from our real estate services business and sales of homes from our properties business. Our primary uses of cash from operating activities include payments for personnel-related costs, including employee benefits and bonus programs, marketing and advertising activities, purchases of homes for our properties business, office and occupancy costs, and outside services costs. Additionally, our mortgage business generates a significant amount operating cash flow activity from the origination and sale of loans held for sale.

Net cash provided by operating activities was \$40.5 million for the year ended December 31, 2022, primarily attributable to changes in assets and liabilities of \$244.7 million and \$116.9 million of non-cash items related to stock-based compensation, depreciation and amortization, gain on extinguishment of convertible senior notes, amortization of debt discounts and issuances costs, lease expense related to right-of-use assets, and other non-cash items. This was offset by a net loss of \$321.1 million. The primary source of cash related to changes in our assets and liabilities was a \$243.9 million decrease in inventory related to the wind-down of RedfinNow. The primary use of cash related to changes in our assets and liabilities was a \$48.9 million decrease in accounts payable and accrued and other liabilities related to the timing of vendor payments and payroll-related expenses.

Net cash used in operating activities was \$301.6 million for the year ended December 31, 2021, primarily attributable to a net loss of \$109.6 million, offset by \$114.8 million of non-cash items related to stock-based compensation, depreciation and amortization, amortization of debt discounts and issuances costs, lease expense related to right-of-use assets, impairment charges related to one of our cost-method investments, and other non-cash items. Changes in assets and liabilities decreased cash provided by operating activities by \$306.8 million. The primary source of cash related to changes in our assets and liabilities was a \$28.9 million increase in accounts payable and other accrued liabilities related to the timing of vendor payments and payroll related expenses. The primary use of cash related to changes in our assets and liabilities was a \$309.1 million increase in inventory related to our properties business.

Net cash provided by operating activities was \$61.3 million for the year ended December 31, 2020, primarily attributable to a net loss of \$18.5 million, offset by \$77.2 million of non-cash items related to stock-based compensation, depreciation and amortization expenses, amortization of debt discounts and issuances costs, and lease expense related to right-of-use assets. Changes in assets and liabilities increased cash used in operating activities by \$2.6 million. The primary sources of cash related to changes in our assets and liabilities were a \$41.2 million increase in accounts payable and other accrued liabilities related to the timing of vendor payments and payroll related expenses, and a \$25.4 million decrease in inventory related to our properties business. The primary uses of cash related to changes in our assets and liabilities were a \$35.5 million increase in accounts receivable related to the timing of escrow payments in-transit, a \$19.5 million increase in net loans held for sale related to our mortgage business, and an \$11.3 million decrease in lease liabilities.

Net Cash Used In Investing Activities

Our primary investing activities include acquisitions of other companies and the purchase of investments and property and equipment, primarily related to capitalized software development expenses and leasehold improvements.

Net cash used in investing activities was \$184.3 million for the year ended December 31, 2022, primarily attributable to cash paid for our acquisition of Bay Equity of \$97.3 million, \$65.5 million in net investments in U.S. government securities, and \$21.5 million in purchases of property and equipment.

Net cash used in investing activities was \$576.3 million for the year ended December 31, 2021, primarily attributable to cash paid for our acquisition of Rent. of \$608.0 million, \$59.2 million in net investments in U.S. government securities, and \$17.6 million of capitalized software development expenses.

Net cash used in investing activities was \$57.1 million for the year ended December 31, 2020, primarily attributable to \$42.4 million in net investments in U.S. government securities, \$5.8 million related to equipment, furnishings and leasehold improvements for new or expansion of existing office space, and \$8.9 million of capitalized software development expenses.

Net Cash (Used In) Provided By Financing Activities

Our primary financing activities have come from (i) our initial public offering in August 2017, (ii) sales of our common stock and 2023 notes in July 2018, our common stock and convertible preferred stock in April 2020, our 2025 notes in October 2020, and our 2027 notes in March 2021, and (iii) the sale of our common stock pursuant to stock option exercises and our ESPP. Additionally, we generate a significant amount of financing cash flow activity due to borrowings from and repayments to our warehouse credit facilities and, historically, our secured revolving credit facility, which we terminated on December 29, 2022.

Net cash used in financing activities was \$332.1 million for the year ended December 31, 2022, primarily attributable to a \$199.8 million decrease in net borrowings under our secured revolving credit facility, \$83.6 million used in connection with repurchases of our 2025 notes, and a \$51.1 million decrease in net borrowings under our warehouse credit facilities.

Net cash provided by financing activities was \$650.3 million for the year ended December 31, 2021, primarily attributable to \$498.9 million in net proceeds from the issuance of our 2027 notes offering, a \$175.8 million increase in net borrowings under our secured revolving credit facility, and \$22.8 million in proceeds from the issuance of common stock pursuant to our equity compensation plans.

Net cash provided by financing activities was \$694.2 million for the year ended December 31, 2020, primarily attributable to \$647.5 million in net proceeds from the issuance of our 2025 notes offering, \$109.5 million in net proceeds from the issuance of common stock and our convertible preferred stock offering, \$21.1 million in proceeds from the issuance of common stock pursuant to our equity compensation plans, a \$19.5 million increase in net borrowings under our secured revolving credit facility, and a \$17.7 million increase in our net borrowings under our warehouse credit facilities. This was partially offset by \$108.1 million used in connection with repurchases and conversions of our 2023 notes.

Critical Accounting Policies and Estimates

Discussion and analysis of our financial condition and results of operations are based on our financial statements, which have been prepared in accordance with GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets and liabilities and related disclosure of contingent assets and liabilities, revenue, and expenses at the date of the financial statements. Generally, we base our estimates on historical experience and on various other assumptions in accordance with GAAP that we believe to be reasonable under the circumstances. Actual results may differ from these estimates under different assumptions or conditions.

Critical accounting policies and estimates are those that we consider the most important to the portrayal of our financial condition and results of operations because they require our most difficult, subjective, or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain. Based on this definition, we have identified the critical accounting policies and estimates addressed below. In addition, we have other key accounting policies and estimates that are described in Note 1 to our consolidated financial statements.

Revenue Recognition

Our key revenue components are brokerage revenue, partner revenue, properties revenue, rentals revenue, mortgage revenue, and other revenue. Of these, we consider the most critical of our revenue recognition policies to be those related to commissions and fees charged on brokerage transactions closed by our lead agents, and from the sale of homes. We recognize commission-based brokerage revenue upon closing of a brokerage transaction, less the amount of any commission refunds, closing-cost reductions, or promotional offers that may result in a material right. We determined that brokerage revenue primarily contains a single performance obligation that is satisfied upon the closing of a transaction, at which point the entire transaction price is earned. We evaluate our brokerage contracts and promotional pricing to determine if there are any additional material rights and allocate the transaction price based on standalone selling prices.

Properties revenue is earned when we sell homes that were previously bought directly from homeowners. Our contracts with customers contain a single performance obligation that is satisfied upon a transaction closing. Properties revenue is recorded at closing on a gross basis, representing the sales price of the home.

Rentals revenue is primarily recognized on a straight-line basis over the term of the contract, which is generally less than one year. Revenue is presented net of sales allowances, which are not material.

Mortgage revenue is recognized (1) when an interest rate lock commitment is made to a customer, adjusted for a pull-through percentage, (2) for origination fees, when the purchase or refinance of a loan is complete, and (3) when the fair value of our interest rate lock commitments, forward sale commitments, and loans held for sale are recorded at current market quotes.

We have utilized the practical expedient in *ASC 606, Revenue from Contracts with Customers*, and elected not to capitalize contract costs for contracts with customers with durations less than one year. We do not have significant remaining performance obligations or contract balances.

See Note 1 to our consolidated financial statements for further discussion of our revenue recognition policy.

Acquired Intangible Assets and Goodwill

We recognize separately identifiable intangible assets acquired in a business combination. Determining the fair value of the intangible assets acquired requires management's judgment, often utilizes third-party valuation specialists, and involves the use of significant estimates and assumptions with respect to the timing and amounts of future cash flows, discount rates, replacement costs, and asset lives, among other estimates.

The judgments made in the determination of the estimated fair value assigned to the intangible assets acquired and the estimated useful life of each asset could significantly impact our consolidated financial statements in periods after the acquisition, such as through depreciation and amortization expense.

We evaluate intangible assets for impairment whenever events or circumstances indicate that they may not be recoverable. We measure recoverability by comparing the carrying amount of an asset group to future undiscounted net cash flows expected to be generated.

Goodwill represents the excess of the purchase price over the fair value of the net tangible assets and identifiable intangible assets acquired in a business combination. Goodwill is not amortized, but is subject to impairment testing. We assess the impairment of goodwill on an annual basis, during the fourth quarter, or whenever events or changes in circumstances indicate that goodwill may be impaired. We assess goodwill for possible impairment by performing a qualitative assessment to determine whether it is more likely than not that the fair value of the reporting unit is less than its carrying amount. When utilizing a quantitative assessment, we determine fair value at the reporting unit level based on a combination of an income approach and market approach. The income approach is based on estimated future cash flows, discounted at a rate that approximates the cost of capital of a market participant, while the market approach is based on guideline public company multiples and adjusted for the specific size and risk profile of the reporting units.

For fiscal year 2022, we performed a quantitative assessment and concluded that there was no impairment to any of our reporting units. No goodwill impairment charges were recorded in fiscal 2022 or 2021.

See Note 2 to our consolidated financial statements for a summary of our valuation of the Bay Equity intangible assets, along with their estimated useful lives.

Inventory

Our inventory represents homes purchased with the intent of resale and are accounted for under the specific identification method. Direct home acquisition and improvement costs are capitalized and tracked directly with each specific home. Homes are stated in inventory at cost and are reviewed on a home by home basis. When evidence exists that the net realizable value of a home is lower than its cost, we recognize the difference as a loss in the period in which it occurs. In determining net realizable value, management must use judgment and estimates, including assessment of readily available market value indicators such as the *Redfin Estimate* and other third-party home value indicators, assessment of a current listing or pending offer price if either are available, and the value of any improvements made to the home. If a home's estimated market value is less than the inventory cost then the home is written down to net realizable value. In determining net realizable value, we use judgment and estimates, including assessment of readily available market value indicators. When evidence exists that the net realizable value of inventory is lower than its cost, the difference is recognized in cost of revenue and the value of the corresponding asset is reduced. As of December 31, 2022, we had \$8.4 million in inventory write-downs. We will continue to monitor our reserve and may make further material adjustments in the future due to changing market conditions, natural disasters, or other forces outside of our control. On November 7, 2022, we decided to wind-down RedfinNow. We expect to complete the liquidation of our RedfinNow inventory in the second quarter of 2023.

See Note 5 to our consolidated financial statements for a summary of our inventory categories and any net realizable write-downs.

Business Combinations

The results of businesses acquired in a business combination are included in our consolidated financial statements from the date of acquisition. We record assets and liabilities of an acquired business at their estimated fair values on the acquisition date. Any excess consideration over the fair value of assets acquired and liabilities assumed is recognized as goodwill. During the measurement period, which may be up to one year from the acquisition date, we may record adjustments to the assets acquired and liabilities assumed with the corresponding offset to goodwill.

The purchase price allocation process requires our management to make significant estimates and assumptions. Although we believe the assumptions and estimates made are reasonable, they are inherently uncertain and based in part on experience, market conditions, projections of future performance, and information obtained from legacy management of acquired companies. Critical estimates include but are not limited to:

- future revenue, cost of revenue and operating margin projections,
- discount rates,
- terminal growth rate; and
- market data of comparable guideline companies.

See Note 2 to our consolidated financial statements for a summary of our business combinations activities.

Recent Accounting Standards

For information on recent accounting standards, see Note 1 to our consolidated financial statements.

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Our primary operations are within the United States and in the first quarter of 2019 we launched limited operations in Canada. We are exposed to market risks in the ordinary course of our business. These risks primarily consist of fluctuations in interest rates.

Interest Rate Risk

Our investment policy allows us to maintain a portfolio of cash equivalents and investments in a variety of securities, including U.S. treasury and agency issues, bank certificates of deposit that are 100% insured by the Federal Deposit Insurance Corporation, and SEC-registered money market funds that consist of a minimum of \$1 billion in assets and meet the above requirements. The goals of our investment policy are liquidity and capital preservation. We do not enter into investments for trading or speculative purposes.

As of December 31, 2022, we had cash and cash equivalents of \$239.8 million and investments of \$151.7 million. Our investments are composed of available-for-sale securities that consist primarily of U.S. treasury securities with maturities of two years or less. We believe we do not have any material exposure to changes in the fair value of these assets as a result of changes in interest rates due to the relatively short-term nature and risk profile of our portfolio. Declines in interest rates, however, would reduce future investment income. Assuming no change in our outstanding cash, cash equivalents, and investments during the first quarter of 2022, a hypothetical 10% change in interest rates, occurring during and sustained throughout that quarter, would not have a material impact on our financial results for that quarter.

We are exposed to interest rate risk on our mortgage loans held for sale and IRLCs associated with our mortgage loan origination services. We manage this interest rate risk through the use of forward sales commitments on both a best efforts whole loans basis and on a mandatory basis. Forward sales commitments entered into on a mandatory basis are done through the use of commitments to sell mortgage-backed securities. We do not enter into or hold derivatives for trading or speculative purposes. The fair value of our IRLCs and forward sales commitments are reflected in other current assets and accrued and other liabilities, as applicable, with changes in the fair value of these commitments recognized as revenue. The net fair value change for the periods presented were not material. See Note 4 to our consolidated financial statements for a summary of the fair value of our forward sales commitments and our IRLCs.

Foreign Currency Exchange Risk

As our operations in Canada have been limited, and we do not maintain a significant balance of foreign currency, we do not currently face significant foreign currency exchange rate risk.

Item 8. Financial Statements and Supplementary Data

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of Redfin Corporation

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Redfin Corporation and subsidiaries (the "Company") as of December 31, 2022 and 2021, the related consolidated statements of comprehensive loss, cash flows, and changes in mezzanine equity and stockholders' equity, for each of the three years in the period ended December 31, 2022, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of 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 accounting principles generally accepted in the United States of America.

We have also 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 (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 16, 2023, expressed an unqualified opinion on the Company's internal control over financial reporting.

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 Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates 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 financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Valuation of Inventory — Refer to Footnote 1 and Footnote 5 to the Consolidated Financial Statements

As discussed in Note 5 to the consolidated financial statements, net inventory was \$114.3 million at December 31, 2022 compared to \$358.2 million as of December 31, 2021. Inventory includes residential homes acquired through the Company's RedfinNow business and is stated at the lower of cost or net realizable value. As of December 31, 2022 and 2021, lower of cost or net realizable value write-downs were \$8.4 million and \$2.4 million, respectively. On a periodic basis, management reviews the value of homes held in inventory for indicators that net realizable value is lower than cost. In determining net realizable value, management uses judgment and estimates, including assessment of readily available market value indicators. When evidence exists that the net realizable value of inventory is lower than its cost, the difference is recognized in cost of revenue and the value of the corresponding asset is reduced.

Given the significant judgment required by management in estimating the net realizable value of inventory, specifically the estimated selling price of each home, our associated audit procedures required a high degree of auditor judgment and an increased extent of effort. Accordingly, we considered the audit of the estimated net realizable value of inventory to be a critical audit matter.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to management's estimate of the net realizable value of inventory included the following, among others:

- We tested the effectiveness of the Company's internal controls over the determination of net realizable value.
- We evaluated the reasonableness of management's process for developing estimates where a net realizable value was not readily available or observable.
- We discussed with management the Company's plans to sell the December 31, 2022 inventory and evaluated whether management's assessment of net realizable value of inventory was consistent with information obtained through such inquiries.
- We tested a sample of homes in inventory to determine whether the net realizable value of these homes was reasonable. To make this determination we obtained and inspected, where available, sales contracts to sell the inventory after December 31, 2022. For homes for which a sales contract was not available, we considered alternate evidence including external data on sales prices for comparable homes in the same geographic location as our audit selections.
- We evaluated management's ability to develop reasonable estimates of net realizable value by comparing prior period estimates of net realizable value to the actual selling prices for homes sold in 2022.
- We tested the mathematical accuracy of management's analysis.

February 16, 2023

We have served as the Company's auditor since 2013.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the stockholders and the Board of Directors of Redfin Corporation

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Redfin Corporation and subsidiaries (the "Company") as of December 31, 2022, based on criteria established in Internal Control — Integrated Framework (2013) issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2022, based on criteria established in Internal Control — Integrated Framework (2013) issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2022, of the Company and our report dated February 17, 2023, expressed an unqualified opinion on those financial statements.

As described in Management's Report on Internal Control over Financial Reporting, management excluded from its assessment the internal control over financial reporting at Bay Equity LLC ("Bay Equity"), which was acquired on April 1, 2022, and whose financial statements constitute 29.6% of total assets (after excluding goodwill and intangible assets which were integrated with the Company's systems and control environment), 5.7% of revenues, and 5.4% of net loss of the consolidated financial statement amounts as of and for the year ended December 31, 2022. Accordingly, our audit did not include the internal control over financial reporting at Bay Equity.

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 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/ Deloitte & Touche LLP
Seattle, Washington
February 16, 2023

Redfin Corporation and Subsidiaries
Consolidated Balance Sheets
(in thousands, except share and per share amounts)

	December 31,	
	2022	2021
Assets		
Current assets		
Cash and cash equivalents	\$ 239,840	\$ 591,003
Restricted cash	2,406	127,278
Short-term investments	122,259	33,737
Accounts receivable, net of allowances for credit losses of \$2,019 and \$1,298	54,880	69,594
Inventory	114,273	358,221
Loans held for sale	199,604	35,759
Prepaid expenses	34,506	22,948
Other current assets	8,690	7,524
Total current assets	776,458	1,246,064
Property and equipment, net	55,105	58,671
Right-of-use assets, net	42,032	54,200
Mortgage servicing rights, at fair value	36,261	—
Long-term investments	29,480	54,828
Goodwill	461,349	409,382
Intangible assets, net	162,272	185,929
Other assets, noncurrent	11,247	12,898
Total assets	\$ 1,574,204	\$ 2,021,972
Liabilities, mezzanine equity, and stockholders' equity		
Current liabilities		
Accounts payable	\$ 11,819	\$ 12,546
Accrued and other liabilities	109,743	118,122
Warehouse credit facilities	190,509	33,043
Secured revolving credit facility	—	199,781
Convertible senior notes, net	23,431	23,280
Lease liabilities	19,137	15,040
Total current liabilities	354,639	401,812
Lease liabilities, noncurrent	37,298	55,222
Convertible senior notes, net, noncurrent	1,078,157	1,214,017
Deferred tax liabilities	243	1,201
Total liabilities	1,470,337	1,672,252
Commitments and contingencies (Note 8)		
Series A convertible preferred stock—par value \$0.001 per share; 10,000,000 shares authorized; 40,000 and 40,000 shares issued and outstanding at December 31, 2022 and 2021, respectively	39,914	39,868
Stockholders' equity		
Common stock—par value \$0.001 per share; 500,000,000 shares authorized; 109,696,178 and 106,308,767 shares issued and outstanding at December 31, 2022 and 2021, respectively	110	106
Additional paid-in capital	757,951	682,084
Accumulated other comprehensive loss	(801)	(174)
Accumulated deficit	(693,307)	(372,164)
Total stockholders' equity	63,953	309,852
Total liabilities, mezzanine equity, and stockholders' equity	\$ 1,574,204	\$ 2,021,972

See Notes to the consolidated financial statements.

Redfin Corporation and Subsidiaries
Consolidated Statements of Comprehensive Loss
(in thousands, except share and per share amounts)

	Year Ended December 31,		
	2022	2021	2020
Revenue			
Service	\$ 1,081,877	\$ 1,042,112	\$ 674,345
Product	1,202,565	880,653	211,748
Total revenue	2,284,442	1,922,765	886,093
Cost of revenue			
Service	772,351	648,660	437,484
Product	1,226,038	870,285	216,499
Total cost of revenue	1,998,389	1,518,945	653,983
Gross profit	286,053	403,820	232,110
Operating expenses			
Technology and development	196,250	156,718	84,297
Marketing	158,071	138,740	54,881
General and administrative	254,593	218,315	85,624
Restructuring and reorganization	40,469	—	6,516
Total operating expenses	649,383	513,773	231,318
(Loss) income from operations	(363,330)	(109,953)	792
Interest income	6,639	635	2,074
Interest expense	(17,745)	(11,762)	(19,495)
Income tax (expense) benefit	(126)	6,107	—
Gain on extinguishment of convertible senior notes	57,193	—	—
Other (expense) income, net	(3,774)	5,360	(1,898)
Net loss	\$ (321,143)	\$ (109,613)	\$ (18,527)
Dividends on convertible preferred stock	(1,560)	(7,269)	(4,454)
Net loss attributable to common stock—basic and diluted	\$ (322,703)	\$ (116,882)	\$ (22,981)
Net loss per share attributable to common stock—basic and diluted	\$ (2.99)	\$ (1.12)	\$ (0.23)
Weighted-average shares used to compute net loss per share attributable to common stock—basic and diluted	107,927,464	104,683,460	98,574,529
Net loss	\$ (321,143)	\$ (109,613)	\$ (18,527)
Other comprehensive income			
Foreign currency translation adjustments	94	6	(3)
Unrealized gain on available-for-sale securities	533	379	172
Comprehensive loss	\$ (320,516)	\$ (109,228)	\$ (18,358)

See Notes to the consolidated financial statements.

Redfin Corporation and Subsidiaries
Consolidated Statements of Cash Flows
(in thousands)

	Year Ended December 31,		
	2022	2021	2020
Operating Activities			
Net loss	\$ (321,143)	\$ (109,613)	\$ (18,527)
Adjustments to reconcile net loss to net cash (used in) provided by operating activities:			
Depreciation and amortization	64,907	46,906	14,564
Stock-based compensation	68,257	54,722	36,973
Amortization of debt discount and issuance costs	6,137	4,989	12,038
Non-cash lease expense	16,234	11,630	9,204
Impairment costs	1,136	—	2,063
Loss on conversions of convertible senior notes	—	—	4,634
Net loss (gain) on IRLCs, forward sales commitments, and loans held for sale	14,427	815	(1,921)
Change in fair value of mortgage servicing rights, net	(801)	—	—
Gain on extinguishment of convertible senior notes	(57,193)	—	—
Other	3,791	(4,227)	(349)
Change in assets and liabilities:			
Accounts receivable, net	24,411	(7,149)	(35,496)
Inventory	243,948	(309,063)	25,432
Prepaid expenses and other assets	(5,904)	(12,248)	2,333
Accounts payable	(2,472)	3,059	2,086
Accrued and other liabilities, deferred tax liabilities, and payroll tax liabilities, noncurrent	(46,454)	25,791	39,092
Lease liabilities	(18,452)	(13,268)	(11,312)
Origination of mortgage servicing rights	(3,140)	—	—
Proceeds from sale of mortgage servicing rights	1,662	—	—
Origination of loans held for sale	(3,949,442)	(986,982)	(677,310)
Proceeds from sale of loans originated as held for sale	4,000,582	993,070	657,763
Net cash provided by (used in) operating activities	40,491	(301,568)	61,267
Investing activities			
Purchases of property and equipment	(21,531)	(27,492)	(14,686)
Purchases of investments	(182,466)	(146,274)	(198,172)
Sales of investments	17,545	98,687	7,887
Maturities of investments	99,455	106,773	147,852
Cash paid for acquisition, net of cash, cash equivalents, and restricted cash acquired	(97,341)	(608,000)	—
Net cash used in investing activities	(184,338)	(576,306)	(57,119)
Financing activities			
Proceeds from the issuance of convertible preferred stock, net of issuance costs	—	—	39,801
Proceeds from the issuance of common stock, net of issuance costs	—	—	69,701
Proceeds from the issuance of common stock pursuant to employee equity plans	11,528	22,772	21,072
Tax payments related to net share settlements on restricted stock units	(7,498)	(27,066)	(16,852)
Borrowings from warehouse credit facilities	3,938,265	942,993	662,278
Repayments to warehouse credit facilities	(3,989,407)	(948,979)	(644,551)
Borrowings from secured revolving credit facility	565,334	624,828	89,619
Repayments to secured revolving credit facility	(765,114)	(448,996)	(70,115)
Cash paid for secured revolving credit facility issuance costs	(733)	(527)	(4)
Proceeds from issuance of convertible senior notes, net of issuance costs	—	561,529	647,486
Purchases of capped calls related to convertible senior notes	—	(62,647)	—
Conversions of convertible senior notes	—	(2,159)	(108,061)
Principal payments under finance lease obligations	(855)	(796)	(221)
Repurchases of convertible senior notes	(83,614)	—	—
Other financing payables	—	(10,611)	4,074
Net cash (used in) provided by financing activities	(332,094)	650,341	694,227
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	(94)	(6)	(3)
Net change in cash, cash equivalents, and restricted cash	(476,035)	(227,539)	698,372
Cash, cash equivalents, and restricted cash:			
Beginning of period	718,281	945,820	247,448
End of period	\$ 242,246	\$ 718,281	\$ 945,820
Supplemental disclosure of cash flow information			
Cash paid for interest	\$ 20,107	\$ 7,592	\$ 4,958
Non-cash transactions			
Stock-based compensation capitalized in property and equipment	3,660	4,059	2,348
Property and equipment additions in accounts payable and accrued liabilities	99	659	1,682
Leasehold improvements paid directly by lessor	118	1,334	37
Issuance of common stock for repurchases and conversions of convertible senior notes	—	—	98,397
Reconciliation of cash, cash equivalents, and restricted cash			
Cash and cash equivalents	\$ 239,840	\$ 591,003	\$ 925,276
Restricted cash	2,406	127,278	20,544
Total cash, cash equivalents, and restricted cash	\$ 242,246	\$ 718,281	\$ 945,820

See Notes to the consolidated financial statements.

Redfin Corporation and Subsidiaries
Consolidated Statements of Changes in Mezzanine Equity and Stockholders' Equity
(in thousands, except share amounts)

	Series A Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Income (Loss)	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
Balance, December 31, 2019	—	\$ —	93,001,597	\$ 93	\$ 583,097	\$ (251,786)	\$ 42	\$ 331,446
Issuance of convertible preferred stock, net	40,000	39,823	—	—	—	—	—	—
Issuance of common stock as dividend on convertible preferred stock	—	—	61,280	—	—	—	—	—
Issuance of common stock, net	—	—	4,484,305	4	69,697	—	—	69,701
Equity component of convertible senior notes, net	—	—	—	—	165,257	—	—	165,257
Issuance of common stock pursuant to employee stock purchase program	—	—	320,609	—	8,174	—	—	8,174
Issuance of common stock pursuant to exercise of stock options	—	—	2,011,938	2	12,703	—	—	12,705
Issuance of common stock pursuant to settlement of restricted stock units	—	—	1,490,506	2	(2)	—	—	—
Common stock surrendered for employees' tax liability upon settlement of restricted stock units	—	—	(439,131)	—	(16,852)	—	—	(16,852)
Issuance of common stock in connection with repurchase of convertible senior notes	—	—	2,056,180	2	(701)	—	—	(699)
Issuance of common stock in connection with conversion of convertible senior notes	—	—	13,310	—	(138)	—	—	(138)
Stock-based compensation	—	—	—	—	39,321	—	—	39,321
Other comprehensive income	—	—	—	—	—	—	169	169
Net loss	—	—	—	—	—	(18,527)	—	(18,527)
Balance, December 31, 2020	40,000	\$ 39,823	103,000,594	\$ 103	\$ 860,556	\$ (270,313)	\$ 211	\$ 590,557
Issuance of convertible preferred stock, net	—	45	—	—	—	—	—	—
Issuance of common stock as dividend on convertible preferred stock	—	—	122,560	—	—	—	—	—
Issuance of common stock pursuant to employee stock purchase program	—	—	334,248	—	13,787	—	—	13,787
Issuance of common stock pursuant to exercise of stock options	—	—	1,709,324	2	8,978	—	—	8,980
Issuance of common stock pursuant to settlement of restricted stock units	—	—	1,559,425	2	(2)	—	—	—
Common stock surrendered for employees' tax liability upon settlement of restricted stock units	—	—	(458,152)	(1)	(27,066)	—	—	(27,067)
Cumulative-effect adjustment from accounting changes	—	—	—	—	(170,240)	7,762	—	(162,478)
Purchases of capped calls related to convertible senior notes	—	—	—	—	(62,647)	—	—	(62,647)
Issuance of common stock in connection with conversion of convertible senior notes	—	—	40,768	—	(63)	—	—	(63)
Stock-based compensation	—	—	—	—	58,781	—	—	58,781
Other comprehensive loss	—	—	—	—	—	—	(385)	(385)
Net loss	—	—	—	—	—	(109,613)	—	(109,613)
Balance, December 31, 2021	40,000	\$ 39,868	106,308,767	\$ 106	\$ 682,084	\$ (372,164)	\$ (174)	\$ 309,852
Issuance of convertible preferred stock, net	—	46	—	—	—	—	—	—
Issuance of common stock as dividend on convertible preferred stock	—	—	122,560	—	—	—	—	—
Issuance of common stock pursuant to employee stock purchase program	—	—	1,170,106	1	6,464	—	—	6,465
Issuance of common stock pursuant to exercise of stock options	—	—	700,333	1	4,986	—	—	4,987
Issuance of common stock pursuant to settlement of restricted stock units	—	—	1,972,441	2	(2)	—	—	—
Common stock surrendered for employees' tax liability upon settlement of restricted stock units	—	—	(578,029)	—	(7,498)	—	—	(7,498)
Stock-based compensation	—	—	—	—	71,917	—	—	71,917
Other comprehensive loss	—	—	—	—	—	—	(627)	(627)
Net loss	—	—	—	—	—	(321,143)	—	(321,143)
Balance, December 31, 2022	40,000	\$ 39,914	109,696,178	\$ 110	\$ 757,951	\$ (693,307)	\$ (801)	\$ 63,953

See Notes to the consolidated financial statements.

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Redfin Corporation and Subsidiaries
Notes to Consolidated Financial Statements
(in thousands, except share and per share amounts)

Note 1: Description of Business and Summary of Significant Accounting Policies

Description of Business—Redfin Corporation was incorporated in October 2002 and is headquartered in Seattle, Washington. We operate an online real estate marketplace and provide real estate services, including assisting individuals in the purchase or sale of their home. We also provide title and settlement services and originate and sell mortgages. In addition, we use digital platforms to connect consumers with rental properties. We have operations located in multiple states across the United States and certain provinces in Canada.

Basis of Presentation—The consolidated financial statements and accompanying notes have been prepared in accordance with generally accepted accounting principles in the United States of America ("GAAP").

Certain amounts presented in the prior period consolidated statements of comprehensive loss have been reclassified to conform to the current period financial statement presentation. The change in classification does not affect previously reported total revenue or expenses in the consolidated statements of comprehensive loss.

Principles of Consolidation—The consolidated financial statements include the accounts of Redfin and its wholly owned subsidiaries, including those entities in which we have a variable interest and of which we are the primary beneficiary. Intercompany transactions and balances have been eliminated.

Certain Significant Risks and Business Uncertainties—We operate in the residential real estate industry and are a technology-focused company. Accordingly, we are affected by a variety of factors that could have a significant negative effect on our future financial position, results of operations, and cash flows. These factors include: negative macroeconomic factors affecting the health of the U.S. residential real estate industry, the continued impact of COVID-19 on the residential real estate industry, negative factors disproportionately affecting markets where we derive most of our revenue, intense competition in the U.S. residential real estate industry, our inability to maintain or improve our technology offerings, our failure to obtain and provide comprehensive and accurate real estate listings, errors or inaccuracies in the business data that we rely on to make decisions, and our inability to attract homebuyers and home sellers to our website and mobile application.

Use of Estimates—The preparation of consolidated financial statements, in conformity with GAAP, requires our management to make estimates and assumptions that affect the reported amounts of assets and liabilities and results of operations during the respective periods. Our estimates include, but are not limited to, valuation of deferred income taxes, stock-based compensation, net realizable value of inventory, capitalization of website and software development costs, the incremental borrowing rate for the determination of the present value of lease payments, recoverability of intangible assets with finite lives, fair value of our mortgage loans held for sale ("LHFS") and mortgage servicing rights, estimated useful life of intangible assets, fair value of reporting units for purposes of allocating and evaluating goodwill for impairment, and current expected credit losses on certain financial assets. The amounts ultimately realized from the affected assets or ultimately recognized as liabilities will depend on, among other factors, general business conditions and could differ materially in the near term from the carrying amounts reflected in the consolidated financial statements.

Cash and Cash Equivalents—We consider all highly liquid investments originally purchased by us with original maturities of three months or less at the date of purchase to be cash equivalents.

Restricted Cash—Restricted cash primarily consists of cash that is specifically designated to repay borrowings under warehouse credit facilities and the secured revolving credit facility. We terminated the secured revolving credit facility on December 29, 2022.

Accounts Receivable, Net and Allowance for Credit Losses—We have three material classes of receivables: (i) real estate services receivables, (ii) receivables from the sale of homes through our properties business, and (iii) receivables from customers in relation to our rentals business. Accounts receivable related to these classes represent closed transactions for which cash has not yet been received. The majority of our transactions are processed through escrow and collectibility is not a significant risk. For transactions not directly processed through escrow, we establish an allowance for expected credit losses based on historical experience of collectibility, current external economic conditions that may affect collectibility, and current or expected changes to the regulatory environment in which we operate our businesses. We evaluate for changes in credit quality indicators on an annual basis or in the event of a material economic event or material change in the regulatory environment in which we operate.

Investments—We have investments in marketable securities that are available to support our operational needs, which are included in our consolidated balance sheets as short-term and long-term investments. Our short-term and long-term investments consist primarily of U.S. treasury securities, including inflation protected securities, and other federal or local government issued securities. Available-for-sale debt securities are recorded at fair value, and unrealized holding gains and losses are recorded as a component of accumulated other comprehensive (loss) income. Securities with maturities of one year or less and those identified by management at the time of purchase to be used to fund operations within one year are classified as short-term. All other securities are classified as long-term. We evaluate our available-for-sale debt securities, both ones classified as cash equivalents and as investments, for expected credit losses on a quarterly basis. An expected credit loss reserve is charged against the fair value of an available-for-sale debt security when it is identified, with a credit loss charged against net earnings. We review factors to determine whether an expected credit loss exists based on credit quality indicators, such as the extent to which the fair value as of the reporting date is less than the amortized cost basis, present value of cash flows expected to be collected, the financial condition and prospects of the issuer, adverse conditions specifically related to the security, and any changes to the credit rating of the security by a rating agency. Realized gains and losses are accounted for using the specific identification method. Purchases and sales are recorded on a trade date basis.

Fair Value—We account for certain assets and liabilities at fair value. Fair value is defined as the exchange price that would be received for an asset or an exit price paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The current accounting guidance for fair value measurements defines a three-level valuation hierarchy for disclosures as follows:

Level 1—Unadjusted quoted prices in active markets for identical assets or liabilities.

Level 2—Inputs other than quoted prices included within Level 1 that are observable, unadjusted quoted prices in markets that are not active, or other inputs that are observable such as quoted prices for similar assets or liabilities in active markets, or can be corroborated by observable market data.

Level 3—Unobservable inputs that are supported by little or no market activity and require us to develop our own assumptions.

The categorization of a financial instrument within the valuation hierarchy is based upon the lowest level of input that is significant to the fair value measurement. Our financial instruments consist of Level 1, Level 2, and Level 3 assets and liabilities.

Concentration of Credit Risk—Financial instruments that potentially subject us to concentrations of credit risk are primarily cash and cash equivalents and investments. We generally place our cash and cash equivalents and investments with major financial institutions we deem to be of high-credit-quality in order to limit our credit exposure. We maintain our cash accounts with financial institutions where deposits exceed federal insurance limits.

Inventory—Our inventory represents homes purchased with the intent of resale and are accounted for under the specific identification method. Direct home acquisition and improvement costs are capitalized and tracked directly with each specific home. Homes are stated in inventory at cost and are reviewed on a home by home basis. If a home's estimated market value is less than the inventory cost then the home is written down to net realizable value. In determining net realizable value, we use judgment and estimates, including assessment of readily available market value indicators. When evidence exists that the net realizable value of inventory is lower than its cost, the difference is recognized in cost of revenue and the value of the corresponding asset is reduced.

We classify inventory into three categories: homes for sale, homes not available for sale, and homes under improvement. Homes for sale represent homes that are currently listed on the market for sale and homes which we are under a contractual commitment to sell after the escrow period. Homes not available for sale are generally recently purchased homes that have been temporarily rented back to the prior owner and are not listed on the market for sale. The rental period is typically less than 30 days. Homes under improvement are homes that are in the process of being prepared to be listed for sale.

Variable Interest Entities—In connection with establishing a secured revolving credit facility to support the financing of homes that it purchases, RedfinNow formed a special purpose entity called RedfinNow Borrower, which is a wholly owned subsidiary of Redfin Corporation. We have determined that RedfinNow Borrower is a variable interest entity ("VIE") and that we are the primary beneficiary of the variable interest in RedfinNow Borrower based on our power to direct the activities that most significantly impact the economic outcomes of the entity through our role in designing the entity and managing the homes purchased and sold by the entity. We have a potentially significant variable interest in the entity based upon our equity interest held in the VIE. As we have concluded that we are the primary beneficiary, we have included the accounts of the VIE in our consolidated financial statements. The lender of the secured revolving credit facility does not have recourse against the general credit of the primary beneficiary beyond the circumstances disclosed in Note 15. See Note 15 for a summary of the secured revolving credit facility, including outstanding borrowings associated with the VIE and related collateral. On November 7, 2022, we decided to wind-down RedfinNow and on December 29, 2022, we terminated our secured revolving credit facility.

Loans Held for Sale—Our mortgage segment originates residential mortgage loans. We have elected the fair value option for all loans held for sale and record these loans at fair value. Gains and losses from changes in fair value and direct loan origination fees and costs are recognized in net gain on loans held for sale. The fair value of loans held for sale is in excess of the contractual principal amounts by \$2,650 and \$660, respectively, as of December 31, 2022 and December 31, 2021. The mortgage loans we originate are intended to be sold in the secondary mortgage market within a short period of time following origination. Mortgage loans held for sale primarily consist of single-family residential loans collateralized by the underlying home. Mortgage loans held for sale are recorded at fair value based on either sale commitments or current market quotes for mortgage loans with similar characteristics. Interest income earned or expense incurred on loans held for sale is captured as a component of income from operations.

Other Current Assets—Other current assets consist primarily of miscellaneous non-trade receivables, interest receivable, and interest rate lock commitments from mortgage origination operations (see Derivative Instruments below).

Derivative Instruments—Our mortgage segment is party to interest rate lock commitments ("IRLCs") with customers resulting from mortgage origination operations. IRLCs for single-family mortgage loans that we intend to sell are considered free-standing derivatives. All free-standing derivatives are required to be recorded on our consolidated balance sheets at fair value. Since we can terminate a loan commitment if the borrower does not comply with the terms of the contract, and some loan commitments may expire without being drawn upon, these commitments do not necessarily represent future cash requirements.

Interest rate risk related to the residential mortgage loans held for sale and IRLCs is offset using forward sales commitments. We manage this interest rate risk through the use of forward sales commitments on both a best efforts whole loans basis and on a mandatory basis. Forward sales commitments entered into on a mandatory basis are done through the use of commitments to sell mortgage-backed securities. We do not enter into or hold derivatives for trading or speculative purposes. Changes in the fair value of IRLCs and forward sales commitments are recognized as revenue, and the fair values are reflected in other current assets and accrued and other liabilities, as applicable. We estimate the fair value of an IRLC based on current market quotes for mortgage loans with similar characteristics, net of origination costs and fees adjusting for the probability that the mortgage loan will not fund according to the terms of commitment (referred to as a pull-through factor). The fair value measurements of our forward sales commitments use prices quoted directly to us from our counterparties.

Property and Equipment—Property and equipment is recorded at cost and depreciated using the straight-line method over the estimated useful lives. Depreciation and amortization is included in cost of revenue, marketing, technology and development, and general and administrative and is allocated based on estimated usage for each class of asset.

Leasehold improvements are amortized over the shorter of the lease term or the estimated useful life of the related asset. Upon retirement or sale, the cost of assets disposed of and the related accumulated depreciation are removed from the accounts, and any resulting gain or loss is reflected in the consolidated statements of operations. Repair and maintenance costs are expensed as incurred.

Costs incurred in the preliminary stages of website and software development are expensed as incurred. Once an application has reached the development stage, direct internal and external costs relating to upgrades or enhancements that meet the capitalization criteria are capitalized in property and equipment and amortized on a straight-line basis over their estimated useful lives. Maintenance and enhancement costs (including those costs in the post-implementation stages) are typically expensed as incurred, unless such costs relate to substantial upgrades and enhancements to the websites (or software) that result in added functionality, in which case the costs are capitalized.

Capitalized software development activities placed in service are amortized over the expected useful lives of those releases. We view capitalized software costs as either internal use, or market and product expansion. Currently, internal use and expansion useful lives are estimated at two to three years.

Estimated useful lives of website and software development activities are reviewed annually, or whenever events or changes in circumstances indicate that intangible assets may be impaired, and adjusted as appropriate to reflect upcoming development activities that may include significant upgrades or enhancements to the existing functionality.

Intangible Assets—Intangible assets are finite lived and mainly consist of trade names, developed technology, and customer relationships and are amortized over their estimated useful lives ranging from three to ten years. The useful lives were determined by estimating future cash flows generated by the acquired intangible assets. Fair values are derived by applying various valuation methodologies including the income approach and cost approach, using critical estimates and assumptions that include the revenue growth rate, royalty rate, discount rate, and cost to replace.

Impairment of Long-Lived Assets—Long-lived assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of such assets may not be recoverable. Recoverability of assets to be held and used is measured first by a comparison of the carrying amount of an asset to future undiscounted net cash flows expected to be generated by the asset. If such asset were considered to be impaired, an impairment loss would be recognized in the amount by which the carrying value of the asset exceeds its fair value. To date, no such impairment has occurred.

Goodwill—Goodwill represents the excess of the purchase price over the fair value of the net tangible assets and identifiable intangible assets acquired in a business combination. Goodwill is not amortized, but is subject to impairment testing. We assess the impairment of goodwill on an annual basis, during the fourth quarter, or whenever events or changes in circumstances indicate that goodwill may be impaired.

We perform an impairment assessment of goodwill at our reporting unit level. To test for goodwill impairment, we have the option to perform a qualitative assessment of goodwill rather than completing the quantitative assessment. We consider macroeconomic conditions, industry and market considerations, cost factors, overall financial performance, other relevant entity-specific events, potential events affecting the reporting units, and changes in the fair value of our common stock. We must assess whether it is more likely than not that the fair value of the reporting unit is less than its carrying amount. If we conclude this is not the case, we do not need to perform any further assessment. Otherwise, we must perform a quantitative assessment and compare the fair value of the reporting unit to its carrying value, including goodwill. If the fair value of the reporting unit is less than its carrying amount, goodwill is written down for the amount by which the carrying amount exceeds the reporting unit's fair value. However, the loss recognized cannot exceed the carrying amount of goodwill. We use a combination of discounted cash flow models and market data of comparable guideline companies to determine the fair value of a reporting unit. The assumptions used in these models are consistent with those we believe a market participant would use and adjusted for the specific size and risk profile of the reporting units.

The aggregate carrying value of goodwill was \$461,349 and \$409,382 at December 31, 2022 and 2021, respectively. For the year ended December 31, 2022, we performed a quantitative assessment and concluded that there was no impairment. See Note 9 for more information.

Other Assets, Noncurrent—Other assets consists primarily of leased building security deposits and the noncurrent portion of prepaid assets.

Leases—The extent of our lease commitments consists of operating leases for physical office locations with original terms ranging from one to 11 years. We have accounted for the portfolio of leases by disaggregation based on the nature and term of the lease. Generally, the leases require a fixed minimum rent with contractual minimum rent increases over the term of the lease. Leases with an initial term of 12 months or less are not recorded in the consolidated balance sheets, but rather lease expense is recognized on a straight-line basis over the term of the lease.

When available, the rate implicit in the lease to discount lease payments to present value would be used; however, none of our significant leases as of December 31, 2022 provide a readily determinable implicit rate. Therefore, we must estimate our incremental borrowing rate for each portfolio of leases to discount the lease payments based on information available at lease commencement.

We have evaluated the performance of existing leases in relation to our leasing strategy and have determined that most renewal options would not be reasonably certain to be exercised.

The right-of-use asset and related lease liability are determined based on the lease component of the consideration in each lease contract. We have evaluated our lease portfolio for appropriate allocation of the consideration in the lease contracts between lease and non-lease components based on standalone prices and determined the allocation per the contracts to be appropriate. A portion of the right-of-use assets and related lease liabilities on our consolidated balance sheets were classified as held for sale as of December 31, 2022, \$413 and \$352, respectively.

Mezzanine Equity—We have issued convertible preferred stock that we have determined is a financial instrument with both equity and debt characteristics and is classified as mezzanine equity in our consolidated financial statements. The instrument was initially recognized at fair value net of issuance costs. We reassess whether the instrument is currently redeemable or probable to become redeemable in the future as of each reporting date, in which, if the instrument meets either criteria, we will accrete the carrying value to the redemption value based on the effective interest method over the remaining term. To assess classification, we review all features of the instrument, including mandatory redemption features and conversion features that may be substantive. All financial instruments that are classified as mezzanine equity are evaluated for embedded derivative features by evaluating each feature against the nature of the host instrument (e.g. more equity-like or debt-like). Features identified as embedded derivatives that are material are recognized separately as a derivative asset or liability in the consolidated financial statements. We have evaluated our convertible preferred stock and determined that its nature is that of an equity host and no material embedded derivatives exist that would require bifurcation on our consolidated balance sheets. See Note 11 for more information.

Foreign Currency Translation—Our international operations generally use their local currency as their functional currency. Assets and liabilities are translated at exchange rates in effect at the balance sheet date. Income and expense accounts are translated at the average monthly exchange rates during the year. Resulting translation adjustments are reported as a component of other comprehensive income and recorded in accumulated other comprehensive loss on our consolidated balance sheets.

Income Taxes—Income taxes are accounted for using an asset and liability approach that requires the recognition of deferred tax assets and liabilities for the expected future tax consequences of temporary differences between the consolidated balance sheets and tax bases of assets and liabilities at the applicable enacted tax rates. We establish a valuation allowance for deferred tax assets if it is more likely than not that these items will expire before we are able to realize their benefits or if future deductibility is uncertain.

We account for uncertainty in income taxes in accordance with *ASC 740, Income Taxes*. Tax positions are evaluated utilizing a two-step process, whereby we first determine whether it is more likely than not that a tax position will be sustained upon examination by the tax authority, including resolutions of any related appeals or litigation processes, based on technical merit. If a tax position meets the more-likely-than-not recognition threshold, it is then measured to determine the amount of benefit to recognize in the financial statements. The tax position is measured as the largest amount of benefit that is greater than 50% likely to be realized upon ultimate settlement. Subsequent adjustments to amounts previously recorded impact the financial statements in the period during which the changes are identified. We recognize interest and penalties related to unrecognized tax benefits as income tax expense.

Convertible Senior Notes—In accounting for the issuance of our convertible senior notes, we treat the instrument wholly as a liability, in accordance with the adoption of ASU 2020-06, *Debt—Debt with Conversion and Other Options (Subtopic 470-20)* and *Derivatives and Hedging—Contracts in Entity's Own Equity (Subtopic 815-40): Accounting for Convertible Instruments and Contracts in an Entity's Own Equity ("ASU 2020-06")*.

Issuance costs are amortized to expense over the respective term of the convertible senior notes.

For conversions prior to the maturity of the notes, we will settle using cash, shares of our common stock, or a combination of cash and shares of our common stock, at our election. The carrying amount of the instrument (including unamortized debt issuance costs) is reduced by cash and other assets transferred, with the difference reflected as a reduction to additional paid-in capital. The indentures governing our convertible senior notes allow us, under certain circumstances, to irrevocably fix our method for settling conversions of the applicable notes by giving notice to the noteholders. Our election to irrevocably fix the settlement method could affect the calculation of diluted earnings per share when applicable. We have no plans to exercise our rights to fix the settlement method.

When we repurchase a portion of our convertible senior notes, we will derecognize the liability, accelerate the amortization of debt issuance costs, and record on our consolidated statements of comprehensive loss a gain or loss on extinguishment dependent on the repurchase price. See Note 15 for information regarding repurchases for the year ended December 31, 2022.

Revenue Recognition—We generate revenue primarily from commissions and fees charged on each real estate services transaction closed by our lead agents or partner agents, from the sale of homes, from subscription-based product offerings for our rentals business, and from the origination, sales, and servicing of mortgages. Our key revenue components are brokerage revenue, partner revenue, properties revenue, rentals revenue, mortgage revenue, and other revenue.

We have utilized the allowable practical expedient in the accounting guidance and elected not to capitalize costs related to obtaining contracts with customers with durations of less than one year. We do not have significant remaining performance obligations.

Revenue earned but not received is recorded as accrued revenue in accounts receivable on our consolidated balance sheets, net of an allowance for credit losses. Accrued revenue consisting of commission revenue is known and is clearing escrow, and therefore it is not estimated.

Nature and Disaggregation of Revenue

Real Estate Services Revenue

Brokerage Revenue—Brokerage revenue includes our offer and listing services, where our lead agents represent homebuyers and home sellers. We recognize commission-based brokerage revenue upon closing of a brokerage transaction, less the amount of any commission refunds, closing-cost reductions, or promotional offers that may result in a material right. The transaction price is generally calculated by taking the agreed upon commission rate and applying that to the home's selling price. Brokerage revenue primarily contains a single performance obligation that is satisfied upon the closing of a transaction, at which point the entire transaction price is earned. We are not entitled to any commission until the performance obligation is satisfied and are not owed any commission for unsuccessful transactions, even if services have been provided. In conjunction with providing offering and listing services to our customers, we may offer promotional pricing or additional discounts on future services. This results in a material right to our customers and represents an additional performance obligation, for which the transaction price is allocated based on standalone selling prices. Amounts allocated to a promise to provide future listing or offering services at a significant discount are initially recorded as contract liabilities. Our promotional pricing and additional discounts have not resulted in a material impact to timing of revenue recognition. The balance of the corresponding contract liabilities are included in accrued and other liabilities on our consolidated balance sheets. See Note 10 for more information.

Partner Revenue—Partner revenue consists of fees paid to us from partner agents or under other referral agreements, less the amount of any payments we make to homebuyers and home sellers. We recognize these fees as revenue on the closing of a transaction. The transaction price is a fixed percentage of the partner agent's commission. The partner agent or other entity related to our referral agreements directly remits the referral fee revenue to us. We are neither entitled to referral fee revenue, nor is our performance obligation satisfied, until the related referred home's sale closes.

Properties Revenue

Properties Revenue—Properties revenue consists of revenue earned when we sell homes that we previously bought directly from homeowners. Properties revenue is recorded at closing on a gross basis, representing the sales price of the home. Our contracts with customers contain a single performance obligation that is satisfied upon a transaction closing. We do not offer warranties for sold homes, and there are no continuing performance obligations following the transaction close date.

Rentals Revenue

Rentals Revenue—Rentals revenue is primarily composed of subscription-based product offerings for internet listing services, as well as lead management and digital marketing solutions.

Rentals revenue is recorded as a component of service revenue in our consolidated statements of comprehensive loss. Revenue is recognized upon transfer of control of promised service to customers over time in an amount that reflects the consideration we expect to receive in exchange for those services. Revenues from subscription-based services are recognized on a straight-line basis over the term of the contract, which generally have a term of less than one year. Revenue is presented net of sales allowances, which are not material.

The transaction price for a contract is generally determined by the stated price in the contract, excluding any related sales taxes. We enter into contracts that can include various combinations of subscription services, which are capable of being distinct and accounted for as separate performance obligations. We allocate the transaction price to each performance obligation in the contract on a relative stand-alone selling price basis. Generally, the combinations of subscription services are fulfilled concurrently and are co-terminus. Our rentals contracts do not contain any refund provisions other than in the event of our non-performance or breach.

Mortgage Revenue

Mortgage Revenue—Mortgage revenue includes fees from the origination and subsequent sale of loans, loan servicing income, interest income on loans held for sale, origination of IRLCs, and the changes in fair value of our IRLCs, forward sales commitments, loans held for sale, and MSRs.

Other Revenue

Other Revenue—Other services revenue includes fees earned from title settlement services, Walk Score data services, and advertising. Substantially all fees and revenue from other services are recognized when the service is provided.

Intercompany Eliminations

Intercompany Eliminations—Revenue earned from transactions between operating segments are eliminated in consolidating our financial statements. Intercompany transactions primarily consist of services performed from our real estate services segment for our properties segment.

Cost of Revenue—Cost of revenue consists primarily of personnel costs (including base pay, benefits, and stock-based compensation), transaction bonuses, home-touring and field expenses, listing expenses, home costs related to our properties segment, customer fulfillment costs related to our rentals segment, office and occupancy expenses, interest expense on our mortgage related warehouse facilities, and depreciation and amortization related to fixed assets and acquired intangible assets. Home costs related to our properties segment include home purchase costs, capitalized improvements, selling expenses directly attributable to the transaction, and home maintenance expenses.

Technology and Development—Technology and development expenses primarily include personnel costs (including base pay, bonuses, benefits, and stock-based compensation), data licenses, software and equipment, and infrastructure such as for data centers and hosted services. The expenses also include amortization of capitalized internal-use software and website and mobile application development costs as well as amortization of acquired intangible assets. We expense research and development costs as incurred and record them in technology and development expenses.

Advertising and Advertising Production Costs—We expense advertising costs as they are incurred and production costs as of the first date the advertisement takes place. Advertising costs and advertising production costs are included in marketing expenses. The following table summarizes total advertising and advertising production costs for the periods listed:

	Year Ended December 31,		
	2022	2021	2020
Advertising costs	\$ 133,593	\$ 119,278	\$ 42,919
Advertising production costs	3,425	2,303	256

Stock-based Compensation—We account for stock-based compensation by measuring and recognizing as compensation expense the fair value of all share-based payment awards made to employees, including stock options and restricted stock unit awards, and shares forecasted to be issued pursuant to our ESPP, in each case based on estimated grant date fair values. Stock-based compensation expense is recognized over the requisite service period on a straight-line basis. The Black-Scholes-Merton option-pricing model is used to determine the fair value of stock options and shares forecasted to be issued pursuant to our ESPP. For restricted stock unit awards and restricted stock unit awards with performance conditions, we use the market value of our common stock on the date of grant to determine the fair value of the award. For restricted stock unit awards with market conditions, the market condition is reflected in the grant date fair value of the award using a Monte Carlo simulation.

In valuing stock options and shares forecasted to be issued pursuant to our ESPP, we make assumptions about expected life, stock price volatility, risk-free interest rates, and expected dividends.

Expected Life—The expected term was estimated using the simplified method allowed under guidance from the SEC as our historical share option exercise experience does not provide a reasonable basis upon which to estimate the expected term.

Volatility—The expected stock price volatility for our common stock was estimated by taking the average historical price volatility for industry peers based on daily price observations. Industry peers consist of several public companies in the real estate and technology industries.

Risk-Free Rate—The risk-free interest rate is based on the yields of U.S. treasury securities with maturities similar to the expected term of the options for each option group.

Dividend Yield—We have never declared or paid any cash dividends and do not presently plan to pay cash dividends in the foreseeable future. Consequently, an expected dividend yield of zero was used.

Business Combinations—The results of businesses acquired in a business combination are included in our consolidated financial statements from the date of acquisition. We record assets and liabilities of an acquired business at their estimated fair values on the acquisition date. Any excess consideration over the fair value of assets acquired and liabilities assumed is recognized as goodwill. During the measurement period, which may be up to one year from the acquisition date, we may record adjustments to the assets acquired and liabilities assumed with the corresponding offset to goodwill.

Restructuring and Reorganization—Restructuring and reorganization expenses primarily consist of employee termination costs (including severance, retention, benefits, and payroll taxes) associated with the restructuring and reorganization activities from our acquisitions of Bay Equity LLC (“Bay Equity”), our mortgage business, and Rent Group Inc. (“Rent.”), our rentals business, and from our June 2022 workforce reduction. Restructuring and reorganization expenses will also include additional expenses throughout 2022 and into 2023 related to our November 9, 2022 workforce reduction and wind-down of our RedfinNow operations. These expenses are included in restructuring and reorganization in our consolidated statements of comprehensive loss and in accrued and other liabilities in our consolidated balance sheets. We expect to complete our restructuring and reorganization activities by the end of 2023.

Mortgage Servicing Rights (“MSRs”)—We determine the fair value of MSRs using a valuation model that calculates the net present value of estimated future cash flows. Key estimates of future cash flows include prepayment speeds, default rates, discount rates, cost of servicing, objective portfolio characteristics, and others factors. Changes in these estimates could materially change the estimated fair value.

Lease Impairment—During the year ended December 31, 2022 we recognized impairment losses of \$ 1,136 due to subleasing two of our operating leases.

Recently Adopted Accounting Pronouncements—None applicable.

Recently Issued Accounting Pronouncements—None applicable.

Note 2: Business Combinations

On April 1, 2022, we acquired, for \$ 139,671 in cash, all of the equity interests of Bay Equity, and Bay Equity became one of our wholly owned subsidiaries. We acquired Bay Equity to expand our mortgage business.

The results of operations and the fair values of the assets acquired and liabilities assumed have been included in our consolidated financial statements since the date of acquisition. The revenue from Bay Equity is reported in our mortgage segment in Note 3. The goodwill recognized in connection with our acquisition of Bay Equity is primarily attributable to the anticipated synergies from future growth of the combined business and is not expected to be deductible for tax purposes. We assigned the recognized goodwill of \$51,967 to the mortgage segment.

The following table summarizes the fair value of assets acquired and liabilities assumed as a result of the Bay Equity acquisition and is subject to revision as more detailed analyses are completed and additional information about the fair value of assets acquired and liabilities assumed becomes available:

Cash and cash equivalents	\$	39,963
Restricted cash		2,367
Accounts receivable		9,697
Prepaid expenses		1,222
Other current assets		19,262
Property and equipment, net		897
Operating lease right-of-use assets		4,995
Loans held for sale		213,891
Mortgage servicing rights, at fair value		33,982
Other assets, noncurrent		294
Intangible assets		14,510
Goodwill		51,967
Total assets acquired		393,047
Accounts payable		1,747
Accrued and other liabilities		38,026
Lease liabilities		2,848
Lease liabilities and deposits, noncurrent		2,147
Warehouse credit facilities		208,608
Total liabilities assumed		253,376
Total purchase consideration	\$	139,671

Acquisition-related costs consisted of external fees for advisory, legal, and other professional services and totaled approximately \$ 2,437 for the year ended December 31, 2022. These costs were expensed as incurred and recorded in general and administrative costs in our consolidated statements of comprehensive loss.

Identifiable Intangible Assets—The following table provides the fair values of the Bay Equity intangible assets, along with their estimated useful lives:

	Estimated Fair Value	Estimated Useful Life (in years)
Trade names	\$ 11,650	5
Developed technology	2,860	3
Total	\$ 14,510	

The identifiable intangible assets include trade names and developed technology. Trade names primarily relate to the Bay Equity brand. Developed technology primarily relates to website functionality around data consolidation and optimization which helps drive efficiencies in loan origination and processing. The fair values of trade names and developed technology are derived by applying the relief from royalty method and replacement cost method, respectively. Critical estimates in valuing the intangible assets include revenue growth rate, royalty rate, discount rate, and number of months to recreate the underlying application.

Unaudited Pro Forma Financial Information—The following table presents unaudited pro forma financial information for the years ended December 31, 2022 and 2021. The pro forma financial information combines our results of operations with that of Bay Equity as though the companies had been combined as of January 1, 2021. The pro forma information is presented for informational purposes only and is not indicative of the results of operations that would have been achieved if the Bay Equity acquisition had taken place at such time. The pro forma financial information presented below includes adjustments for depreciation and amortization, restructuring costs, and transaction costs:

	Year Ended December 31,	
	2022	2021
Revenue	\$ 2,340,310	\$ 2,286,570
Net loss	(316,933)	(57,883)

There were no material non-recurring adjustments made in the pro forma financial information disclosed above.

Note 3: Segment Reporting and Revenue

In its operation of our business, our management, including our chief operating decision maker ("CODM"), who is also our chief executive officer, evaluates the performance of our operating segments based on our statement of operations results, inclusive of net loss. We do not analyze discrete segment balance sheet information related to long-term assets, substantially all of which are located in the United States. We have six operating segments and four reportable segments, real estate services, properties, rentals, and mortgage. As a result of our decision to wind-down RedfinNow operations, we plan to report our properties segment as a discontinued operation beginning with the period during which we complete wind-down of the business.

We generate revenue primarily from commissions and fees charged on each real estate services transaction closed by our lead agents or partner agents, from the sale of homes, from subscription-based product offerings for our rentals business, and from the origination, sales, and servicing of mortgages. Our key revenue components are brokerage revenue, partner revenue, properties revenue, rentals revenue, mortgage revenue, and other revenue.

Information on each of our reportable and other segments and reconciliation to consolidated net loss is presented in the tables below. We have assigned certain previously reported expenses to each segment to conform to the way we internally manage and monitor our business. We allocated indirect costs to each segment based on a reasonable allocation methodology, when such costs are significant to the performance measures of the segments.

Year Ended December 31, 2022							
	Real estate services	Properties	Rentals	Mortgage	Other	Corporate Overhead and Intercompany Eliminations	Total
Revenue	\$ 787,076	\$ 1,202,651	\$ 155,910	\$ 132,904	\$ 23,684	\$ (17,783)	\$ 2,284,442
Cost of revenue	608,027	1,225,717	33,416	126,552	22,460	(17,783)	1,998,389
Gross profit	179,049	(23,066)	122,494	6,352	1,224	—	286,053
Operating expenses							
Technology and development	105,196	17,326	59,899	6,034	3,591	4,204	196,250
Marketing	98,673	2,762	51,064	4,889	199	484	158,071
General and administrative	88,171	11,203	92,728	25,680	3,307	33,504	254,593
Restructuring and reorganization	—	—	—	—	—	40,469	40,469
Total operating expenses	292,040	31,291	203,691	36,603	7,097	78,661	649,383
Loss from operations	(112,991)	(54,357)	(81,197)	(30,251)	(5,873)	(78,661)	(363,330)
Interest income, interest expense, income tax expense, gain on extinguishment of convertible senior notes, and other expense, net	(123)	(7,607)	1,389	(114)	140	48,502	42,187
Net loss	\$ (113,114)	\$ (61,964)	\$ (79,808)	\$ (30,365)	\$ (5,733)	\$ (30,159)	\$ (321,143)

Year Ended December 31, 2021							
	Real estate services	Properties	Rentals	Mortgage	Other	Corporate Overhead and Intercompany Eliminations	Total
Revenue	\$ 903,334	\$ 880,653	\$ 121,877	\$ 19,818	\$ 13,609	\$ (16,526)	\$ 1,922,765
Cost of revenue	603,320	870,052	21,739	26,096	14,264	(16,526)	1,518,945
Gross profit	300,014	10,601	100,138	(6,278)	(655)	—	403,820
Operating expenses							
Technology and development	81,588	13,237	41,492	10,396	2,528	7,477	156,718
Marketing	98,746	1,889	36,174	561	209	1,161	138,740
General and administrative	84,655	9,593	71,943	8,306	2,288	41,530	218,315
Restructuring and reorganization	—	—	—	—	—	—	—
Total operating expenses	264,989	24,719	149,609	19,263	5,025	50,168	513,773
Loss from operations	35,025	(14,118)	(49,471)	(25,541)	(5,680)	(50,168)	(109,953)
Interest income, interest expense, income tax benefit, and other expense, net	(87)	(4,261)	3,301	3	2	1,382	340
Net income (loss)	\$ 34,938	\$ (18,379)	\$ (46,170)	\$ (25,538)	\$ (5,678)	\$ (48,786)	\$ (109,613)

Year Ended December 31, 2020							
	Real estate services	Properties	Rentals	Mortgage	Other	Corporate Overhead and Intercompany Eliminations	Total
Revenue	\$ 651,208	\$ 209,686	\$ —	\$ 15,835	\$ 12,377	\$ (3,013)	\$ 886,093
Cost of revenue	417,140	214,382	—	15,627	9,847	(3,013)	653,983
Gross profit	234,068	(4,696)	—	208	2,530	—	232,110
Operating expenses							
Technology and development	66,389	5,986	—	5,914	1,288	4,720	84,297
Marketing	53,399	536	—	267	88	591	54,881
General and administrative	54,538	2,810	—	1,665	764	25,847	85,624
Restructuring and reorganization	—	—	—	—	—	6,516	6,516
Total operating expenses	174,326	9,332	—	7,846	2,140	37,674	231,318
Loss from operations	59,742	(14,028)	—	(7,638)	390	(37,674)	792
Interest income, interest expense, and other expense, net	—	(1,018)	—	73	30	(18,404)	(19,319)
Net income (loss)	\$ 59,742	\$ (15,046)	\$ —	\$ (7,565)	\$ 420	\$ (56,078)	\$ (18,527)

Note 4: Financial Instruments

Derivatives

Our primary market exposure is to interest rate risk, specifically U.S. treasury and mortgage interest rates, due to their impact on mortgage-related assets and commitments. We use forward sales commitments on whole loans and mortgage-backed securities to manage and reduce this risk. We do not have any derivative instruments designated as hedging instruments.

Forward Sales Commitments—We are exposed to interest rate and price risk on loans held for sale from the funding date until the date the loan is sold. Forward sales commitments on whole loans and mortgage-backed securities are used to fix the forward sales price that will be realized at the sale of each loan.

Interest Rate Lock Commitments—IRLCs represent an agreement to extend credit to a mortgage loan applicant. We commit (subject to loan approval) to fund the loan at the specified rate, regardless of changes in market interest rates between the commitment date and the funding date. Outstanding IRLCs are subject to interest rate risk and related price risk during the period from the date of commitment through the loan funding date or expiration date. Loan commitments generally range between 30 and 90 days and the borrower is not obligated to obtain the loan. Therefore, IRLCs are subject to fallout risk, which occurs when approved borrowers choose not to close on the underlying loans. We review our commitment-to-closing ratio ("pull-through rate") as part of an estimate of the number of mortgage loans that will fund according to the IRLCs.

Notional Amounts	December 31,	
	2022	2021
Forward sales commitments	\$ 301,548	\$ 70,550
IRLCs	210,787	67,485

The locations and amounts of gains (losses) recognized in revenue related to our derivatives are as follows:

Instrument	Classification	Year Ended December 31,		
		2022	2021	2020
Forward sales commitments	Service revenue	\$ (11,336)	\$ 518	\$ (184)
IRLCs	Service revenue	(4,184)	(641)	1,342

Fair Value of Financial Instruments

A summary of assets and liabilities related to our financial instruments, measured at fair value on a recurring basis and as reflected on our consolidated balance sheets, is set forth below:

	Balance at December 31, 2022	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Cash equivalents				
Money market funds	\$ 186,410	\$ 186,410	\$ —	\$ —
Total cash equivalents	186,410	186,410	—	—
Short-term investments				
U.S. treasury securities	96,925	96,925	—	—
Agency bonds	25,334	25,334	—	—
Total short-term investments	122,259	122,259	—	—
Loans held for sale	199,604	—	199,604	—
Other current assets				
Forward sales commitments	1,669	—	1,669	—
IRLCs	2,338	—	—	2,338
Total other current assets	4,007	—	1,669	2,338
Mortgage servicing rights, at fair value	36,261	—	—	36,261
Long-term investments				
U.S. treasury securities	29,480	29,480	—	—
Total assets	\$ 578,021	\$ 338,149	\$ 201,273	\$ 38,599
Liabilities				
Accrued and other liabilities				
Forward sales commitments	\$ 1,873	\$ —	\$ 1,873	\$ —
IRLCs	1,041	—	—	1,041
Total liabilities	\$ 2,914	\$ —	\$ 1,873	\$ 1,041

	Balance at December 31, 2021	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets				
Cash equivalents				
Money market funds	\$ 509,971	\$ 509,971	\$ —	\$ —
Total cash equivalents	509,971	509,971	—	—
Short-term investments				
U.S. treasury securities	16,718	16,718	—	—
Agency bonds	11,906	11,906	—	—
Equity securities	5,113	5,113	—	—
Loans held for sale	35,759	—	35,759	—
Prepaid expenses and other current assets				
Forward sales commitments	138	—	138	—
IRLCs	1,191	—	—	1,191
Total prepaid expenses and other current assets	1,329	—	138	1,191
Long-term investments				
U.S. treasury securities	54,828	54,828	—	—
Total assets	\$ 635,624	\$ 598,536	\$ 35,897	\$ 1,191
Liabilities				
Accrued and other liabilities				
Forward sales commitments	\$ 93	\$ —	\$ 93	\$ —
IRLCs	60	—	—	60
Total liabilities	\$ 153	\$ —	\$ 93	\$ 60

There were no transfers into or out of Level 3 financial instruments during the years ended December 31, 2022 and 2021.

The significant unobservable input used in the fair value measurement of IRLCs is the pull-through rate. Significant changes in the input could result in a significant change in fair value measurement.

The following is a quantitative summary of key unobservable inputs used in the valuation of IRLCs:

Key Inputs	Valuation Technique	December 31, 2022		December 31, 2021	
		Range	Weighted-Average	Range	Weighted-Average
IRLCs					
Pull-through rate	Market pricing	62.0% - 100.0%	91.0%	71.1%	71.1%
MSRs					
Prepayment speed	Discounted cash flow	6.0% - 14.4%	6.6%	N/A	N/A
Default rates	Discounted cash flow	0.0% - 0.5%	0.1%	N/A	N/A
Discount rate	Discounted cash flow	9.5% - 12.4%	9.6%	N/A	N/A

The following is a summary of changes in the fair value of IRLCs:

	Year Ended December 31,		
	2022	2021	2020
Balance, net—beginning of period	\$ 1,131	\$ 1,771	\$ 438
IRLCs acquired in business combination	4,326	—	—
Issuances of IRLCs	51,453	18,415	18,090
Settlements of IRLCs	(54,784)	(18,827)	(16,986)
Fair value changes recognized in earnings	(829)	(228)	229
Balance, net—end of period	\$ 1,297	\$ 1,131	\$ 1,771

The following is a summary of changes in the fair value of MSRs:

	Year Ended December 31,		
	2022	2021	2020
Balance—beginning of period	\$ —	\$ —	\$ —
MSRs acquired in business combination	33,982	—	—
MSRs originated	3,140	—	—
MSRs sales	(1,662)	—	—
Fair value changes recognized in earnings	801	—	—
Balance, net—end of period	\$ 36,261	\$ —	\$ —

The following table presents the carrying amounts and estimated fair values of our convertible senior notes that are not recorded at fair value on our consolidated balance sheets:

Issuance	December 31, 2022		December 31, 2021	
	Net Carrying Amount	Estimated Fair Value	Net Carrying Amount	Estimated Fair Value
2023 notes	\$ 23,431	\$ 22,147	\$ 23,280	\$ 34,487
2025 notes	512,683	309,292	650,783	593,366
2027 notes	565,474	267,398	563,234	467,814

The difference between the principal amounts of our 2023 notes, our 2025 notes, and our 2027 notes, which were \$ 23,512, \$518,728, and \$575,000, respectively, and the net carrying amounts of the notes represents the unamortized debt issuance costs. The estimated fair value of each tranche of convertible senior notes is based on the closing trading price of the notes on the last day of trading for the period, and is classified as Level 2 within the fair value hierarchy, due to the limited trading activity of the notes. Based on the closing price of our common stock of \$4.24 on December 31, 2022, the if-converted value of all three convertible notes were less than the principal amounts. See Note 15 for additional details on our convertible senior notes.

See Note 11 for the carrying amount of our convertible preferred stock.

Assets and liabilities recognized or disclosed at fair value on a nonrecurring basis include items such as property and equipment, goodwill and other intangible assets, equity investments, and other assets. These assets are measured at fair value if determined to be impaired.

The cost or amortized cost, gross unrealized gains and losses, and estimated fair market value of our cash, money market funds, restricted cash, available-for-sale investments, and equity securities were as follows:

	Fair Value Hierarchy	December 31, 2022				Cash, Cash Equivalents, Restricted Cash	Short-term Investments	Long-term Investments
		Cost or Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value			
Cash	N/A	\$ 53,430	\$ —	\$ —	\$ 53,430	\$ 53,430	\$ —	\$ —
Money markets funds	Level 1	186,410	—	—	186,410	186,410	—	—
Restricted cash	N/A	2,406	—	—	2,406	2,406	—	—
U.S. treasury securities	Level 1	127,130	28	(753)	126,405	—	96,925	29,480
Agency bonds	Level 1	25,339	—	(5)	25,334	—	25,334	—
Total		\$ 394,715	\$ 28	\$ (758)	\$ 393,985	\$ 242,246	\$ 122,259	\$ 29,480

December 31, 2021								
	Fair Value Hierarchy	Cost or Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value	Cash, Cash Equivalents, Restricted Cash	Short-term Investments	Long-term Investments
Cash	N/A	\$ 81,032	\$ —	\$ —	\$ 81,032	\$ 81,032	\$ —	\$ —
Money markets funds	Level 1	509,971	—	—	509,971	509,971	—	—
Restricted cash	N/A	127,278	—	—	127,278	127,278	—	—
U.S. treasury securities	Level 1	71,749	1	(204)	71,546	—	16,718	54,828
Agency bonds	Level 1	11,900	6	—	11,906	—	11,906	—
Equity securities	Level 1	500	4,613	—	5,113	—	5,113	—
Total		<u>\$ 802,430</u>	<u>\$ 4,620</u>	<u>\$ (204)</u>	<u>\$ 806,846</u>	<u>\$ 718,281</u>	<u>\$ 33,737</u>	<u>\$ 54,828</u>

As of December 31, 2022 and 2021, the aggregate fair value of available-for-sale debt securities in an unrealized loss position totaled \$ 77,277 and \$54,671, with aggregate unrealized losses of \$ 758 and \$204, respectively. We have evaluated our portfolio of available-for-sale debt securities based on credit quality indicators for expected credit losses and do not believe there are any expected credit losses. In addition, as of December 31, 2022 and 2021, we had not made a decision to sell any of our debt securities held, nor did we consider it more likely than not that we would be required to sell such securities before recovery of our amortized cost basis. Our portfolio consists of U.S. government securities, all with a high quality credit rating issued by various credit agencies.

As of December 31, 2022 and 2021, we had accrued interest of \$ 576 and \$86, respectively, on our available-for-sale investments, for which we have recorded no expected credit losses. Accrued interest receivable is presented within other current assets in our consolidated balance sheets.

Note 5: Inventory

The components of inventory were as follows:

	December 31,	
	2022	2021
Finished goods		
Homes for sale	\$ 97,636	\$ 119,410
Work in progress		
Homes not available for sale	2,467	16,377
Homes under improvement	14,170	222,434
Inventory	<u>\$ 114,273</u>	<u>\$ 358,221</u>

Inventory costs include direct home purchase costs and any capitalized improvements, net of inventory reserves, which reflect the lower of cost or net realizable value write-downs applied on a specific home basis. As of December 31, 2022 and 2021, lower of cost or net realizable value write-downs were \$8,404 and \$2,364, respectively. These write-downs are included within the changes in inventory in net cash provided by (used in) operating activities in our consolidated statements of cash flows.

The following table summarizes our inventory activities:

	December 31,	
	2022	2021
Number of homes purchased	1,569	2,021
Inventory value of homes purchased	\$ 806,269	\$ 1,034,916
Number of homes sold	2,044	1,450
Inventory value of homes sold	\$ 1,033,866	\$ 738,809

Note 6: Property and Equipment

The components of property and equipment were as follows:

	Useful Lives (years)	December 31,	
		2022	2021
Leasehold improvements	Shorter of lease term or economic life	\$ 32,285	\$ 33,455
Website and software development costs	2 - 3	62,963	50,439
Computer and office equipment	3 - 5	20,036	14,216
Software	3	1,871	1,871
Furniture	7	7,911	8,091
Property and equipment, gross		125,066	108,072
Accumulated depreciation and amortization		(76,788)	(59,766)
Construction in progress		6,827	10,365
Property and equipment, net		\$ 55,105	\$ 58,671

The following table summarizes depreciation and amortization and capitalized software development costs:

	Year Ended December 31,		
	2022	2021	2020
Depreciation and amortization for property and equipment	\$ 26,740	\$ 20,047	\$ 14,076
Capitalized software development costs, including stock-based compensation	19,906	19,175	11,414

Note 7: Leases

The components of lease expense were as follows:

Lease Cost	Classification	Year Ended December 31,	
		2022	2021
Operating lease cost:			
Operating lease cost ⁽¹⁾	Cost of revenue	\$ 13,144	\$ 9,437
Operating lease cost ⁽¹⁾	Operating expenses	8,223	6,123
Total operating lease cost		\$ 21,367	\$ 15,560
Finance lease cost:			
Amortization of right-of-use assets	Cost of revenue	\$ 788	\$ 492
Interest on lease liabilities	Cost of revenue	94	73
Total finance lease cost		\$ 882	\$ 565

(1) Includes lease expense with initial terms of 12 months or less of \$ 3,599 and \$ 1,464 for the years ended December 31, 2022 and 2021.

Maturity of Lease Liabilities	Lease Liabilities		Other Leases		Total Lease Obligations
	Operating	Financing	Operating		
2023	\$ 20,525	\$ 658	\$ 2,602	\$	23,785
2024	14,799	278	491		15,568
2025	10,649	164	434		11,247
2026	8,619	35	159		8,813
2027	4,620	—	116		4,736
Thereafter	678	—	40		718
Total lease payments	\$ 59,890	\$ 1,135	\$ 3,842	\$	64,867
Less: Interest ⁽¹⁾	4,537	53			
Present value of lease liabilities	\$ 55,353	\$ 1,082			

(1) Includes interest on operating leases of \$ 1,996 and financing leases of \$ 31 due within the next 12 months.

Lease Term and Discount Rate	December 31,	
	2022	2021
Weighted-average remaining operating lease term (years)	3.6	4.8
Weighted-average remaining finance lease term (years)	2.7	3.2
Weighted-average discount rate for operating leases	4.5 %	4.4 %
Weighted-average discount rate for finance leases	5.4 %	5.4 %

Supplemental Cash Flow Information	Year Ended December 31,	
	2022	2021
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash outflows from operating leases	\$ 21,504	\$ 16,421
Operating cash outflows from finance leases	100	83
Financing cash outflows from finance leases	612	347
Right-of-use assets obtained in exchange for lease liabilities		
Operating leases	\$ 132	\$ 7,677
Finance leases	234	1,333

Note 8: Commitments and Contingencies

Legal Proceedings

Below is a discussion of our material, pending legal proceedings. We cannot estimate a range of reasonably possible losses given the preliminary stage of these proceedings and the claims and issues presented. In addition to the matters discussed below, from time to time, we are involved in litigation, claims, and other proceedings arising in the ordinary course of our business. Except for the matters discussed below, we do not believe that any of our pending litigation, claims, and other proceedings are material to our business.

Lawsuit by David Eraker—On May 11, 2020, David Eraker, our co-founder and former chief executive officer who departed Redfin in 2006, filed a complaint through Appliance Computing III, Inc. (d/b/a Surefield) ("Surefield"), which is a company that Mr. Eraker founded and that we believe he controls, in the U.S. District Court for the Western District of Texas, Waco Division. The complaint alleged that we were infringing four patents claimed to be owned by Surefield without its authorization or license. Surefield sought an unspecified amount of damages and an injunction against us offering products and services that allegedly infringe the patents at issue. On May 17, 2022, the jury returned a verdict in our favor, finding that we did not infringe any of the asserted claims of the patents claimed to be owned by Surefield, and accordingly, we do not owe any damages to Surefield. The jury also found that all asserted claims of Surefield's claimed patents were invalid. The court entered final judgment on August 15, 2022. On September 12, 2022, Surefield filed a motion for judgment as a matter of law and a motion for a new trial. In the motions, Surefield asserts that no jury could have found non-infringement based on the trial record, among other things. We filed oppositions to the motions on October 3, 2022 and Surefield filed replies on October 21, 2022.

Lawsuit Alleging Violations of the Fair Housing Act—On October 28, 2020, a group of ten organizations filed a complaint against us in the U.S. District Court for the Western District of Washington. The organizations are the National Fair Housing Alliance, the Fair Housing Center of Metropolitan Detroit, the Fair Housing Justice Center, the Fair Housing Rights Center in Southeastern Pennsylvania, the HOPE Fair Housing Center, the Lexington Fair Housing Council, the Long Island Housing Services, the Metropolitan Milwaukee Fair Housing Council, Open Communities, and the South Suburban Housing Center. The complaint alleged that certain of our business policies and practices violate certain provisions of the Fair Housing Act (the "FHA"). The plaintiffs alleged that these policies and practices (i) have the effect of our services being unavailable in predominantly non-white communities on a more frequent basis than predominantly white communities and (ii) are unnecessary to achieve a valid interest or legitimate objective. The complaint focused on the following policies and practices, as alleged by the plaintiffs: (i) a home's price must exceed a certain dollar amount before we offer service through one of our lead agents or partner agents and (ii) our services and pricing structures are available only for homes serviced by one of our lead agents and those same services and pricing structures may not be offered by one of our partner agents. The plaintiffs sought (i) a declaration that our alleged policies and practices violate the FHA, (ii) an order enjoining us from further alleged violations, (iii) an unspecified amount of monetary damages, and (iv) payment of plaintiffs' attorneys' fees and costs.

On April 29, 2022, we settled this lawsuit. As part of the settlement, we paid an aggregate of \$ 3,000 to the ten organizations on May 25, 2022 and will pay an additional aggregate of \$1,000 to the ten organizations by April 29, 2023. The latter payment will be dedicated to fund programs devoted to expanding home ownership opportunities. In addition to the financial payments, we also agreed to certain changes to our business practices, including expanding our brokerage services to lower-priced homes in certain markets, designating a fair housing compliance officer, revamping our fair housing training, and expanding our diversity recruiting efforts.

Lawsuits Alleging Misclassification—On August 28, 2019, Devin Cook, who was one of our former independent contractor licensed sales associates, whom we call associate agents, filed a complaint against us in the Superior Court of California, County of San Francisco. The plaintiff initially pled the complaint as a class action and alleged that we misclassified her as an independent contractor instead of an employee. The plaintiff also sought unspecified penalties pursuant to representative claims under California's Private Attorney General Act ("PAGA"). On January 30, 2020, the plaintiff filed a first amended complaint dismissing her class action claim and asserting only claims under PAGA.

On November 20, 2020, Jason Bell, who was one of our former lead agents as well as a former associate agent, filed a complaint against us in the U.S. District Court for the Southern District of California. The complaint was pled as a class action and alleges that, (1) during the time he served as an associate agent, we misclassified him as an independent contractor instead of an employee and (2) during the time he served as a lead agent, we misclassified him as an employee who was exempt from minimum wage and overtime laws. The plaintiff also asserted representative claims under PAGA. The plaintiff sought unspecified amounts of unpaid overtime wages, regular wages, meal and rest period compensation, waiting time and other penalties, injunctive and other equitable relief, and plaintiff's attorneys' fees and costs.

On May 23, 2022, pursuant to a combined mediation, we settled the lawsuits brought by Ms. Cook and Mr. Bell for an aggregate of \$ 3,000. This amount is subject to adjustment if our actual number of associate agents, lead agents, or their respective workweeks differs from the number that we represented to the plaintiffs. This settlement is subject to each court's approval.

Commitments

Purchase Commitments—Purchase commitments primarily relate to network infrastructure for our data operations. Future payments due under these agreements as of December 31, 2022 are as follows:

	Purchase Commitments	
2023	\$	38,322
2024		33,075
2025		31,762
2026		31,360
2027		16,860
Thereafter		—
Total future minimum payments	\$	151,379

Other Commitments—Our title and settlement business and our mortgage business each hold cash in escrow at third-party financial institutions on behalf of homebuyers and home sellers. As of December 31, 2022, we held \$17,649 in escrow and did not record this amount on our consolidated balance sheets. We may be held contingently liable for the disposition of the cash we hold in escrow.

Note 9: Acquired Intangible Assets and Goodwill

Acquired Intangible Assets—The following table presents the gross carrying amount and accumulated amortization of intangible assets:

	Weighted-Average Useful Life (years)	December 31, 2022			December 31, 2021		
		Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net
Trade names	9.3	\$ 82,690	\$ (14,856)	\$ 67,834	\$ 71,040	\$ (6,004)	\$ 65,036
Developed technology	3.3	66,340	(38,465)	27,875	63,480	(17,285)	46,195
Customer relationship	10	81,360	(14,797)	66,563	81,360	(6,662)	74,698
		<u>\$ 230,390</u>	<u>\$ (68,118)</u>	<u>\$ 162,272</u>	<u>\$ 215,880</u>	<u>\$ (29,951)</u>	<u>\$ 185,929</u>

Our intangible assets are amortized on a straight-line basis over their respective estimated useful lives to a split between general and administrative and cost of revenue for customer relationships and trade names; and developed technology intangible assets are split between general and administrative expense, cost of revenue, and technology and development expense in our consolidated statements of comprehensive loss. Amortization expense amounted to \$38,167 and \$26,901 for the years ended December 31, 2022 and 2021, respectively.

The following table presents our estimate of remaining amortization expense for intangible assets that existed as of December 31, 2022:

2023	\$	38,988
2024		23,741
2025		17,618
2026		17,380
2027		15,633
Thereafter		48,912
Estimated remaining amortization expense	<u>\$</u>	<u>162,272</u>

Goodwill—The carrying amounts of goodwill by reportable segment were as follows:

	Real Estate Services	Rentals	Mortgage	Total
Balance as of December 31, 2021	\$ 250,231	\$ 159,151	\$ —	\$ 409,382
Goodwill resulting from acquisition	—	—	51,967	51,967
Balance as of December 31, 2022	<u>\$ 250,231</u>	<u>\$ 159,151</u>	<u>\$ 51,967</u>	<u>\$ 461,349</u>

For the year ended December 31, 2022, we performed a quantitative assessment and concluded there was no impairment since it was not more likely than not that the fair value of any of our reporting units was less than its carrying value. We did not recognize any goodwill impairment charges during the years ended December 31, 2022 or 2021.

Note 10: Accrued and Other Liabilities

The components of accrued and other liabilities were as follows:

	December 31,	
	2022	2021
Accrued compensation and benefits	\$ 76,539	\$ 78,437
Miscellaneous accrued and other liabilities	27,543	25,217
Payroll tax liability deferred by the CARES Act	—	7,760
Customer contract liabilities	5,661	6,708
Total accrued and other liabilities	<u>\$ 109,743</u>	<u>\$ 118,122</u>

Note 11: Mezzanine Equity

On April 1, 2020, we issued 4,484,305 shares of our common stock, at a price of \$ 15.61 per share, and 40,000 shares of our preferred stock, at a price of \$1,000 per share, for aggregate gross proceeds of \$ 110,000. We designated this preferred stock as Series A Convertible Preferred Stock (our "convertible preferred stock"). Our convertible preferred stock is classified as mezzanine equity in our consolidated financial statements as the substantive conversion features at the option of the holder precludes liability classification. We have determined there are no material embedded features that require recognition as a derivative asset or liability.

We allocated the gross proceeds of \$ 110,000 to the common stock issuance and the convertible preferred stock issuance based on the standalone fair value of the issuances, resulting in a fair valuation of \$40,000 for the preferred stock, which is also the value of the mandatory redemption amount.

As of December 31, 2022, the carrying value of our convertible preferred stock, net of issuance costs, is \$ 39,914, and holders have earned unpaid stock dividends in the amount of 30,640 shares of common stock. This stock dividend was issued on January 3, 2023. These shares are included in basic and diluted net loss per share attributable to common stock, as described in Note 13. As of December 31, 2022, no shares of the preferred stock have been converted, and the preferred stock was not redeemable, nor probable to become redeemable in the future as there is a more than remote chance the shares will be automatically converted prior to the mandatory redemption date. The number of shares of common stock reserved for future issuance resulting from dividends, conversion, or redemption with respect to the preferred stock was 2,622,177 as of the issuance date.

Dividends—The holders of our convertible preferred stock are entitled to dividends. Dividends accrue daily based on a 360 day fiscal year at a rate of 5.5% per annum based on the issue price and are payable quarterly in arrears on the first business day following the end of each calendar quarter. Assuming we satisfy certain conditions, we will pay dividends in shares of common stock at a rate of the dividend payable divided by \$17.95. If we do not satisfy such conditions, we will pay dividends in a cash amount equal to (i) the dividend shares otherwise issuable on the dividends multiplied by (ii) the volume-weighted average closing price of our common stock for the ten trading days preceding the date the dividends are payable.

Participation Rights—Holders of our convertible preferred stock are entitled to dividends paid and distributions made to holders of our common stock to the same extent as if such preferred stockholders had converted their shares of preferred stock into common stock and held such shares on the record date for such dividends and distributions.

Conversion—Holders may convert their convertible preferred stock into common stock at any time at a rate per share of preferred stock equal to the issue price divided by \$19.51 (the "conversion price"). A holder that converts will also receive any dividend shares resulting from accrued dividends.

Our convertible preferred stock may also be automatically converted to shares of our common stock. If the closing price of our common stock exceeds \$27.32 per share (i) for each day of the 30 consecutive trading days immediately preceding April 1, 2023 or (ii) following April 1, 2023 until 30 trading days prior to November 30, 2024, for each day of any 30 consecutive trading days, then each outstanding share of preferred stock will automatically convert into a number of shares of our common stock at a rate per share of preferred stock equal to the issue price divided by the conversion price. Upon an automatic conversion, a holder will also receive any dividend shares resulting from accrued dividends.

Redemption—On November 30, 2024, we will be required to redeem any outstanding shares of our convertible preferred stock, and each holder may elect to receive cash, shares of common stock, or a combination of cash and shares. If a holder elects to receive cash, we will pay, for each share of preferred stock, an amount equal to the issue price plus any accrued dividends. If a holder elects to receive shares, we will issue, for each share of preferred stock, a number of shares of common stock at a rate of the issue price divided by the conversion price plus any dividend shares resulting from accrued dividends.

A holder of our convertible preferred stock has the right to require us to redeem up to all shares of preferred stock it holds following certain events outlined in the document governing the preferred stock. If a holder redeems as the result of such events, such holder may elect to receive cash or shares of common stock, as calculated in the same manner as the mandatory redemption described above. Additionally, such holder will also receive, in cash or shares of common stock as elected by the holder, an amount equal to all scheduled dividend payments on the preferred stock for all remaining dividend periods from the date the holder gives its notice of redemption.

Liquidation Rights—Upon our liquidation, dissolution, or winding up, holders of our convertible preferred stock will be entitled to receive cash out of our assets prior to holders of the common stock.

Note 12: Equity and Equity Compensation Plans

Common Stock—As of December 31, 2022 and 2021, our amended and restated certificate of incorporation authorized us to issue 500,000,000 shares of common stock with a par value of \$0.001 per share.

Preferred Stock—As of December 31, 2022 and 2021, our amended and restated certificate of incorporation authorized us to issue 10,000,000 shares of preferred stock with a par value of \$0.001 per share.

Amended and Restated 2004 Equity Incentive Plan—We granted stock options under our 2004 Equity Incentive Plan, as amended ("2004 Plan"), until July 26, 2017, when we terminated it in connection with our IPO. Accordingly, no shares are available for future issuance under our 2004 Plan. Our 2004 Plan continues to govern outstanding equity awards granted thereunder, all of which are fully vested. The term of each stock option under the plan is no more than 10 years, and each stock option generally vests over a four-year period.

2017 Equity Incentive Plan—Our 2017 Equity Incentive Plan ("2017 EIP") became effective on July 26, 2017 and provides for issuance of incentive and nonqualified common stock options and restricted stock units to employees, directors, officers, and consultants. The number of shares of common stock initially reserved for issuance under our 2017 EIP was 7,898,159. The number of shares reserved for issuance under our 2017 EIP will increase automatically on January 1 of each calendar year beginning on January 1, 2018, and continuing through January 1, 2028, by the number of shares equal to the lesser of 5% of the total outstanding shares of our common stock as of the immediately preceding December 31 or an amount determined by our board of directors. The term of each stock option and restricted stock unit under the plan will not exceed 10 years, and each award generally vests between two and four years.

We have reserved shares of common stock for future issuance under our 2017 EIP as follows:

	December 31,	
	2022	2021
Stock options issued and outstanding	3,282,789	4,019,011
Restricted stock units outstanding	15,731,632	4,617,425
Shares available for future equity grants	7,951,616	15,205,854
Total shares reserved for future issuance	26,966,037	23,842,290

2017 Employee Stock Purchase Plan—Our 2017 Employee Stock Purchase Plan ("ESPP") was approved by the board of directors on July 27, 2017, and enables eligible employees to purchase shares of our common stock at a discount. Purchases will be accomplished through participation in discrete offering periods. We initially reserved 1,600,000 shares of common stock for issuance under our ESPP. The number of shares reserved for issuance under our ESPP will increase automatically on January 1 of each calendar year beginning after the first offering date and continuing through January 1, 2028, by the number of shares equal to the lesser of 1% of the total outstanding shares of our common stock as of the immediately preceding December 31 or an amount determined by our board of directors. On each purchase date, eligible employees will purchase our common stock at a price per share equal to 85% of the lesser of (i) the fair market value of our common stock on the first trading day of the offering period, and (ii) the fair market value of our common stock on the purchase date.

We have reserved shares of common stock for future issuance under our ESPP as follows:

	December 31,	
	2022	2021
Shares available for issuance at beginning of period	5,865,467	4,039,667
Shares issued during the period	(1,170,106)	(334,248)
Total shares available for issuance at end of period	4,695,361	3,705,419

The weighted-average grant date fair value and the assumptions used in calculating fair values of shares forecasted to be issued pursuant to our ESPP are as follows:

	For the Offering Period beginning July 1, 2022	For the Offering Period beginning January 1, 2022
Expected life	0.5 years	0.5 years
Volatility	95.48%	53.94%
Risk-free interest rate	2.52%	0.22%
Dividend yield	—%	—%
Weighted-average grant date fair value	\$3.35	\$11.52

Stock Options—Option activity for the year ended December 31, 2022 was as follows:

	Number Of Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (years)	Aggregate Intrinsic Value
Outstanding at January 1, 2022	4,019,011	\$ 8.02	3.73	\$ 122,038
PSOs earned ⁽¹⁾	150,000	27.50		
Options exercised	(700,333)	6.94		
Options expired	(185,889)	8.89		
Outstanding at December 31, 2022	3,282,789	\$ 9.10	2.90	\$ 1,145
Options exercisable at December 31, 2022	3,282,789	\$ 9.10	2.90	\$ 1,145

(1) We granted stock options subject to performance conditions ("PSOs") to our chief executive officer in 2019. We previously reported the target achievement level of these PSOs - 150,000 PSOs - within our outstanding stock options. During the first quarter of 2022, our board of directors determined that our chief executive officer earned his PSOs at the maximum achievement level. Accordingly, we are reporting an additional 150,000 PSOs as being earned during the first quarter of 2022.

The grant date fair value of our stock options was recorded as stock-based compensation over the stock options' vesting period. All outstanding options were fully vested as of December 31, 2022. We did not recognize any option-related expense during the year ended December 31, 2022. With respect to our PSOs, we had previously expensed the PSOs based on their maximum achievement level. During the first quarter of 2022, our board of directors certified our maximum achievement of the PSOs.

The fair value of stock options vested and the intrinsic value of stock options exercised are as follows:

	Year Ended December 31,		
	2022	2021	2020
Fair value of options vested	\$ 484	\$ 793	\$ 2,228
Intrinsic value of options exercised	5,588	90,920	55,822

Restricted Stock Units—Restricted stock unit activity for the year ended December 31, 2022 was as follows:

	Restricted Stock Units	Weighted-Average Grant Date Fair Value
Outstanding at January 1, 2022	4,617,425	\$ 37.13
Granted	16,408,296	8.54
Vested	(1,972,441)	30.43
Forfeited or canceled	(3,321,648)	21.13
Outstanding or deferred at December 31, 2022 ⁽¹⁾	15,731,632	\$ 11.53

(1) Starting with the restricted stock units granted to them in June 2019, our non-employee directors have the option to defer the issuance of common stock receivable upon vesting of such restricted stock units until 60 days following the day they are no longer providing services to us or, if earlier, upon a change in control transaction. The amount reported as vested excludes restricted stock units that have vested but whose settlement into shares have been deferred. The amount reported as outstanding or deferred as of December 31, 2022 includes these restricted stock units. As no further conditions exist to prevent the issuance of the shares of common stock underlying these restricted stock units, the shares are included in the basic and diluted weighted shares outstanding used to calculate net loss per share attributable to common stock. The amount of shares whose issuance have been deferred is not considered material and is not reported separately from stock-based compensation in our consolidated statements of changes in mezzanine equity and stockholders' equity.

The grant date fair value of restricted stock units is recorded as stock-based compensation over the vesting period. As of December 31, 2022, there was \$147,928 of total unrecognized stock-based compensation related to restricted stock units, which is expected to be recognized over a weighted-average period of 2.65 years.

As of December 31, 2022, there were 1,593,465 restricted stock units subject to performance and market conditions ("PSUs") outstanding at 100% of the target level. Depending on our achievement of the performance and market conditions, the actual number of shares of common stock issuable upon vesting of PSUs will range from 0% to 200% of the target amount. For each PSU recipient, the awards will vest only if the recipient is continuing to provide service to us upon our board of directors, or its compensation committee, certifying that we have achieved the PSUs' related performance or market conditions. Stock-based compensation expense for PSUs with performance conditions will be recognized when it is probable that the performance conditions will be achieved. For PSUs with market conditions, the market condition is reflected in the grant date fair value of the award and the expense is recognized over the life of the award. Stock-compensation expense associated with the PSUs is as follows:

	Year Ended December 31,		
	2022	2021	2020
Expense associated with the current period	\$ 5,341	\$ 6,314	\$ 2,664
Expense due to reassessment of achievement related to prior periods	(267)	—	190
Total expense	\$ 5,074	\$ 6,314	\$ 2,854

Compensation Cost—The following table details, for each period indicated, (i) our stock-based compensation net of forfeitures, and the amount capitalized in internally developed software and (ii) includes changes to the probability of achieving outstanding performance-based equity awards, each as included in our consolidated statements of comprehensive loss:

	Year Ended December 31,		
	2022	2021	2020
Cost of revenue	\$ 15,950	\$ 13,614	\$ 8,844
Technology and development ⁽¹⁾	29,608	23,275	16,564
Marketing	4,093	2,350	1,569
General and administrative	18,606	15,483	9,996
Total stock-based compensation	\$ 68,257	\$ 54,722	\$ 36,973

(1) Net of \$ 3,660, \$4,059 and \$2,348 of stock-based compensation expense capitalized for internally developed software for the years ended December 31, 2022, 2021 and 2020, respectively.

Note 13: Net Loss per Share Attributable to Common Stock

Net loss per share attributable to common stock is computed by dividing the net loss attributable to common stock by the weighted-average number of common shares outstanding. We have outstanding stock options, restricted stock units, options to purchase shares under our ESPP, convertible preferred stock, and convertible senior notes, which are considered in the calculation of diluted net income per share whenever doing so would be dilutive.

We calculate basic and diluted net loss per share attributable to common stock in conformity with the two-class method required for companies with participating securities. We consider our convertible preferred stock to be a participating security. Under the two-class method, net loss attributable to common stock is not allocated to the preferred stock as its holders do not have a contractual obligation to share in losses, as discussed in Note 11.

The calculation of basic and diluted net loss per share attributable to common stock was as follows:

	Year Ended December 31,		
	2022	2021	2020
Numerator:			
Net loss	\$ (321,143)	\$ (109,613)	\$ (18,527)
Dividends on convertible preferred stock	(1,560)	(7,269)	(4,454)
Net loss attributable to common stock—basic and diluted	<u>\$ (322,703)</u>	<u>\$ (116,882)</u>	<u>\$ (22,981)</u>
Denominator:			
Weighted-average shares—basic and diluted ⁽¹⁾	107,927,464	104,683,460	98,574,529
Net loss per share attributable to common stock—basic and diluted	<u>\$ (2.99)</u>	<u>\$ (1.12)</u>	<u>\$ (0.23)</u>

(1) Basic and diluted weighted-average shares outstanding include (i) common stock earned but not yet issued related to share-based dividends on our convertible preferred stock, and (ii) restricted stock units whose settlement into common stock were deferred at the option of certain non-employee directors.

The following outstanding shares of common stock equivalents were excluded from the computation of the diluted net loss per share attributable to common stock for the periods presented because their effect would have been anti-dilutive.

	Year Ended December 31,		
	2022	2021	2020
2023 notes as if converted	769,623	769,623	838,821
2025 notes as if converted	7,154,297	9,119,960	9,119,960
2027 notes as if converted	6,147,900	6,147,900	—
Convertible preferred stock as if converted	2,040,000	2,040,000	2,040,000
Stock options outstanding ⁽¹⁾	3,282,789	4,019,011	5,733,738
Restricted stock units outstanding ^{(1)/(2)}	15,710,223	4,589,696	4,443,315
Total	<u>35,104,832</u>	<u>26,686,190</u>	<u>22,175,834</u>

(1) Excludes 1,593,465 incremental PSUs that could vest, assuming applicable performance criteria and market conditions are achieved at 200% of target, which is the maximum achievement level. See Note 12 for additional information regarding PSUs.

(2) Excludes 21,409 restricted stock units whose settlement into common stock were deferred at the option of certain non-employee directors as of December 31, 2022.

Note 14: Income Taxes

Our deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The following table represents the significant components of our deferred tax assets and liabilities for the periods presented:

	December 31,	
	2022	2021
Deferred income tax assets		
Net operating loss carryforwards	\$ 164,242	\$ 143,917
Business interest limitation carryforwards	34,445	35,234
Tax credit carryforwards	23,240	18,828
Lease liabilities	15,019	17,396
Capitalized research and development costs	32,216	—
Other	30,719	23,152
Gross deferred income tax assets	299,881	238,527
Valuation allowance	(245,212)	(176,872)
Total deferred income tax assets, net of valuation allowance	54,669	61,655
Deferred income tax liabilities		
Intangible assets	(40,069)	(48,250)
Right-of-use assets	(11,225)	(13,465)
Other	(3,618)	(1,141)
Total deferred income tax liabilities	(54,912)	(62,856)
Net deferred income tax assets and liabilities	\$ (243)	\$ (1,201)

In determining the realizability of the net U.S. federal and state deferred tax assets, we consider numerous factors including historical profitability, estimated future taxable income, prudent and feasible tax planning strategies, and the industry in which we operate. Management reassesses the realization of the deferred tax assets each reporting period, which resulted in a valuation allowance against the full amount of our U.S. deferred tax assets for all periods presented. To the extent that the financial results of our U.S. operations improve in the future and the deferred tax assets become realizable, we will reduce the valuation allowance through earnings.

The following table represents our net operating loss ("NOL") carryforwards as of December 31, 2022 and 2021:

	December 31,	
	2022	2021
Federal	\$ 651,498	\$ 611,296
Various states	34,718	18,777
Foreign	5,255	3,213

Federal NOL carryforwards are available to offset federal taxable income with NOL carryforwards of \$ 413,145 generated after 2017 available to offset future U.S. federal taxable income over an indefinite period, and the remainder expiring between 2023 and 2037. State NOL carryforwards are available to offset future taxable income and begin to expire in 2023. NOL carryforward periods for the various states jurisdictions generally range from 5 to 20 years. Foreign NOL carryforward periods for foreign federal and provincial jurisdictions are generally 20 years and will begin to expire in 2039.

Net research and development credit carryforwards of \$ 23,240 and \$ 18,828 are available as of December 31, 2022 and 2021, respectively, to reduce future tax liabilities. The research and development credit carryforwards begin to expire in 2026.

Deductible but limited federal business interest expense carryforwards of \$ 145,296 and \$ 149,710 are available as of December 31, 2022 and 2021, respectively, to offset future U.S. federal taxable over an indefinite period.

Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, substantial changes in our ownership may limit the amount of NOL and income tax credit carryforwards that could be utilized annually in the future to offset taxable income and income tax liabilities. Any such annual limitation may significantly reduce the utilization of the NOLs and income tax credits before they expire. A Section 382 limitation study performed as of March 31, 2017 determined that we experienced an ownership change in 2006 with \$1,506 of the 2006 NOL, and \$32 of the 2006 research and development tax credit unavailable for future use. Furthermore, in connection with the acquisition of Rent., Rent. experienced an ownership change that triggered Section 382. As of September 30, 2021, Rent. completed a Section 382 limitation study and, based on this analysis, we do not expect a reduction in our ability to fully utilize Rent.'s pre-change NOLs.

The components of loss before benefit for income taxes for the years ended December 31, 2022, 2021, and 2020 were \$(318,216), \$(114,262), and \$(17,582), for federal purposes, respectively, and \$(2,801), \$(1,458), and \$(945), for foreign purposes, respectively.

The following table is a reconciliation of the U.S. federal income tax at statutory rate to our effective income tax rate:

	December 31,		
	2022	2021	2020
U.S. federal income tax at statutory rate	21.00 %	21.00 %	21.00 %
State taxes (net of federal benefit)	4.89	9.06	25.23
Stock-based compensation	(2.53)	14.88	69.14
Permanent differences	(0.14)	(0.12)	(1.03)
Federal research and development credit	1.38	5.41	20.42
Change in valuation allowance	(21.29)	(41.89)	(132.88)
Other	0.20	(1.62)	1.32
Acquisition costs	(0.01)	(1.44)	—
Extinguishment of convertible notes	—	—	(3.20)
Expiration of tax attribute carryforwards	(3.53)	—	—
Effective income tax rate	(0.03)%	5.28 %	— %

We recorded an income tax expense of \$126 for the year ended December 31, 2022, which in part consists of current state income tax expense recorded for the year ended December 31, 2022. Our current state income tax expense was partially offset with a deferred income tax benefit generated by the reduction to a deferred tax liability created through our April 2, 2021 acquisition of Rent.. We recorded an income tax benefit of \$6,107 for the year ended December 31, 2021, which is primarily a result of a deferred tax liability created through our April 2, 2021 acquisition of Rent. and can be used to realize certain deferred tax assets against which we had previously recorded a full valuation allowance. Our deferred income tax benefit was partially offset by current state income tax expense recorded for the year ended December 31, 2021. We did not record any tax benefit for the year ended December 31, 2020.

The difference between the U.S. federal income tax at statutory rate of 21% for the years ended December 31, 2022, 2021, and 2020, and our effective tax rate in all periods is primarily due to a full valuation allowance related to our U.S. deferred tax assets and the impact of U.S. states where we incur current income tax expense.

The following table summarizes the components of our income tax benefit for the periods presented:

	December 31,		
	2022	2021	2020
Current income tax expense:			
U.S. - State	\$ 1,084	\$ 1,215	\$ —
Total current income tax expense	1,084	1,215	—
Deferred income tax benefit:			
U.S. - Federal	97	—	—
U.S. - State	(1,055)	(7,322)	—
Total deferred income tax benefit	(958)	(7,322)	—
Total income tax benefit	\$ 126	\$ (6,107)	\$ —

We account for uncertainty in income taxes in accordance with ASC 740. Tax positions are evaluated utilizing a two-step process, whereby we first determine whether it is more likely than not that a tax position will be sustained upon examination by the tax authority, including resolutions of any related appeals or litigation processes, based on technical merit. If a tax position meets the more-likely-than-not recognition threshold, it is then measured to determine the amount of benefit to recognize in the financial statements. The tax position is measured as the largest amount of benefit that is greater than 50% likely of being realized upon ultimate settlement.

The following table summarizes the activity related to unrecognized tax benefits:

	December 31,		
	2022	2021	2020
Unrecognized benefit—beginning of year	\$ 4,692	\$ 3,105	\$ 2,159
Gross (decreases) increases—prior year tax positions	(210)	32	—
Gross increases—current year tax positions	1,327	1,555	946
Unrecognized benefit—end of year	\$ 5,809	\$ 4,692	\$ 3,105

All of the unrecognized tax benefits as of December 31, 2022 and 2021 are accounted for as a reduction in our deferred tax assets. Due to our valuation allowance, none of the \$5,809 and \$4,692 of unrecognized tax benefits would affect our effective tax rate, if recognized. We do not believe it is reasonably possible that our unrecognized tax benefits will significantly change in the next 12 months.

We recognize interest and penalties related to unrecognized tax benefits as income tax expense. There was no interest or penalties accrued related to unrecognized tax benefits for each year ended December 31, 2022 and 2021 and no liability for accrued interest or penalties related to unrecognized tax benefits as of December 31, 2022.

Our material income tax jurisdictions are the United States (federal) and Canada (foreign). As a result of NOL carryforwards, we are subject to audit for all tax years for federal and foreign purposes. All tax years remain subject to examination in various other jurisdictions that are not material to our consolidated financial statements.

Note 15: Debt

Warehouse Credit Facilities—To provide capital for the mortgage loans that it originates, our mortgage segment utilizes warehouse credit facilities that are classified as current liabilities on our consolidated balance sheets. Borrowings under each warehouse credit facility are secured by the related mortgage loan, and rights and income related to the loans. The following table summarizes borrowings under these facilities as of the periods presented:

Lender	December 31, 2022			December 31, 2021		
	Borrowing Capacity	Outstanding Borrowings	Weighted-Average Interest Rate on Outstanding Borrowings	Borrowing Capacity	Outstanding Borrowings	Weighted-Average Interest Rate on Outstanding Borrowings
Western Alliance Bank	N/A	N/A	N/A	\$ 50,000	\$ 17,089	3.00 %
Texas Capital Bank, N.A.	N/A	N/A	N/A	40,000	11,852	3.01
Flagstar Bank, FSB	N/A	N/A	N/A	25,000	4,102	3.00
City National Bank	75,000	27,288	5.89 %	N/A	N/A	N/A
Comerica Bank	75,000	26,526	6.36 %	N/A	N/A	N/A
Origin Bank	75,000	23,739	5.98 %	N/A	N/A	N/A
M&T Bank	50,000	19,126	6.45 %	N/A	N/A	N/A
Prosperity Bank	100,000	35,856	6.18 %	N/A	N/A	N/A
Republic Bank & Trust Company	75,000	26,636	5.81 %	N/A	N/A	N/A
Wells Fargo Bank, N.A.	100,000	31,338	6.41 %	N/A	N/A	N/A
Total	\$ 550,000	\$ 190,509		\$ 115,000	\$ 33,043	

Secured Revolving Credit Facility—To provide capital for the homes that it purchases, RedfinNow, through a special purpose entity called RedfinNow Borrower, entered into a secured revolving credit facility with Goldman Sachs Bank, N.A. ("Goldman Sachs"). Borrowings under the facility were secured by RedfinNow Borrower's assets, including the financed homes, as well as the equity interests in RedfinNow Borrower. The following table summarizes borrowings under this facility as of the period presented:

Lender	December 31, 2022			December 31, 2021		
	Borrowing Capacity	Outstanding Borrowings	Weighted-Average Interest Rate on Outstanding Borrowings	Borrowing Capacity	Outstanding Borrowings	Weighted-Average Interest Rate on Outstanding Borrowings
Goldman Sachs Bank USA	\$ —	\$ —	— %	\$ 200,000	\$ 199,781	3.30 %

We terminated the facility on December 29, 2022 after repaying all borrowings and accrued interest. Prior to this termination, Goldman Sachs was permitted to, at its sole option, finance a portion of RedfinNow Borrower's acquisition costs of qualified homes that had been purchased. The portion financed was based, in part, on how long the qualifying home had been owned by a Redfin entity. Beginning on January 1, 2022, all outstanding borrowings generally bore interest at a rate equal to (i) the USD-SOFR-Compound rate plus (ii) 11.448 basis points (subject to a floor of 0.30%) plus (iii) 3.00%. Outstanding borrowings before January 1, 2022 generally bore interest at a rate of one-month LIBOR (subject to a floor of 0.30%) plus 3.00%.

As of December 31, 2022 and 2021, RedfinNow Borrower had \$ 214,707 and \$567,128 of total assets, respectively, of which \$ 113,684 and \$337,630 related to inventory, and \$98,781 and \$101,064 in cash and cash equivalents, respectively.

The following table summarizes the debt issuance costs amortized and interest expense recognized in relation to our RedfinNow Borrower facility:

	Year Ended December 31,		
	2022	2021	2020
Debt issuance costs	\$ 996	\$ 324	\$ 619
Interest expense	7,863	3,946	643

Convertible Senior Notes—We have issued convertible senior notes with the following characteristics:

Issuance	Maturity Date	Stated Cash Interest Rate	Effective Interest Rate	First Interest Payment Date	Semi-Annual Interest Payment Dates	Conversion Rate
2023 notes	July 15, 2023	1.75 %	2.45 %	January 15, 2019	January 15; July 15	32.7332
2025 notes	October 15, 2025	— %	0.42 %	—	—	13.7920
2027 notes	April 1, 2027	0.50 %	0.90 %	October 1, 2021	April 1; October 1	10.6920

We issued our 2023 notes on July 23, 2018, with an aggregate principal amount of \$ 143,750. Subsequent to the issuance date, we repurchased or settled conversions of an aggregate of \$120,238 of our 2023 notes. On July 20, 2021, our 2023 notes became redeemable by us, but we did not exercise our redemption right during the three months ended December 31, 2022.

We issued our 2025 notes on October 20, 2020, with an aggregate principal amount of \$ 661,250. In the quarter ended December 31, 2022, we repurchased and retired approximately \$142,522 in aggregate principal amount of our 2025 notes at a price of \$ 83,614 using available cash. In connection with these repurchases, we recorded a gain on extinguishment of debt of \$57,193 in the year ended December 31, 2022.

We issued our 2027 notes on March 25, 2021 and April 5, 2021, with an aggregate principal amount of \$ 575,000.

The components of the convertible senior notes are as follows:

December 31, 2022					
Issuance	Aggregate Principal Amount	Unamortized Debt Discount	Unamortized Debt Issuance Costs	Net Carrying Amount	
2023 notes	\$ 23,512	\$ —	\$ 81	\$ 23,431	
2025 notes	518,728	—	6,045	512,683	
2027 notes	575,000	—	9,526	565,474	

December 31, 2021					
Issuance	Aggregate Principal Amount	Unamortized Debt Discount	Unamortized Debt Issuance Costs	Net Carrying Amount	
2023 notes	\$ 23,512	\$ —	\$ 232	\$ 23,280	
2025 notes	661,250	—	10,467	650,783	
2027 notes	575,000	—	11,766	563,234	

	Year End December 31,		
	2022	2021	2020
2023 notes			
Contractual interest expense	\$ 411	\$ 413	\$ 2,113
Amortization of debt discount	—	—	4,735
Amortization of debt issuance costs	150	189	623
Total interest expense	\$ 561	\$ 602	\$ 7,471
2025 notes			
Contractual interest expense	—	—	—
Amortization of debt discount	—	—	5,693
Amortization of debt issuance costs	2,706	2,760	346
Total interest expense	\$ 2,706	\$ 2,760	\$ 6,039
2027 notes			
Contractual interest expense	2,875	2,187	—
Amortization of debt discount	—	—	—
Amortization of debt issuance costs	2,240	1,705	—
Total interest expense	\$ 5,115	\$ 3,892	\$ —
Total			
Contractual interest expense	3,286	2,600	2,113
Amortization of debt discount	—	—	10,428
Amortization of debt issuance costs	5,096	4,654	969
Total interest expense	\$ 8,382	\$ 7,254	\$ 13,510

Conversion of Our Convertible Senior Notes

Prior to the free conversion date, a holder of each tranche of our convertible senior notes may convert its notes in multiples of \$1,000 principal amount only if one or more of the conditions described below is satisfied. On or after the free conversion date, a holder may convert its notes in such multiples without any conditions. The free conversion date is April 15, 2023 for our 2023 notes, July 15, 2025 for our 2025 notes, and January 1, 2027 for our 2027 notes.

The conditions are:

- during any calendar quarter (and only during such calendar quarter), if the last reported sale price of our common stock for at least 20 trading days (whether or not consecutive) during a period of 30 consecutive trading days ending on, and including, the last trading day of the immediately preceding calendar quarter is greater than or equal to 130% of the applicable conversion price on each applicable trading day;
- during the five business day period after any five consecutive trading day period in which the trading price per \$1,000 principal amount of the applicable notes for each trading day of the measurement period was less than 98% of the product of the last reported sale price of our common stock and the applicable conversion rate on each such trading day;
- if we call any or all of the applicable notes for redemption, at any time prior to the close of business on the scheduled trading day prior to the redemption date; or
- upon the occurrence of specified corporate events.

We intend to settle any future conversions of our convertible senior notes by paying or delivering, as the case may be, cash, shares of our common stock, or a combination of cash and shares of our common stock, at our election. We apply the if-converted method to calculate diluted earnings per share when applicable. Under the if-converted method, the denominator of the diluted earnings per share calculation is adjusted to reflect the full number of common shares issuable upon conversion, while the numerator is adjusted to add back interest expense for the period.

Classification of Our Convertible Senior Notes

Historically, we had separated our 2023 notes and our 2025 notes into liability and equity components. With our adoption of ASU 2020-06 on January 1, 2021, using the modified retrospective approach, this accounting treatment is no longer applicable. All of our convertible senior notes are now accounted for wholly as liabilities. The difference between the principal amount of the notes and the net carrying amount represents the unamortized debt discount, which we record as a deduction from the debt liability in our consolidated balance sheets. This discount is amortized to interest expense using the effective interest method over the term of the notes.

See Note 4 for fair value information related to our convertible senior notes.

2027 Capped Calls—In connection with the pricing of our 2027 notes, we entered into capped call transactions with certain counterparties (the “2027 capped calls”). The 2027 capped calls have initial strike prices of \$93.53 per share and initial cap prices of \$ 138.56 per share, in each case subject to certain adjustments. Conditions that cause adjustments to the initial strike price and initial cap price of the 2027 capped calls are similar to the conditions that result in corresponding adjustments to the conversion rate for our 2027 notes. The 2027 capped calls cover, subject to anti-dilution adjustments, 6,147,900 shares of our common stock and are generally intended to reduce or offset the potential dilution to our common stock upon any conversion of the 2027 notes, with such reduction or offset, as the case may be, subject to a cap based on the cap price. The 2027 capped calls are separate transactions, and not part of the terms of our 2027 notes. As these instruments meet certain accounting criteria, the 2027 capped calls are recorded in stockholders’ equity and are not accounted for as derivatives. The cost of \$62,647 incurred in connection with the 2027 capped calls was recorded as a reduction to additional paid-in capital on our consolidated balance sheets.

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 and principal financial officers, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rule 13a-15(e) under the Securities Exchange Act of 1934), as of the end of the period covered by this Annual Report. Based on such evaluation, our principal executive and principal financial officers have concluded that as of such date, our disclosure controls and procedures were effective at the reasonable assurance level described below.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) under the Securities Exchange Act of 1934. Our management, with the participation of our principal executive and principal financial officers, evaluated the effectiveness of our internal control over financial reporting using the framework set forth by the Committee of Sponsoring Organizations of the Treadway Commission in *Internal Control—Integrated Framework (2013)*. Based on this assessment, management concluded that Redfin Corporation maintained effective internal control over financial reporting as of the end of the period covered by this Annual Report. Deloitte & Touche LLP, our independent registered public accounting firm, has issued an attestation report on our internal control over financial reporting, and this attestation report appears in Item 8.

As permitted by SEC guidance, our management has excluded from its evaluation of the effectiveness of our internal control over financial reporting the internal control over financial reporting of Bay Equity, which we acquired on April 1, 2022. Bay Equity constituted 29.6% of our total assets (after excluding goodwill and intangible assets which were integrated with our systems and control environment), 5.7% of our revenues, and 5.4% of our net loss, of the consolidated financial statement amounts as of and for the year ended December 31, 2022.

Changes in Internal Control Over Financing Reporting

In connection with the evaluation required by Rule 13a-15(d) under the Securities Exchange Act of 1934, there were no changes in our internal control over financial reporting that occurred during the quarter ended December 31, 2022 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Effectiveness of Controls

Our management does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent or detect all errors and all fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within our company have been detected. The design of any system of controls is also based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

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 by reference to our proxy statement to be filed in connection with our 2023 Annual Meeting of Stockholders by April 30, 2023.

Item 11. Executive Compensation

The information required by this Item is incorporated by reference to our proxy statement to be filed in connection with our 2023 Annual Meeting of Stockholders by April 30, 2023.

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

The information required by this Item is incorporated by reference to our proxy statement to be filed in connection with our 2023 Annual Meeting of Stockholders by April 30, 2023.

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

The information required by this Item is incorporated by reference to our proxy statement to be filed in connection with our 2023 Annual Meeting of Stockholders by April 30, 2023.

Item 14. Principal Accounting Fees and Services

The information required by this Item is incorporated by reference to our proxy statement to be filed in connection with our 2023 Annual Meeting of Stockholders by April 30, 2023.

PART IV

Item 15. Exhibits, Financial Statement Schedules

The financial statements and financial statement schedules required to be filed as part of this annual report are included under Item 8.

The exhibits required to be filed as part of this Annual Report are listed below. Exhibits 10.1 through 10.15 constitute management contracts or compensatory plans or arrangements. Notwithstanding any language to the contrary, Exhibits 32.1, 32.2, 101, and 104 shall not be deemed to be filed as part of this annual report for purposes of Section 18 of the Securities Exchange Act of 1934.

Exhibit Number	Exhibit Description	Incorporated by Reference			Filed Herewith
		Filing	Exhibit	Filing Date	
2.1	Merger Agreement, dated as of January 10, 2022, by and among Redfin Corporation, Ruby Merger Sub LLC, BE Holdco, LLC, and Brett McGovern	8-K	2.1	Jan. 11, 2022	
3.1	Restated Certificate of Incorporation	10-Q	3.1	Aug. 4, 2022	
3.2	Restated Bylaws	8-K	3.1	Jan. 26, 2022	
3.3	Amended and Restated Certificate of Designation, Rights and Limitations of Series A Convertible Preferred Stock	8-K	3.1	June 15, 2020	
4.1	Form of Common Stock Certificate	S-1/A	4.1	July 26, 2017	
4.2	Description of Common Stock	10-K	4.2	Feb. 17, 2022	
4.3	Indenture, dated as of July 23, 2018, between Redfin Corporation and Wells Fargo Bank, National Association	8-K	4.1	July 23, 2018	
4.4	Form of Convertible Senior Note due 2023 (contained in exhibit 4.3)	8-K	4.1	July 23, 2018	
4.5	Indenture, dated as of October 20, 2020 between Redfin Corporation and Wells Fargo Bank, National Association	8-K	4.1	Oct. 20, 2020	
4.6	Form of Convertible Senior Note due 2025 (contained in exhibit 4.5)	8-K	4.1	Oct. 20, 2020	
4.7	Indenture, dated as of March 25, 2021, between Redfin Corporation and Wells Fargo Bank, National Association	8-K	4.1	March 25, 2021	
4.8	Form of Convertible Senior Note due 2027 (contained in exhibit 4.7)	8-K	4.2	March 25, 2021	
10.1	Amended and Restated 2004 Equity Incentive Plan and forms of award agreements thereunder	S-1	10.2	June 30, 2017	
10.2	2017 Equity Incentive Plan and forms of award agreements thereunder	10-K	10.3	Feb. 22, 2018	
10.3	Form of Restricted Stock Unit Award Notice and Restricted Stock Unit Award Agreement under the 2017 Equity Incentive Plan (February 2019)	10-Q	10.1	May 8, 2019	
10.4	Form of Notice of Performance-Based Restricted Stock Unit Award and Performance-Based Restricted Stock Unit Award Agreement under the 2017 Equity Incentive Plan (June 2018)	8-K	10.1	June 6, 2018	
10.5	Form of Performance-Based Stock Option Notice and Award Agreement (June 2019)	8-K	10.1	June 6, 2019	
10.6	Form of Restricted Stock Unit Notice and Award Agreement for Non-Employee Directors (May 2019)	10-Q	10.2	Aug. 1, 2019	
10.7	Form of Indemnification Agreement	S-1/A	10.1	July 17, 2017	
10.8	Form of Change in Control Severance Agreement	10-Q	10.1	Nov. 5, 2020	
10.9	Amended and Restated Offer Letter by and between Redfin Corporation and Glenn Kelman, dated June 27, 2017	S-1	10.4	June 30, 2017	
10.10	Amended and Restated Offer Letter by and between Redfin Corporation and Bridget Frey, dated June 27, 2017	S-1	10.5	June 30, 2017	
10.11	Amended and Restated Offer Letter by and between Redfin Corporation and Anthony Kappus, dated February 9, 2022	10-K	10.11	Feb. 17, 2022	
10.12	Amended and Restated Offer Letter by and between Redfin Corporation and Chris Nielsen, dated June 27, 2017	10-K	10.6	Feb. 22, 2018	
10.13	Offer Letter by and between Redfin Corporation and Anna Stevens, dated June 3, 2022	10-Q	10.1	Nov. 9, 2022	
10.14	Offer Letter by and between Redfin Corporation and Christian Taubman, dated October 13, 2019	10-K	10.13	Feb. 12, 2020	
10.15	Amended and Restated Offer Letter by and between Redfin Corporation and Adam Wiener, dated June 27, 2017	10-K	10.10	Feb. 14, 2019	
10.16	Form of Registration Rights Agreement by and among Redfin Corporation, Brett McGovern, as the member representative, and each member party thereto	8-K	10.1	Jan. 11, 2022	
21.1	List of Subsidiaries				X
23.1	Consent of Deloitte & Touche LLP, Independent Registered Public Accounting Firm				X
24.1	Power of Attorney (contained in "Signatures")				X
31.1	Certification of Principal Executive Officer, pursuant to Rule 13a-14(a)				X
31.2	Certification of Principal Financial Officer, pursuant to Rule 13a-14(a)				X
32.1	Certification of Chief Executive Officer, pursuant to 18 U.S.C. Section 1350				X
32.2	Certification of Chief Financial Officer, pursuant to 18 U.S.C. Section 1350				X
101	Interactive Data Files				X
104	Cover page interactive data file, submitted using inline XBRL (contained in Exhibit 101)				X

Item 16. Form 10-K Summary

None.

SIGNATURES

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

Redfin Corporation
(Registrant)

<u>February 16, 2023</u>	<u>By/s/ Glenn Kelman</u>
(Date)	Glenn Kelman Chief Executive Officer

KNOW ALL PERSONS BY THESE PRESENTS, that each individual whose signature appears below constitutes and appoints Glenn Kelman and Chris Nielsen, and each of them, as his or her true and lawful attorneys-in-fact and agents with full power of substitution, for him or her in any and all capacities, to sign 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 U.S. 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 requisite and necessary to be done in connection therewith, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents, or any of them, or his or her or their substitute or substitutes, may lawfully do or cause to be done or by virtue hereof.

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

<u>Name</u>	<u>Title</u>	<u>Date</u>
<u>/s/ Glenn Kelman</u> Glenn Kelman	Chief Executive Officer and Director (Principal Executive Officer)	February 16, 2023
<u>/s/ Chris Nielsen</u> Chris Nielsen	Chief Financial Officer (Principal Financial and Accounting Officer)	February 16, 2023
<u>/s/ David Lissy</u> David Lissy	Chairman of the Board of Directors	February 16, 2023
<u>/s/ Robert Bass</u> Robert Bass	Director	February 16, 2023
<u>/s/ Julie Bornstein</u> Julie Bornstein	Director	February 16, 2023
<u>/s/ Kerry Chandler</u> Kerry Chandler	Director	February 16, 2023
<u>/s/ Austin Ligon</u> Austin Ligon	Director	February 16, 2023
<u>/s/ Brad Singer</u> Brad Singer	Director	February 16, 2023
<u>/s/ James Slavet</u> James Slavet	Director	February 16, 2023
<u>/s/ Selina Tobaccowala</u> Selina Tobaccowala	Director	February 16, 2023

Directors

Robert Bass

Former Vice Chairman
Deloitte

Julie Bornstein

Former Senior Vice President and Chief Shopping Officer
Pinterest, Inc.

Kerry D. Chandler

Chief Human Resources Officer
Bombas

Glenn Kelman

Chief Executive Officer
Redfin

Austin Ligon

Co-Founder and former Chief Executive Officer
CarMax

David H. Lissy

Chairman
Bright Horizons Family Solutions

Brad Singer

Former Chief Operating Officer and Partner
ValueAct Capital

James Slavet

Partner
Greylock Partners

Selina Tobaccowala

Chief Digital Officer
Openfit

Executive Officers

Glenn Kelman

Chief Executive Officer

Bridget Frey

Chief Technology Officer

Anthony Kappus

Chief Legal Officer

Chris Nielsen

Chief Financial Officer

Anna Stevens

Chief Human Resources Officer

Christian Taubman

Chief Growth Officer

Adam Wiener

President of Real Estate Operations

We will provide to each stockholder as of April 14, 2023, upon the written request of the stockholder, a copy of our annual report on Form 10-K for the year ended December 31, 2022, including the financial statements and financial statement schedules. We will provide this annual report, other than exhibits, without charge. Please direct your request to: Redfin Corporation, 1099 Stewart Street, Suite 600, Attn: Corporate Secretary, Seattle, WA 98101.

REDFIN

Annual Report 2022