UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

(Mark One)

☒ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the quarterly period ended March 31, 2023

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	**74-3064240**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)
1099 Stewart Street Suite 600 **Seattle WA**	**98101**
(Address of Principal Executive Offices)	(Zip Code)

(206) 576-8333
Registrant's telephone number, including area code

(Former name, former address and former fiscal year, if changed since last report)

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 Global Select Market

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	☒	Accelerated filer	☐
Non-accelerated filer	☐	Smaller reporting company	☐
		Emerging growth company	☐

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

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

The registrant had 110,805,182 shares of common stock outstanding as of May 1, 2023.

Redfin Corporation

Quarterly Report on Form 10-Q
For the Quarter Ended March 31, 2023

Table of Contents

As used in this quarterly 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, and (ii) each warehouse credit facility, the terms "we," "us," and "our" refer to Redfin Mortgage, LLC or Bay Equity LLC, as the context dictates.

Note Regarding Forward-Looking Statements

This quarterly 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 of our annual report for the year ended December 31, 2022, as supplemented by Part II, Item 1A of this report. 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 quarterly 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 - FINANCIAL INFORMATION

Item 1. Financial Statements.

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

	March 31, 2023	December 31, 2022
Assets		
Current assets		
Cash and cash equivalents	$ 149,940	$ 239,840
Restricted cash	2,416	2,406
Short-term investments	140,531	122,259
Accounts receivable, net of allowances for credit losses of $2,277 and $2,019	48,142	54,880
Inventory	10,685	114,273
Loans held for sale	192,622	199,604
Prepaid expenses	33,784	34,506
Other current assets	14,918	8,690
Total current assets	593,038	776,458
Property and equipment, net	52,551	55,105
Right-of-use assets, net	38,932	42,032
Mortgage servicing rights, at fair value	35,061	36,261
Long-term investments	9,572	29,480
Goodwill	461,349	461,349
Intangible assets, net	152,525	162,272
Other assets, noncurrent	11,413	11,247
Total assets	$ 1,354,441	$ 1,574,204
Liabilities, mezzanine equity, and stockholders' equity		
Current liabilities		
Accounts payable	$ 10,154	$ 11,819
Accrued and other liabilities	92,275	109,743
Warehouse credit facilities	185,283	190,509
Convertible senior notes, net	23,468	23,431
Lease liabilities	18,015	19,137
Total current liabilities	329,195	354,639
Lease liabilities, noncurrent	35,757	37,298
Convertible senior notes, net, noncurrent	928,651	1,078,157
Deferred tax liabilities	249	243
Total liabilities	1,293,852	1,470,337
Commitments and contingencies (Note 8)		
Series A convertible preferred stock—par value $0.001 per share; 10,000,000 shares authorized; 40,000 shares issued and outstanding at March 31, 2023 and December 31, 2022, respectively	39,925	39,914
Stockholders' equity		
Common stock—par value $0.001 per share; 500,000,000 shares authorized; 110,526,884 and 109,696,178 shares issued and outstanding at March 31, 2023 and December 31, 2022, respectively	110	110
Additional paid-in capital	775,094	757,951
Accumulated other comprehensive loss	(435)	(801)
Accumulated deficit	(754,105)	(693,307)
Total stockholders' equity	20,664	63,953
Total liabilities, mezzanine equity, and stockholders' equity	$ 1,354,441	$ 1,574,204

See Notes to the consolidated financial statements.

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

	Three Months Ended March 31,	
	2023	2022
Revenue		
Service	$ 212,934	$ 217,593
Product	112,727	379,753
Total revenue	325,661	597,346
Cost of revenue		
Service	154,796	165,809
Product	114,658	358,999
Total cost of revenue	269,454	524,808
Gross profit	56,207	72,538
Operating expenses		
Technology and development	48,192	49,640
Marketing	40,908	43,342
General and administrative	69,962	58,966
Restructuring and reorganization	1,053	5,710
Total operating expenses	160,115	157,658
Loss from operations	(103,908)	(85,120)
Interest income	3,406	220
Interest expense	(1,922)	(3,861)
Income tax expense	(410)	(134)
Gain on extinguishment of convertible senior notes	42,270	—
Other expense, net	(234)	(1,911)
Net loss	$ (60,798)	$ (90,806)
Dividends on convertible preferred stock	(226)	(793)
Net loss attributable to common stock—basic and diluted	$ (61,024)	$ (91,599)
Net loss per share attributable to common stock—basic and diluted	$ (0.55)	$ (0.86)
Weighted-average shares to compute net loss per share attributable to common stock—basic and diluted	110,103,598	106,664,140
Net loss	$ (60,798)	$ (90,806)
Other comprehensive (loss) income		
Foreign currency translation adjustments	58	4
Unrealized (loss) gain on available-for-sale debt securities	(424)	561
Comprehensive loss	$ (61,164)	$ (90,241)

See Notes to the consolidated financial statements.

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

	Three Months Ended March 31, 2023	Three Months Ended March 31, 2022
Operating Activities		
Net loss	$ (60,798)	$ (90,806)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation and amortization	17,013	14,813
Stock-based compensation	19,028	16,788
Amortization of debt discount and issuance costs	1,087	1,440
Non-cash lease expense	4,816	3,169
Impairment costs	113	—
Net (gain) loss on IRLCs, forward sales commitments, and loans held for sale	(8,326)	60
Change in fair value of mortgage servicing rights, net	1,208	—
Gain on extinguishment of convertible senior notes	(42,270)	—
Other	(1,174)	2,290
Change in assets and liabilities:		
Accounts receivable, net	6,738	17,312
Inventory	103,588	112,734
Prepaid expenses and other assets	1,110	(1,982)
Accounts payable	(1,675)	9,876
Accrued and other liabilities, deferred tax liabilities, and payroll tax liabilities, noncurrent	(16,813)	(14,442)
Lease liabilities	(4,619)	(3,642)
Origination of mortgage servicing rights	(347)	—
Proceeds from sale of mortgage servicing rights	339	—
Origination of loans held for sale	(854,085)	(159,186)
Proceeds from sale of loans originated as held for sale	861,771	170,577
Net cash provided by operating activities	26,704	79,001
Investing activities		
Purchases of property and equipment	(2,919)	(7,442)
Purchases of investments	(57,556)	(77,596)
Sales of investments	12,014	5,346
Maturities of investments	48,483	6,500
Net cash provided by (used in) investing activities	22	(73,192)
Financing activities		
Proceeds from the issuance of common stock pursuant to employee equity plans	143	1,887
Tax payments related to net share settlements on restricted stock units	(3,161)	(2,595)
Borrowings from warehouse credit facilities	852,988	152,386
Repayments to warehouse credit facilities	(858,214)	(163,144)
Borrowings from secured revolving credit facility	—	156,799
Repayments to secured revolving credit facility	—	(219,711)
Cash paid for secured revolving credit facility issuance costs	—	(764)
Principal payments under finance lease obligations	(40)	(217)
Repurchases of convertible senior notes	(108,274)	—
Net cash used in financing activities	(116,558)	(75,359)
Effect of exchange rate changes on cash, cash equivalents, and restricted cash	(58)	(4)
Net change in cash, cash equivalents, and restricted cash	(89,890)	(69,554)
Cash, cash equivalents, and restricted cash:		
Beginning of period	242,246	718,281
End of period	$ 152,356	$ 648,727
Supplemental disclosure of cash flow information		
Cash paid for interest	$ 4,609	$ 3,377
Non-cash transactions		
Stock-based compensation capitalized in property and equipment	1,134	1,134
Property and equipment additions in accounts payable and accrued liabilities	32	326

	As of March 31, 2023	As of March 31, 2022
Reconciliation of cash, cash equivalents, and restricted cash		
Cash and cash equivalents	$ 149,940	$ 612,680
Restricted cash	2,416	36,047
Total cash, cash equivalents, and restricted cash	$ 152,356	$ 648,727

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, unaudited)

	Series A Convertible Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total Stockholders' Equity
	Shares	Amount	Shares	Amount				
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	—	11	—	—	—	—	—	—
Issuance of common stock as dividend on convertible preferred stock	—	—	30,640	—	—	—	—	—
Issuance of common stock pursuant to exercise of stock options	—	—	208,499	—	1,815	—	—	1,815
Issuance of common stock pursuant to settlement of restricted stock units	—	—	684,357	1	(1)	—	—	—
Common stock surrendered for employees' tax liability upon settlement of restricted stock units	—	—	(206,572)	—	(2,595)	—	—	(2,595)
Stock-based compensation	—	—	—	—	17,922	—	—	17,922
Other comprehensive loss	—	—	—	—	—	—	(565)	(565)
Net loss	—	—	—	—	—	(90,806)	—	(90,806)
Balance, March 31, 2022	40,000	$ 39,879	107,025,691	$ 107	$ 699,225	$ (462,970)	$ (739)	$ 235,623
Balance, December 31, 2022	40,000	$ 39,914	109,696,178	$ 110	$ 757,951	$ (693,307)	$ (801)	$ 63,953
Issuance of convertible preferred stock, net	—	11	—	—	—	—	—	—
Issuance of common stock as dividend on convertible preferred stock	—	—	30,640	—	—	—	—	—
Issuance of common stock pursuant to exercise of stock options	—	—	18,037	—	143	—	—	143
Issuance of common stock pursuant to settlement of restricted stock units	—	—	1,155,826	1	(1)	—	—	—
Common stock surrendered for employees' tax liability upon settlement of restricted stock units	—	—	(373,797)	(1)	(3,161)	—	—	(3,162)
Stock-based compensation	—	—	—	—	20,162	—	—	20,162
Other comprehensive income	—	—	—	—	—	—	366	366
Net loss	—	—	—	—	—	(60,798)	—	(60,798)
Balance, March 31, 2023	40,000	$ 39,925	110,526,884	$ 110	$ 775,094	$ (754,105)	$ (435)	$ 20,664

See Notes to the consolidated financial statements.

Index to Notes to Consolidated Financial Statements

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

Note 1: Summary of Accounting Policies

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").

The financial information as of December 31, 2022 that is included in this quarterly report is derived from the audited consolidated financial statements and notes for the year ended December 31, 2022 included in Item 8 in our annual report for the year ended December 31, 2022. Such financial information should be read in conjunction with the notes and management's discussion and analysis of the consolidated financial statements included in our annual report.

The unaudited consolidated interim financial statements, in the opinion of management, reflect all adjustments, consisting only of normal recurring adjustments, necessary to present fairly our financial position as of March 31, 2023, our statements of comprehensive loss, and statements of changes in mezzanine equity and stockholders' equity for the three months ended March 31, 2023 and 2022, as well as our statements of cash flows for the three months ended March 31, 2023 and 2022. The results for the three months ended March 31, 2023 are not necessarily indicative of the results to be expected for the year ending December 31, 2023 or for any interim period or for any other future year.

Principles of Consolidation—The unaudited consolidated interim financial statements include the accounts of Redfin Corporation 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.

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.

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:

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

There were $0 and $917 acquisition-related costs associated with the Bay Equity Acquisition for the three months ended March 31, 2023 and 2022, respectively.

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 three months ended March 31, 2023 and 2022. 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.

	Three Months Ended March 31,	
	2023	2022
Revenue	$ 325,661	$ 653,214
Net loss	(60,798)	(86,594)

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 revenue and gross profit. 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 in November 2022, 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.

	Three Months Ended March 31, 2023						
	Real estate services	Properties	Rentals	Mortgage	Other	Corporate Overhead and Intercompany Eliminations	Total
Revenue	$ 127,296	$ 112,727	$ 42,870	$ 36,489	$ 7,428	$ (1,149)	$ 325,661
Cost of revenue	111,494	114,658	9,765	29,213	5,473	(1,149)	269,454
Gross profit	15,802	(1,931)	33,105	7,276	1,955	—	56,207
Operating expenses							
Technology and development	28,895	529	15,964	643	1,224	937	48,192
Marketing	25,060	505	14,326	980	10	27	40,908
General and administrative	19,618	523	26,302	6,929	1,053	15,537	69,962
Restructuring and reorganization	—	—	—	—	—	1,053	1,053
Total operating expenses	73,573	1,557	56,592	8,552	2,287	17,554	160,115
Loss from operations	(57,771)	(3,488)	(23,487)	(1,276)	(332)	(17,554)	(103,908)
Interest income, interest expense, income tax expense, gain on extinguishment of convertible senior notes, and other expense, net	—	814	45	(60)	115	42,196	43,110
Net loss	$ (57,771)	$ (2,674)	$ (23,442)	$ (1,336)	$ (217)	$ 24,642	$ (60,798)

	Three Months Ended March 31, 2022						
	Real estate services	Properties	Rentals	Mortgage	Other	Corporate Overhead and Intercompany Eliminations	Total
Revenue	$ 177,487	$ 379,753	$ 38,044	$ 2,917	$ 4,368	$ (5,223)	$ 597,346
Cost of revenue	153,784	358,866	7,193	5,517	4,671	(5,223)	524,808
Gross profit	23,703	20,887	30,851	(2,600)	(303)	—	72,538
Operating expenses							
Technology and development	26,739	4,119	14,282	2,347	1,036	1,117	49,640
Marketing	30,844	1,153	11,042	28	53	222	43,342
General and administrative	22,992	2,825	24,192	1,524	712	6,721	58,966
Restructuring and reorganization	—	—	—	—	—	5,710	5,710
Total operating expenses	80,575	8,097	49,516	3,899	1,801	13,770	157,658
Income (loss) from operations	(56,872)	12,790	(18,665)	(6,499)	(2,104)	(13,770)	(85,120)
Interest income, interest expense, income tax expense, and other expense, net	—	(1,624)	469	1	1	(4,533)	(5,686)
Net (loss) income	$ (56,872)	$ 11,166	$ (18,196)	$ (6,498)	$ (2,103)	$ (18,303)	$ (90,806)

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—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	March 31, 2023	December 31, 2022
Forward sales commitments	$ 416,648	$ 301,548
IRLCs	384,007	210,787

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

		Three Months Ended March 31,	
Instrument	Classification	2023	2022
Forward sales commitments	Service revenue	$ (253)	$ 1,503
IRLCs	Service revenue	7,874	(887)

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 in our consolidated balance sheets, is set forth below:

	Balance at March 31, 2023	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	$ 123,762	$ 123,762	$ —	$ —
Total cash equivalents	123,762	123,762	—	—
Short-term investments				
U.S. treasury securities	108,326	108,326	—	—
Agency bonds	32,205	32,205	—	—
Total short-term investments	140,531	140,531	—	—
Loans held for sale	192,622	—	192,622	—
Other current assets				
Forward sales commitments	1,840	—	1,840	—
IRLCs	9,213	—	—	9,213
Total other current assets	11,053	—	1,840	9,213
Mortgage servicing rights, at fair value	35,061	—	—	35,061
Long-term investments				
U.S. treasury securities	4,939	4,939	—	—
Agency bonds	4,633	4,633	—	—
Total long-term investments	9,572	9,572	—	—
Total assets	$ 512,601	$ 273,865	$ 194,462	$ 44,274
Liabilities				
Accrued liabilities				
Forward sales commitments	$ 2,297	$ —	$ 2,297	$ —
IRLCs	43	—	—	43
Total liabilities	$ 2,340	$ —	$ 2,297	$ 43

	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 liabilities				
Forward sales commitments	$ 1,873	$ —	$ 1,873	$ —
IRLCs	1,041	—	—	1,041
Total liabilities	$ 2,914	$ —	$ 1,873	$ 1,041

There were no transfers into or out of Level 3 financial instruments during the periods presented.

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 and Mortgage Servicing Rights ("MSRs"):

		March 31, 2023		December 31, 2022	
Key Inputs	**Valuation Technique**	**Range**	**Weighted-Average**	**Range**	**Weighted-Average**
IRLCs					
Pull-through rate	Market pricing	58.6% - 100.0%	85.0%	62.0% - 100.0%	91.0%
MSRs					
Prepayment speed	Discounted cash flow	6.0% - 12.0%	6.6%	6.0% - 14.4%	6.6%
Default rates	Discounted cash flow	0.0% - 0.5%	0.1%	0.0% - 0.5%	0.1%
Discount rate	Discounted cash flow	9.5% - 11.5%	9.6%	9.5% - 12.4%	9.6%

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

	Three Months Ended March 31,	
	2023	2022
Balance, net—beginning of period	$ 1,297	$ 1,155
Issuances of IRLCs	15,963	2,289
Settlements of IRLCs	(10,238)	(2,893)
Fair value changes recognized in earnings	2,148	(308)
Balance, net—end of period	$ 9,170	$ 243

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

	Three Months Ended March 31,	
	2023	2022
Balance—beginning of period	$ 36,261	$ —
MSRs originated	347	—
MSRs sales	(339)	—
Fair value changes recognized in earnings	(1,208)	—
Balance, net—end of period	$ 35,061	$ —

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:

	March 31, 2023		December 31, 2022	
Issuance	Net Carrying Amount	Estimated Fair Value	Net Carrying Amount	Estimated Fair Value
2023 notes	$ 23,468	$ 22,718	$ 23,431	$ 22,147
2025 notes	362,617	263,998	512,683	309,292
2027 notes	566,034	354,723	565,474	267,398

The difference between the principal amounts of our 2023 notes, our 2025 notes, and our 2027 notes, which were $ 23,512, $366,506, 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 $9.06 on March 31, 2023, the if-converted values of all three convertible notes were less than the principal amounts, respectively. 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, and other assets. These assets are remeasured 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:

	March 31, 2023							
	Fair Value Hierarchy	Cost or Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value	Cash, Cash Equivalents, and Restricted Cash	Short-term Investments	Long-term Investments
Cash	N/A	$ 26,178	$ —	$ —	$ 26,178	$ 26,178	$ —	$ —
Money markets funds	Level 1	123,762	—	—	123,762	123,762	—	—
Restricted cash	N/A	2,416	—	—	2,416	2,416	—	—
U.S. treasury securities	Level 1	113,600	16	(351)	113,265	—	108,326	4,939
Agency bonds	Level 1	36,809	34	(5)	36,838	—	32,205	4,633
Total		$ 302,765	$ 50	$ (356)	$ 302,459	$ 152,356	$ 140,531	$ 9,572

	December 31, 2022							
	Fair Value Hierarchy	Cost or Amortized Cost	Unrealized Gains	Unrealized Losses	Estimated Fair Value	Cash, Cash Equivalents, and Restricted Cash	Short-term Investments	Long-term Investments
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

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. Our portfolio consists of U.S. government securities, all with a high-quality credit rating issued by various credit agencies.

As of March 31, 2023 and December 31, 2022, we had accrued interest of $ 383 and $576, respectively, on our available-for-sale investments, of which we have recorded no expected credit losses. Accrued interest receivable is recorded in other current assets in our consolidated balance sheets.

Note 5: Inventory

Our inventory is comprised of homes purchased by our RedfinNow operations. The subsequent sale of our home inventory constitutes the majority of our properties segment revenue. In the fourth quarter of 2022 we began to wind down our RedfinNow operations, and expect to complete the wind-down in 2023.

The components of inventory were as follows:

	March 31, 2023	December 31, 2022
Finished goods		
Homes for sale	$ 9,122	$ 97,636
Work in progress		
Homes not available for sale	—	2,467
Homes under improvement	1,563	14,170
Inventory	$ 10,685	$ 114,273

Inventory includes 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 March 31, 2023 and December 31, 2022, lower of cost or net realizable value write-downs were $941 and $8,404, respectively. These write-downs are included within the changes in inventory in net cash used in operating activities in our consolidated statements of cash flows.

The following table summarizes our inventory activities:

	Three Months Ended	
	March 31, 2023	March 31, 2022
Number of homes purchased	—	398
Inventory value of homes purchased	$ —	$ 197,549
Number of homes sold	191	617
Inventory value of homes sold	$ 103,588	$ 306,379

Note 6: Property and Equipment

The components of property and equipment were as follows:

	Useful Lives (Years)	March 31, 2023	December 31, 2022
Leasehold improvements	Shorter of lease term or economic life	$ 32,249	$ 32,285
Website and software development costs	2 - 3	66,210	62,963
Computer and office equipment	3 - 5	20,158	20,036
Software	3	1,858	1,871
Furniture	7	8,045	7,911
Property and equipment, gross		128,520	125,066
Accumulated depreciation and amortization		(83,572)	(76,788)
Construction in progress		7,603	6,827
Property and equipment, net		$ 52,551	$ 55,105

Depreciation and amortization expense for property and equipment amounted to $ 7,266 and $5,887 for the three months ended March 31, 2023 and 2022, respectively. We capitalized website and software development costs, including stock-based compensation, of $4,555 and $6,115 for the three months ended March 31, 2023 and 2022, respectively.

Note 7: Leases

We lease office space under noncancelable operating leases with original terms ranging from one to 11 years and vehicles under noncancelable finance leases with terms of four years. Generally, the operating leases require a fixed minimum rent with contractual minimum rent increases over the lease term. The components of lease expense were as follows:

		Three Months Ended March 31,	
Lease Cost	**Classification**	**2023**	**2022**
Operating lease cost:			
Operating lease cost[(1)]	Cost of revenue	$ 3,322	$ 2,380
Operating lease cost[(1)]	Operating expenses	2,546	1,691
Total operating lease cost		$ 5,868	$ 4,071
Finance lease cost:			
Amortization of right-of-use assets	Cost of revenue	$ 44	$ 183
Interest on lease liabilities	Cost of revenue	2	25
Total finance lease cost		$ 46	$ 208

(1) Includes lease expense with initial terms of twelve months or less of $ 848 and $376 for the three months ended March 31, 2023 and 2022, respectively.

	Lease Liabilities		Other Leases	
Maturity of Lease Liabilities	**Operating**	**Financing**	**Operating**	**Total Lease Obligations**
2023, excluding the three months ended March 31, 2023	$ 15,606	$ 62	$ 2,012	$ 17,680
2024	15,740	43	842	16,625
2025	11,650	22	851	12,523
2026	9,258	—	639	9,897
2027	4,896	—	96	4,992
Thereafter	760	—	34	794
Total lease payments	$ 57,910	$ 127	$ 4,474	$ 62,511
Less: Interest[(1)]	4,259	6		
Present value of lease liabilities	$ 53,651	$ 121		

(1) Includes interest on operating leases of $ 1,909 and financing lease of $ 4 within the next twelve months.

Lease Term and Discount Rate	**March 31, 2023**	**December 31, 2022**
Weighted-average remaining operating lease term (years)	3.5	3.6
Weighted-average remaining finance lease term (years)	2.1	2.7
Weighted-average discount rate for operating leases	4.5 %	4.5 %
Weighted-average discount rate for finance leases	5.4 %	5.4 %

	Three Months Ended March 31,	
Supplemental Cash Flow Information	**2023**	**2022**
Cash paid for amounts included in the measurement of lease liabilities		
Operating cash flows from operating leases	$ 5,253	$ 4,389
Operating cash flows from finance leases	5	26
Financing cash flows from finance leases	37	133
Right of use assets obtained in exchange for lease liabilities		
Operating leases	$ 3,130	$ 76
Finance leases	—	309

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 alleges that certain of our business policies and practices violate certain provisions of the Fair Housing Act (the "FHA"). The plaintiffs allege 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 plaintiff organizations and additional non-profit organizations in 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 court approval. On April 7, 2023, plaintiffs filed a motion for preliminary approval of the class settlements.

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 March 31, 2023, we held $28,610 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:

		March 31, 2023			December 31, 2022		
	Weighted-Average Useful Lives (Years)	Gross	Accumulated Amortization	Net	Gross	Accumulated Amortization	Net
Trade names	9.3	$ 82,690	$ (17,214)	$ 65,476	$ 82,690	$ (14,856)	$ 67,834
Developed technology	3.3	66,340	(43,820)	22,520	66,340	(38,465)	27,875
Customer relationships	10	81,360	(16,831)	64,529	81,360	(14,797)	66,563
Total		$ 230,390	$ (77,865)	$ 152,525	$ 230,390	$ (68,118)	$ 162,272

Amortization expense amounted to $9,747 and $8,926 for the three months ended March 31, 2023 and 2022, respectively.

The following table presents our estimate of remaining amortization expense for intangible assets that existed as of March 31, 2023:

2023, excluding the three months ended March 31, 2023	$ 29,241
2024	23,741
2025	17,618
2026	17,380
2027	15,633
Thereafter	48,912
Estimated remaining amortization expense	$ 152,525

Goodwill—The following table presents the carrying amount of goodwill by reportable segment:

	Real Estate Services	Rentals	Mortgage	Total
Balance as of March 31, 2023 and December 31, 2022	$ 250,231	$ 159,151	$ 51,967	$ 461,349

Note 10: Accrued and Other Liabilities

The components of accrued and other liabilities were as follows:

	March 31, 2023	December 31, 2022
Accrued compensation and benefits	$ 59,751	$ 76,539
Miscellaneous accrued liabilities	27,848	27,543
Customer contract liabilities	4,676	5,661
Total accrued and other liabilities	$ 92,275	$ 109,743

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 March 31, 2023, the carrying value of our convertible preferred stock, net of issuance costs, is $ 39,925, and there were no unpaid stock dividends. As of March 31, 2023, 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 March 31, 2023 and December 31, 2022, 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 March 31, 2023 and December 31, 2022, 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 options under our 2004 Equity Incentive Plan, as amended (our "2004 Plan"), until July 26, 2017, when we terminated it in connection with our initial public offering. Accordingly, no shares are available for future issuance under our 2004 Plan. Our 2004 Plan continues to govern outstanding equity awards granted thereunder. 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 (our "2017 EIP") became effective on July 26, 2017, and provides for the issuance of incentive and nonqualified common stock options and restricted stock units to employees, directors, 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:

	March 31, 2023	December 31, 2022
Stock options issued and outstanding	3,235,085	3,282,789
Restricted stock units outstanding	15,047,813	15,731,632
Shares available for future equity grants	13,324,587	7,951,616
Total shares reserved for future issuance	31,607,485	26,966,037

2017 Employee Stock Purchase Plan—Our 2017 Employee Stock Purchase Plan (our "ESPP") was approved by our 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:

	Three Months Ended March 31, 2023	Year Ended December 31, 2022
Shares available for issuance at beginning of period	4,695,361	5,865,467
Shares issued during the period	—	(1,170,106)
Total shares available for future issuance at end of period	4,695,361	4,695,361

Stock Options—Option activity for the three months ended March 31, 2023 was as follows:

	Number of Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Life (Years)	Aggregate Intrinsic Value
Outstanding as of January 1, 2023	3,282,789	$ 9.10	2.90	$ 1,145
Options exercised	(18,037)	7.35		
Options expired	(29,667)	9.76		
Outstanding as of March 31, 2023	3,235,085	9.10	2.69	6,039
Options exercisable as of March 31, 2023	3,235,085	9.10	2.69	6,039

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 March 31, 2023. We did not recognize any option-related expense during the three months ended March 31, 2023.

Restricted Stock Units—Restricted stock unit activity for the three months ended March 31, 2023 was as follows:

	Restricted Stock Units	Weighted-Average Grant-Date Fair Value
Outstanding as of January 1, 2023	15,731,632	$ 11.53
Granted	1,110,508	8.81
Vested	(1,155,826)	17.44
Forfeited or canceled	(638,501)	13.32
Outstanding or deferred as of March 31, 2023[(1)]	15,047,813	10.80

(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 has been deferred. The amount reported as outstanding or deferred as of March 31, 2023 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 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 March 31, 2023, there was $131,636 of total unrecognized compensation cost related to restricted stock units, which is expected to be recognized over a weighted-average period of 2.61 years.

As of March 31, 2023, there were 1,478,501 restricted stock units subject to performance and market conditions ("PSUs") 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 PSU's related performance or market conditions. Stock-based compensation expense for PSUs with performance conditions is 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-based compensation expense associated with the PSUs is as follows:

	Three Months Ended March 31,	
	2023	2022
PSU expense	$ 1,844	$ 693

Compensation Cost—The following table details, for each period indicated, our stock-based compensation, net of forfeitures, and the amount capitalized in website and software development costs, each as included in our consolidated statements of comprehensive loss:

	Three Months Ended March 31,	
	2023	2022
Cost of revenue	$ 4,181	$ 3,377
Technology and development[(1)]	8,209	7,965
Marketing	1,263	1,072
General and administrative	5,375	4,374
Total stock-based compensation	$ 19,028	$ 16,788

(1) Net of $ 1,134 and $ 1,134 of stock-based compensation that was capitalized in the three months ended March 31, 2023 and 2022, 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 loss 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 participating securities. 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 12.

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

	Three Months Ended March 31,	
	2023	2022
Numerator:		
Net loss	$ (60,798)	$ (90,806)
Dividends on convertible preferred stock	(226)	(793)
Net loss attributable to common stock—basic and diluted	$ (61,024)	$ (91,599)
Denominator:		
Weighted-average shares—basic and diluted[1]	110,103,598	106,664,140
Net loss per share attributable to common stock—basic and diluted	$ (0.55)	$ (0.86)

(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 that have vested but 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 for the periods presented because their effect would have been anti-dilutive:

	Three Months Ended March 31,	
	2023	2022
2023 notes as if converted	769,623	769,623
2025 notes as if converted	5,054,851	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
Stock options outstanding	3,235,085	3,955,888
Restricted stock units outstanding[1][2]	15,026,404	4,602,696
Employee stock purchase plan	1,422,936	265,167
Total	33,696,799	26,901,234

(1) Excludes 1,478,501 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 that have vested but whose settlement into common stock were deferred at the option of certain non-employee directors as of March 31, 2023.

Note 14: Income Taxes

During the three months ended March 31, 2023, we recorded an income tax expense of $ 410, resulting in an effective tax rate of (0.67)%, which is primarily a result of current state income taxes. Our current income tax expense was supplemented by deferred tax expenses associated with increases to indefinite-lived deferred tax liabilities created through the Company's April 2, 2021 acquisition of Rent., and April 1, 2022 acquisition of Bay Equity. Our March 31, 2022 effective tax rate of (0.15)% is primarily a result of current state income taxes which were partially offset by a deferred tax benefit resulting from a reduction to deferred tax liabilities originally created through our April 2, 2021 acquisition of Rent.

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 the three months ended March 31, 2023 and 2022. 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.

Under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, substantial changes in our ownership may limit the amount of net operating loss ("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 our 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.

As of December 31, 2022, we had accumulated approximately $ 651,498 of federal net operating losses, approximately $ 34,718 (tax effected) of state net operating losses, and approximately $5,255 of foreign net operating losses. Federal net operating losses are available to offset federal taxable income and begin to expire in 2023, with net operating loss carryforwards of $413,145 generated after 2017 available to offset future U.S. federal taxable income over an indefinite period.

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

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

Our material income tax jurisdiction is the United States (federal) and Canada (foreign). As a result of NOL carryforwards, we are subject to audit for all tax years for federal 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 in our consolidated balance sheets. Borrowings under each warehouse credit facility are secured by the related mortgage loan and rights and income associated with the loan. The following table summarizes borrowings under these facilities as of the periods presented:

	March 31, 2023			December 31, 2022		
Lender	**Borrowing Capacity**	**Outstanding Borrowings**	**Weighted-Average Interest Rate on Outstanding Borrowings**	**Borrowing Capacity**	**Outstanding Borrowings**	**Weighted-Average Interest Rate on Outstanding Borrowings**
City National Bank	$ 75,000	$ 24,513	6.69 %	$ 75,000	$ 27,288	5.89 %
Comerica Bank	75,000	27,185	6.92 %	75,000	26,526	6.36 %
Origin Bank	75,000	23,997	6.54 %	75,000	23,739	5.98 %
M&T Bank	50,000	16,086	6.98 %	50,000	19,126	6.45 %
Prosperity Bank	100,000	36,043	6.67 %	100,000	35,856	6.18 %
Republic Bank & Trust Company	75,000	28,112	6.63 %	75,000	26,636	5.81 %
Wells Fargo Bank, N.A.	100,000	29,347	6.88 %	100,000	31,338	6.41 %
Total	$ 550,000	$ 185,283		$ 550,000	$ 190,509	

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 March 31, 2023.

We issued our 2025 notes on October 20, 2020, with an aggregate principal amount of $ 661,250. In the three months ended March 31, 2023, we repurchased and retired approximately $152,222 in aggregate principal amount of our 2025 notes at a price of $ 108,274 using available cash. In connection with these repurchases, we recorded a gain on extinguishment of debt of $42,270 for the three months ended March 31, 2023.

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

The components of our convertible senior notes were as follows:

	March 31, 2023			
Issuance	Aggregate Principal Amount	Unamortized Debt Discount	Unamortized Debt Issuance Costs	Net Carrying Amount
2023 notes	$ 23,512	$ —	$ 44	$ 23,468
2025 notes	366,506	—	3,889	362,617
2027 notes	575,000	—	8,966	566,034

	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

	Three Months Ended March 31,	
	2023	2022
2023 notes		
Contractual interest expense	$ 103	$ 103
Amortization of debt discount	—	—
Amortization of debt issuance costs	38	38
Total interest expense	$ 141	$ 141
2025 notes		
Contractual interest expense	—	—
Amortization of debt discount	—	—
Amortization of debt issuance costs	2,156	690
Total interest expense	$ 2,156	$ 690
2027 notes		
Contractual interest expense	719	719
Amortization of debt discount	—	—
Amortization of debt issuance costs	560	560
Total interest expense	$ 1,279	$ 1,279
Total		
Contractual interest expense	822	822
Amortization of debt discount	—	—
Amortization of debt issuance costs	2,754	1,288
Total interest expense	$ 3,576	$ 2,110

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

2027 Capped Calls—In 2021, and 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.

Item 2. 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 quarterly report and our annual report for the year ended December 31, 2022. In particular, the disclosure contained in Item 1A in our annual report, as updated by Part II, Item 1A in this quarterly report, 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. Please 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. Please 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 and Canada, 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 and service mortgage loans and offer title and settlement services. We use 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 and continuing through the first quarter of 2023, a number of economic factors adversely impacted 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. 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 2022, we laid off 442 employees, which represented approximately eight percent of total employees. In November 2022, we laid off 862 employees, which represented 13% of total employees. In April 2023, we laid off 200 employees, which represented 4% of total employees. From April 2022, after completing the acquisition of Bay Equity, through the end of April 2023, through involuntary reductions and attrition, we reduced our total of number of employees by 34%, including a reduction in lead agents of 34%. 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 of 2022, 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. As of the first week of May 2023, we have just five homes remaining in inventory and all are under contract to sell.

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.

	Three Months Ended							
	Mar. 31, 2023	Dec. 31, 2022	Sep. 30, 2022	Jun. 30, 2022	Mar. 31, 2022	Dec. 31, 2021	Sep. 30, 2021	Jun. 30, 2021
Monthly average visitors (in thousands)	50,440	43,847	50,785	52,698	51,287	44,665	49,147	48,437
Real estate services transactions								
Brokerage	10,301	12,743	18,245	20,565	15,001	19,428	21,929	21,006
Partner	3,187	2,742	3,507	3,983	3,417	4,603	4,755	4,597
Total	13,488	15,485	21,752	24,548	18,418	24,031	26,684	25,603
Real estate services revenue per transaction								
Brokerage	$ 11,556	$ 10,914	$ 11,103	$ 11,692	$ 11,191	$ 10,900	$ 11,107	$ 11,307
Partner	2,592	2,611	2,556	2,851	2,814	2,819	2,990	3,195
Aggregate	9,438	9,444	9,725	10,258	9,637	9,352	9,661	9,850
U.S. market share by units[(1)]	0.78 %	0.76 %	0.80 %	0.82 %	0.79 %	0.78 %	0.78 %	0.77 %
Revenue from top-10 Redfin markets as a percentage of real estate services revenue	53 %	57 %	58 %	59 %	57 %	61 %	62 %	64 %
Average number of lead agents	1,876	2,022	2,293	2,640	2,750	2,485	2,370	2,456
RedfinNow homes sold	191	474	530	423	617	600	388	292
Revenue per RedfinNow home sold (in ones)	$ 573,571	$ 538,788	$ 550,903	$ 604,120	$ 608,851	$ 622,519	$ 599,963	$ 571,670
Mortgage originations by dollars (in millions)	$ 991	$ 1,036	$ 1,557	$ 1,565	$ 159	$ 242	$ 258	$ 261
Mortgage originations by units (in ones)	2,444	2,631	3,720	3,860	414	591	671	749

(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. 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.

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, Dallas, Denver (including Boulder and Colorado Springs), Los Angeles (including Santa Barbara), Maryland, Northern Virginia, Portland (including Bend), 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, including any revenue from leasebacks, 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 revenues earned when we sell homes that we previously bought directly from homeowners and when we perform maintenance on customers' homes. Properties revenue is recorded at closing on a gross basis, representing the sales price of the home or maintenance performed.

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 comprised 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.

Restructuring and Reorganization

Restructuring and reorganization expenses consist primarily of personnel-related costs associated with employee terminations, furloughs, or retention.

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

Interest Income

Interest income consists primarily of interest earned on our cash, cash equivalents, and investments, and interest income related to originated mortgage loans.

Interest Expense

Interest expense consists primarily of any interest payable on our convertible senior notes and, for the three months ended March 31, 2023, 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 and our warehouse credit facilities. See Note 15 to our consolidated financial statements for information regarding interest for the facility.

Income Tax Expense

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, Net

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

	Three Months Ended March 31,	
	2023	2022
	(in thousands)	
Revenue	$ 325,661	$ 597,346
Cost of revenue[(1)]	269,454	524,808
Gross profit	56,207	72,538
Operating expenses		
Technology and development[(1)]	48,192	49,640
Marketing[(1)]	40,908	43,342
General and administrative[(1)]	69,962	58,966
Restructuring and reorganization	1,053	5,710
Total operating expenses	160,115	157,658
Loss from operations	(103,908)	(85,120)
Interest income	3,406	220
Interest expense	(1,922)	(3,861)
Income tax expense	(410)	(134)
Gain on extinguishment of convertible notes	42,270	—
Other expense, net	(234)	(1,911)
Net loss	$ (60,798)	$ (90,806)

(1) Includes stock-based compensation as follows:

	Three Months Ended March 31, 2023	Three Months Ended March 31, 2022
	(in thousands)	
Cost of revenue	$ 4,181	$ 3,377
Technology and development	8,209	7,965
Marketing	1,263	1,072
General and administrative	5,375	4,374
Total stock-based compensation	$ 19,028	$ 16,788

	Three Months Ended March 31, 2023	Three Months Ended March 31, 2022
	(as a percentage of revenue)	
Revenue	100.0 %	100.0 %
Cost of revenue(1)	82.7	87.9
Gross profit	17.3	12.1
Operating expenses		
Technology and development(1)	14.8	8.3
Marketing(1)	12.6	7.3
General and administrative(1)	21.5	9.9
Restructuring	0.3	1.0
Total operating expenses	49.2	26.4
Loss from operations	(31.9)	(14.2)
Interest income	1.0	—
Interest expense	(0.6)	(0.6)
Income tax expense	(0.1)	—
Gain on extinguishment of convertible notes	13.0	—
Other expense, net	(0.1)	(0.3)
Net loss	(18.7)%	(15.2)%

(1) Includes stock-based compensation as follows:

	Three Months Ended March 31, 2023	Three Months Ended March 31, 2022
	(as a percentage of revenue)	
Cost of revenue	1.3 %	0.6 %
Technology and development	2.5	1.3
Marketing	0.4	0.2
General and administrative	1.6	0.7
Total	5.8 %	2.8 %

Comparison of the Three Months Ended March 31, 2023 and 2022

Revenue

	Three Months Ended March 31,		Change	
	2023	2022	Dollars	Percentage
	(in thousands, except percentages)			
Real estate services				
Brokerage	$ 119,034	$ 167,872	$ (48,838)	(29) %
Partner	8,262	9,615	(1,353)	(14)
Total real estate services	127,296	177,487	(50,191)	(28)
Properties	112,727	379,753	(267,026)	(70)
Rentals	42,870	38,044	4,826	13
Mortgage	36,489	2,917	33,572	1,151
Other	7,428	4,368	3,060	70
Intercompany elimination	(1,149)	(5,223)	4,074	78
Total revenue	$ 325,661	$ 597,346	$ (271,685)	(45)
Percentage of revenue				
Real estate services				
Brokerage	36.6 %	28.1 %		
Partner	2.5	1.6		
Total real estate services	39.1	29.7		
Properties	34.6	63.6		
Rentals	13.2	6.4		
Mortgage	11.2	0.5		
Other	2.3	0.7		
Intercompany elimination	(0.4)	(0.9)		
Total revenue	100.0 %	100.0 %		

In the three months ended March 31, 2023, revenue decreased by $271.7 million, or 45%, as compared with the same period in 2022. This decrease was partially offset by $36.5 million in revenue resulting from our acquisition of Bay Equity, and there were no such revenues in the three months ended March 31, 2022. Excluding these revenues from Bay Equity, this decrease in revenue was primarily attributable to a $267.0 million decrease in properties revenue and a $50.2 million decrease in real estate services revenue. Properties revenue decreased 70%, primarily driven by a 69% decrease in RedfinNow homes sold and a 6% decrease in revenue per RedfinNow home sold. These decreases are due to the wind-down of our properties business. Brokerage revenue decreased by $48.8 million, and partner revenue decreased by $1.4 million. Brokerage revenue decreased 29% during the period, driven by a 31% decrease in brokerage transactions and a 3% increase in brokerage revenue per transaction with the elimination of our homebuyer commission refund more than offsetting an 8% decrease in average home prices for brokerage transactions.

Cost of Revenue and Gross Margin

	Three Months Ended March 31,		Change	
	2023	2022	Dollars	Percentage
	(in thousands, except percentages)			
Cost of revenue				
Real estate services	$ 111,494	$ 153,784	$ (42,290)	(27) %
Properties	114,658	358,866	(244,208)	(68)
Rentals	9,765	7,193	2,572	36
Mortgage	29,213	5,517	23,696	430
Other	5,473	4,671	802	17
Intercompany elimination	(1,149)	(5,223)	4,074	78
Total cost of revenue	$ 269,454	$ 524,808	$ (255,354)	(49)
Gross profit				
Real estate services	$ 15,802	$ 23,703	$ (7,901)	(33) %
Properties	(1,931)	20,887	(22,818)	(109)
Rentals	33,105	30,851	2,254	7
Mortgage	7,276	(2,600)	9,876	380
Other	1,955	(303)	2,258	745
Total gross profit	$ 56,207	$ 72,538	$ (16,331)	(23)
Gross margin (percentage of revenue)				
Real estate services	12.4 %	13.4 %		
Properties	(1.7)	5.5		
Rentals	77.2	81.1		
Mortgage	19.9	(89.1)		
Other	26.3	(6.9)		
Total gross margin	17.3	12.1		

In the three months ended March 31, 2023, total cost of revenue decreased by $255.4 million, or 49%, as compared with the same period in 2022. This decrease was partially offset by $29.1 million in costs resulting from our acquisition of Bay Equity, and there were no such costs in the three months ended March 31, 2022. Excluding these expenses from Bay Equity, this decrease in cost of revenue was primarily attributable to (1) a $220.2 million decrease in home purchase costs and related capitalized improvements by our properties business, due to the wind-down of our properties business, and (2) a $45.5 million decrease in personnel costs and transaction bonuses, due to decreased headcount and decreased brokerage transactions, respectively.

In the three months ended March 31, 2023, total gross margin increased 520 basis points as compared with the same period in 2022, driven primarily by the relative decrease of our properties business compared to our real estate services and other businesses, and increases in mortgage and other gross margin. This was partially offset by decreases in real estate services and rentals gross margin.

In the three months ended March 31, 2023, real estate services gross margin decreased 100 basis points as compared with the same period in 2022. This was primarily attributable to a 230 basis point increase in costs as a percentage of revenue from our annual, in-person company event, which we did not conduct in the same period in 2022. This was partially offset by a 130 basis point decrease in personnel costs and transaction bonuses as a percentage of revenue.

In the three months ended March 31, 2023, properties gross margin decreased 720 basis points as compared with the same period in 2022. This was primarily attributable to a 840 basis point increase in home purchase costs and related capitalized improvements as a percentage of revenue. This was partially offset by a 90 basis point decrease in personnel costs and transaction bonuses as a percentage of revenue.

In the three months ended March 31, 2023, rentals gross margin decreased 390 basis points as compared with the same period in 2022. This was primarily attributable to a 530 basis point increase in marketing expense as a percentage of revenue and due to expanded services. This was partially offset by an 80 basis point decrease in personnel costs as a percentage of revenue.

In the three months ended March 31, 2023, mortgage gross margin increased 10,900 basis points as compared with the same period in 2022. This was primarily attributable to a 9,320 basis point decrease in personnel costs and transaction bonuses as a percentage of revenue.

In the three months ended March 31, 2023, other gross margin increased 3,320 basis points. This was primarily attributable to a 2,060 basis point decrease in personnel costs and transaction bonuses, and an 830 basis point decrease in production costs, each as a percentage of revenue.

Operating Expenses

	Three Months Ended March 31,		Change	
	2023	2022	Dollars	Percentage
	(in thousands, except percentages)			
Technology and development	$ 48,192	$ 49,640	$ (1,448)	(3) %
Marketing	40,908	43,342	(2,434)	(6)
General and administrative	69,962	58,966	10,996	19
Restructuring	1,053	5,710	(4,657)	(82)
Total operating expenses	$ 160,115	$ 157,658	$ 2,457	2
Percentage of revenue				
Technology and development	14.8 %	8.3 %		
Marketing	12.6	7.3		
General and administrative	21.5	9.8		
Restructuring and reorganization	0.3	1.0		
Total operating expenses	49.2 %	26.4 %		

In the three months ended March 31, 2023, technology and development expenses decreased by $1.4 million, or 3%, as compared with the same period in 2022. This decrease was partially offset by $0.4 million in costs resulting from our acquisition of Bay Equity, and there were no such expenses in the three months ended March 31, 2022. Excluding these expenses from Bay Equity, the decrease was primarily attributable to a $2.3 million decrease in personnel costs.

In the three months ended March 31, 2023, marketing expenses decreased by $2.4 million, or 6%, as compared with the same period in 2022. This decrease was partially offset by $1.0 million in costs resulting from our acquisition of Bay Equity, and there were no such expenses in the three months ended March 31, 2022. Excluding these expenses from Bay Equity, the decrease was primarily attributable to a $3.7 million decrease in marketing media costs as we reduced advertising.

In the three months ended March 31, 2023, general and administrative expenses increased by $11.0 million, or 19%, as compared with the same period in 2022. Included in the increase was $6.9 million resulting from our acquisition of Bay Equity, and there were no such expenses in the three months ended March 31, 2022. Excluding these expenses from Bay Equity, general and administrative expenses increased by $4.1 million. The increase was primarily attributable to a $5.9 million increase in costs associated with our annual, in-person company event, which we did not conduct in the same period in 2022. This was partially offset by a $2.1 million decrease in personnel costs.

In the three months ended March 31, 2023, restructuring and reorganization expenses decreased by $4.7 million, or 82% as compared with the same period in 2022. This decrease is primarily attributable to a lower volume of restructuring activities in the three months ended March 31, 2023 as compared with the same period in 2022. In the three months ended March 31, 2022, costs were primarily driven from severance and other costs associated with our mortgage restructuring.

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

	Three Months Ended March 31,		Change	
	2023	2022	Dollars	Percentage
	(in thousands, except percentages)			
Interest income	$ 3,406	$ 220	$ 3,186	1,448 %
Interest expense	(1,922)	(3,861)	1,939	(50)
Income tax expense	(410)	(134)	(276)	(206)
Gain on extinguishment of convertible senior notes	42,270	—	42,270	n/a
Other expense, net	(234)	(1,911)	1,677	(88)
Interest income, interest expense, income tax expense, gain on extinguishment of convertible notes, and other expense, net	$ 43,110	$ (5,686)	$ 48,796	(858)
Percentage of revenue				
Interest income	1.0 %	0.0 %		
Interest expense	(0.6)	(0.6)		
Income tax expense	(0.1)	0.0		
Gain on extinguishment of convertible senior notes	13.0	0.0		
Other expense, net	(0.1)	(0.3)		
Interest income, interest expense, income tax expense, gain on extinguishment of convertible notes, and other expense, net	13.2 %	(0.9)%		

In the three months ended March 31, 2023, interest income, interest expense, income tax expense, gain on extinguishment of convertible senior notes, and other expense, net increased by $48.8 million as compared to the same period in 2022.

Interest expense decreased by $1.9 million due primarily to the closing of our secured revolving credit facility.

Gain on extinguishment of convertible senior notes increased by $42.3 million, due to our paying down a portion of our 2025 notes at a discount, and there was no such activity in 2022. See Note 15 to our consolidated financial statements for further information on these transactions.

Other expense, net decreased by $1.7 million primarily due to the sale of one of our equity investments at a loss in the three months ended March 31, 2022, and we had no such transaction in the three months ended March 31, 2023.

Segment Financial Information

The following tables 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 three months ended March 31, 2023 and 2022.

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 three months ended March 31, 2023 and 2022 is presented below, along with a reconciliation of adjusted EBITDA to net loss.

	Three Months Ended March 31, 2023						
	Real estate services	Properties	Rentals	Mortgage	Other	Corporate Overhead and Intercompany Eliminations	Total
Revenue	$ 127,296	$ 112,727	$ 42,870	$ 36,489	$ 7,428	$ (1,149)	$ 325,661
Cost of revenue	111,494	114,658	9,765	29,213	5,473	(1,149)	269,454
Gross profit	15,802	(1,931)	33,105	7,276	1,955	—	56,207
Operating expenses							
Technology and development	28,895	529	15,964	643	1,224	937	48,192
Marketing	25,060	505	14,326	980	10	27	40,908
General and administrative	19,618	523	26,302	6,929	1,053	15,537	69,962
Restructuring and reorganization	—	—	—	—	—	1,053	1,053
Total operating expenses	73,573	1,557	56,592	8,552	2,287	17,554	160,115
Loss from operations	(57,771)	(3,488)	(23,487)	(1,276)	(332)	(17,554)	(103,908)
Interest income, interest expense, income tax expense, gain on extinguishment of convertible senior notes, and other expense, net	—	814	45	(60)	115	42,196	43,110
Net (loss) income	$ (57,771)	$ (2,674)	$ (23,442)	$ (1,336)	$ (217)	$ 24,642	$ (60,798)

	Three Months Ended March 31, 2023						
	Real estate services	Properties	Rentals	Mortgage	Other	Corporate Overhead and Intercompany Eliminations	Total
Net (loss) income	$ (57,771)	$ (2,674)	$ (23,442)	$ (1,336)	$ (217)	$ 24,642	$ (60,798)
Interest income[1]	—	(814)	(80)	(2,490)	(115)	(2,387)	(5,886)
Interest expense[2]	—	—	—	2,615	—	1,921	4,536
Income tax expense	—	—	43	68	—	299	410
Depreciation and amortization	4,432	122	10,152	988	216	1,103	17,013
Stock-based compensation[3]	9,593	248	3,616	1,258	561	3,752	19,028
Restructuring and reorganization[4]	—	—	—	—	—	1,053	1,053
Impairment[5]	—	—	—	—	—	113	113
Gain on extinguishment of convertible senior notes	—	—	—	—	—	(42,270)	(42,270)
Adjusted EBITDA	$ (43,746)	$ (3,118)	$ (9,711)	$ 1,103	$ 445	$ (11,774)	$ (66,801)

(1) Interest income includes $2.5 million of interest income related to originated mortgage loans for the three months ended March 31, 2023.
(2) Interest expense includes $2.6 million of interest expense related to our warehouse credit facilities for the three months ended March 31, 2023.
(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 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 2022, October 2022, and March 2023 workforce reductions.
(5) Impairment consists of an impairment loss due to subleasing one of our operating leases.

	Three Months Ended March 31, 2022						
	Real estate services	Properties	Rentals	Mortgage	Other	Corporate Overhead and Intercompany Eliminations	Total
Revenue	$ 177,487	$ 379,753	$ 38,044	$ 2,917	$ 4,368	$ (5,223)	$ 597,346
Cost of revenue	153,784	358,866	7,193	5,517	4,671	(5,223)	524,808
Gross profit	23,703	20,887	30,851	(2,600)	(303)	—	72,538
Operating expenses							
Technology and development	26,739	4,119	14,282	2,347	1,036	1,117	49,640
Marketing	30,844	1,153	11,042	28	53	222	43,342
General and administrative	22,992	2,825	24,192	1,524	712	6,721	58,966
Restructuring and reorganization	—	—	—	—	—	5,710	5,710
Total operating expenses	80,575	8,097	49,516	3,899	1,801	13,770	157,658
Income (loss) from operations	(56,872)	12,790	(18,665)	(6,499)	(2,104)	(13,770)	(85,120)
Interest income, interest expense, income tax expense, and other expense, net	—	(1,624)	469	1	1	(4,533)	(5,686)
Net (loss) income	$ (56,872)	$ 11,166	$ (18,196)	$ (6,498)	$ (2,103)	$ (18,303)	$ (90,806)

	Three Months Ended March 31, 2022						
	Real estate services	Properties	Rentals	Mortgage	Other	Corporate Overhead and Intercompany Eliminations	Total
Net (loss) income	$ (56,872)	$ 11,166	$ (18,196)	$ (6,498)	$ (2,103)	$ (18,303)	$ (90,806)
Interest income(1)	—	(25)	—	(318)	(1)	(194)	(538)
Interest expense(2)	—	1,649	—	277	—	2,212	4,138
Income tax expense	—	—	(203)	—	—	337	134
Depreciation and amortization	4,018	537	9,356	302	255	345	14,813
Stock-based compensation(3)	10,140	1,537	2,240	601	369	1,901	16,788
Acquisition-related costs(4)	—	—	—	—	—	917	917
Restructuring and reorganization(5)	—	—	—	—	—	5,710	5,710
Adjusted EBITDA	$ (42,714)	$ 14,864	$ (6,803)	$ (5,636)	$ (1,480)	$ (7,075)	$ (48,844)

(1) Interest income includes $0.3 million of interest income related to originated mortgage loans for the three months ended March 31, 2022.
(2) Interest expense includes $0.3 million of interest expense related to our warehouse credit facilities for the three months ended March 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 for our rentals segment due to the restructuring and reorganization activities from our acquisition of Rent.

Liquidity and Capital Resources

As of March 31, 2023, we had cash and cash equivalents of $149.9 million and investments of $150.1 million, which consist primarily of operating cash on deposit with financial institutions, money market instruments, U.S. treasury securities, and agency bonds.

As of March 31, 2023, we had $965.0 million of convertible senior notes outstanding across three issuances, maturing between July 15, 2023 and April 1, 2027. During the three months ended March 31, 2023, we repurchased and retired $152.2 million of our 2025 convertible senior notes pursuant to the repurchase program authorized by our board of directors on October 17, 2022, using $108.3 million in cash. As of March 31, 2023, we have repurchased a total of $294.7 million of our 2025 convertible senior notes, using $191.9 million in cash. As of March 31, 2023, we have $58.1 million remaining under the repurchase program for future repurchases. 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.

As of March 31, 2023, 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.

In 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 2023.

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 on 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 presented:

	Three Months Ended March 31,	
	2023	2022
	(in thousands)	
Net cash provided by operating activities	$ 26,704	$ 79,001
Net cash provided by (used in) investing activities	22	(73,192)
Net cash used in financing activities	(116,558)	(75,359)

Net Cash Provided by Operating Activities

Our operating cash flows result primarily from cash generated by commissions paid to us from our real estate services business, sales of homes from our properties business, and subscription-based product offerings from our rentals 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 $26.7 million for the three months ended March 31, 2023, primarily attributable to changes in assets and liabilities, which increased cash provided by operating activities by $96.0 million. This was offset by a net decrease of $8.5 million from 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, changes in the fair value of mortgage servicing rights, gain on extinguishment of our convertible senior notes, and other non-cash items. The primary source of cash related to changes in our assets and liabilities was a $103.6 million decrease in inventory related to our properties business. This increase was partially offset by our net loss of $60.8 million.

Net cash provided by operating activities was $79.0 million for the three months ended March 31, 2022, primarily attributable to (i) changes in assets and liabilities, which increased cash provided by operating activities by $131.2 million, and (ii) $38.6 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, and other non-cash items. The primary source of cash related to changes in our assets and liabilities was a $112.7 million decrease in inventory related to our properties business. This increase was partially offset by our net loss of $90.8 million.

Net Cash Provided by (Used In) Investing Activities

Our primary investing activities include the purchase, sale, and maturity of investments and purchases of property and equipment, primarily related to capitalized software development expenses and computer equipment and software.

Net cash provided by investing activities was $0.0 million for the three months ended March 31, 2023, primarily attributable to $2.9 million in net maturities of our investments in U.S. government securities, offset nearly in full by $2.9 million in purchases of property and equipment.

Net cash used in investing activities was $73.2 million for the three months ended March 31, 2022, primarily attributable to $65.8 million in net investments in U.S. government securities, and $5.0 million of capitalized software development expenses.

Net Cash Used In 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 our secured revolving credit facility.

Net cash used in financing activities was $116.6 million for the three months ended March 31, 2023, attributable to $108.3 million used in connection with repurchases of our 2025 notes and a $5.2 million decrease in net borrowings under our warehouse credit facilities.

Net cash used in financing activities was $75.4 million for the three months ended March 31, 2022, attributable to a $62.9 million decrease in net borrowings under our secured revolving credit facility and a $10.8 million decrease in net borrowings under our warehouse credit facilities.

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.

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, as well as impairment charges, if applicable.

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 with such asset group. 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.

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. If we qualitatively determine that it is not more likely than not that the fair value is less than its carrying amount, then no additional impairment steps are necessary. 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 similar market participant, while the market approach is based on guideline public company multiples and adjusted for the specific size and risk profile of each reporting units. No goodwill impairment charges were recorded in the first quarter of 2023 or 2022.

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. While no material adjustments were required to our home inventory during the three months ended March 31, 2023, material adjustments may be required in the future due to changing market conditions, natural disasters, or other forces outside of our control.

See Note 5 to our consolidated financial statements for a summary of the wind-down of our RedfinNow operations and our inventory categories and any 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 3. Qualitative and Quantitative Disclosures About Market Risk.

Our primary operations are within the United States and 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 March 31, 2023, we had cash and cash equivalents of $149.9 million and investments of $150.1 million. Our investments are comprised of available-for-sale securities that consist primarily of U.S. treasury securities with maturities of two years or less. We believe that 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 second quarter of 2023, 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 effort 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 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 as of March 31, 2023.

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 4. 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 quarterly 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.

Changes in Internal Control

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 March 31, 2023 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.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings.

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

Item 1A. Risk Factors.

There have not been any material changes from the risk factors included in Item 1A of our annual report for the year ended December 31, 2022. You should carefully consider the risks described in our annual report for the year ended December 31, 2022, together with all other information in this quarterly 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.

Item 6. Exhibits.

The exhibits required to be filed or furnished as part of this Quarterly Report are listed below. 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 Quarterly Report for purposes of Section 18 of the Securities Exchange Act of 1934.

		Incorporated by Reference			
Exhibit Number	**Exhibit Description**	**Form**	**Exhibit**	**Filing Date**	**Filed or Furnished Herewith**
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

SIGNATURES

Pursuant to the requirements 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)

May 4, 2023	/s/ Glenn Kelman
(Date)	Glenn Kelman President and Chief Executive Officer *(Duly Authorized Officer)*
May 4, 2023	/s/ Chris Nielsen
(Date)	Chris Nielsen Chief Financial Officer *(Principal Financial Officer)*

CERTIFICATION OF PRINCIPAL EXECUTIVE OFFICER

PURSUANT TO RULE 13a-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934

I, Glenn Kelman, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Redfin Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: May 4, 2023

/s/ Glenn Kelman
Glenn Kelman
Chief Executive Officer
(Principal Executive Officer)

CERTIFICATION OF PRINCIPAL FINANCIAL OFFICER

PURSUANT TO RULE 13a-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934

I, Chris Nielsen, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Redfin Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

(a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

(b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

(c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

(d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant’s other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant’s auditors and the audit committee of the registrant’s board of directors (or persons performing the equivalent functions):

(a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant’s ability to record, process, summarize and report financial information; and

(b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant’s internal control over financial reporting.

Date: May 4, 2023

/s/ Chris Nielsen

Chris Nielsen
Chief Financial Officer
(Principal Financial Officer)

CERTIFICATION OF CHIEF EXECUTIVE OFFICER

PURSUANT TO 18 U.S.C. SECTION 1350

I, Glenn Kelman, Chief Executive Officer of Redfin Corporation (the “Company”), certify pursuant to 18 U.S.C. Section 1350 that, to my knowledge, the Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2023 (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 4, 2023

/s/ Glenn Kelman

Glenn Kelman
Chief Executive Officer

CERTIFICATION OF CHIEF FINANCIAL OFFICER

PURSUANT TO 18 U.S.C. SECTION 1350

I, Chris Nielsen, Chief Financial Officer of Redfin Corporation (the “Company”), certify pursuant to 18 U.S.C. Section 1350 that, to my knowledge, the Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2023 (the “Report”) fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934, as amended, and the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date: May 4, 2023

/s/ Chris Nielsen

Chris Nielsen
Chief Financial Officer