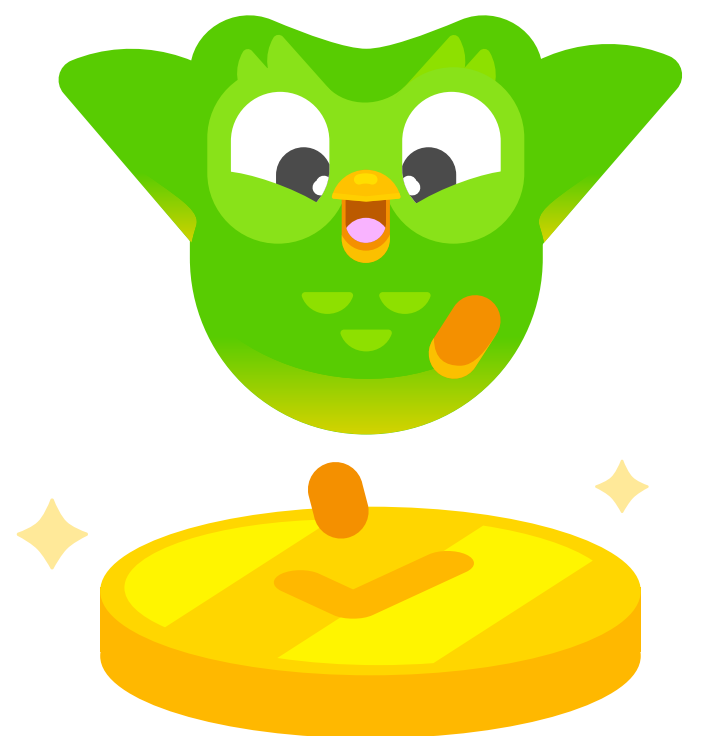


# shareholder letter Q1 2022

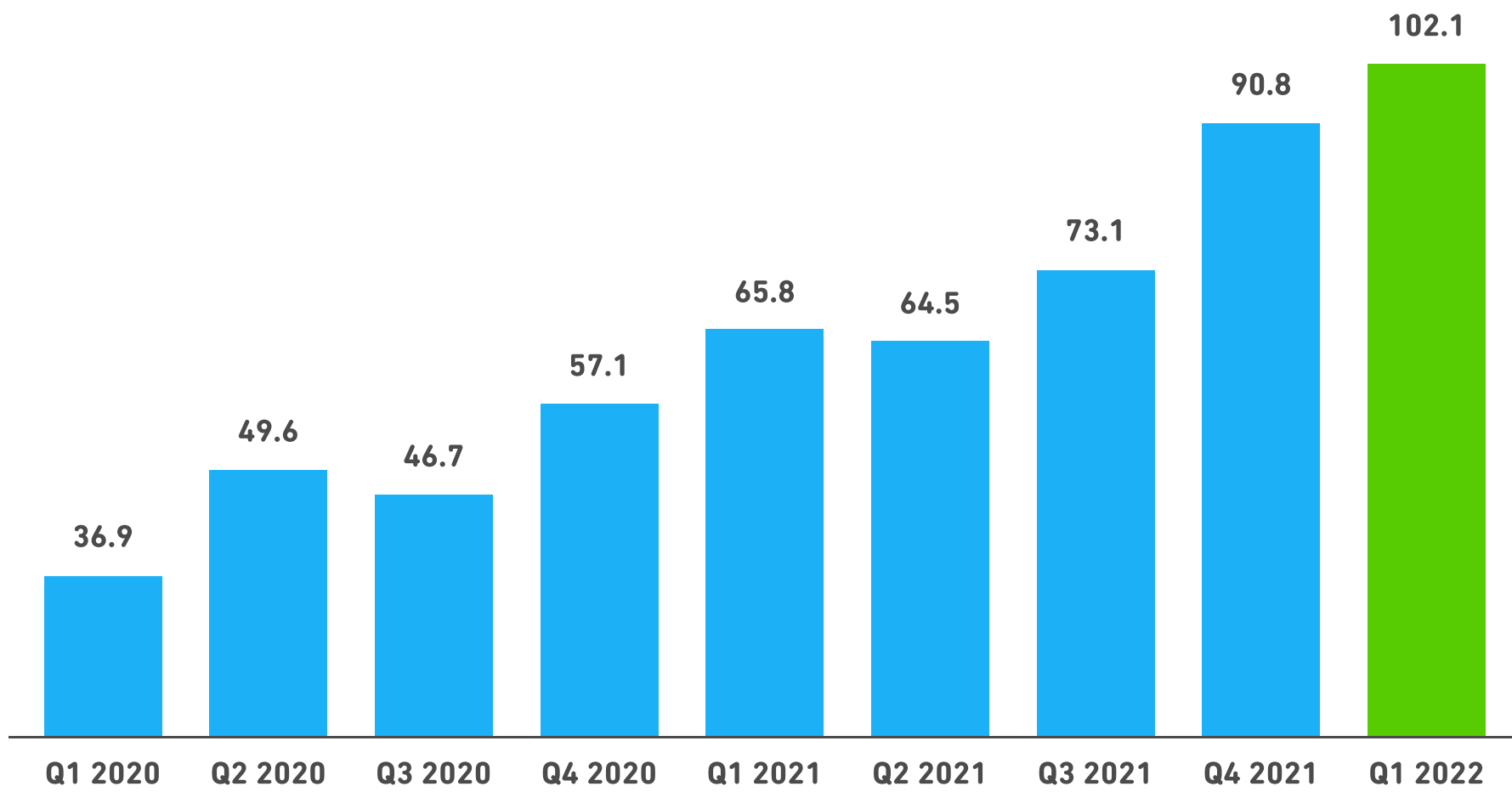
our mission is  
to develop the  
best education  
in the world  
and make it  
universally  
available.



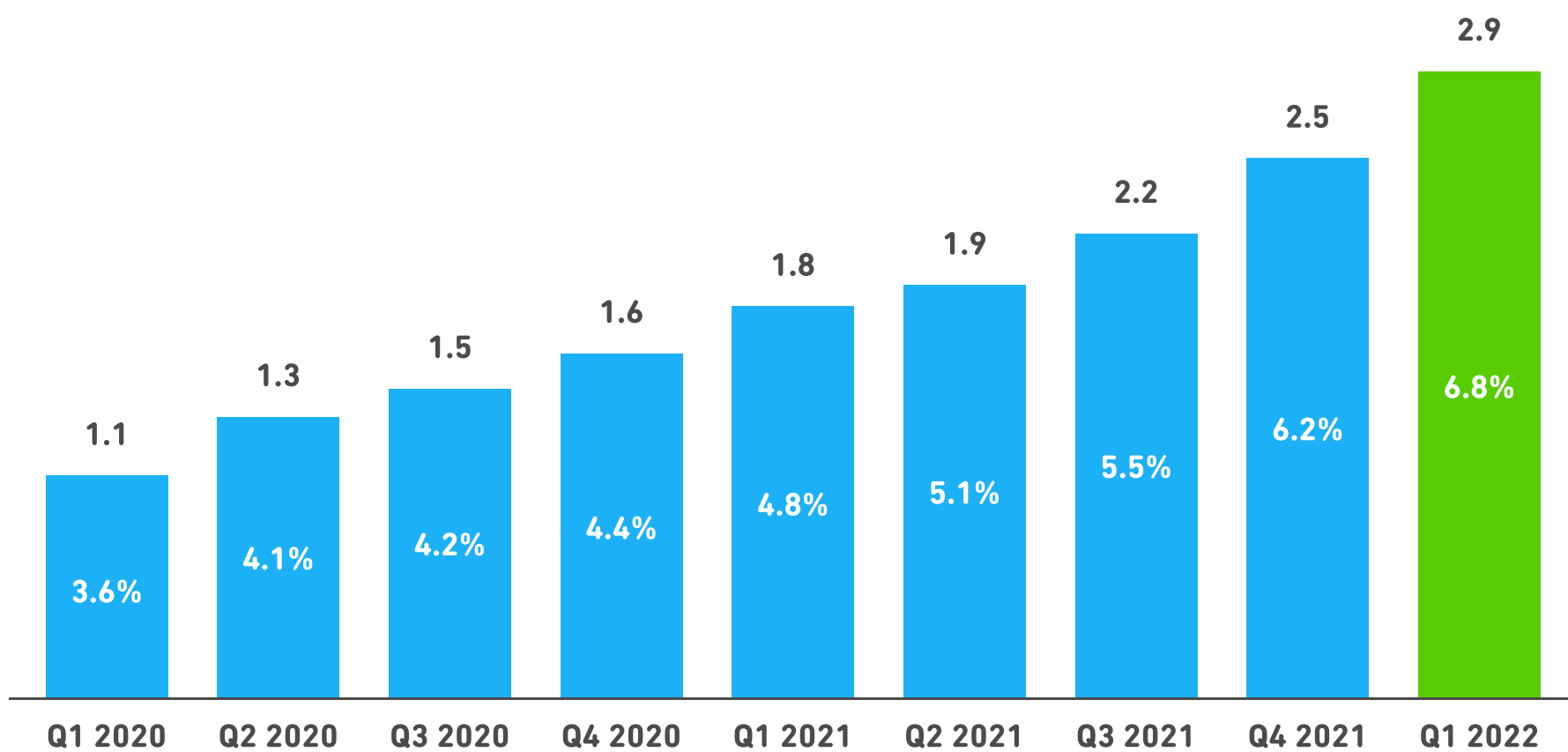
# Q1 highlights

	Q1 2021	Q1 2022
Daily Active Users (DAU)	9.5M	12.5M +31% YoY
Monthly Active Users (MAU)	39.9M	49.2M +23% YoY
Paid Subscribers at period end	1.8M	2.9M +60% YoY
Revenue	\$55.4M	\$81.2M +47% YoY
Total Bookings	\$65.8M	\$102.1M +55% YoY
Net Loss	\$(13.5)M	\$(12.2)M
Adjusted EBITDA	\$0.9M	\$3.9M

### Total Bookings (\$M)



### Paid Subscribers (M) and Subscriber Penetration as % of MAUs



# Dear shareholders,

Q1 2022 was Duolingo's best quarter yet, with bookings and user activity hitting all-time highs. We surpassed our own performance expectations, which led us to raise our 2022 guidance. We are now projecting full-year bookings growth well above 30% and also expect to be profitable for the year on an Adjusted EBITDA basis.

In this letter, I'll discuss the key factors driving our outperformance and also what's ahead for us in 2022, including one of the biggest design changes we've made to the Duolingo language learning app in years. But first, let's start with our results.

## In the first quarter:

- Our MAUs increased 23% to 49.2 million, and our DAUs increased 31% to 12.5 million, compared to the prior year quarter;
- We added a record number of paid subscribers, reaching 2.9 million, which represents 60% year-over-year growth;
- Total bookings grew 55% and revenue grew 47% compared to the prior year quarter.

The New Year's campaign in late December 2021 and January 2022, our biggest promotional event of the year and the only time we discount our subscription, generated more bookings and new subscribers than ever before. This was driven in large part by the many product improvements we made in 2021.

## Delivering on our mission

Our mission is to develop the best education in the world and make it universally available. We believe that wider access to high-quality education can help make the world more equitable. And in times of global crisis, we are often reminded that education is a human right, and that our products can serve those in need.

Since the Russian invasion of Ukraine began, there has been a large increase in people learning Ukrainian on Duolingo (+513% globally from the beginning of the conflict in February to the end of Q1). Some are studying this language as a show of support for the Ukrainian people, but many are doing so to welcome or interact with refugees, especially in Poland and other parts of Europe.

While it's wonderful to know that Duolingo can help in times of crisis, it's not our intention to profit from moments like this. We therefore decided to donate the ad revenue from people studying Ukrainian to [Ukraine relief](#). We are also waiving Duolingo English Test fees for Ukrainian students.

Standing by our mission is part of what makes people want to work for Duolingo.

## What's driving our growth

Our outperformance this quarter can be attributed to higher-than-expected user growth, higher-than-expected conversion to paid subscription, and improved subscriber retention, all of which we believe are **primarily the result of compounding effects from thousands of A/B tests to improve our product**. For example, at quarter end, 63% of our DAUs had a usage “**streak**” of 7 consecutive days or more, which is up 16% from the previous year quarter. Thanks to our continuous product improvements, we have a greater number of learners maintaining their daily habit, which is key to learning a new language.

Our accelerating user growth can also be partially attributed to a flywheel effect across social media platforms that has helped us reach new audiences and resurrect inactive learners. In past quarters, we've discussed our ongoing initiative to make the Duolingo app more social, with features that allow learners to give Kudos to their friends, as well as share their accomplishments on social media. (Our social features have even helped our users **find love!**) The number of shares per day from Duolingo to outside social media networks has increased 140% since the beginning of 2022.

On the marketing side, Duolingo's TikTok account has generated hundreds of millions of views over the last year with hardly any media spending. We also continue to see user growth from our successful paid influencer campaigns, notably in Southeast Asia, Mexico and Brazil.

While we're proud of this strong growth, we're just getting started. Only 6.8% of our MAUs are paying subscribers (up from 4.8% at the end of the prior year quarter), and we believe that we have a significant opportunity to not only increase subscribers as we grow, but to also expand the language learning market worldwide.

## What's coming in 2022

Duolingo is driven by innovation. We've pioneered many of the design and gamification elements that make mobile learning fun and effective, and we're always striving to improve how engaging our products are and how well we teach.

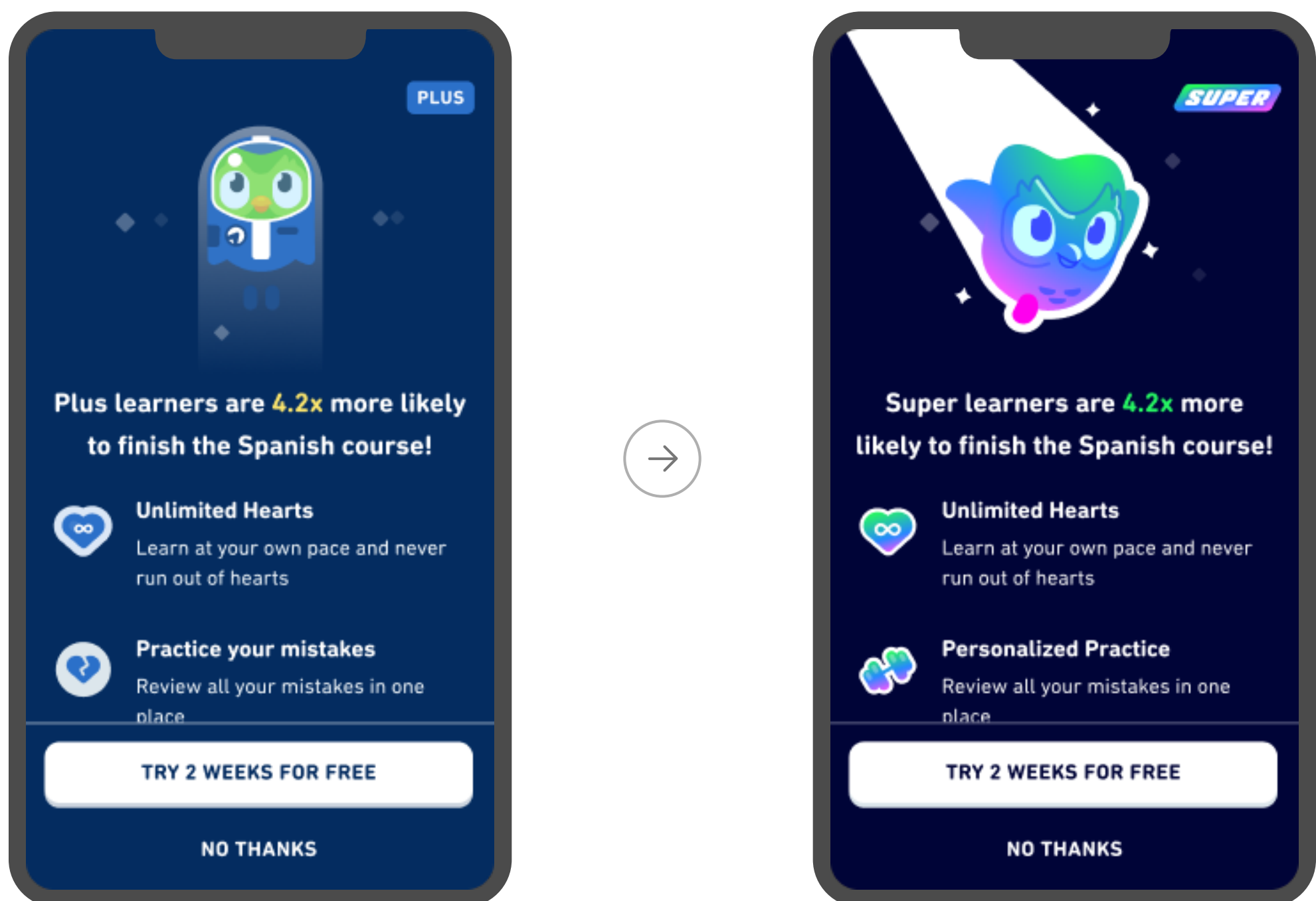
Below, I'd like to highlight two major design changes coming soon to the Duolingo app.

## Duolingo Plus is now Super Duolingo!

Duolingo Plus was the name of our premium subscription offering. From now on, the premium version of Duolingo is being rebranded as Super Duolingo, with a fresh new design. All Duolingo Plus subscribers will automatically become Super Duolingo subscribers.

Super Duolingo has the same features as Duolingo Plus, but in a sleeker, more colorful package. We believe the new branding will do a better job of conveying the value of the subscription, which is being able to learn faster with an ad-free experience, unlimited hearts, and other premium features like Practice Hub. Super Duolingo is also more aligned with Duolingo's overall gamified learning approach, and part of our long-term strategy to build an iconic global brand and grow subscribers.

Here's what it looks like:



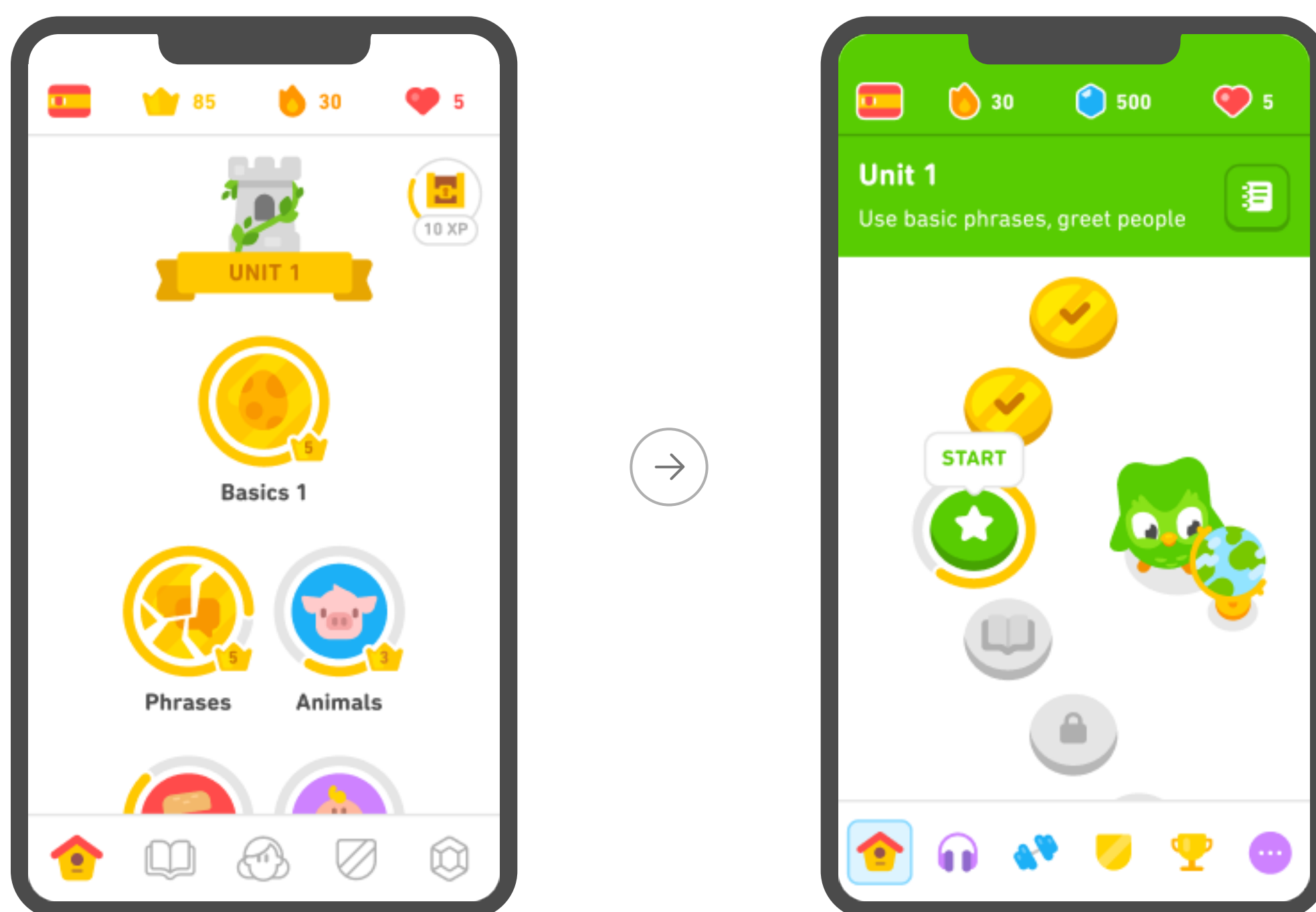
Super Duolingo will be fully rolled out to all learners by the end of Q3 2022.

## The new Duolingo home screen

As we mentioned last quarter, we're completely redesigning the Duolingo app's home screen. The current home screen, which features a learning "tree," will be replaced by a new, simplified "path" that more seamlessly guides learners through their chosen courses.

The lesson content is the same, but now lessons will be ordered so that users will learn a mix of concepts. We've [previously recommended](#) this exact learning method, so we're making it the default!

Once this design change is launched, any learner who takes a given course will cover material in the same order as others in that course. Previously, our level-based system meant that two learners in the same part of a course could have very different experiences, depending on which lessons they chose to complete first.



The new design will have a number of benefits for Duolingo and our learners. In addition to simplifying the experience for new users who were sometimes confused about how to best make progress on Duolingo, it will help us achieve several of our strategic growth initiatives:

- **Teach Better.** Simplifying the path through Duolingo's courses allows us to better assess learning and improve how well we teach. New Guidebooks along the path provide more explicit instruction on grammar in our flagship courses, and immersive features like Stories, which teach listening and reading comprehension, will be easier to find.



- **Grow Users.** We believe the new path will drive more engagement and give lapsed learners a reason to return to their language learning. We will also feature our **cast of characters** and animations along the path to add delight to the experience.
- **Grow Subscribers.** Ultimately, if we continue to improve how well we teach, and our learners are more engaged, this will translate into more paid subscriptions.

As of today, we are currently experimenting with the new path on a subset of our new users and have seen encouraging results. We plan to launch the new Duolingo experience to all learners in the coming months, so stay tuned for updates.

## The Duolingo English Test

The Duolingo English Test (DET) continues to grow and hit an all-time high for daily test volume in Q1, seeing 60% growth in revenue compared to the prior year quarter. The DET is now used for international admissions by more than 3,600 higher education programs worldwide.

We believe that the future of standardized assessment is online, and our ongoing innovation continues to make us a pioneer in the field. We recently published new **research** supporting our test security framework in a peer-reviewed journal and introduced an innovative **new question type** called Interactive Reading to complement our assessment of reading proficiency.

The DET is an excellent example of how Duolingo takes the long view by investing in research and development. We expect to see more educational and government programs adopting the DET in 2022 and beyond, which will allow us to continue taking a larger share of global test volume and eventually become the language proficiency standard.

## In closing

2022 is off to a fantastic start for our business. We know what is working for us, and we know what we need to do to continue to grow and improve our products.

I would like to thank our team for their hard work and their commitment to striving for excellence with everything we do. And I'd like to thank you, our shareholders, for your continued support.

Happy learning,



A black ink handwritten signature, appearing to read 'Luis von Ahn', written in a cursive style.

**Luis von Ahn**  
CEO and Co-Founder

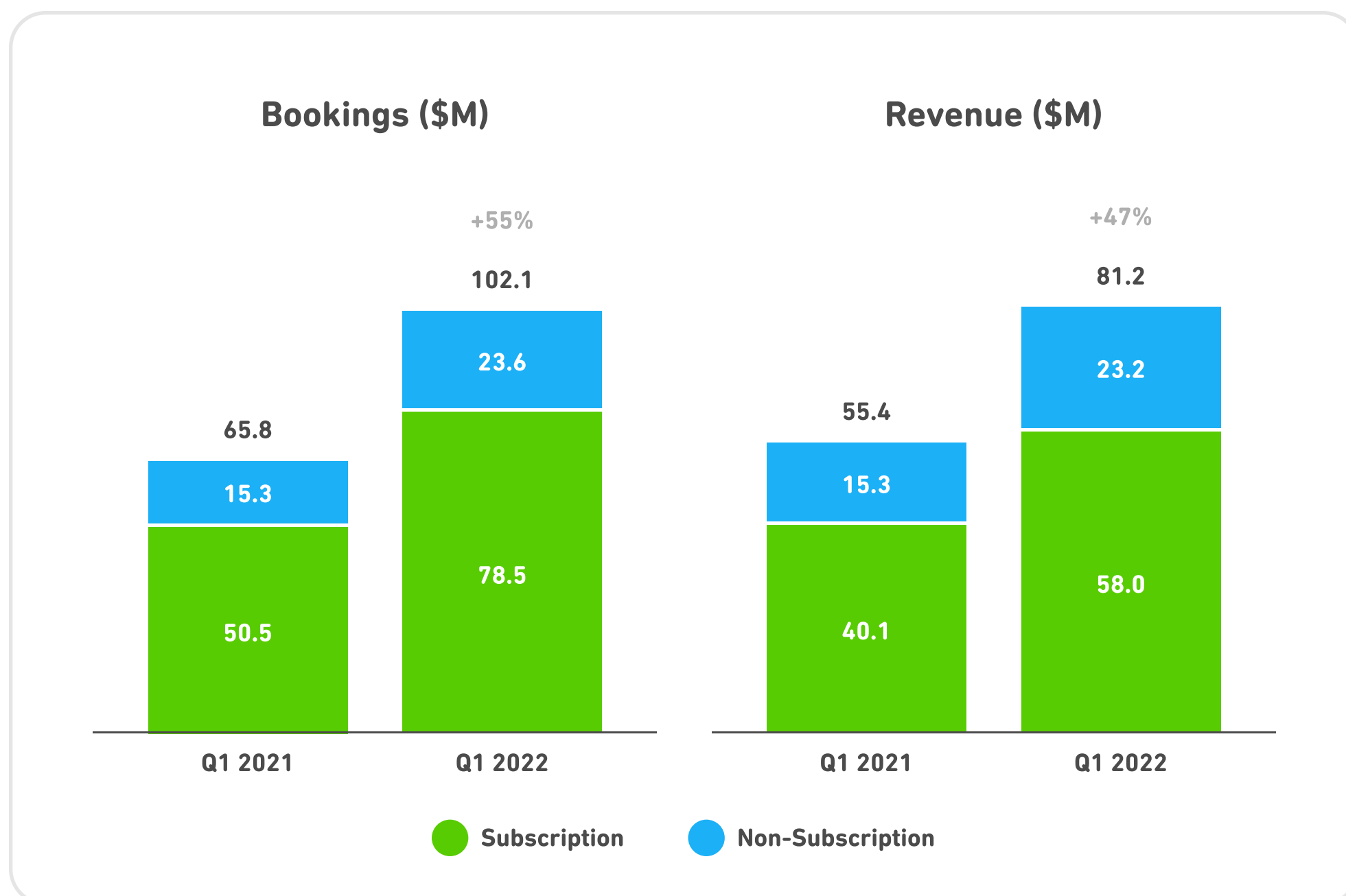
# financial performance and outlook

## Summary of financial and operating metrics

(in millions)	Q1 2021	Q1 2022	YoY
<b>Operating Metrics</b>			
Monthly active users (MAUs)	39.9	49.2	23%
Daily active users (DAUs)	9.5	12.5	31%
Paid subscribers (period end)	1.8	2.9	60%
Total bookings	\$65.8	\$102.1	55%
Subscription bookings	\$50.5	\$78.5	56%
<b>GAAP Financial Metrics</b>			
Revenues	\$55.4	\$81.2	47%
Gross profit	\$40.3	\$59.7	48%
Gross margin (%)	72.9%	73.5%	67 bps
Net income (loss)	(13.5)	(12.2)	—
Net cash from operating activities	\$5.1	\$20.6	—
<b>Non-GAAP Financial Metrics</b>			
Adjusted EBITDA	\$0.9	\$3.9	—
Free cash flow	\$3.8	\$18.9	—

Please refer to the Appendix at the end of this letter for a reconciliation of these non-GAAP financial measures to the most directly comparable GAAP financial measure.

Amounts reported in millions are rounded based on the amounts in thousands. As a result, the sum of the components reported in millions may not equal the total amount reported in millions due to rounding. In addition, percentages presented are calculated from the underlying numbers in thousands and may not add to their respective totals due to rounding.



In the first quarter, total bookings reached an all-time high of \$102.1 million, growing 55% year-over-year. Subscription bookings grew 56% year-over-year to a record \$78.5 million, driven by the growth in first-time and renewing paid subscribers, and the continued shift to annual plan subscriptions.

In the first quarter, revenues were \$81.2 million, growing 47% year over year, driven by a 45% increase in subscription revenue. This is due to an increase in the average number of paid subscribers during the period, which is the result of continued product improvements that drove stronger conversion and retention.

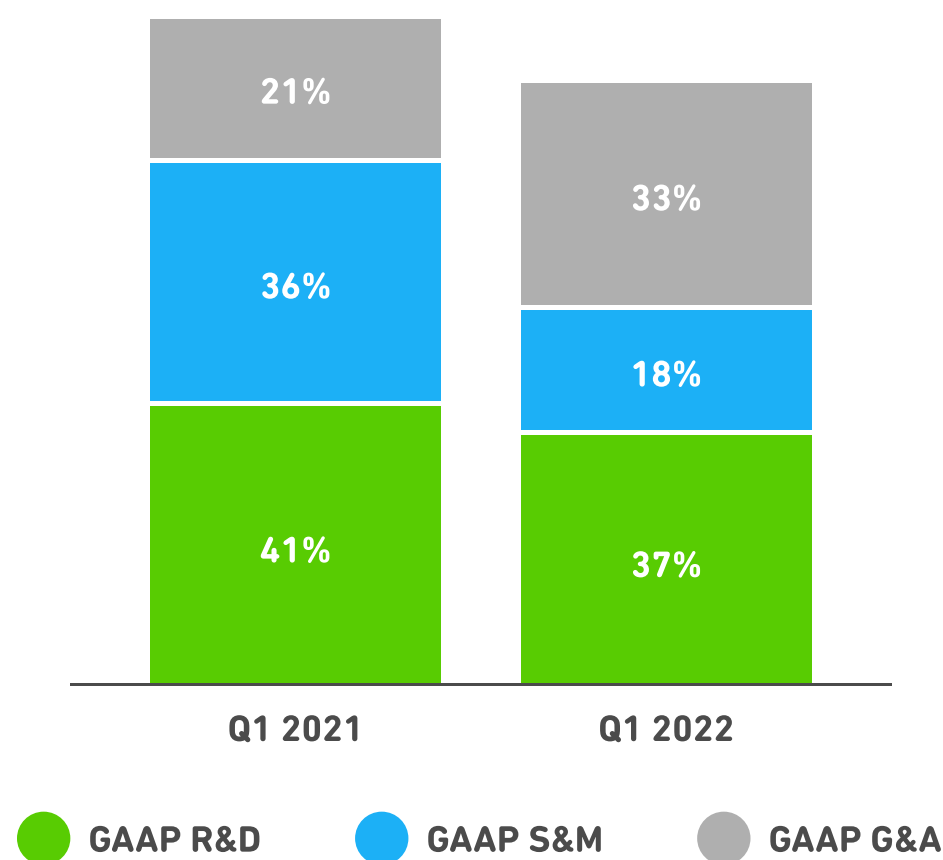
The following table provides the changes in revenues by product type:

<b>(in millions)</b>	<b>Q1 2021</b>	<b>Q1 2022</b>	<b>Change</b>	<b>% Change</b>
Subscription	\$40.1	\$58.0	\$18.0	45%
Advertising	9.3	11.7	2.5	27%
Duolingo English Test	5.0	8.1	3.0	60%
Other *	1.0	3.4	2.4	240%
<b>Total revenues</b>	<b>\$55.4</b>	<b>\$81.2</b>	<b>\$25.9</b>	<b>47%</b>

Gross margin increased nearly 70 basis points to 73.5% in the first quarter, primarily driven by higher subscription margins due to improved retention and lower app store fees charged by Google, and partially offset by a decrease in Duolingo English Test margins.

\*Other primarily includes in-app sales of virtual goods.

## GAAP Operating Expenses (% of Revenue)



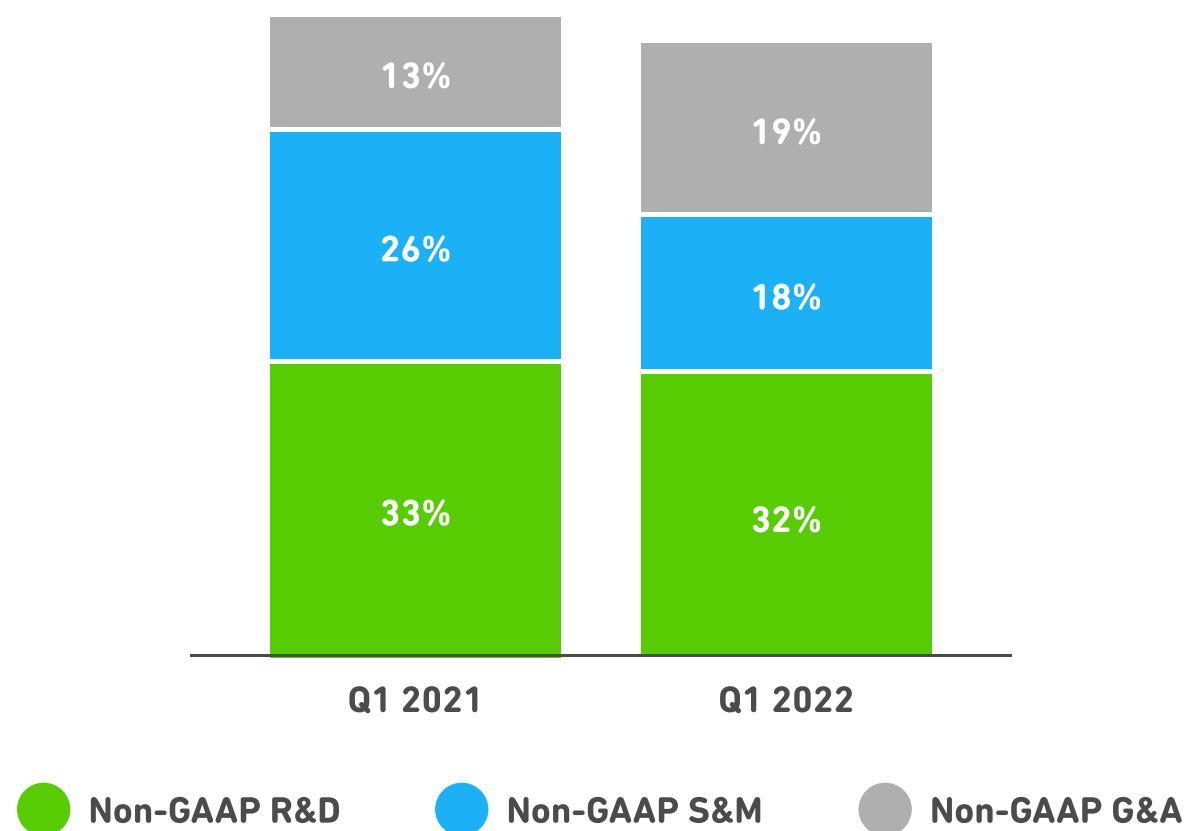
We report three categories of operating expenses: Research and Development (R&D), Sales and Marketing (S&M), and General and Administrative (G&A).

GAAP R&D expense decreased from 41% to 37% of revenue during the first quarter as compared to the prior year quarter. In absolute dollar terms, GAAP R&D increased by \$7.3 million or 32%, to \$29.8 million, primarily due to our growth in headcount. We continue to invest heavily in R&D in order to drive user engagement and customer satisfaction through continuous product improvements, which we believe drive organic growth in MAUs and DAUs. These product improvements also enable us to convert more users to paid subscribers and retain them better. A larger base of free users also contributes to greater advertising opportunities within the app.

GAAP S&M expense decreased from 36% to 18% of revenue in the first quarter as compared to the prior year quarter. In absolute dollar terms, GAAP S&M expenses decreased \$4.8 million or 24% to \$14.9 million. This was primarily due to the one-time awards of \$5.1 million granted to Duolingo contributors under our non-employee volunteer program in the year-ago quarter. We've used our learnings from past campaigns to drive more efficient spending on performance marketing (i.e., growing quality DAUs at a lower cost) and on brand marketing in priority markets to drive awareness.

GAAP G&A expense increased from 21% to 33% of revenue during the first quarter compared to the prior year quarter. In absolute dollar terms, GAAP G&A expense increased \$15.4 million or 134% to \$26.9 million, driven primarily by stock-based compensation related to founder equity awards, higher headcount and facilities expenses, and additional costs associated with becoming a public company.

## Non-GAAP Operating Expenses (% of Revenue)



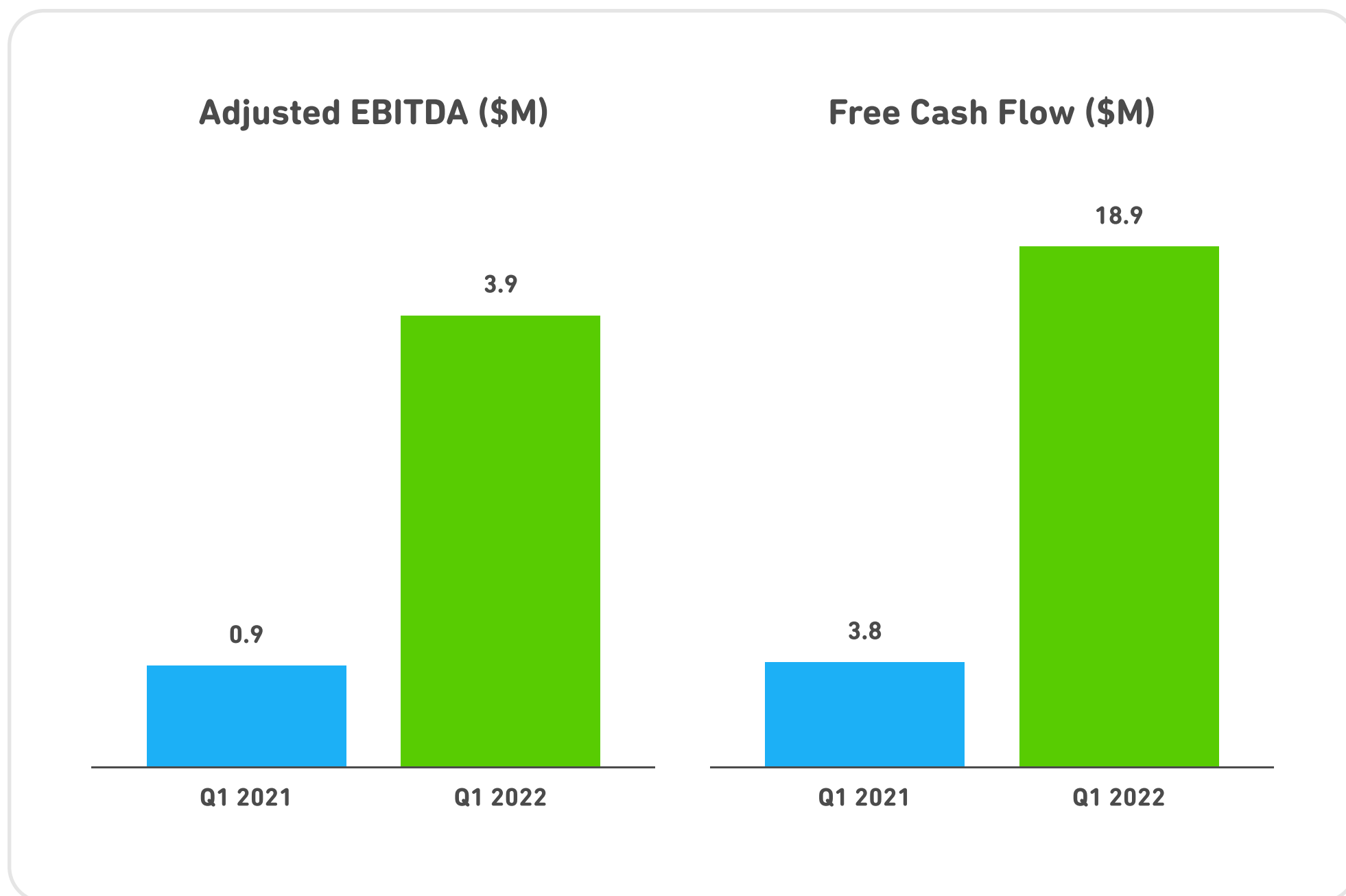
Non-GAAP operating expenses represent GAAP expenses adjusted for depreciation, amortization, stock-based compensation, and public company readiness costs, as well as other expenses. Please refer to the Appendix at the end of this letter for a reconciliation of these non-GAAP financial measures to the most directly comparable GAAP financial measure.

For reference, in Q1 2022, we recognized \$14.6 million in stock-based compensation, a majority of which was related to the founder awards.

Non-GAAP R&D expenses decreased from 33% to 32% of revenue year-over-year. The absolute dollar increase of \$7.7 million, 42% year-over-year growth, was primarily driven by an increase in headcount during the period.

Non-GAAP S&M declined from 26% to 18% of revenue year-over-year. In absolute dollar terms, non-GAAP S&M expenses remained approximately flat compared to the prior year quarter. As described above, we are driving more efficient marketing spending.

Non-GAAP G&A increased from 13% to 19% of revenue year-over-year. In absolute dollar terms, non-GAAP G&A increased \$8.2 million, primarily due to an increase in facilities expense as we expanded our Pittsburgh headquarters. We also had higher employee-related expenses due to increased headcount and our return to office, and costs related to being a public company.



Adjusted EBITDA increased by \$3.0 million to \$3.9 million in the first quarter as a result of revenue growth and improved gross margin, as well as overall Non-GAAP operating expense leverage. **As we have since our founding, we continue to manage the business with cost and capital discipline.**

In addition, in Q1 we generated \$18.9 million in free cash flow. As a reminder, we define free cash flow as net cash provided by operating activities, reduced by purchases of property and equipment and capitalized software development costs, and increased by IPO and public company readiness costs, taxes paid related to stock-based compensation equity awards and other costs, as we believe they are not indicative of future liquidity.

The \$18.9 million in free cash flow represents an increase of \$15.1 million over the prior year quarter. The increase was driven by the increase in net cash provided by operating activities.

## 2Q22 and FY22 guidance

Duolingo is providing the following guidance for the second quarter and the full year ending December 31, 2022.

<b>(in millions)</b>	<b>Q2 2022</b>	<b>FY 2022</b>
<b>Bookings</b>	<b>\$86 - 89</b>	<b>\$388 - 397</b>
YoY Bookings Growth	33% - 38%	32% - 35%
<b>Revenues</b>	<b>\$84 - 87</b>	<b>\$349 - 358</b>
YoY Revenue Growth	43% - 48%	39% - 43%
<b>Adjusted EBITDA</b>	<b>\$(4) - (1)</b>	<b>\$0 - 3</b>

With regards to the Non-GAAP Adjusted EBITDA outlook provided above, a reconciliation to GAAP net loss has not been provided as the quantification of certain items included in the calculation of GAAP net loss cannot be calculated or predicted at this time without unreasonable efforts. For example, the non-GAAP adjustment for stock-based compensation expense requires additional inputs such as number of shares granted and market price that are not currently ascertainable, and the non-GAAP adjustment for certain legal, tax and regulatory reserves and expenses depends on the timing and magnitude of these expenses and cannot be accurately forecasted. For the same reasons, we are unable to address the probable significance of the unavailable information, which could have a potentially unpredictable, and potentially significant, impact on our future GAAP financial results.

## Conference Call

Duolingo will host a conference call to discuss its quarterly results today, May 12, 2022 at 5:30 p.m. ET. The live webcast of Duolingo's earnings conference call will be publicly available and can be accessed at [investors.duolingo.com](https://investors.duolingo.com). A replay will be available on the Investor Relations website one hour following completion of the call and will remain available for a period of one year.

## About Duolingo

Duolingo is the leading mobile learning platform globally. With over 500 million downloads and over 45 million monthly active users, its flagship app has organically become the world's most popular way to learn languages and the top grossing app in the Education category on both Google Play and the Apple App Store. With technology at the core of everything it does, Duolingo has consistently invested to provide learners a fun, engaging, and effective learning experience while remaining committed to its mission to develop the best education in the world and make it universally available.



## Definitions

**Subscription Bookings and Total Bookings.** Subscription bookings represent the amounts we receive from a purchase of a subscription to Duolingo Plus. Total bookings represent the amounts we receive from a purchase of a subscription to Duolingo Plus, a registration for a Duolingo English Test, an in-app purchase for a virtual good, and from advertising networks for advertisements served to our users. We believe bookings provide an indication of trends in our operating results, including cash flows, that are not necessarily reflected in our revenues because we recognize subscription revenues ratably over the lifetime of a subscription, which is generally from one to twelve months.

**Monthly Active Users (MAUs).** MAUs are defined as unique Duolingo users who engage with our mobile language learning application or the language learning section of our website each month. MAUs are reported for a measurement period by taking the average of the MAUs for each calendar month in that measurement period. MAUs are a measure of the size of our global active user community on Duolingo.

**Daily Active Users (DAUs).** DAUs are defined as unique Duolingo users who engage with our mobile language learning application or the language learning section of our website each calendar day. DAUs are reported for a measurement period by taking the average of the DAUs for each day in that measurement period. DAUs are a measure of the consistent engagement of our global user community on Duolingo.

Throughout this document, the measurement period for MAUs and DAUs is the three months ended March 31, 2022 and the same period in the prior year where applicable, and the analysis of results is based on those periods.

**Paid Subscribers.** Paid subscribers are defined as users who pay for access to Duolingo Plus, including users who pay for a family plan, and had an active subscription as of the end of the measurement period. Each unique user account is treated as a single paid subscriber regardless of whether such user purchases multiple subscriptions, and the count of paid subscribers does not include users who are currently on a free trial, or who are non-paying members of a family plan.

## Non-GAAP Financial Measures

We use certain non-GAAP financial measures to supplement our consolidated financial statements, which are presented in accordance with GAAP. These non-GAAP financial measures include Adjusted EBITDA, free cash flow and non-GAAP operating expenses, including R&D, S&M, and G&A expenses. Please refer to the definitions and reconciliations at the end of this shareholder letter. We use these non-GAAP financial measures for financial and operational decision-making and as a means to evaluate period-to-period comparisons. By excluding certain items that may not be indicative of our recurring core operating results, we believe that Adjusted EBITDA and free cash flow provide meaningful supplemental information regarding our performance. Accordingly, we believe these non-GAAP financial measures are useful to investors and others because they allow for additional information with respect to financial measures used by management in its financial and operational decision-making and they may be used by our institutional investors and the analyst community to help them analyze the health of our business. However, there are a number of limitations related to the use of non-GAAP financial measures, and these non-GAAP measures should be considered in addition to, not as a substitute for or in isolation from, our financial results prepared in accordance with GAAP. Other companies, including companies in our industry, may calculate these non-GAAP financial measures differently or not at all, which reduces their usefulness as comparative measures.

## Forward-Looking Statements

This Shareholder Letter contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. We intend such forward-looking statements to be covered by the safe harbor provisions for forward-looking statements contained in Section 27A of the Securities Act of 1933, as amended (the "Securities Act") and Section 21E of the Securities Exchange Act of 1934, as amended (the "Exchange Act"). All statements other than statements of historical facts contained in this Shareholder Letter, including without limitation, statements regarding our business model and strategic plans and our financial outlook for the second quarter and fiscal year 2022 are forward-looking statements. Without limiting the generality of the foregoing, you can identify forward-looking statements because they contain words such as "may," "will," "shall," "should," "expects," "plans," "anticipates," "could," "intends," "target," "projects," "contemplates," "believes," "estimates," "predicts," "potential," "goal," "objective," "seeks," or "continue" or the negative of these words or other similar terms or expressions that concern our expectations, strategy, plans, or intentions. Such forward-looking statements are subject to a number of known and unknown risks, uncertainties and assumptions, and actual results may differ materially from those expressed or implied in the forward-looking statements due to various factors, including, but not limited to: our ability to retain and grow our users and sustain their engagement with our products; competition in the online language learning industry; our limited operating history; our ability to achieve profitability; our ability to manage our growth and operate at such scale; the success of our investments; our reliance on third-party platforms to store and distribute our products and collect revenue; our reliance on third-party hosting and cloud computing providers; our ability to compete for advertisements; acceptance by educational organizations of technology-based education; our ability to access, collect, and use personal data about our users and payers, and to comply with applicable data privacy laws; potential intellectual property-related litigation and proceedings, our ability adequately obtain, protect and maintain our intellectual property rights; and the other important factors more fully detailed under the caption "Risk Factors" in our Annual Report on Form 10-K for the fiscal year ended December 31, 2021, as any such factors may be updated from time to time in our other filings with the SEC, which are accessible on the SEC's website at [www.sec.gov](http://www.sec.gov) and the Company's Investor Relations website at <https://investors.duolingo.com>. All forward-looking statements speak only as of the date of this Shareholder Letter and, except as required by applicable law, we have no obligation to update or revise any forward-looking statements contained herein, whether as a result of any new information, future events, changed circumstances or otherwise.

## Website Information

We routinely post important information for investors on the Investor Relations section of our website, <https://investors.duolingo.com> and also from time to time may use social media channels, including our Twitter account ([twitter.com/duolingo](https://twitter.com/duolingo)) and our LinkedIn account ([linkedin.com/company/duolingo/](https://linkedin.com/company/duolingo/)), as an additional means of disclosing public information to investors, the media and others interested in us. It is possible that certain information we post on our website and on social media could be deemed to be material information, and we encourage investors, the media and others interested in us to review the business and financial information we post on our website and on the social media channels identified above, in addition to following our press releases, SEC filings, public conference calls, presentations and webcasts. The information contained on, or that may be accessed through, our website and our social media channels is not incorporated by reference into, and is not a part of, this document.

**DUOLINGO INC. AND SUBSIDIARIES**  
**UNAUDITED CONDENSED CONSOLIDATED BALANCE SHEETS**

<b>(in thousands)</b>	<b>December 31, 2021</b>	<b>March 31, 2022</b>
Cash and cash equivalents	\$553,922	\$577,331
Accounts receivable	33,163	28,573
Deferred cost of revenues	24,219	27,780
Prepaid expenses and other current assets	7,967	6,951
Non-current assets	42,040	43,876
<b>Total Assets</b>	<b>\$661,311</b>	<b>\$684,511</b>
Accounts payable	\$7,818	\$2,018
Deferred revenues	98,267	119,101
Other current liabilities	13,046	14,656
Long-term liabilities	29,124	28,022
<b>Total liabilities</b>	<b>148,255</b>	<b>163,797</b>
Total stockholders' equity (deficit)	513,056	520,714
<b>Total liabilities, convertible preferred stock and stockholders' equity (deficit)</b>	<b>\$661,311</b>	<b>\$684,511</b>

**DUOLINGO INC. AND SUBSIDIARIES**  
**UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF NET LOSS AND COMPREHENSIVE LOSS**

<b>(in thousands)</b>	<b>Three Months Ended March 31,</b>	
	<b>2021</b>	<b>2022</b>
Revenues	\$55,360	\$81,220
Cost of revenues	15,019	21,490
Gross profit	40,341	59,730
Operating expenses:		
Research and development	22,529	29,781
Sales and marketing	19,773	14,940
General and administrative	11,453	26,856
Total operating expenses	53,755	71,577
Loss from operations	(13,414)	(11,847)
Other expense, net of other income	(41)	(279)
Loss before provision for income taxes	(13,455)	(12,126)
Provision for income taxes	17	28
<b>Net loss and comprehensive loss</b>	<b>\$(13,472)</b>	<b>\$(12,154)</b>

**DUOLINGO INC. AND SUBSIDIARIES**  
**UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS**

<b>(in thousands)</b>	<b>Three Months Ended March 31,</b>	
	<b>2021</b>	<b>2022</b>
Net loss	\$(13,472)	\$(12,154)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation and amortization	600	774
Stock-based compensation	2,551	14,586
Changes in assets and liabilities	15,444	17,421
Net cash provided by operating activities	5,123	20,627
Net cash used for investing activities	(1,778)	(2,444)
Net cash provided by (used by) financing activities	(6,376)	5,226
Net increase in cash and cash equivalents	(3,031)	23,409
Cash and cash equivalents - Beginning of period	120,490	553,922
<b>Cash and cash equivalents - End of period</b>	<b>\$117,459</b>	<b>\$577,331</b>

# appendix

## Reconciliation: Adjusted EBITDA

Adjusted EBITDA is defined as net loss excluding interest (income) expense, net, income tax provision, depreciation and amortization, Initial Public Offering (“IPO”) and public company readiness costs, stock-based compensation expenses related to equity awards, tender offer-related costs and other expenses. Adjusted EBITDA is used by management to evaluate the financial performance of our business and we present Adjusted EBITDA because we believe that it is helpful in highlighting trends in our operating results and that it is frequently used by analysts, investors and other interested parties to evaluate companies in our industry. The following table presents a reconciliation of our net loss, the most directly comparable financial measure presented in accordance with GAAP, to Adjusted EBITDA.

(in thousands)	Q1 2021	Q1 2022
<b>Net Income (Loss)</b>	<b>\$(13,472)</b>	<b>\$(12,154)</b>
Less: Interest Income	(2)	(33)
Plus: Provision for Income Taxes	17	28
Plus: Depreciation & Amortization	600	774
Plus: IPO and Public Company Readiness Costs	480	231
Plus: Stock-based Compensation (1)	2,551	15,100
Plus: Tender Offer-Related Costs	5,599	-
Plus: Other expenses	5,098	-
<b>Adjusted EBITDA</b>	<b>\$871</b>	<b>\$3,946</b>

(1) In addition to stock-compensation expense of \$14,586 for the three months ended March 31, 2022, this includes costs incurred related to taxes paid on equity transactions of \$514.

## Reconciliation: Free Cash Flow

Free cash flow represents net cash provided by operating activities, reduced by purchases of property and equipment, capitalized software development costs, and increased by IPO and public company readiness costs, taxes paid related to stock-based compensation equity awards and other costs, as we believe they are not indicative of future liquidity. We believe that free cash flow is a measure of liquidity that provides useful information to our management, investors and others in understanding and evaluating the strength of our liquidity and future ability to generate cash that can be used for strategic opportunities or investing in our business. The following table presents a reconciliation of net cash provided by operating activities, the most directly comparable financial measure calculated in accordance with GAAP, to free cash flow.

(in thousands)	Q1 2021	Q1 2022
<b>Net cash provided by operating activities</b>	<b>\$5,123</b>	<b>\$20,627</b>
Less: Capitalized Software Development Costs	(939)	(1,117)
Less: Purchases of Property and Equipment	(839)	(1,327)
Plus: IPO and Public Company Readiness Costs	480	231
Plus: Taxes Paid Related to Stock-Based Compensation on Equity Awards	-	514
<b>Free Cash Flow</b>	<b>\$3,825</b>	<b>\$18,928</b>

## Reconciliation: GAAP to Non-GAAP Operating Expense

(in thousands)	Q1 2021	Q1 2022
<b>Total GAAP Operating Expense</b>	<b>\$53,755</b>	<b>\$71,577</b>
Less: Depreciation & Amortization	(600)	(774)
Less: Stock-based Compensation	(2,549)	(14,580)
Less: Other Adjustments	(11,167)	(745)
<b>Non-GAAP Operating Expense</b>	<b>\$39,439</b>	<b>\$55,478</b>

## Reconciliation: GAAP to Non-GAAP R&D Expense

(in thousands)	Q1 2021	Q1 2022
<b>Total GAAP R&amp;D Expense</b>	<b>\$22,529</b>	<b>\$29,781</b>
Less: Depreciation & Amortization	-	(134)
Less: Stock-based Compensation	(1,111)	(3,632)
Less: Other Adjustments	(3,302)	(226)
<b>Non-GAAP R&amp;D Expense</b>	<b>\$18,116</b>	<b>\$25,789</b>

## Reconciliation: GAAP to Non-GAAP S&M Expense

(in thousands)	Q1 2021	Q1 2022
<b>Total GAAP S&amp;M Expense</b>	<b>\$19,773</b>	<b>\$14,940</b>
Less: Depreciation & Amortization	(148)	(228)
Less: Stock-based Compensation	(68)	(348)
Less: Other Adjustments	(5,351)	(15)
<b>Non-GAAP S&amp;M Expense</b>	<b>\$14,206</b>	<b>\$14,349</b>

## Reconciliation: GAAP to Non-GAAP G&A Expense

(in thousands)	Q1 2021	Q1 2022
<b>Total GAAP G&amp;A Expense</b>	<b>\$11,453</b>	<b>\$26,856</b>
Less: Depreciation & Amortization	(452)	(412)
Less: Stock-based Compensation	(1,370)	(10,600)
Less: Other Adjustments	(2,514)	(504)
<b>Non-GAAP G&amp;A Expense</b>	<b>\$7,117</b>	<b>\$15,340</b>

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