docusign

Q2 FY25 Investor Prepared Remarks

September 5, 2024

Allan Thygesen, CEO

Blake Grayson, CFO

These prepared remarks should only be viewed together with this quarter's earnings webcast and press release. The webcast includes these prepared remarks and a question and answer session. To access the webcast of the executive comments and Q&A session, please visit the IR section of our website at investor.docusign.com. A reconciliation of GAAP to non-GAAP financial measures is provided in the tables at the end of this document.

Allan Thygesen
CEO



Introduction

Docusign drove another quarter of improved stability and greater efficiency while introducing the new IAM platform that we believe will be the foundation for future growth. During Q2, revenue was $736 million, up 7% year-over-year for the second consecutive quarter. Dollar net retention was consistent versus Q1 at 99%. Continued improvements in customer usage and utilization further supported stability, which Blake will describe in more detail.

Non-GAAP operating margins increased to 32%, an all-time high and significant improvement vs. Q2 fiscal '24 at 25%. Free cash flow generation remained strong, approaching $200 million, resulting in a 27% yield for the quarter. This efficiency allowed us to opportunistically allocate capital by repurchasing $200 million worth of shares during Q2.

Our strong results reflect continued progress across our three strategic pillars: accelerating product innovation, evolving omnichannel go-to-market capabilities, and improving operating efficiency.

Product Innovation

Let's turn to product innovation. In Q2, we shipped the first version of our Intelligent Agreement Management (IAM) platform. This is the most important launch in Docusign's recent history because of the value we believe IAM will create for our customers. IAM addresses the massive $2 trillion in lost economic value each year experienced by organizations when managing agreements.

In Q2, IAM launched to small and mid-sized commercial customers in the United States, Canada, and Australia. It's very early days, but the initial results and customer feedback are promising. So far, IAM customer win rates are higher, average deal sizes are larger, and time to close with customers is faster. Customer deal count and bookings are increasing month over month, with August being larger than June and July combined. Overall, preliminary IAM adoption momentum is tracking as planned, and we look forward to the continued rollout to additional segments and geographies throughout the rest of the fiscal year.

Customer feedback captures the value IAM is already delivering, with customers focused on strong ease of use and fast time to value:

- Legal service provider Mass Tort Strategies tells us that with IAM, they anticipate "saving thousands annually" now that their completed agreements are organized and easily searchable.
- Midwestern healthcare provider Welia Health, said that they were impressed by how quickly they put IAM to use and that, within a few days, they were using Docusign Navigator as the organization's central agreement repository.

We're focused on continuously introducing and enhancing IAM's value to more customers. Before the end of this fiscal year, we will make IAM available for departmental use within large enterprise customers, in multiple languages and additional geographies, and for purchase via self-serve channels. In 2025, we will unlock moving from department-level adoption to organization-wide deployments in large enterprises, add more languages, and introduce more features to escape the agreement trap. Our rollout timeline allows us to use customer feedback to refine our product and go-to-market strategies, ensuring we meet customer needs with a long-term, sustainable approach.

Omnichannel go-to-market

Let's turn to the second strategic pillar, our omnichannel go-to-market.

In Q2, we drove further stabilization in our core business. Overall customer growth remained consistent at 11% year-over-year for the fourth consecutive quarter, while envelopes sent and contract utilization modestly improved compared to last year. Digital and international revenue continued to outpace overall growth and remain large, long-term opportunities. In addition, we are focused on continuing to upgrade and enable our sales, partner, and self-serve strategies to sell IAM.

The direct salesforce continued to show improved execution. Direct customer growth remained strong with a 12% year-over-year increase; and large value customers with over $300,000 in ACV saw modest acceleration, benefitting from the impact of our retention efforts. CLM continued to outpace overall revenue growth. Lastly, IAM enablement across our salesforce was a key priority in Q2. In Q3, the remaining teams in our salesforce will complete IAM training and certification, including our enterprise-focused teams and teams outside the initial launch markets.

Turning to our other routes to market, this quarter we're providing more context on the partner and self-serve channels where we've increased focus and investment.

In the partner channel, we've strengthened our strategic relationships with Microsoft, SAP, and Salesforce. Our Microsoft collaboration now includes dedicated co-selling through the Azure Marketplace and Copilot integrations, driving increased customer volume. We aim to build similar success with SAP, especially with the newly launched CLM-Ariba integration announced at SAP's Sapphire events. Also, we continued to partner deeply with Salesforce, which remains our largest go-to-market partnership with tens of thousands of jointly deployed customers. We'll have more to share about this partnership at their Dreamforce event in a few weeks.

Improving our partner and sales channels has led to enterprise customers adopting Docusign across a growing set of use cases. A prime example is Canva, the leading online design and visual communication platform, which has deeply integrated Docusign workflows to support its rapid growth. This quarter, the Microsoft integrations and co-selling agreements led to deeper agreements with global banking and insurance customers as well as with a Fortune 100 retailer. A leading human capital management provider has integrated eSignature functionality directly into its core product offering, allowing its customers to drive faster onboarding with new employees. We anticipate continued partner-enabled usage evolution as IAM rolls out.

Omnichannel go-to-market

Evolving our self-serve capability has also been an important priority. Over the last 12 months, we've invested in building this infrastructure. Digital revenue growth has outpaced overall growth, demonstrating continued positive impact from our focus on e-commerce and execution. Our goal is to continuously improve the ability for customers to discover, try, use, and buy our products digitally, further enabling greater scale and efficiency across our business.

Today, new and existing customers worldwide can use our digital platform to more easily move from free trials to paid accounts, upgrade their plans, and expand to additional products such as ID Verification and SMS Delivery – all without engaging a sales rep. We've introduced improved personalization on Docusign.com and integrated new payment options in international markets to improve conversion rates. We expect continued strong e-commerce execution and delivery as we expand our digital growth and prepare for self-service IAM purchasing.

Closing

We're excited to welcome new Chief Revenue Officer Paula Hansen and Chief Technology Officer Sagnik Nandy, who've both hit the ground running after starting in early August. Paula and Sagnik bring large-scale experience selling and building enterprise-customer solutions, and complete an already strong leadership team.

We are excited to continue our transformation journey. IAM represents a massive opportunity to leverage our market leadership and unlock incredible value for customers as the system of record for agreements. We will continue to evolve, remain efficient, and invest for the future.

Thank you to our entire team for bringing the IAM vision to life with our customers. We're proud of what we've accomplished, and we're just getting started.

Blake Grayson
CFO



Introduction

Our Q2 results continue to show stabilization in our core business. Besides the resiliency demonstrated by a number of key metrics, we continued to focus on balancing efficiency gains with investment in long-term growth. We achieved that balance in Q2 when we began the launch of our new IAM platform to general availability, while producing the highest operating margin in our company's history.

With regards to IAM, we've engaged with a portion of customers over the past three months and we're encouraged by early traction and customer feedback. We're in the very early days of both our multi-year transition to IAM, and in realizing our aspiration of re-accelerating our long term growth. I'm excited to partner with our team to execute against this strategy.

Business Stabilization

Q2 total revenue of $736 million and subscription revenue of $717 million, both grew 7% year-over-year. Billings were $725 million, up 2% year-over-year. As mentioned on last quarter's call, the growth rate of Q2 billings year-over-year was impacted by last year's strong on-time renewal performance and the timing impacts of various customer contracts this year. Also, as mentioned previously, we expect Q2 billings growth to be our lowest quarterly growth rate in fiscal year 2025.

Business Stabilization

International revenue represented 28% of total revenue and grew at approximately double the rate of our overall revenue. Our global expansion strategy is an important component of our long-term vision, and we are optimistic about the continued growth opportunities in our international markets. This includes IAM, which will launch in the majority of our direct international markets by the end of this fiscal year.

In addition, investments in our PLG motion continue to deliver results, and in Q2, digital revenue grew at more than double the rate of direct revenue. Specifically concerning PLG, we are improving mechanisms to allow self-service plan upgrades, and our mix of billings this quarter was slightly more weighted to digital than in the prior year.

Stabilizing trends continued from Q1 into Q2 as we saw year-over-year improvements in usage, utilization, and customer growth. That momentum underscores the resiliency of our business despite continued macro uncertainty.

Dollar net retention rate was 99% in Q2, consistent with Q1. We expect that these recent stabilization trends will continue, and we anticipate our dollar net retention rate to remain consistent through the remainder of fiscal year 2025.

Usage trends continue to show modest improvement. The volume of envelopes sent increased year-over-year for the third consecutive quarter, while consumption, a measure of utilization, also continued to improve year-over-year, particularly in verticals like healthcare, insurance and technology.

We continued to see strong growth and stability in new customer acquisition. In Q2, total customers again grew by 11% year-over-year to approximately 1.6 million. The continued momentum in overall customer growth gives us confidence that our strategy of both self-service and direct sales options is resonating across segments and geographies. The unique scale and breadth of our customer base provides a strong foundation for the measured rollout of the IAM platform.

The number of large customers spending over $300k annually increased year-over-year and quarter-over-quarter to 1,066 in Q2. Additionally, bookings from customers with total contract value over $1 million continued to grow at a double-digit pace year-over-year.

Financial and operating efficiency

Turning to the financials, our focus on operating efficiency continued to yield strong results this quarter.

Non-GAAP gross margin for Q2 was 82.2%, relatively in-line with the prior year.

We delivered record-high non-GAAP operating income in Q2 at $237 million, up 40% year-over-year resulting in a 32.2% operating margin, of which approximately 150 basis points was attributable to one-time items associated with professional fees, which primarily consisted of insurance reimbursements and the release of a litigation reserve. Q2 operating margin was up 750 basis points versus last year and a significant improvement over the 18.0% operating margin generated two years ago. Our improvement over the previous year underscores our ability to grow efficiently while continuing to invest in critical areas like R&D. We do expect operating margin to decline slightly in the second half of the year as we invest to support our IAM launch and continued rollout, although we still expect to exit the year with improving operating margins on a year-over-year basis.

We ended Q2 with 6,612 employees vs. 6,748 at this time last year, approximately 2% lower, reflecting our disciplined approach to hiring and resource allocation. A measured approach to hiring to support our strategic initiatives, including R&D and PLG as well as the Lexion acquisition, drove the quarter-over-quarter increase in headcount.

In terms of cash flow, Q2 was another strong quarter. We delivered $198 million of free cash flow, a 27% margin which was in line with Q2 of last year. As expected, our free cash flow yield moderated from Q1 as we compare against the significant working capital improvements from prior quarters. That said, our collections efficiency remains strong, with less than 1% of our accounts receivable over 90 days past due. We expect that the Q3 cash flow yield will decrease versus Q2, due to the timing of compensation payments and investments we're making in the second half of this year. We continue to expect that our fiscal year 2025 free cash flow yield will more closely match our full year non-GAAP operating margin.

Financial and operating efficiency

Our balance sheet showed continued strength, ending the quarter with $1 billion of cash, cash equivalents, and investments. We have no debt on the balance sheet. Because of the stability in our balance sheet and consistency in free cash flow generation, we can continue investing in the business and opportunistically return cash to shareholders. In Q2, we accelerated the pace of our buyback activity and repurchased a record $200 million in share value, effectively redeploying 100% of our quarterly free cash flow generation back to shareholders. While this rate will fluctuate as we pursue an opportunistic strategy balanced against investment initiatives and the operating environment, we believe this activity further demonstrates our commitment to delivering value to shareholders. We also used $39 million in cash to pay taxes due on RSU settlements, reducing the dilutive impact of our equity programs.

Non-GAAP diluted EPS for Q2 was $0.97, a $0.25 per share improvement from $0.72 last year. GAAP diluted EPS was $4.26 vs. $0.04 last year. Related to our GAAP financials, as discussed last quarter, we released a valuation allowance on certain existing deferred tax assets. This had a GAAP-only financial impact of decreasing our non-cash tax expense by approximately $838 million. Diluted weighted average shares were flat year-over-year at 208 million shares, as our repurchase activity was weighted towards the latter portion of Q2. We are pleased with the improvements in both non-GAAP and GAAP profitability, and we are actively managing the impact of dilution and cost of our equity programs.

Guidance

With that let me turn to guidance.

For Q3'25 and fiscal year 2025, we expect:

Total revenue of $743 to $747 million in Q3, or a 6% year-over-year increase at the midpoint. For fiscal year 2025, we expect revenue between $2.940 to $2.952 billion, or a 7% year-over-year increase at the midpoint. Of this, we expect subscription revenue of $722 to $726 million in Q3, or a 6% year-over-year increase at the midpoint, and $2.864 to $2.876 billion for Fiscal 2025, or a 7% year-over-year increase at the midpoint.

For billings, we expect $710 to $720 million in Q3 and $2.990 to $3.030 billion for Fiscal 2025. As continually shown in recent quarters and years, billings are heavily impacted by the timing of customer renewals, leading to meaningful variability from period to period. This affects both year-over-year and sequential quarter-over-quarter comparisons, with the impact further amplified by the scale of our book of business.

We expect non-GAAP gross margin to be 81.0% to 82.0% for Q3 and for Fiscal 2025.

We expect non-GAAP operating margin of 28.5% to 29.5% for Q3 and 29.0% to 29.5% for Fiscal 2025. We will continue to focus on driving efficiencies while investing in long-term growth areas like product innovation.

We are revising our guidance to reflect the anticipated impact of our buyback activities on the non-GAAP fully diluted weighted average shares outstanding. As a result, the range is now 206 to 211 million for both Q3 and Fiscal 2025.

Closing

In closing, Q2 marked an important step toward our future with the initial launch of our AI-powered, IAM platform into general availability while delivering record non-GAAP operating profit and margins. We delivered another solid quarter of execution against our three strategic pillars: accelerating product innovation, enhancing our go-to-market initiatives, and strengthening our financial and operational efficiency. We remain pleased with our overall performance, particularly the progress we've made stabilizing our business, deepening customer relationships, driving profitability, and generating consistent and meaningful free cash flow.

As we look ahead we are excited about the opportunities in front of us, particularly with our IAM platform and the rollout to more customer segments and international regions during the remainder of this fiscal year. We believe the future is bright for Docusign, and we remain committed to delivering value to our customers, shareholders, and employees as we continue executing our long-term vision.

Appendix

Safe Harbor

This document contains "forward-looking" statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, that are based on our management's beliefs and assumptions and on information currently available to management, and which statements involve substantial risk and uncertainties. All statements contained in this document other than statements of historical fact, including statements regarding our future operating results and financial position, our business strategy and plans, market growth and trends, objectives for future operations, and the impact of such assumptions on our financial condition and results of operations are forward-looking statements. Forward-looking statements in this document also include, among other things, statements under "Guidance" above and any other statements about expected financial metrics, such as revenue, billings, non-GAAP gross margin, non-GAAP operating margin, non-GAAP diluted weighted-average shares outstanding, and non-financial metrics, as well as statements related to our expectations regarding the benefits and rollout of the Docusign IAM platform. Forward-looking statements generally relate to future events or our future financial or operating performance. In some cases, you can identify forward-looking statements because they contain words such as "may," "will," "should," "expects," "plans," "anticipates," "could," "intends," "target," "projects," "contemplates," "believes," "estimates," "predicts," "potential," or "continue" or the negative of these words or other similar terms or expressions that concern our expectations, strategy, plans or intentions.

Forward-looking statements contained in this document include, but are not limited to, statements about: our expectations regarding global macro-economic conditions, including the effects of inflation, volatile interest rates, and market volatility on the global economy; our ability to estimate the size and growth of our total addressable market; our ability to compete effectively in an evolving and competitive market; the impact of any data breaches, cyberattacks or other malicious activity on our technology systems; our ability to effectively sustain and manage our growth and future expenses and maintain or increase future profitability; our ability to attract new customers and maintain and expand our existing customer base; our ability to effectively implement and execute our restructuring plans; our ability to scale and update our platform to respond to customers' needs and rapid technological change, including our ability to successfully incorporate generative artificial intelligence into our existing and future products; our ability to successfully execute our go-to-market and sales strategy for our IAM platform; our ability to expand use cases within existing customers and vertical solutions; our ability to expand our operations and increase adoption of our platform internationally; our ability to strengthen and foster our relationships with developers; our ability to retain our direct sales force, customer success team and strategic partnerships around the world; our ability to identify targets for and execute potential acquisitions and to successfully integrate and realize the anticipated benefits of such acquisitions; our ability to maintain, protect and enhance our brand; the sufficiency of our cash, cash equivalents and capital resources to satisfy our liquidity needs; limitations on us due to obligations we have under our credit facility or other indebtedness; our ability to realize the anticipated benefits of our stock repurchase program; our failure or the failure of our software to comply with applicable industry standards, laws and regulations; our ability to maintain, protect and enhance our intellectual property; our ability to successfully defend litigation against us; our ability to attract large organizations as users; our ability to maintain our corporate culture; our ability to offer high-quality customer support; our ability to hire, retain and motivate qualified personnel, including executive level management; our ability to successfully manage and integrate executive management transitions; uncertainties regarding the impact of general economic and market conditions, including as a result of regional and global conflicts; our ability to successfully implement and maintain new and existing information technology systems, including our ERP system; and our ability to maintain proper and effective internal controls.

Additional risks and uncertainties that could affect our financial results are included in the sections titled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" in our annual report on Form 10-K for the fiscal year ended January 31, 2024 filed on March 21, 2024, our quarterly report on Form 10-Q for the quarter ended July 31, 2024, which we expect to file on September 6, 2024 with the Securities and Exchange Commission (the "SEC"), and other filings that we make from time to time with the SEC. The forward-looking statements made in this document relate only to events as of the date on which such statements are made. We undertake no obligation to update any forward-looking statements after the date of this document or to conform such statements to actual results or revised expectations, except as required by law.

Non-GAAP financial measures and other key metrics

To supplement our consolidated financial statements, which are prepared and presented in accordance with GAAP, we use certain non-GAAP financial measures, as described below, to understand and evaluate our core operating performance. These non-GAAP financial measures, which may be different than similarly-titled measures used by other companies, are presented to enhance investors' overall understanding of our financial performance and should not be considered a substitute for, or superior to, the financial information prepared and presented in accordance with GAAP.

We believe that these non-GAAP financial measures provide useful information about our financial performance, enhance the overall understanding of our past performance and future prospects, and allow for greater transparency with respect to important metrics used by our management for financial and operational decision-making. We present these non-GAAP measures to assist investors in seeing our financial performance using a management view, and because we believe that these measures provide an additional tool for investors to use in comparing our core financial performance over multiple periods with other companies in our industry. However, these non-GAAP measures are not intended to be considered in isolation from, a substitute for, or superior to our GAAP results.

Non-GAAP gross profit, non-GAAP gross margin, non-GAAP operating expenses, non-GAAP income from operations, non-GAAP operating margin, non-GAAP net income and non-GAAP net income per share: We define these non-GAAP financial measures as the respective GAAP measures, excluding expenses related to stock-based compensation, employer payroll tax on employee stock transactions, amortization of acquisition-related intangibles, amortization of debt discount and issuance costs, fair value adjustments to strategic investments, acquisition-related expenses, lease-related impairment and lease-related charges, restructuring and other related charges, as these costs are not reflective of ongoing operations and, as applicable, other special items. The amount of employer payroll tax-related items on employee stock transactions is dependent on our stock price and other factors that are beyond our control and do not correlate to the operation of the business.

When evaluating the performance of our business and making operating plans, we do not consider these items (for example, when considering the impact of equity award grants, we place a greater emphasis on overall stockholder dilution rather than the accounting charges associated with such grants). We believe it is useful to exclude these expenses in order to better understand the long-term performance of our core business and to facilitate comparison of our results to those of peer companies and over multiple periods. In addition to these exclusions, we subtract an assumed provision for income taxes to calculate non-GAAP net income. We utilize a fixed long-term projected tax rate in our computation of the non-GAAP income tax provision to provide better consistency across the reporting periods. For fiscal 2024 and fiscal 2025, we have determined the projected non-GAAP tax rate to be 20%.

Free cash flow: We define free cash flow as net cash provided by operating activities less purchases of property and equipment. We believe free cash flow is an important liquidity measure of the cash that is available (if any), after purchases of property and equipment, for operational expenses, investment in our business, and to make acquisitions. Free cash flow is useful to investors as a liquidity measure because it measures our ability to generate or use cash in excess of our capital investments in property and equipment. Once our business needs and obligations are met, cash can be used to maintain a strong balance sheet and invest in future growth.

Billings: We define billings as total revenues plus the change in our contract liabilities and refund liability less contract assets and unbilled accounts receivable in a given period. Billings reflects sales to new customers plus subscription renewals and additional sales to existing customers. Only amounts invoiced to a customer in a given period are included in billings. We believe billings can be used to measure our periodic performance, when taking into consideration the timing aspects of customer renewals, which represents a large component of our business. Given that most of our customers pay in annual installments one year in advance, but we typically recognize a majority of the related revenue ratably over time, we use billings to measure and monitor our ability to provide our business with the working capital generated by upfront payments from our customers.

A reconciliation of GAAP to non-GAAP financial measures to the most directly comparable GAAP financial measure is provided in the tables at the end of this document.

GAAP to Non-GAAP gross profit reconciliation

	Three Months Ended July 31,		Six Months Ended July 31,	
Gross Profit (in $ thousands)	2024	2023	2024	2023
GAAP gross profit	580,562	542,105	1,140,756	1,067,006
Add: Stock-based compensation	20,591	20,367	39,474	38,454
Add: Amortization of acquisition-related intangibles	3,067	2,314	5,137	4,717
Add: Employer payroll tax on employee stock transactions	816	713	1,839	1,387
Add: Lease-related impairment and lease-related charges	—	292	—	721
Non-GAAP gross profit	605,036	565,791	1,187,206	1,112,285
GAAP gross margin	78.9%	78.8%	78.9%	79.1%
Non-GAAP gross margin	82.2%	82.3%	82.0%	82.4%

	Three Months Ended July 31,		Six Months Ended July 31,	
Subscription Gross Profit (in $ thousands)	2024	2023	2024	2023
GAAP subscription revenue	717,366	669,367	1,408,849	1,308,674
Less: GAAP subscription cost of revenue	132,372	116,185	258,974	225,127
GAAP subscription gross profit	584,994	553,182	1,149,875	1,083,547
Add: Stock-based compensation	15,593	13,081	29,774	24,438
Add: Amortization of acquisition-related intangibles	3,067	2,314	5,137	4,717
Add: Employer payroll tax on employee stock transactions	595	465	1,387	930
Add: Lease-related impairment and lease-related charges	—	206	—	505
Non-GAAP subscription gross profit	604,249	569,248	1,186,173	1,114,137
GAAP subscription gross margin	81.5%	82.6%	81.6%	82.8%
Non-GAAP subscription gross margin	84.2%	85.0%	84.2%	85.1%

GAAP to Non-GAAP operating income and free cash flow reconciliation

	Three Months Ended July 31,		Six Months Ended July 31,	
Operating Income (in $ thousands)	2024	2023	2024	2023
GAAP income from operations	57,801	6,612	80,429	1,961
Add: Stock-based compensation	164,448	151,673	302,324	291,425
Add: Amortization of acquisition-related intangibles	6,180	4,944	10,879	9,976
Add: Employer payroll tax on employee stock transactions	4,772	4,046	11,176	8,230
Add: Acquisition-related expenses	3,358	—	4,716	—
Add: Restructuring and other related charges	597	811	29,721	29,583
Add: Lease-related impairment and lease-related charges	—	1,784	—	4,460
Non-GAAP income from operations	237,156	169,870	439,245	345,635
GAAP operating margin	7.9%	1.0%	5.6%	0.1%
Non-GAAP operating margin	32.2%	24.7%	30.4%	25.6%

	Three Months Ended July 31,		Six Months Ended July 31,	
Free Cash Flow (in $ thousands)	2024	2023	2024	2023
Net cash provided by operating activities	220,208	211,016	475,034	444,651
Less: Purchases of property and equipment	(22,280)	(27,379)	(45,033)	(46,436)
Non-GAAP free cash flow	197,928	183,637	430,001	398,215
Free cash flow margin	27%	27%	30%	30%
Net cash used in investing activities	(176,110)	(64,723)	(236,887)	(56,911)
Net cash used in financing activities	(239,068)	(69,347)	(408,942)	(90,251)

GAAP to Non-GAAP operating expenses reconciliation

	Three Months Ended July 31,		Six Months Ended July 31,	
Sales & Marketing (in $ thousands)	2024	2023	2024	2023
GAAP sales and marketing	287,464	294,838	569,108	575,443
Less: Stock-based compensation	(58,778)	(51,563)	(105,049)	(96,889)
Less: Amortization of acquisition-related intangibles	(3,113)	(2,630)	(5,742)	(5,259)
Less: Employer payroll tax on employee stock transactions	(1,595)	(1,400)	(3,733)	(3,070)
Less: Lease-related impairment and lease-related charges	—	(815)	—	(2,171)
Non-GAAP sales and marketing	223,978	238,430	454,584	468,054
GAAP sales and marketing as a percentage of revenue	39.1%	42.9%	39.4%	42.7%
Non-GAAP sales and marketing as a percentage of revenue	30.4%	34.7%	31.4%	34.7%
Research & Development (in $ thousands)	2024	2023	2024	2023
GAAP research and development	147,571	135,960	281,891	251,324
Less: Stock-based compensation	(53,430)	(45,151)	(97,632)	(81,148)
Less: Employer payroll tax on employee stock transactions	(1,754)	(1,387)	(4,319)	(2,795)
Less: Lease-related impairment and lease-related charges	—	(381)	—	(873)
Non-GAAP research and development	92,387	89,041	179,940	166,508
GAAP research and development as a percentage of revenue	20.0%	19.8%	19.5%	18.6%
Non-GAAP research and development as a percentage of revenue	12.6%	12.9%	12.4%	12.3%
General & Administrative (in $ thousands)	2024	2023	2024	2023
GAAP general and administrative	87,129	103,884	179,607	208,695
Less: Stock-based compensation	(31,649)	(34,592)	(60,169)	(74,934)
Less: Employer payroll tax on employee stock transactions	(607)	(546)	(1,285)	(978)
Less: Acquisition-related expenses	(3,358)	—	(4,716)	—
Less: Lease-related impairment and lease-related charges	—	(296)	—	(695)
Non-GAAP general and administrative	51,515	68,450	113,437	132,088
GAAP general and administrative as a percentage of revenue	11.8%	15.1%	12.4%	15.4%
Non-GAAP general and administrative as a percentage of revenue	7.0%	10.0%	7.8%	9.8%

Computation of billings

	Three Months Ended July 31,		Six Months Ended July 31,	
Computation of Billings (in $ thousands)	2024	2023	2024	2023
Revenue	736,027	687,687	1,445,667	1,349,075
Add: Contract liabilities and refund liability, end of period	1,334,461	1,233,894	1,334,461	1,233,894
Less: Contract liabilities and refund liability, beginning of period	(1,340,680)	(1,210,965)	(1,343,792)	(1,191,269)
Add: Contract assets and unbilled accounts receivable, beginning of period	17,179	22,936	20,189	16,615
Less: Contract assets and unbilled accounts receivable, end of period	(17,461)	(22,358)	(17,461)	(22,358)
Add: Contract assets and unbilled accounts receivable by acquisitions	53	—	53	—
Less: Contract liabilities and refund liability contributed by acquisitions	(5,071)	—	(5,071)	—
Non-GAAP billings	724,508	711,194	1,434,046	1,385,957