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 June 30, 2020

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: 1-34283

Rosetta Stone Inc.
(Exact name of registrant as specified in its charter)

Delaware (State of incorporation)	**04-3837082** (I.R.S. Employer Identification No.)
1621 North Kent Street, Suite 1200 **Arlington, Virginia** **(Address of principal executive offices)**	**22209** (Zip Code)

703-387-5800
(Registrant's telephone number, including area code)

N/A
(Former name or former address, if changed since last report)

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 and posted on its corporate Website, if any, every Interactive Data File required to be submitted and posted 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 and post such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	Accelerated filer	Non-accelerated filer	Smaller reporting company	Emerging growth company
☐	☒	☐ (Do not check if a smaller reporting 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 ☒

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock, par value $0.00005 per share	RST	New York Stock Exchange

Indicate the number of shares outstanding of each of the issuer's classes of stock, as of the latest practicable date.

As of July 30, 2020, there were 24,600,714 shares of the registrant's Common Stock, $.00005 par value, outstanding.

ROSETTA STONE INC.

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements

ROSETTA STONE INC.
CONSOLIDATED BALANCE SHEETS
(in thousands, except per share amounts)
(unaudited)

	As of June 30, 2020	As of December 31, 2019
Assets		
Current assets:		
Cash and cash equivalents	$ 31,259	$ 43,010
Restricted cash	65	54
Accounts receivable (net of allowance for doubtful accounts of $603 and $510 at June 30, 2020 and December 31, 2019, respectively)	27,003	22,919
Inventory	1,270	1,545
Deferred sales commissions	10,730	11,558
Prepaid expenses and other current assets	3,957	4,172
Total current assets	74,284	83,258
Deferred sales commissions	8,121	7,682
Property and equipment, net	38,787	39,251
Operating lease right-of-use assets	5,013	5,818
Intangible assets, net	13,555	14,317
Goodwill	49,057	48,958
Other assets	2,186	1,823
Total assets	$ 191,003	$ 201,107
Liabilities and stockholders' deficit		
Current liabilities:		
Accounts payable	$ 4,727	$ 7,534
Accrued compensation	12,470	9,854
Income tax payable	169	78
Operating lease liabilities	1,436	1,455
Other current liabilities	11,483	13,090
Deferred revenue	109,288	119,851
Total current liabilities	139,573	151,862
Deferred revenue	64,815	57,766
Deferred income taxes	2,723	2,590
Operating lease liabilities	3,458	4,167
Other long-term liabilities	675	914
Total liabilities	211,244	217,299
Commitments and contingencies (Note 11)		
Stockholders' deficit:		
Preferred stock, $0.001 par value; 10,000 and 10,000 shares authorized, zero and zero shares issued and outstanding at June 30, 2020 and December 31, 2019, respectively)	—	—
Non-designated common stock, $0.00005 par value, 190,000 and 190,000 shares authorized, 25,604 and 25,060 shares issued, and 24,604 and 24,060 shares outstanding, at June 30, 2020 and December 31, 2019, respectively)	2	2
Additional paid-in capital	216,295	210,846
Treasury stock, at cost; 1,000 and 1,000 shares at June 30, 2020 and December 31, 2019, respectively)	(11,435)	(11,435)
Accumulated loss	(222,240)	(212,548)
Accumulated other comprehensive loss	(2,863)	(3,057)
Total stockholders' deficit	(20,241)	(16,192)
Total liabilities and stockholders' deficit	$ 191,003	$ 201,107

See accompanying notes to consolidated financial statements

ROSETTA STONE INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except per share amounts)

(unaudited)

	Three months ended June 30,		Six months ended June 30,	
	2020	2019	2020	2019
Revenue	$ 49,195	$ 45,942	$ 96,374	$ 90,553
Cost of revenue	11,436	8,861	22,537	17,287
Gross profit	37,759	37,081	73,837	73,266
Operating expenses				
Sales and marketing	25,974	25,800	51,408	49,038
Research and development	6,177	5,776	13,094	11,514
General and administrative	8,945	8,566	18,507	17,258
Total operating expenses	41,096	40,142	83,009	77,810
Loss from operations	(3,337)	(3,061)	(9,172)	(4,544)
Other income and (expense):				
Interest income	10	9	26	42
Interest expense	(54)	(99)	(107)	(159)
Other income and (expense)	18	519	89	1,315
Total other income and (expense)	(26)	429	8	1,198
Loss before income taxes	(3,363)	(2,632)	(9,164)	(3,346)
Income tax expense	223	175	603	5
Net loss	$ (3,586)	$ (2,807)	$ (9,767)	$ (3,351)
Loss per share:				
Basic	$ (0.15)	$ (0.12)	$ (0.41)	$ (0.14)
Diluted	$ (0.15)	$ (0.12)	$ (0.41)	$ (0.14)
Common shares and equivalents outstanding:				
Basic weighted average shares	24,103	23,455	23,953	23,247
Diluted weighted average shares	24,103	23,455	23,953	23,247

See accompanying notes to consolidated financial statements

ROSETTA STONE INC.

CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS

(in thousands)

(unaudited)

	Three months ended June 30,		Six months ended June 30,	
	2020	**2019**	**2020**	**2019**
Net loss	$ (3,586)	$ (2,807)	$ (9,767)	$ (3,351)
Other comprehensive loss, net of tax:				
Foreign currency translation (loss) gain	247	(265)	194	(52)
Other comprehensive (loss) income	247	(265)	194	(52)
Comprehensive loss	$ (3,339)	$ (3,072)	$ (9,573)	$ (3,403)

See accompanying notes to consolidated financial statements

ROSETTA STONE INC.

CONSOLIDATED STATEMENTS OF CASH FLOWS

(in thousands)

(unaudited)

	Six months ended June 30, 2020	Six months ended June 30, 2019
CASH FLOWS FROM OPERATING ACTIVITIES:		
Net loss	$ (9,767)	$ (3,351)
Non-cash adjustments to reconcile net loss to cash used in operating activities:		
Stock-based compensation expense	5,270	2,576
(Gain) loss on foreign currency transactions	(10)	191
Bad debt expense	336	123
Depreciation and amortization	8,771	6,986
Operating lease costs	1,049	1,059
Deferred income tax expense (benefit)	254	(515)
(Gain) loss on disposal or sale of assets	—	(1,394)
Amortization of deferred financing costs	30	33
Net change in:		
Accounts receivable	(4,625)	(3,826)
Inventory	275	(718)
Deferred sales commissions	371	2,332
Prepaid expenses and other current assets	114	(819)
Income tax receivable or payable	91	(49)
Other assets	(450)	(89)
Accounts payable	(2,792)	(466)
Accrued compensation	2,395	(1,027)
Other current liabilities	(1,201)	(1,324)
Operating lease liabilities	(969)	(1,060)
Other long-term liabilities	—	(31)
Deferred revenue	(2,947)	(20,045)
Net cash used in operating activities	(3,805)	(21,414)
CASH FLOWS FROM INVESTING ACTIVITIES:		
Purchases of property and equipment	(7,592)	(9,709)
Proceeds from sale of assets	—	1,396
Net cash used in investing activities	(7,592)	(8,313)
CASH FLOWS FROM FINANCING ACTIVITIES:		
Proceeds from the exercise of stock options	410	2,887
Proceeds from borrowings under credit facility	—	10,500
Repayments of borrowings under credit facility	—	(600)
Payment of deferred financing costs	(66)	(47)
Payments under financing lease liabilities	(171)	(222)
Net cash provided by financing activities	173	12,518
Decrease in cash, cash equivalents, and restricted cash	(11,224)	(17,209)
Effect of exchange rate changes in cash, cash equivalents, and restricted cash	(516)	(159)
Net decrease in cash, cash equivalents, and restricted cash	(11,740)	(17,368)
Cash, cash equivalents, and restricted cash—beginning of period	43,064	38,174
Cash, cash equivalents, and restricted cash—end of period	$ 31,324	$ 20,806
SUPPLEMENTAL CASH FLOW DISCLOSURE:		
Cash paid during the periods for:		
Interest	$ 77	$ 126
Income taxes, net of refund	$ 324	$ 575
Noncash operating, investing and financing activities:		
Operating right-of-use assets obtained in exchange for operating lease liabilities	$ 59	$ 1,971
Financing right-of-use assets obtained in exchange for financing lease liabilities	$ —	$ —
Accrued liability for purchase of property and equipment	$ 921	$ 1,341

See accompanying notes to consolidated financial statements

ROSETTA STONE INC.

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDERS' DEFICIT

(unaudited)

	Non-Designated Common Stock		Additional Paid-in Capital	Treasury Stock	Accumulated Loss	Accumulated Other Comprehensive Loss	Total Stockholders' Deficit
	Shares	Amount					
Balance—January 1, 2020	$ 23,667	$ 2	$ 210,846	$ (11,435)	$ (212,548)	$ (3,057)	$ (16,192)
Stock issued upon the exercise of stock options	6	—	42	—	—	—	42
Restricted stock award and performance stock unit vesting	299	—	—	—	—	—	—
Unrestricted common stock issued in lieu of cash bonus	68	—	1,322	—	—	—	1,322
Stock-based compensation expense	—	—	1,998	—	—	—	1,998
Net loss	—	—	—	—	(6,181)	—	(6,181)
Cumulative effect adjustment - adoption of CECL	—	—	—	—	75	—	75
Other comprehensive loss	—	—	—	—	—	(53)	(53)
Balance—March 31, 2020	24,040	$ 2	$ 214,208	$ (11,435)	$ (218,654)	$ (3,110)	$ (18,989)
Stock issued upon the exercise of stock options	30	—	368	—	—	—	368
Restricted stock award and performance stock unit vesting	49	—	—	—	—	—	—
Stock-based compensation expense	—	—	1,719	—	—	—	1,719
Net loss	—	—	—	—	(3,586)	—	(3,586)
Other comprehensive income	—	—	—	—	—	247	247
Balance—June 30, 2020	24,119	$ 2	$ 216,295	$ (11,435)	$ (222,240)	$ (2,863)	$ (20,241)

	Non-Designated Common Stock		Additional Paid-in Capital	Treasury Stock	Accumulated Loss	Accumulated Other Comprehensive Loss	Total Stockholders' Deficit
	Shares	Amount					
Balance—January 1, 2019	22,912	$ 2	$ 202,355	$ (11,435)	$ (199,592)	$ (3,338)	$ (12,008)
Stock issued upon the exercise of stock options	67	—	744	—	—	—	744
Restricted stock award and performance stock unit vesting	270	—	—	—	—	—	—
Unrestricted common stock issued in lieu of cash bonus	37	—	576	—	—	—	576
Stock-based compensation expense	—	—	1,220	—	—	—	1,220
Net loss	—	—	—	—	(544)	—	(544)
Other comprehensive income	—	—	—	—	—	213	213
Balance—March 31, 2019	23,286	$ 2	$ 204,895	$ (11,435)	$ (200,136)	$ (3,125)	$ (9,799)
Stock issued upon the exercise of stock options	206	—	2,145	—	—	—	2,145
Restricted stock award and performance stock unit vesting	70	—	—	—	—	—	—
Stock-based compensation expense	—	—	1,356	—	—	—	1,356
Net loss	—	—	—	—	(2,807)	—	(2,807)
Other comprehensive loss	—	—	—	—	—	(265)	(265)
Balance—June 30, 2019	23,562	$ 2	$ 208,396	$ (11,435)	$ (202,943)	$ (3,390)	$ (9,370)

See accompanying notes to consolidated financial statements

ROSETTA STONE INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

1. NATURE OF OPERATIONS

Rosetta Stone Inc. and its subsidiaries ("Rosetta Stone," or the "Company") develop, market and support a suite of language-learning and literacy solutions consisting of web-based software subscriptions, online services, professional services, and mobile applications. The Company's offerings are sold on a direct basis and through select third party retailers and distributors. The Company provides its solutions to customers domestically and in certain international markets.

The impact of the COVID-19 pandemic continues to unfold. The extent of the pandemic’s effect on the Company depends on future developments which cannot be predicted at this time. Future developments include the duration, scope and severity of the pandemic, the actions taken to contain or mitigate its impact, the impact on governmental programs and budgets, the development of treatments or vaccines, and the resumption of widespread economic activity. These uncertainties have been considered in the development of these financial statements and the notes thereto. See “Management's Discussion and Analysis of Financial Condition and Results of Operations” for more information about the Company’s response to the COVID-19 pandemic.

2. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of Consolidation

The accompanying consolidated financial statements include the accounts of Rosetta Stone Inc. and its wholly owned subsidiaries. All intercompany accounts and transactions have been eliminated in consolidation.

Basis of Presentation

The accompanying consolidated financial statements are unaudited. These unaudited interim consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles ("GAAP") and applicable rules and regulations of the Securities and Exchange Commission ("SEC") regarding interim financial reporting. Certain information and note disclosures normally included in the financial statements prepared in accordance with GAAP have been condensed or omitted pursuant to such rules and regulations. Accordingly, these interim consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto contained in the Company’s most recent Annual Report on Form 10-K filed with the SEC on March 11, 2020. The June 30, 2020 consolidated balance sheet included herein includes account balances as of December 31, 2019 that were derived from the audited financial statements as of that date. The Consolidated Financial Statements and the Notes to the Consolidated Financial Statements do not include all disclosures required for annual financial statements and notes.

The unaudited interim consolidated financial statements have been prepared on the same basis as the audited consolidated financial statements. In the opinion of management, all adjustments, consisting only of normal recurring adjustments, necessary for the fair presentation of the Company’s statements of financial position at June 30, 2020 and December 31, 2019, the Company’s results of operations and stockholders’ equity activity for the three and six months ended June 30, 2020 and 2019, and its cash flows for the six months ended June 30, 2020 and June 30, 2019 have been made. The results for the three and six months ended June 30, 2020 are not necessarily indicative of the results to be expected for the year ending December 31, 2020. All references to June 30, 2020 or to the three and six months ended June 30, 2020 and 2019 in the notes to the consolidated financial statements are unaudited.

Use of Estimates

The preparation of financial statements in accordance with GAAP requires management to make certain estimates and assumptions. The amounts reported in the consolidated financial statements include significant estimates and assumptions that have been made, including, but not limited to, those related to revenue recognition, allowance for doubtful accounts, estimated sales returns and reserves, stock-based compensation, fair value of intangibles and goodwill, disclosure of contingent assets and liabilities, disclosure of contingent litigation, allowance for valuation of deferred tax assets, and the Company's quarterly going concern assessment. The Company bases its estimates and assumptions on historical experience and on various other judgments that are believed to be reasonable under the circumstances. The Company continuously evaluates its estimates and assumptions. Actual results may differ from these estimates and assumptions. The severity, magnitude and duration, as well as the economic consequences of the COVID-19 pandemic, are uncertain, rapidly changing and difficult to predict. Therefore, accounting estimates and assumptions may change over time in response to COVID-19 and may change materially in future periods.

ROSETTA STONE INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Recently Issued Accounting Standards

Accounting Standards Adopted During the Period: During 2020, the Company adopted the following recently issued Accounting Standard Updates ("ASU"):

In June 2016, the FASB issued ASU No. 2016-13, Financial Instruments - Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments ("ASU 2016-13"), as subsequently amended. ASU 2016-13 changed the methodology for measuring credit losses of financial instruments and the timing of when such losses are recorded. ASU 2016-13 was effective for fiscal years, and interim periods within those years, beginning after December 15, 2019. The Company adopted ASU 2016-13 beginning January 1, 2020 using a modified-retrospective approach. The impact of ASU 2016-13 was limited to credit losses associated with trade receivables as the Company does not hold additional significant financial instruments. Adoption of ASU 2016-13 resulted in less than a $0.1 million decrease in bad debt reserves as of January 1, 2020 which was recorded as a cumulative effect adjustment to accumulated loss.

In August 2018, the FASB issued ASU No. 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework—Changes to the Disclosure Requirements for Fair Value Measurement* ("ASU 2018-13"). ASU 2018-13 modifies the disclosure requirements for fair value measurements by removing, modifying, or adding certain disclosures. ASU 2018-13 was effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. The Company adopted this guidance effective January 1, 2020.

In January 2017, the FASB issued ASU No. 2017-04, *Intangibles - Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment* ("ASU 2017-04"). ASU 2017-04 simplified the subsequent measurement of goodwill and eliminates Step 2 from the goodwill impairment test. ASU 2017-04 was effective for annual and interim goodwill tests beginning after December 15, 2019. The Company adopted this guidance effective January 1, 2020.

Accounting Standards Not Yet Adopted:

There are currently no accounting standards not yet adopted that are expected to have a material impact on the Company's financial statements or disclosures.

Revenue Recognition

Nature of Revenue: The Company accounts for revenue contracts with customers by applying the requirements of ASC topic 606, *Revenue from Contracts with Customers*, ("ASC 606"), which includes the following five steps:

- Identification of the contract, or contracts with a customer.
- Identification of the performance obligations in the contract.
- Determination of the transaction price.
- Allocation of the transaction price to the performance obligations in the contract.
- Recognition of the revenue when, or as, the Company satisfies a performance obligation.

The Company's primary sources of revenue are web-based software subscriptions, mobile applications, online services, and professional services.

Revenue is recognized upon transfer of control of promised goods or services to customers in an amount that reflects the consideration expected to be received in exchange for those goods or services. Revenue is recognized net of allowances for returns. Revenue is also recognized net of any taxes collected from customers, which are subsequently remitted to governmental authorities.

The majority of our revenue is recognized from non-cancellable web-based software subscriptions, online services, professional services, and mobile applications. Subscription revenue is generated from contracts with customers that provide access to hosted software over a contract term without the customer taking possession of the software. Subscription revenue is recognized ratably over the contract period as the performance obligation is satisfied. Subscription revenue is generated by all three reportable segments and range from short-term to multi-year contracts. Online services are typically sold in short-term service periods and include dedicated online conversational coaching services and access to online communities of language learners. Professional services include implementation services. Online services revenue and professional services revenue are recognized as the services are provided. Expired services are forfeited and revenue is recognized upon expiry.

Performance Obligations: A performance obligation is a promise in a contract to transfer a distinct good or service to the customer, and is the unit of account in ASC 606. A contract's transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied. The Company's performance obligations are satisfied at a point in time or over time as delivery occurs or as work progresses.

ROSETTA STONE INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Significant Judgments: Some of the Company’s contracts with customers include promises to transfer multiple products and services to a customer. Determining whether products and services are considered distinct performance obligations that should be accounted for separately, versus together, requires significant judgment. This includes determining whether distinct services are part of a series of distinct services that are substantially the same. When subscription services are sold with professional services, judgment is required to determine whether the professional services are distinct and can be accounted for separately. In the E&E Language segment, the Company has concluded that each promised service within the language-learning subscription is delivered concurrently with all other promised services over the contract term and, as such, concluded that these promises are a single performance obligation that includes a series of distinct services that have the same pattern of transfer to the customer. When there are multiple performance obligations, revenue is allocated to each performance obligation based on its relative standalone selling price (“SSP”). Judgment is required to determine the SSP for each distinct performance obligation where SSP is not directly observable, such as when the product or service is not sold separately, SSP is determined using internally published price lists which include suggested sales prices for each performance obligation based on the type of client and volume purchased. These price lists are derived from past experience and from the expectation of obtaining a reasonable margin based on the cost to fulfill each performance obligation.

Subscription revenue is recognized ratably over the contract period as the performance obligation is satisfied. Certain Consumer Language offerings have contracts with no fixed duration and are marketed as lifetime subscriptions. For these lifetime subscriptions, the Company estimates the expected contract period as the greater of the typical customer usage period or the longest fixed-period duration subscription that is currently marketed. The Company's current expected contract period for lifetime subscriptions is 24 months.

Certain Consumer Language offerings are sold with a right of return and the Company may provide other credits or incentives. These rights are accounted for as variable consideration when estimating the amount of revenue to recognize by utilizing the expected value method. Returns and credits are estimated at contract inception based on historical return rates, estimated channel inventory levels, the timing of new product introductions and other factors. Reserves for returns and credits are updated at the end of each reporting period as additional information becomes available.

The Company distributes its products and services both directly to the end customer and indirectly through resellers. Resellers earn commissions generally calculated as a fixed percentage of the gross sale amount to the end customer. The Company evaluates each of its reseller relationships to determine whether it is the principal (where revenue is recognized at the gross amount) or agent (where revenue is recognized net of the reseller commission). In making this determination the Company evaluates a variety of factors including the amount of control the Company is able to exercise over the transactions.

Contract Balances: The timing of revenue recognition, invoicing, and cash collection results in accounts receivable and deferred revenue in the consolidated balance sheets. Payment from customers is often received in advance of services being provided, resulting in deferred revenue. Accounts receivable is recorded when there is an executed customer contract and the right to the consideration becomes unconditional. Contract assets such as unbilled receivables are not material.

The allowance for doubtful accounts reflects the best estimate of probable losses inherent in the accounts receivable balance. The Company establishes an allowance for doubtful accounts based on specific risks identified, historical experience, and other currently available evidence.

Payment terms and conditions vary by contract type and customer. For the E&E Language and Literacy segments, payment terms generally range from 30 to 90 days. In the Consumer Language segment, resellers and mobile app stores are generally granted payment terms between 30 to 45 days. Within Consumer Language, sales to end customers via the Rosetta Stone ecommerce website are done by credit card, which generally are settled within 7-10 days and may be made in installments. In instances where the timing of revenue recognition differs from the timing of invoicing, the Company has determined that contracts generally do not include a significant financing component. The primary purpose of invoicing terms is to provide customers with simplified and predictable ways of purchasing products and services and not to provide customers with financing.

Deferred revenue is comprised mainly of unearned revenue related to subscription services which is recognized ratably over the subscription period. Deferred revenue also includes payments for professional services and online services to be performed in the future which are earned as revenue when the service is provided. Most of our business is SaaS-based; consequently, backlog is not significant. See Note 10 "Revenue and Deferred Revenue" for additional disclosures.

Assets Recognized from Costs to Obtain a Contract with a Customer: The Company recognizes an asset for the incremental costs of obtaining a contract with a customer, which primarily represents sales commissions paid when a customer contract is either recorded as revenue or deferred revenue. Sales commission consists of variable commissions paid to salespeople as well as third party costs such as fees associated with sales made in App stores. Sales commissions paid to obtain non-cancellable subscription contracts are deferred and amortized in proportion to the period over which the revenue is recognized from the related contract. Deferred sales commissions are amortized to sales and marketing expense on the consolidated statements of operations. Deferred sales commissions are classified as non-current unless the associated amortization period is one year or less.

Income Taxes

The Company accounts for income taxes in accordance with ASC topic 740, *Income Taxes* ("ASC 740"), which provides for an asset and liability approach to accounting for income taxes. Deferred tax assets and liabilities represent the future tax consequences of the differences between the financial statement carrying amounts of assets and liabilities versus the tax basis of assets and liabilities. Under this method, deferred tax assets are recognized for deductible temporary differences, and operating loss and tax credit carryforwards. Deferred liabilities are recognized for taxable temporary differences. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized. The impact of tax rate changes on deferred tax assets and liabilities is recognized in the year that the change is enacted.

Significant judgment is required to determine whether a valuation allowance is necessary and the amount of such valuation allowance, if appropriate. The valuation allowance is reviewed at each reporting period and is maintained until sufficient positive evidence exists to support a reversal.

When assessing the realization of the Company's deferred tax assets, the Company considers all available evidence, including:

- the nature, frequency, and severity of cumulative financial reporting losses in recent years;
- the carryforward periods for the net operating loss, capital loss, and foreign tax credit carryforwards;
- predictability of future operating profitability of the character necessary to realize the asset;
- prudent and feasible tax planning strategies that would be implemented, if necessary, to protect against the loss of the deferred tax assets; and
- the effect of reversing taxable temporary differences.

The evaluation of the recoverability of the deferred tax assets requires that the Company weigh all positive and negative evidence to reach a conclusion that it is more likely than not that all or some portion of the deferred tax assets will not be realized. The weight given to the evidence is commensurate with the extent to which it can be objectively verified. The more negative evidence that exists, the more positive evidence is necessary and the more difficult it is to support a conclusion that a valuation allowance is not needed.

The establishment of a valuation allowance has no effect on the ability to use the deferred tax assets in the future to reduce cash tax payments. The valuation allowance analysis considers a number of factors, including cumulative losses in recent years, expectations of future taxable income and the timeframe over which net operating losses expire. If future events change the outcome of the Company’s projected return to profitability, a valuation allowance may not be required to reduce the deferred tax assets. The Company will continue to assess the need for a valuation allowance and the likelihood that the deferred tax assets will be realizable at each reporting period. The valuation allowance will be adjusted accordingly, which could materially affect the Company's financial position and results of operations. See Note 15 "Income Taxes" for additional disclosures.

Fair Value of Financial Instruments

The Company values its assets and liabilities using the methods of fair value as described in ASC topic 820, *Fair Value Measurements*, ("ASC 820"). ASC 820 establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value. The three levels of fair value hierarchy are described below:

Level 1: Quoted prices for identical instruments in active markets.

Level 2: Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations whose inputs are observable or whose significant value drivers are observable.

Level 3: Significant inputs to the valuation model are unobservable.

The carrying amounts reported in the consolidated balance sheets for cash and cash equivalents, restricted cash, accounts receivable, accounts payable and other accrued expenses approximate fair value due to relatively short periods to maturity.

ROSETTA STONE INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Stock-Based Compensation

The Company accounts for its stock-based compensation in accordance with ASC topic 718, *Compensation—Stock Compensation* ("ASC 718"). Under ASC 718, all stock-based awards, including employee stock option grants, are recorded at fair value as of the grant date. For options granted with service and/or performance conditions, the fair value of each grant is estimated on the date of grant using the Black-Scholes option pricing model which require the use of estimates, including future stock price volatility, expected term and forfeitures.

Stock options are granted to directors with a 10 -year contractual term. The Company estimates the expected term of stock options using historical grant and exercise information. The Company uses its own historical stock price data to estimate its forfeiture rate and expected volatility over the most recent period commensurate with the estimated expected term of the awards. For the risk-free interest rate, the Company uses a U.S. Treasury Bond rate consistent with the estimated expected term of the option award.

The Company's restricted stock and restricted stock unit grants are accounted for as equity awards. Stock compensation expense associated with service-based equity awards is recognized in the statements of operations ratably over the requisite service period, which is the vesting period. If an award's service inception date precedes the grant date, compensation expense is initially measured at fair value at the service inception date based on probability of payout, and remeasured at subsequent reporting dates until all of the award's key terms and conditions are known and the grant date is established. For equity awards granted with performance-based conditions, stock compensation expense is recognized in the statements of operations ratably for each vesting tranche based on the probability that operating performance conditions will be met and to what extent. Changes in the probability estimates associated with performance-based awards will be accounted for in the period of change using a cumulative catch-up adjustment to retroactively apply the new probability estimates. In any period in which the Company determines that achievement of the performance metrics is not probable, the Company ceases recording compensation expense and all previously recognized compensation expense for the performance-based award is reversed. For equity awards granted with market-based conditions, stock compensation expense is recognized in the statements of operations ratably for each vesting tranche regardless of meeting or not meeting the market conditions. See Note 12 "Stock-Based Compensation" for additional disclosures.

Basic and Diluted Net Loss Per Share

Net loss per share is computed under the provisions of ASC topic 260, Earnings Per Share. Basic loss per share is computed by dividing net loss by the weighted average number of common shares outstanding during the period. Diluted loss per share is computed by dividing net loss by the weighted average number of common shares and potential common shares outstanding during the period. Potential common shares are included in the diluted computation when dilutive. Potentially dilutive shares are computed using the treasury stock method and primarily consist of shares issuable upon the exercise of stock options, restricted stock awards, restricted stock units and conversion of shares of preferred stock. Common stock equivalent shares are excluded from the diluted computation if their effect is anti-dilutive. When there is a net loss, there is a presumption that there are no dilutive shares as these would be anti-dilutive. See Note 14 "Basic and Diluted Net Loss Per Share" for additional disclosures.

Foreign Currency Translation and Transactions

The functional currency of the Company's foreign subsidiaries is their local currency. Accordingly, assets and liabilities of the foreign subsidiaries are translated into U.S. dollars at exchange rates in effect on the balance sheet date. Income and expense items are translated at average rates for the period. Translation adjustments are recorded as a component of accumulated other comprehensive loss in stockholders' deficit.

Cash flows of consolidated foreign subsidiaries, whose functional currency is their local currency, are translated to U.S. dollars using average exchange rates for the period. The Company reports the effect of exchange rate changes on cash balances held in foreign currencies as a separate item in the reconciliation of the changes in cash, cash equivalents and restricted cash during the period.

The following table presents the effect of exchange rate changes on total comprehensive loss (in thousands):

	Three months ended June 30,		Six months ended June 30,	
	2020	2019	2020	2019
Net loss	$ (3,586)	$ (2,807)	$ (9,767)	$ (3,351)
Foreign currency translation (loss) gain	247	(265)	194	(52)
Comprehensive loss	$ (3,339)	$ (3,072)	$ (9,573)	$ (3,403)

ROSETTA STONE INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Comprehensive Loss

Comprehensive loss consists of net loss and other comprehensive income or loss. Other comprehensive income or loss refers to revenues, expenses, gains, and losses that are not included in net loss, but rather are recorded directly in stockholders' deficit. For the three and six months ended June 30, 2020 and 2019, the Company's comprehensive loss consisted of net loss and foreign currency translation losses or gains.

The other comprehensive loss presented in the consolidated financial statements and the notes are presented net of tax. There has been no tax expense or benefit associated with the components of other comprehensive loss due to the presence of a full valuation allowance for each of the three and six months ended June 30, 2020 and 2019.

Advertising Costs

Costs for advertising are expensed as incurred. Advertising expense consisted of the following (in thousands):

	Three months ended June 30,		Six months ended June 30,	
	2020	2019	2020	2019
Advertising costs	$ 6,291	$ 6,463	$ 12,459	$ 11,198

Going Concern Assessment

As part of its internal control framework, the Company routinely performs a quarterly going concern assessment in accordance with ASC sub-topic 205-40, *Presentation of Financial Statements - Going Concern* ("ASC 205-40"). Under ASC 205-40, management is required to assess the Company's ability to continue as a going concern. As further described below, management has concluded based on projections that the cash balance, funds available from the line of credit, and the cash flows from operations are sufficient to meet the liquidity needs through the one year period following the financial statement issuance date.

The consolidated financial statements have been prepared on a going concern basis, which contemplates the realization of assets and the satisfaction of liabilities in the normal course of business. Management has evaluated whether relevant conditions or events, considered in the aggregate, indicate that there is substantial doubt about the Company's ability to continue as a going concern. Substantial doubt exists when conditions and events, considered in the aggregate, indicate it is probable that the Company will be unable to meet its obligations as they become due within one year after the financial statement issuance date. The assessment is based on the relevant conditions that are known or reasonably knowable as of August 6, 2020.

The assessment of the Company's ability to meet its future obligations is inherently judgmental, subjective and susceptible to change. The inputs that are considered important in the Company's going concern analysis, include, but are not limited to, the Company's 2020 cash flow forecast, 2020 operating budget, and long-term plan that extends beyond 2020. These inputs consider information including, but not limited to, the Company’s financial condition, liquidity sources, obligations due within one year after the financial statement issuance date, funds necessary to maintain operations, and financial conditions, including negative financial trends or other indicators of possible financial difficulty.

The Company has considered both quantitative and qualitative factors as part of the assessment that are known or reasonably knowable as of August 6, 2020, and concluded that conditions and events considered in the aggregate, do not indicate that it is probable that the Company will be unable to meet obligations as they become due through the one year period following the financial statement issuance date.

3. INVENTORY

Inventory consisted of the following (in thousands):

	As of	
	June 30, 2020	December 31, 2019
Raw materials	$ 755	$ 834
Finished goods	515	711
Total inventory	$ 1,270	$ 1,545

ROSETTA STONE INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

4. PROPERTY AND EQUIPMENT

Depreciation and amortization expense related to property and equipment includes depreciation related to its physical assets and amortization expense related to amounts capitalized in the development of internal-use software. Depreciation and amortization expense associated with property and equipment consisted of the following (in thousands):

	Three months ended June 30,		Six months ended June 30,	
	2020	2019	2020	2019
Cost of revenue	$ 3,287	$ 2,357	$ 6,590	$ 4,759
Sales and marketing	115	175	222	359
Research and development	6	15	74	17
General and administrative	561	528	1,122	1,081
Total depreciation expense	$ 3,969	$ 3,075	$ 8,008	$ 6,216

5. INTANGIBLE ASSETS

Intangible assets consisted of the following items as of the dates indicated (in thousands):

	Trade name / trademark *	Core technology	Customer relationships	Patents and Other	Total
Gross Carrying Amount	$ 12,311	$ 13,356	$ 25,608	$ 312	$ 51,587
Accumulated Amortization/Impairment	(1,704)	(13,014)	(22,240)	(312)	(37,270)
Balance as of January 1, 2020	$ 10,607	$ 342	$ 3,368	$ —	$ 14,317
Gross Carrying Amount	$ 12,315	$ 13,383	$ 25,637	$ 312	$ 51,647
Accumulated Amortization/Impairment	(1,708)	(13,334)	(22,738)	(312)	(38,092)
Balance as of June 30, 2020	$ 10,607	$ 49	$ 2,899	$ —	$ 13,555

* Included in the tradename/trademark line above is the Rosetta Stone tradename, which is the Company's only indefinite-lived intangible asset. As of January 1, 2020 and June 30, 2020, the Rosetta Stone tradename comprised the entire tradename/trademark net carrying amount of $10.6 million.

Amortization Expense for the Long-lived Intangible Assets

The following table presents amortization of intangible assets included in the related financial statement line items during the respective periods (in thousands):

	Three months ended June 30,		Six months ended June 30,	
	2020	2019	2020	2019
Cost of revenue	$ 147	$ 147	$ 293	$ 293
Sales and marketing	235	235	470	470
Research and development	—	—	—	7
General and administrative	—	—	—	—
Total intangible amortization expense	$ 382	$ 382	$ 763	$ 770

ROSETTA STONE INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table summarizes the estimated future amortization expense related to intangible assets for the remaining months of 2020 and years thereafter (in thousands):

	As of June 30, 2020
2020 - remaining	$ 520
2021	940
2022	940
2023	548
2024	—
Thereafter	—
Total	$ 2,948

Impairment Reviews of Intangible Assets

The Company also routinely reviews indefinite-lived intangible assets and long-lived assets for potential impairment as part of the Company's internal control framework. As an indefinite-lived intangible asset, the Rosetta Stone tradename was evaluated as of June 30, 2020 to determine if indicators of impairment exist, particularly in light of the COVID-19 pandemic. The Company concluded that there were no potential indicators of impairment related to this indefinite-lived intangible asset. Additionally, all other long-lived intangible assets were evaluated to determine if indicators of impairment exist and the Company concluded that there are no potential indicators of impairment.

6. GOODWILL

The value of goodwill is primarily derived from the acquisition of Rosetta Stone Ltd. (formerly known as Fairfield & Sons, Ltd.) in January 2006, the acquisition of certain assets of SGLC International Co. Ltd ("SGLC") in November 2009, the acquisition of Livemocha, Inc. ("Livemocha") in April 2013, the acquisition of Lexia Learning Systems, Inc. ("Lexia") in August 2013, and the acquisition of Tell Me More S.A. ("Tell Me More") in January 2014.

The Company tests goodwill for impairment annually on June 30 of each year at the reporting unit level using a fair value approach, in accordance with the provisions of ASC topic 350, *Intangibles - Goodwill and other* ("ASC 350"), or more frequently, if impairment indicators arise.

The following table shows the balance and changes in goodwill for the Company's operating segments for the six months ended June 30, 2020 (in thousands):

	Literacy	E&E Language	Consumer Language	Total
Balance as of January 1, 2020				
Gross Goodwill	$ 9,962	$ 38,996	$ 27,514	$ 76,472
Accumulated Impairment	—	—	(27,514)	(27,514)
Goodwill as of January 1, 2020	$ 9,962	$ 38,996	$ —	$ 48,958
Effect of change in foreign currency rate	—	99	—	99
Balance as of June 30, 2020				
Gross Goodwill	$ 9,962	$ 39,095	$ 27,514	$ 76,571
Accumulated Impairment	—	—	(27,514)	(27,514)
Goodwill as of June 30, 2020	$ 9,962	$ 39,095	$ —	$ 49,057

Annual Impairment Testing of Goodwill

The Company exercised its option to bypass the qualitative test and began its June 30, 2020 annual goodwill test with the quantitative test for its reporting units with remaining goodwill balances, which were the Literacy and the E&E Language reporting units.

ROSETTA STONE INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

As of June 30, 2020, the Company determined that the fair values of the Literacy and E&E Language reporting units exceeded their carrying values. Therefore, no goodwill impairment charges were recorded in connection with the annual analysis for these reporting units.

7. LEASES

Under ASC 842, the Company determines if an arrangement is a lease at inception. Right-of-use assets represent the Company's right to use an underlying asset for the lease term and lease liabilities represent the obligation to make lease payments arising from the lease. Some leases include options to extend or terminate the lease, which are included in the lease term when it is reasonably certain that the option will be exercised. Lease expense is recognized on a straight-line basis over the lease term.

The following table summarizes supplemental statement of operations information related to operating and finance lease costs as indicated (in thousands):

	Three months ended June 30,		Six months ended June 30,	
Supplemental statement of operations information:	**2020**	**2019**	**2020**	**2019**
Operating lease cost	$ 514	$ 533	$ 1,049	$ 1,059
Amortization of right-to-use assets	$ 114	$ 113	$ 228	$ 226
Interest on lease liabilities	14	17	28	34
Finance lease cost	$ 128	$ 130	$ 256	$ 260

The following table summarizes undiscounted future operating and finance lease payments as of June 30, 2020 and for the five years thereafter (in thousands):

As of June 30, 2020	**Operating Leases**	**Finance Leases**
2020 - remaining	$ 855	$ 331
2021	1,643	529
2022	1,620	402
2023	1,019	20
2024	102	13
Thereafter	76	—
Total undiscounted lease payments	5,315	1,295
Less: imputed interest	421	70
Total	$ 4,894	$ 1,225

The following table summarizes supplemental information related to operating and finance leases as indicated below:

	As of June 30, 2020	
	Operating Leases	**Finance Leases**
Weighted-average remaining lease term	39 months	31 months
Weighted-average discount rate	5.4%	4.8%
Range of remaining term	3 - 36 months	11 - 49 months

The following table summarizes balance sheet information related to financing leases as indicated (in thousands):

	As of	
Financing Lease Right-of-Use Assets and Liabilities:	**June 30, 2020**	**December 31, 2019**
Property and equipment, at cost	$ 5,663	$ 5,627
Accumulated depreciation	(3,952)	(3,697)
Property and equipment, net	$ 1,711	$ 1,930
Other current liabilities	$ 550	$ 474
Other long-term liabilities	675	914
Total finance lease liabilities	$ 1,225	$ 1,388

8. BORROWING ARRANGEMENTS

Credit Facility

On October 28, 2014, Rosetta Stone Ltd ("RSL"), a wholly owned subsidiary of parent company Rosetta Stone Inc., executed a Loan and Security Agreement with Silicon Valley Bank ("Bank") to obtain a credit facility (the "credit facility"). Since the original date of execution, the Company and the Bank have executed several amendments to the credit facility to reflect updates to the Company's financial outlook, expand the availability, and extend the credit facility.

On March 10, 2020, the Company executed the eighth amendment to the credit facility. Under the amended agreement, the Company may borrow up to $25.0 million. The credit facility has a term that expires on April 1, 2023, during which time RSL may borrow and re-pay loan amounts and re-borrow the loan amounts subject to customary borrowing conditions. However, the Company must have less than $5.0 million in outstanding borrowings for 30 consecutive days during each twelve month period beginning as of the date of execution. Interest on borrowings accrues at the greater of Prime Rate or 1.5% and must be paid quarterly.

Proceeds of loans made under the credit facility may be used as working capital or to fund general business requirements. All obligations under the credit facility, including letters of credit, are secured by a security interest on substantially all of the Company's assets including intellectual property rights and by a stock pledge by the Company of 100% of its ownership interests in U.S. subsidiaries and 66% of its ownership interests in certain foreign subsidiaries.

The credit facility contains customary affirmative and negative covenants, including covenants that limit or restrict the ability to, among other things, incur additional indebtedness, dispose of assets, execute a material change in business, acquire or dispose of an entity, grant liens, make share repurchases, and make distributions, including payment of dividends. The Company is required to maintain compliance with a minimum liquidity coverage ratio of 1.75 and minimum financial performance requirements, as defined in the credit facility. As of June 30, 2020, the Company was in compliance with all covenants.

The credit facility contains customary events of default, including among others, non-payment defaults, covenant defaults, bankruptcy and insolvency defaults, and a change of control default, in each case, subject to customary exceptions. The occurrence of a default event could result in the Bank's acceleration of repayment obligations of any loan amounts then outstanding.

As of June 30, 2020, there were no borrowings outstanding. A quarterly commitment fee accrues on any unused portion of the credit facility at a nominal annual rate.

9. OTHER CURRENT LIABILITIES

The following table summarizes other current liabilities (in thousands):

	As of	
	June 30, 2020	December 31, 2019
Accrued marketing expenses	$ 4,031	$ 5,394
Accrued professional and consulting fees	1,633	1,443
Sales return reserve	293	448
Sales, withholding, and property taxes payable	3,566	3,331
Other	1,960	2,474
Total other current liabilities	$ 11,483	$ 13,090

10. REVENUE AND DEFERRED REVENUE

The opening and closing balances of the Company's accounts receivable and deferred revenue are as follows (in thousands):

	Accounts Receivable	Deferred Revenue (current)	Deferred Revenue (non-current)
Opening balance as of January 1, 2020	$ 22,919	$ 119,851	$ 57,766
Increase/(decrease), net	4,084	(10,563)	7,049
Ending balance as of June 30, 2020	$ 27,003	$ 109,288	$ 64,815

ROSETTA STONE INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The amount of revenue recognized in the three months ended June 30, 2020 that was included in the opening January 1, 2020 deferred revenue balance was $44.0 million. The amount of revenue recognized in the six months ended June 30, 2020 that was included in the opening January 1, 2020 deferred revenue balance was $81.2 million. The vast majority of this revenue consists of deferred subscription revenue. The amount of revenue recognized from performance obligations satisfied in prior periods was not material.

The following table sets forth deferred revenue by reportable segment which represents the Company's unfulfilled performance obligations as of June 30, 2020 and the estimated revenue expected to be recognized in the future related to these performance obligations (in thousands):

	As of June 30, 2020				
	Total	Less than 1 Year	1-3 Years	3-5 Years	More than 5 Years
Literacy	$ 42,647	$ 30,965	$ 9,315	$ 1,213	$ 1,154
E&E Language	53,585	32,407	8,641	2,797	9,740
Consumer Language	77,871	45,916	19,375	1,822	10,758
Total	$ 174,103	$ 109,288	$ 37,331	$ 5,832	$ 21,652

In 2017, the Company entered into a series of agreements with SOURCENEXT Corporation, (“SOURCENEXT”), comprising a single performance obligation associated with the perpetual license of certain intellectual property, software, and product code for exclusive development and sale of language and education-related products in Japan. The Company estimated a 20 year period to recognize the performance obligation. As of June 30, 2020, deferred revenue associated with SOURCENEXT totaled $15.3 million, which will be recognized ratably through April 2037 and comprised the majority of the Consumer Language non-current deferred revenue. As this customer relationship progresses, the Company will prospectively reassess the recognition period as needed.

See Note 16 - “Segment Information” for further information on the disaggregation of revenue, including revenue by reportable segment and geographic area.

11. COMMITMENTS AND CONTINGENCIES

Litigation

From time to time, the Company has been subject to various claims and legal actions in the ordinary course of its business. The Company is not currently involved in any legal proceeding the ultimate outcome of which, in its judgment based on information currently available, would have a material impact on its business, financial condition or results of operations.

12. STOCK-BASED COMPENSATION

2009 Omnibus Incentive Plan

On February 27, 2009, the Company's Board of Directors approved the 2009 Omnibus Incentive Plan (the "2009 Plan") that provided the Company the ability to grant up to 2,437,744 of new stock incentive awards or options including Incentive and Nonqualified Stock Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Performance Units, Performance Shares, Performance based Restricted Stock, Share Awards, Phantom Stock and Cash Incentive Awards. Service, performance and market-based restricted stock awards are considered outstanding at the time of grant as the stockholder is entitled to voting rights and to receive any dividends declared subject to the loss of the right to receive accumulated dividends if the award is forfeited prior to vesting. Performance units and restricted stock units do not have voting rights. The stock incentive awards and options granted under the 2009 Plan generally expire at the earlier of a specified period after termination of service or the date specified by the Board or its designated committee at the date of grant, but not more than ten years from such grant date. On February 27, 2019, the 2009 plan expired and no additional grants will be made under this plan. Since the establishment of the 2009 Plan, the Board of Directors authorized and the Company's shareholders approved the allocation of additional shares of common stock to the 2009 Plan as follows:

Authorization Dates of 2009 Plan Additions	Number of Common Stock Shares Authorized to 2009 Plan
February 27, 2009	2,437,744
May 26, 2011	1,000,000
May 23, 2012	1,122,930
May 23, 2013	2,317,000
May 20, 2014	500,000
June 12, 2015	1,200,000
May 27, 2017	1,900,000

2019 Omnibus Incentive Plan

On May 16, 2019, the Company's stockholders and Board of Directors approved the 2019 Omnibus Incentive Plan (the "2019 Plan") that provided the Company the ability to grant up to 2,350,000 of new stock incentive awards or options including Incentive and Nonqualified Stock Options, Stock Appreciation Rights, Restricted Stock, Restricted Stock Units, Performance Units, Performance Shares, Performance based Restricted Stock, Share Awards, Phantom Stock and Cash Incentive Awards. Service, performance and market-based restricted stock awards are considered outstanding at the time of grant as the stockholder is entitled to voting rights and to receive any dividends declared subject to the loss of the right to receive accumulated dividends if the award is forfeited prior to vesting. Performance units and restricted stock units do not have voting rights. The stock incentive awards and options granted under the 2019 Plan generally expire at the earlier of a specified period after termination of service or the date specified by the Board or its designated committee at the date of grant, but not more than ten years from such grant date. At June 30, 2020 there were 1,265,010 shares available for future grant under the 2019 Plan.

Valuation Assumptions

The determination of fair value of our stock-based awards is affected by assumptions regarding subjective and complex variables. Generally, our assumptions are based on historical information and judgment is required to determine if historical trends may be indicators of future outcomes. In accordance with ASC 718, the fair value of stock-based awards to employees is calculated as of the date of grant. Compensation expense is then recognized over the requisite service period of the award. Stock-based compensation expense recognized is based on the estimated portion of the awards that is expected to vest. Estimated forfeiture rates are applied in the expense calculation. The Company determines the fair values of stock-based awards as follows:

- Service-Based Restricted Stock Awards, Restricted Stock Units, Performance-Based Restricted Stock Awards, and Performance Share Units: Fair value is determined based on the quoted market price of our common stock on the date of grant.
- Service-Based Stock Options and Performance-Based Stock Options: Fair value is determined using the Black-Scholes pricing model, which requires the use of estimates, including the risk-free interest rate, expected volatility, expected dividends, and expected term.

- Market-Based Restricted Stock Awards and Market-Based Stock Options: The fair value of the market-based awards is determined using a Monte-Carlo simulation model. The Monte Carlo valuation also estimates the number of market-based awards that would be awarded which is reflected in the fair value on the grant date. There have been no market based awards or options granted in the periods presented.

For the six months ended June 30, 2020 and June 30, 2019, the fair value of stock options granted was calculated using the following assumptions in the Black-Scholes model:

	Six months ended June 30,	
	2020	2019
Expected stock price volatility	45.3%	39.9%
Expected term of options	5.2 years	5.1 years
Expected dividend yield	—	—
Risk-free interest rate	0.36%	2.16%

Stock-Based Compensation Expense

Stock compensation expense associated with service-based equity awards is recognized in the statements of operations ratably over the requisite service period, which is the vesting period. If an award's service inception date precedes the grant date, compensation expense is initially measured at fair value at the service inception date based on probability of payout, and remeasured at subsequent reporting dates until all of the award's key terms and conditions are known and the grant date is established. For equity awards granted with performance-based conditions, stock compensation expense is recognized in the statements of operations ratably for each vesting tranche based on the probability that operating performance conditions will be met and to what extent. Changes in the probability estimates associated with performance-based awards are accounted for in the period of change using a cumulative catch-up adjustment to retroactively apply the new probability estimates. In any period in which the Company determines that achievement of the performance metrics is not probable, the Company ceases recording compensation expense and all previously recognized compensation expense for the performance-based award is reversed. For equity awards granted with market-based conditions, stock compensation is recognized in the statements of operations ratably for each vesting tranche regardless of meeting or not meeting the market conditions.

The following table presents stock-based compensation expense included in the related financial statement line items (in thousands):

	Three months ended June 30,		Six months ended June 30,	
	2020	2019	2020	2019
Cost of revenue	$ 111	$ 16	$ 120	$ (16)
Sales and marketing	849	303	1,459	505
Research & development	658	120	898	143
General and administrative	1,391	917	2,793	1,944
Total stock based compensation expense	$ 3,009	$ 1,356	$ 5,270	$ 2,576

The following table presents the future stock-based compensation expense, net of forfeitures, for each equity award category as of June 30, 2020 and the weighted average period over which the expense will be recognized:

	Service-based Restricted Stock Awards	Service-based Stock Options	Restricted Stock Units	Performance Stock Units
Unrecognized compensation expense, net of forfeitures (in thousands)	$ 5,077	$ 341	$ 686	$ 3,519
Weighted average period over which the above expense will be recognized (in years)	2.77	0.95	1.12	1.43

Service-Based Restricted Stock Awards

Shares of service-based restricted stock are generally recognized as expense ratably over the requisite service period of the awards, which is also the vesting period. Service-based restricted stock awards are granted at the discretion of the Board of Directors or the Compensation Committee (or its authorized member(s)) and generally vest over one-year, two-year or four -year period based upon required service conditions and do not have performance or market conditions. The Company's service-based restricted stock awards are accounted for as equity awards. The grant date fair value is based on the market price of the Company's common stock at the date of grant. The Company did not grant any restricted stock prior to April 2009.

The following table summarizes the Company's service-based restricted stock award activity from January 1, 2020 to June 30, 2020:

	Service-based Restricted Stock Awards	Weighted Average Grant Date Fair Value	Aggregate Intrinsic Value
Non-vested service-based awards, January 1, 2020	343,010	$ 12.77	$ 4,379,414
Service-based awards granted	279,078	19.45	
Service-based awards vested	(131,954)	11.73	
Service-based awards cancelled	(7,636)	16.64	
Non-vested Service-based awards, June 30, 2020	482,498	16.85	8,130,091

The following table summarizes the Company's weighted average grant date fair value and vested fair value for the six months ended June 30, 2020 and June 30, 2019:

	Six months ended June 30,	
	2020	2019
Weighted-average grant-date fair value of service-based restricted stock awards granted	$ 19.45	$ 15.28
Fair value of service-based restricted stock awards vested (in thousands)	$ 2,526	$ 4,088

Performance-Based Restricted Stock Units

Beginning in the first quarter of 2017, the Company began granting annual performance-based restricted stock units ("PSUs") to certain employees which will become earned or eligible to vest based on the Company's achievement of certain pre-defined key operating performance goals during a one to three -year period. The number of PSUs earned or eligible to vest following the performance period is subject to approval by the Compensation Committee of the Board of Directors. Once earned, PSUs vest shortly after being earned. PSUs were granted at "target" (at 100% of target). Based upon actual attainment of the operating performance results relative to target, actual issuance of PSUs can be eligible for vest anywhere between a maximum of 200% and 0% of the target number of PSUs originally granted.

The following table summarizes the Company's PSU activity from January 1, 2020 to June 30, 2020:

	Performance Stock Units	Weighted Average Grant Date Fair Value	Aggregate Intrinsic Value
Non-vested PSUs, January 1, 2020	615,614	$ 13.84	$ 11,167,238
PSUs granted	255,105	16.62	
PSUs vested	(168,324)	10.91	
PSUs cancelled	(112,904)	14.78	
Non-vested PSUs, June 30, 2020	589,491	$ 15.69	$ 9,938,818

ROSETTA STONE INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table summarizes the Company's weighted average grant date fair value and fair value of PSUs vested for the six months ended June 30, 2020 and June 30, 2019:

	Six months ended June 30,	
	2020	2019
Weighted average grant date fair value of PSUs granted	$ 16.62	$ 15.21
Fair value of PSUs vested (in thousands)	$ 2,302	$ 3,120

Service-Based Stock Options

Service-based stock options are granted at the discretion of the Board of Directors or the Compensation Committee (or its authorized member(s)) and expire 10 years from the date of the grant. Service-based stock options to directors generally vest quarterly over a one year period based upon required service conditions and do not have performance or market conditions. The aggregate intrinsic value disclosed below represents the total intrinsic value (the difference between the fair market value of the Company's common stock as of June 30, 2020, and the exercise price, multiplied by the number of in-the-money service-based stock options) that would have been received by the option holders had all option holders exercised their options on June 30, 2020. This amount is subject to change based on changes to the fair market value of the Company's common stock.

The following table summarizes the Company's service-based stock option activity from January 1, 2020 to June 30, 2020:

	Service-based Options	Weighted Average Exercise Price	Weighted Average Contractual Life (years)	Aggregate Intrinsic Value
Service-based options outstanding, January 1, 2020	1,081,592	$ 10.06	5.57	$ 9,022,107
Service-based options granted	58,224	17.11		
Service-based options exercised	(36,222)	11.30		
Service-based options cancelled	(6,474)	25.99		
Service-based options outstanding, June 30, 2020	1,097,120	10.30	5.39	7,492,525
Vested and expected to vest at June 30, 2020	1,091,769	10.27	5.37	7,492,525
Exercisable at June 30, 2020	1,038,896	9.92	5.13	$ 7,492,525

The following table summarizes the Company's weighted average grant date fair value and intrinsic value of options exercised for the six months ended June 30, 2020 and June 30, 2019:

	Six months ended June 30,	
	2020	2019
Weighted average grant date fair value of service-based stock options granted	$ 6.87	$ 9.84
Intrinsic value of options exercised (in thousands)	$ 672	$ 6,432

Restricted Stock Units

Restricted stock units are granted to members of the Board of Directors as part of their compensation packages. Restricted stock units to directors convert to common stock following the separation of service with the Company. Director restricted stock units vest quarterly over a one year period from the date of grant. The Company also grants restricted stock units to international employees which typically vest over a two-year or four-year period. Restricted stock unit expense is recognized ratably over the vesting period. The Company's restricted stock units are accounted for as equity awards. The grant date fair value is based on the market price of the Company's common stock at the date of grant. The Company did not grant any restricted stock units prior to April 2009.

ROSETTA STONE INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

The following table summarizes the Company's restricted stock unit activity from January 1, 2020 to June 30, 2020:

	Restricted Stock Units	Weighted Average Grant Date Fair Value	Aggregate Intrinsic Value
Units outstanding, January 1, 2020	265,913	$ 12.56	$ 4,823,662
Units granted	46,252	17.24	
Units released	(432)	15.11	
Units cancelled	—	—	
Units outstanding, June 30, 2020	311,733	13.25	5,255,818
Vested and expected to vest at June 30, 2020	306,819	13.19	5,172,968
Vested and deferred at June 30, 2020	264,191	$ 12.55	$ 4,454,260

The following table summarizes the Company's weighted average grant date fair value and fair value of units converted for the six months ended June 30, 2020 and June 30, 2019:

	Six months ended June 30,	
	2020	2019
Weighted average grant date fair value of restricted stock units granted	$ 17.24	$ 24.66
Fair value of restricted stock units converted (in thousands)	$ 8	$ —

CEO 2016 Performance and Market Conditioned Restricted Stock Awards and Stock Options Grants

On April 4, 2016, the Company named Mr. John Hass as President, CEO and Chairman of the Board. In conjunction with his appointment, the Compensation Committee approved a stock-based compensation package for Mr. Hass aimed to provide significant reward potential for achieving outstanding Company operating performance results and building stockholder value. The package was comprised of 70,423 performance-based restricted stock awards (PRSAs), 314,465 performance-based stock options (PSOs), 70,423 market-based restricted stock awards (MRSAs), and 314,465 market-based stock options (MSOs). The April 4, 2016 grant date fair values associated with these grants were $7.10, $3.24, $6.17 and $0.94, respectively.

On February 20, 2017, the Compensation Committee approved 64,719 PRSAs and 144,497 PSOs as eligible for further service vesting requirements. The non-eligible 5,704 and 169,968 PRSAs and PSOs, respectively, were cancelled as of February 20, 2017. PRSAs and PSOs vested 50%, 25% and 25% on April 4, 2017, 2018 and 2019, respectively. As of June 30, 2020, all PRSAs and PSOs were vested. As of June 30, 2020, no PSOs have been exercised.

On February 22, 2018, the Compensation Committee approved the maximum quantity of 140,846 MRSAs and 314,465 MSOs as eligible for further service vesting requirements. MRSAs and MSOs vest annually on a pro-rata basis over three years beginning April 4, 2018. As of June 30, 2020, all MRSAs and MSOs were vested. As of June 30, 2020, no MSOs have been exercised.

13. STOCKHOLDERS' DEFICIT

At June 30, 2020, the Company's Board of Directors had the authority to issue 200,000,000 shares of stock, of which 190,000,000 were designated as Common Stock, with a par value of $0.00005 per share, and 10,000,000 were designated as Preferred Stock, with a par value of $0.001 per share. At June 30, 2020, the Company had shares of common stock issued of 25,603,682 and shares of common stock outstanding of 24,603,682.

In the first quarter of 2020, the Company issued 67,540 shares of unrestricted common stock in settlement of a previously accrued cash bonus liability; resulting in the reclassification of $1.3 million to additional paid-in capital. In the first quarter of 2019, the Company issued 36,776 shares of unrestricted common stock in settlement of a previously accrued cash bonus liability; resulting in the reclassification of $0.6 million to additional paid-in capital.

14. BASIC AND DILUTED NET LOSS PER SHARE

Net loss per share is computed under the provisions of ASC topic 260, *Earnings Per Share*. Basic loss per share is computed using net loss and the weighted average number of shares of common stock outstanding. Diluted loss per share reflects the weighted average number of shares of common stock outstanding plus any dilutive shares outstanding during the period. Potentially dilutive shares consist of shares issuable upon the exercise of stock options, restricted stock awards, and restricted stock units.

The following table sets forth the computation of basic and diluted net loss per common share (amounts in thousands, except per share amounts):

	Three months ended June 30,		Six months ended June 30,	
	2020	2019	2020	2019
Numerator:				
Net loss	$ (3,586)	$ (2,807)	$ (9,767)	$ (3,351)
Denominator:				
Basic weighted average shares	24,103	23,455	23,953	23,247
Diluted weighted average shares	24,103	23,455	23,953	23,247
Loss per share:				
Basic	$ (0.15)	$ (0.12)	$ (0.41)	$ (0.14)
Diluted	$ (0.15)	$ (0.12)	$ (0.41)	$ (0.14)

The Company calculates dilutive common stock equivalent shares using the treasury stock method. In periods where the Company has a net loss, no dilutive common stock equivalent shares are included in the calculation for diluted shares as they are considered anti-dilutive. The following table sets forth dilutive common stock equivalent shares calculated using the treasury stock method (in thousands):

	Three months ended June 30,		Six months ended June 30,	
	2020	2019	2020	2019
Stock options	585	818	587	787
Restricted stock units	272	244	267	238
Restricted stocks	296	519	394	556
Total common stock equivalent shares	1,153	1,581	1,248	1,581

Share-based awards to purchase approximately 0.2 million and zero shares of common stock that had an exercise price in excess of the average market price of the common stock during the three months ended June 30, 2020 and June 30, 2019, respectively, were not included in the calculation of diluted loss per share because they were anti-dilutive. Share-based awards to purchase approximately 0.2 million and zero shares of common stock that had an exercise price in excess of the average market price of the common stock during the six months ended June 30, 2020 and June 30, 2019, respectively, were not included in the calculation of diluted loss per share because they were anti-dilutive.

15. INCOME TAXES

In accordance with ASC topic 740, *Income Taxes* (“ASC 740”), and ASC subtopic 740-270, *Income Taxes: Interim Reporting*, the income tax provision for the six months ended June 30, 2020 is based on the estimated annual effective tax rate for fiscal year 2020. The estimated effective tax rate may be subject to adjustment in subsequent quarterly periods as the estimates of pretax income for the year, along with other items that may affect the rate, may change and may create a different relationship between domestic and foreign income and loss.

Valuation Allowance Recorded for Deferred Tax Assets

As of June 30, 2020, a valuation allowance was provided for the U.S., Hong Kong, Mexico, Spain, France, and Brazil where the Company previously determined in prior periods the deferred tax assets will not more likely than not be realized.

Evaluation of the remaining jurisdictions as of June 30, 2020, resulted in the determination that no additional valuation allowances were necessary at this time. However, the Company will continue to assess the need for a valuation allowance against its deferred tax assets in the future and the valuation allowance will be adjusted accordingly, which could materially affect the Company’s financial position and results of operations.

As of June 30, 2020, and December 31, 2019, the Company's U.S. deferred tax liability was $2.7 million and $2.5 million, respectively, related to its goodwill and indefinite lived intangibles. As of June 30, 2020 the Company had no foreign net deferred tax assets compared to foreign net deferred tax assets of $0.1 million at December 31, 2019. As of June 30, 2020, and December 31, 2019, the Company had no unrecognized tax benefits.

For the six months ended June 30, 2020 the Company recorded an income tax expense of $0.6 million related to profits of operations for foreign jurisdictions in the U.K., Germany, China, France and Canada and deferred tax expense related to the tax impact of amortization of indefinite lived intangible assets.

16. SEGMENT INFORMATION

The Literacy segment derives the majority of its revenue from the sales of literacy solutions to educational institutions serving grades K through 12. The E&E Language segment derives revenue from sales of language-learning solutions to educational institutions, corporations, and government agencies worldwide. The Consumer Language segment derives the majority of its revenue from sales of language-learning solutions to individuals and retail partners. Revenue from transactions between the Company's operating segments is not material.

The Company and its Chief Operating Decision Maker ("CODM") assess profitability and performance of each of its current operating segments in terms of segment contribution. Segment contribution is a segment measure of profitability determined consistent with Accounting Standards Codification 280. Segment contribution is calculated as segment revenue less expenses directly incurred by or allocated to the segment. Direct segment expenses include materials costs, service costs, customer care and coaching costs, sales and marketing expenses, and bad debt expense. In addition to the previously referenced expenses, the Literacy segment includes direct research and development expenses and Combined Language includes shared research and development expenses, cost of revenue, and sales and marketing expenses applicable to the Consumer Language and E&E Language segments. Segment contribution excludes depreciation, amortization, stock compensation, restructuring and other related expenses. The Company does not allocate expenses beneficial to all segments, which include certain general and administrative expenses such as legal fees, payroll processing fees, accounting related expenses, lease abandonment, impairment, and non-operating income and expense. These expenses are included below the segment contribution line in the unallocated expenses section of the tables presented below.

The E&E Language segment and Consumer Language segment are characterized as "Language" since both of these segments primarily address the language-learning market and share many of the same costs. These shared language costs are included in the "Shared Services" column of the tables presented below. General and administrative expenses directly incurred by the Language segments consist only of bad debt expense, net of recoveries. Additionally, research and development expenses are included as shared Language costs. The Company will continue to evaluate its management reporting and will update its operating and reportable segments as appropriate. With the exception of goodwill, the Company does not identify or allocate its assets by operating segment. Consequently, the Company does not present assets or liabilities by operating segment.

ROSETTA STONE INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Operating results by segment for the three months ended June 30, 2020 were as follows (in thousands):

		Language				
	Literacy Segment	E&E Language Segment	Consumer Language Segment	Shared Services	Combined Language	Total Company
Revenue	$ 17,814	$ 13,640	$ 17,741	$ —	$ 31,381	$ 49,195
Cost of revenue	2,811	2,657	2,423	(1)	5,079	7,890
Sales and marketing	8,583	5,318	10,834	(4)	16,148	24,731
Research and development	2,850	—	—	2,667	2,667	5,517
General and administrative	522	179	(28)	—	151	673
Segment contribution	$ 3,048	$ 5,486	$ 4,512	$ (2,662)	$ 7,336	$ 10,384
Segment contribution margin %	*17.1%*	*40.2%*	*25.4%*		*23.4%*	
Unallocated depreciation and amortization, stock compensation, and other expenses (net) included in:						
Cost of revenue						3,546
Sales and marketing						1,243
Research and development						660
General and administrative						2,016
Subtotal						7,465
Corporate unallocated expenses, net:						
Unallocated general and administrative						6,256
Unallocated non-operating expense						26
Subtotal						6,282
Loss before income taxes						**$ (3,363)**

ROSETTA STONE INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Operating results by segment for the three months ended June 30, 2019 were as follows (in thousands):

		Language				
	Literacy Segment	E&E Language Segment	Consumer Language Segment	Shared Services	Combined Language	Total Company
Revenue	$ 15,101	$ 14,502	$ 16,339	$ —	$ 30,841	$ 45,942
Cost of revenue	2,404	1,698	2,242	(2)	3,938	6,342
Sales and marketing	7,559	6,848	10,430	29	17,307	24,866
Research and development	2,224	—	—	3,360	3,360	5,584
General and administrative	543	108	18	—	126	669
Segment contribution	$ 2,371	$ 5,848	$ 3,649	$ (3,387)	$ 6,110	$ 8,481
Segment contribution margin %	*15.7%*	*40.3%*	*22.3%*		*19.8%*	
Unallocated depreciation and amortization, stock compensation, and other expenses (net) included in:						
Cost of revenue						2,519
Sales and marketing						934
Research and development						192
General and administrative						1,449
Subtotal						5,094
Corporate unallocated expenses, net:						
Unallocated general and administrative						6,448
Unallocated non-operating income						(429)
Subtotal						6,019
Loss before income taxes						**$ (2,632)**

ROSETTA STONE INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Operating results by segment for the six months ended June 30, 2020 were as follows (in thousands):

	Literacy Segment	Language: E&E Language Segment	Language: Consumer Language Segment	Language: Shared Services	Language: Combined Language	Total Company
Revenue	$ 35,300	$ 27,192	$ 33,882	$ —	$ 61,074	$ 96,374
Cost of revenue	5,747	4,928	4,860	(2)	9,786	15,533
Sales and marketing	16,622	11,125	21,422	—	32,547	49,169
Research and development	5,992	—	—	5,849	5,849	11,841
General and administrative	1,074	155	178	—	333	1,407
Segment contribution	$ 5,865	$ 10,984	$ 7,422	$ (5,847)	$ 12,559	$ 18,424
Segment contribution margin %	*16.6%*	*40.4%*	*21.9%*		*20.6%*	
Unallocated depreciation and amortization, stock compensation, and other expenses (net) included in:						
Cost of revenue						7,004
Sales and marketing						2,239
Research and development						1,253
General and administrative						3,979
Subtotal						14,475
Corporate unallocated expenses, net:						
Unallocated general and administrative						13,121
Unallocated non-operating income						(8)
Subtotal						13,113
Loss before income taxes						**$ (9,164)**

ROSETTA STONE INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Continued)

Operating results by segment for the six months ended June 30, 2019 were as follows (in thousands):

	Literacy Segment	Language: E&E Language Segment	Language: Consumer Language Segment	Language: Shared Services	Language: Combined Language	Total Company
Revenue	$ 29,907	$ 28,945	$ 31,701	$ —	$ 60,646	$ 90,553
Cost of revenue	4,862	3,167	4,226	(3)	7,390	12,252
Sales and marketing	14,468	13,694	19,263	59	33,016	47,484
Research and development	4,219	—	—	7,011	7,011	11,230
General and administrative	974	129	15	—	144	1,118
Segment contribution	$ 5,384	$ 11,955	$ 8,197	$ (7,067)	$ 13,085	$ 18,469
Segment contribution margin %	*18.0%*	*41.3%*	*25.9%*		*21.6%*	
Unallocated depreciation and amortization, stock compensation, and other expenses (net) included in:						
Cost of revenue						5,035
Sales and marketing						1,554
Research and development						284
General and administrative						3,086
Subtotal						9,959
Corporate unallocated expenses, net:						
Unallocated general and administrative						13,054
Unallocated non-operating income						(1,198)
Subtotal						11,856
Loss before income taxes						**$ (3,346)**

Geographic Information

Revenue by major geographic region is based primarily upon the geographic location of the customers who purchase the Company's products. The geographic locations of distributors and resellers who purchase and resell the Company's products may be different from the geographic locations of end customers.

The information below summarizes revenue from customers by geographic area for the three and six months ended June 30, 2020 and 2019 (in thousands):

	Three months ended June 30, 2020	Three months ended June 30, 2019	Six months ended June 30, 2020	Six months ended June 30, 2019
United States	$ 44,415	$ 41,179	$ 86,944	$ 81,009
International	4,780	4,763	9,430	9,544
Total revenue	$ 49,195	$ 45,942	$ 96,374	$ 90,553

The information below summarizes long-lived assets by geographic area classified as held and used as of June 30, 2020 and December 31, 2019 (in thousands):

	As of June 30, 2020	As of December 31, 2019
United States	$ 37,125	$ 37,378
International	1,662	1,873
Total property and equipment, net	$ 38,787	$ 39,251

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

This Quarterly Report on Form 10-Q (this "Report") and other statements or presentations made from time to time by the Company, including the documents incorporated by reference, contain forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward-looking statements can be identified by non-historical statements and often include words such as "outlook," "potential," "believes," "expects," "anticipates," "estimates," "intends," "plans," "seeks" or words of similar meaning, or future-looking or conditional verbs, such as "will," "should," "could," "may," "might," "aims," "intends," "projects," or similar words or phrases. These statements may include, but are not limited to, statements related to: our business strategy; guidance or projections related to revenue, Adjusted EBITDA, sales and bookings (which is an operational metric that represents executed contracts received by the Company that are either recorded immediately as revenue or deferred revenue and in any one period is equal to revenue plus the change in deferred revenue), and other measures of future economic performance; the contributions and performance of our businesses including acquired businesses and international operations; projections for future capital expenditures; and other guidance, projections, plans, objectives, and related estimates and assumptions. A forward-looking statement is neither a prediction nor a guarantee of future events or circumstances. In addition, forward-looking statements are based on the Company's current assumptions, expectations and beliefs and are subject to certain risks and uncertainties that could cause actual results to differ materially from our present expectations or projections. Some important factors that could cause actual results, performance or achievement to differ materially from those expressed or implied by these forward-looking statements include, but are not limited to: the impact of the COVID-19 pandemic on the global economy; the risk that we are unable to execute our business strategy; declining demand for our language learning and literacy solutions; the risk that we are not able to manage and grow our business; the impact of any revisions to our pricing strategy; the risk that we might not succeed in introducing and producing new products and services; the impact of foreign exchange fluctuations; the adequacy of internally generated funds and existing sources of liquidity, such as bank financing, as well as our ability to raise additional funds; the risk that we cannot effectively adapt to and manage complex and numerous technologies; the risk that businesses acquired by us might not perform as expected; and the risk that we are not able to successfully expand internationally. We expressly disclaim any obligation to update or revise any forward-looking statements, whether as a result of new information, future developments or otherwise, except as required by law. These factors should not be construed as exhaustive and should be read in conjunction with the other cautionary statements risks and uncertainties that are more fully described in the Company's filings with the U.S. Securities and Exchange Committee (SEC), including those described below, those discussed in the sections titled "Risk Factors" in Part II, Item 1A of this Report and those updated from time to time in our future reports filed with the Securities and Exchange Commission. This section should be read together with our unaudited consolidated financial statements and related notes set forth elsewhere in this Report, "Management's Discussion and Analysis of Financial Condition and Results of Operations", and our Annual Report on Form 10-K filed with the Securities and Exchange Commission on March 11, 2020.

Overview

Rosetta Stone Inc. ("Rosetta Stone," the "Company," "we" or "us") is dedicated to changing people's lives through the power of language and literacy education. Our innovative digital solutions drive positive learning outcomes for the inspired learner at home or in schools and workplaces around the world. Founded in 1992, Rosetta Stone's language division uses advanced digital technology to help all types of learners read, write, and speak world languages. Lexia Learning, Rosetta Stone's literacy education division, was founded more than 30 years ago and is a leader in the literacy education space. Today, Lexia helps students build foundational reading skills through its rigorously researched, independently evaluated, and widely respected instruction and assessment programs. Rosetta Stone Inc. was incorporated in Delaware in 2005.

The Literacy segment derives the majority of its revenue from sales of literacy solutions to educational institutions serving grades K through 12. The Enterprise & Education ("E&E") Language segment derives revenue from sales of language-learning solutions to educational institutions, corporations, and government agencies worldwide. The Consumer Language segment derives the majority of revenue from sales of language-learning solutions to individuals and retail partners. Our Literacy distribution channel utilizes a direct sales force as well as relationships with third-party resellers focused on the sale of Lexia Learning solutions to K-12 schools. Our E&E Language distribution model is focused on targeted sales activity primarily through a direct sales force in five markets: K-12 schools; higher education; federal government agencies; corporations; and not-for-profit organizations. Our Consumer Language distribution channel comprises a mix of our call centers, websites, app-stores, third party e-commerce websites, select retail resellers, such as Amazon.com, Barnes & Noble, Target, and Best Buy, consignment distributors such as Software Packaging Associates, and daily deal partners and home shopping resellers.

As our Company has evolved, we believe that our current portfolio of language and literacy products and our SaaS-based delivery model provides multiple opportunities for long-term value creation. We also believe the demand is growing for e-learning based literacy solutions in the U.S. and English language-learning around the globe, and we are uniquely positioned with the power of our global brand to meet the growing needs of global learners.

We continue to emphasize the development of products and solutions for learners who need to speak and read English. This focus extends to the Consumer Language segment, where we continue to make product investments serving the needs of passionate language learners who are mobile, results focused and value a quality language-learning experience.

To position the organization for success, our focus is on the following priorities:

1. Continued growth of our K-12 business;
2. Leveraging our iconic Rosetta Stone brand;
3. Position ourselves as a leader in adaptive blended learning; and
4. Accelerate growth and increase intrinsic value.

As of June 30, 2020, we currently have three operating segments, Literacy, E&E Language, and Consumer Language. We discuss the profitability of each segment in terms of segment contribution. Segment contribution is the measure of profitability used by our Chief Operating Decision Maker ("CODM"). See Note 16 "Segment Information" of Part 1 - Item 1, Financial Statements for information about recent changes in the definition and presentation of segment contribution.

COVID-19 Update

In late 2019, a novel strain of coronavirus that causes the disease COVID-19 surfaced and quickly spread, causing a global pandemic. To combat the spread of COVID-19, authorities have taken a variety of steps to protect their citizens, including closing schools and workplaces and requiring people to stay at home and practice social distancing. These actions have had significant negative impacts on the global economy.

On March 16, 2020, our global employee base began to work from home. We have a distributed workforce that has historically operated out of multiple offices. As a result, we already had in place the appropriate technology and tools to facilitate operating in a remote work environment and under restricted travel. As such, to date, we have not identified any significant issues with travel restrictions and in the transition to a remote work environment. We have established a plan, in compliance with applicable guidance, to return to our offices. We have also given our employees the option to continue to work remotely for the remainder of the year. We have not had any COVID-19 related employment terminations, however we have taken the following employee-related actions to decrease costs and preserve our cash flows to provide cushion for future uncertainty:

- the furlough of 14 employees effective June 1, 2020 and the furlough of an additional 4 employees effective July 15, 2020, who were in direct or indirect support of the Enterprise business;
- adoption of the deferral on the payment of social security under the CARES Act through the remainder of 2020;
- discontinuation of the 4% company match on 401(k) contributions beginning June 1, 2020 through the end of the calendar year;
- a pause on salary increases that have not already been communicated; and
- restriction on personnel hiring to only areas that are critical to the business or that create or support bookings, especially in our K-12 and Consumer Language businesses.

We recognize that COVID-19 has changed the way our employees work with each other and our customers, and we are committed to ensuring these changes cause the least disruption to our learners. All of our solutions can be used by learners remotely and we are capable of providing our services to our customers while following social distancing protocols. In response to extensive business and school closures around the world and the growing need to adopt distance-learning solutions, we implemented the following initiatives:

- expanded access to our products for all of our existing K-12 customers through the end of the 2019/2020 school year, with no additional charge, to help them move to remote learning (the “Learn From Home” program);
- provided Lexia Academy, which provides online implementation and training support for teachers, to help teachers implement our products with their students;
- communicated to districts and schools regarding best practices for remote learning;
- left expired licenses on for a period of time for customers who were dealing with very disruptive changes to the way they worked, and delayed aggressive collection actions;
- made available three months of a free language learning subscription to any elementary, middle or high school student through June 30, 2020;
- provided free unlimited group language tutoring for all paying consumer subscribers through June 30, 2020; and
- upgraded our “bronze” access level Enterprise customers to a “silver” access level at no charge to provide access to online group tutoring through June 1, 2020.

During the second quarter of 2020, we experienced the following as a direct result of COVID-19:

- in Lexia, there was a 12% increase in active school licenses and a tripling of the number of unlimited school site licenses, attributable to expansions in existing districts that were driven by the Learn From Home initiative. While we recognize that not all of these new learners will convert to paying licenses, we are focused on continuing these relationships, with as many of these schools as we can as paying customers;

- an increase in Consumer Language subscriptions and users as people sought language learning enrichment opportunities during stay-at-home orders. Given the proximity of the Lifetime Unlimited subscription launch and the onset of the pandemic, it is not possible to precisely determine how much of the 92% second quarter year-over-year bookings growth was directly attributable to the pandemic, but we believe a significant portion is attributable to the pandemic. We do not expect Consumer bookings growth to continue at this rate in future periods;
- we did not make any short term borrowings under our credit facility during our typical mid-year seasonal cash low point driven primarily by the increase in Consumer language bookings. These Consumer sales turn to cash quickly because they are paid up front via credit card transactions and had a positive impact on our liquidity during the first half of 2020;
- reduction of future pipeline sales opportunities in our Enterprise business where new and existing customers that are experiencing financial hardship may decide to postpone purchase or renewal;
- direct and indirect cost cutting measures in the E&E Language business, including furloughs, to reduce related operating expenses by approximately $4 million on an annual basis; and
- a year over year reduction in second quarter travel related expenses of $1.5 million.

While we continue to be confident of our ability to support learners during this period, there remains uncertainty surrounding:

- unprecedented levels of disruption that may distract our customers and delay purchasing decisions;
- customers, particularly in our Enterprise business and with our custom content deals that support language preservation for Native American tribes, that may be facing financial difficulties that may lead to delayed purchase decisions slower cash collection or non-renewal due to lack of funds;
- the length of the economic downturn and the impact on local K-12 school budgets and consumer discretionary spending; and
- productivity disruptions caused by the distraction of our workforce in a remote work environment.

We continue to monitor these risks. Alternatively, the COVID-19 pandemic may continue to create opportunities for us to expand our relationships with existing customers who appreciate the value of remote learning. We believe that over time that this period will serve to highlight the affordability and convenience of online training and coaching.

Components of Our Statements of Operations

Revenue

We derive revenue from sales of language-learning and literacy solutions. Our revenue consists of fees associated with web-based software subscriptions, online services, professional services, and mobile applications. Subscription revenue is generated from contracts with customers that provide access to hosted software over a contract term without the customer taking possession of the software. Subscription revenue is recognized ratably over the contract period as the performance obligation is satisfied. Subscription revenue is generated by all three reportable segments and range from short-term to multi-year contracts. Online services are typically sold in short-term service periods and include dedicated online conversational coaching services and access to online communities of language learners. Professional services include training and implementation services. Online services revenue and professional services revenue are recognized as the services are provided. Expired services are forfeited and revenue is recognized upon expiry.

We sell our solutions directly and indirectly to individuals, educational institutions, corporations, and governmental agencies. We sell to enterprise and education organizations primarily through our direct sales force as well as through our network of resellers and organizations who typically gain access to our solutions under a web-based subscription service. We distribute our Consumer Language products predominantly through our direct sales channels, primarily utilizing our websites, mobile applications and call centers, which we refer to as our direct-to-consumer ("DTC") channel. We also distribute our Consumer Language products through select third-party retailers and distributors. For purposes of explaining variances in our revenue, we separately discuss changes in our E&E Language, Literacy, and our Consumer Language segments because the customers and revenue drivers of these channels are different.

Literacy segment sales are seasonally strongest in the second and third quarter of the calendar year corresponding to the end and beginning of school district budget years. Within our E&E Language segment, sales in our education, government, and corporate sales channels are seasonally stronger in the second half of the calendar year due to purchasing and budgeting cycles. Consumer Language sales are affected by seasonal trends associated with the holiday shopping season. We expect these trends to continue, but may be impacted by the COVID-19 pandemic.

Cost of Revenue

Cost of revenue primarily represents costs associated with supporting our web-based subscription services and online language-learning services, which includes online language conversation coaching, hosting costs and depreciation. We also include the cost of credit card processing and customer technical support in cost of revenue. Cost of revenue also includes third-party royalty fees, and inventory storage, obsolescence and shrinkage.

Operating Expenses

We classify our operating expenses into the following categories: sales and marketing, research and development, and general and administrative. Our operating expenses primarily consist of personnel costs, direct advertising and marketing expenses, and professional fees associated with contract product development, legal, accounting and consulting. Personnel costs for each category of operating expenses include salaries, bonuses, stock-based compensation and employee benefit costs.

Sales and Marketing. Our sales and marketing expenses consist primarily of direct advertising expenses related to television, print, radio, online and other direct marketing activities, personnel costs for our sales and marketing staff, and commissions earned by our sales personnel and app stores. Sales commissions are generally paid when a customer contract is either recorded as revenue or deferred revenue. However, sales commissions are deferred and recognized as expense in proportion to when the related revenue is recognized.

Research and Development. Research and development expenses consist primarily of employee compensation costs, consulting fees, and overhead costs associated with development of our solutions. Our development efforts are primarily based in the U.S. and are devoted to modifying and expanding our offering portfolio through the addition of new content, as well as new paid and complementary products and services to our language-learning and literacy solutions.

General and Administrative. General and administrative expenses consist primarily of shared services, such as personnel costs of our executive, finance, legal, human resources and other administrative personnel, as well as accounting and legal professional services fees including professional service fees related to other corporate expenses.

Interest and Other Income (Expense)

Interest and other income (expense) primarily consist of interest income, interest expense, and foreign exchange gains and losses. Interest income represents interest received on our cash and cash equivalents. Interest expense is primarily related to interest on our finance leases, interest on borrowings associated with our credit facility, and amortization of deferred financing fees associated with our credit facility. Fluctuations in foreign currency exchange rates in our foreign subsidiaries cause foreign exchange gains and losses. Other income (expense) can also include the gains and losses associated with non-customer transactions.

Income Tax Expense

Income tax expense consists of federal, state and foreign income taxes.

Critical Accounting Policies and Estimates

In presenting our financial statements in conformity with U.S. generally accepted accounting principles ("GAAP"), we are required to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, costs and expenses, and related disclosures.

Some of the estimates and assumptions we are required to make relate to matters that are inherently uncertain as they pertain to future events. We base these estimates and assumptions on historical experience or on various other factors that we believe to be reasonable and appropriate under the circumstances. On an ongoing basis, we reconsider and evaluate our estimates and assumptions. Our future estimates may change if the underlying assumptions change. Actual results may differ significantly from these estimates.

We believe that the following critical accounting policies involve our more significant judgments, assumptions and estimates and, therefore, could have the greatest potential impact on our consolidated financial statements. In addition, we believe that a discussion of these policies is necessary for readers to understand and evaluate our consolidated financial statements contained in this quarterly report on Form 10-Q:

- Revenue Recognition
- Stock-based Compensation
- Goodwill
- Going Concern Assessment

For further information on our critical and other significant accounting policies, see our Annual Report on Form 10-K filed with the SEC on March 11, 2020.

Goodwill

We test goodwill for impairment annually on June 30 of each year at the reporting unit level in accordance with the provisions of Accounting Standards Codification topic 350, Intangibles—Goodwill and Other ("ASC 350") or more frequently, if impairment indicators arise. This guidance provides the option to first assess qualitative factors to determine whether it is more likely than not that the fair value of a reporting unit is less than its carrying value. The factors that we consider important, and which could trigger a quantitative test, include, but are not limited to: a significant decline in the market value of our common stock for a sustained period; a material adverse change in economic, financial market, industry or sector trends; a material failure to achieve operating results relative to historical levels or projected future levels; and significant changes in operations or business strategy. If, based on a review of qualitative factors, it is more likely than not that the fair value of a reporting unit is less than its carrying value we perform a quantitative goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. If the carrying value exceeds the fair value, we measure the amount of impairment loss, if any, by comparing the implied fair value of the reporting unit goodwill to its carrying amount.

For our annual goodwill test performed at June 30, we exercised our option to bypass the qualitative assessment and began our annual test with the quantitative test using a fair value approach. In estimating the fair value of our reporting units, we use a variety of techniques including the income approach (i.e., the discounted cash flow method) and the market approach (i.e., the guideline public company method). Our projections are estimates that can significantly affect the outcome of the analysis, both in terms of our ability to accurately project future results and in the allocation of fair value between reporting units.

As of June 30, 2020, we determined that the fair values of our reporting units with remaining goodwill balances exceeded their carrying values. Accordingly, no goodwill impairment charges were recorded in connection with the annual impairment test. For additional risk factors which could affect the assumptions used in our valuation of our reporting units, see the section titled "Risk Factors" in Part II, Item 1A of this Report. Accordingly, we cannot provide assurance that the assumptions, estimates and values used in our assessment will be realized and actual results could vary materially.

Results of Operations

The following table sets forth our consolidated statements of operations for the periods indicated (in thousands, except per share amounts):

	Three months ended June 30,		Six months ended June 30,	
	2020	2019	2020	2019
Revenue	$ 49,195	$ 45,942	$ 96,374	$ 90,553
Cost of revenue	11,436	8,861	22,537	17,287
Gross profit	37,759	37,081	73,837	73,266
Operating expenses				
Sales and marketing	25,974	25,800	51,408	49,038
Research and development	6,177	5,776	13,094	11,514
General and administrative	8,945	8,566	18,507	17,258
Total operating expenses	41,096	40,142	83,009	77,810
Loss from operations	(3,337)	(3,061)	(9,172)	(4,544)
Other income and (expense):				
Interest income	10	9	26	42
Interest expense	(54)	(99)	(107)	(159)
Other income and (expense)	18	519	89	1,315
Total other income and (expense)	(26)	429	8	1,198
Loss before income taxes	(3,363)	(2,632)	(9,164)	(3,346)
Income tax expense	223	175	603	5
Net loss	$ (3,586)	$ (2,807)	$ (9,767)	$ (3,351)
Loss per share:				
Basic	$ (0.15)	$ (0.12)	$ (0.41)	$ (0.14)
Diluted	$ (0.15)	$ (0.12)	$ (0.41)	$ (0.14)
Common shares and equivalents outstanding:				
Basic weighted average shares	24,103	23,455	23,953	23,247
Diluted weighted average shares	24,103	23,455	23,953	23,247

Comparison of the three months ended June 30, 2020 and the three months ended June 30, 2019:

The following table sets forth revenue for our three operating segments for the three months ended June 30, 2020 and 2019 (in thousands, except percentages):

	Three months ended June 30,						2020 versus 2019		
	2020			2019			Change		% Change
	(in thousands, except percentages)								
Revenue and Revenue as a Percent of Total Revenue									
Literacy	$	17,814	36.2%	$	15,101	32.9%	$	2,713	18.0%
Enterprise & Education Language		13,640	27.7%		14,502	31.6%		(862)	(5.9)%
Consumer Language		17,741	36.1%		16,339	35.5%		1,402	8.6%
Total Revenue	$	49,195	100.0%	$	45,942	100.0%	$	3,253	7.1%
Segment Contribution and Segment Contribution Margin									
Literacy	$	3,048	17.1%	$	2,371	15.7%	$	677	28.6%
Enterprise & Education Language		5,486	40.2%		5,848	40.3%		(362)	(6.2)%
Consumer Language		4,512	25.4%		3,649	22.3%		863	23.7%
Language Shared Services		(2,662)			(3,387)			725	21.4%
Total Segment Contribution	$	10,384		$	8,481		$	1,903	22.4%

Literacy Segment

The increase in Literacy segment revenue was a result of continued demand for its product portfolio and the concentrated efforts of a direct sales team. As an impact of the COVID-19 disruptions, our Literacy customers could renew their sales contracts later, which could result in lower revenue recognized in period. In the second quarter, we built deferred revenue partially through the sale of multi-year new sales in a US state that only recently became available to purchase our Literacy services, as well as the conversion of free licenses that had been provided to our Literacy customers as part of our Learn From Home initiative. Our Literacy business is seasonal with sales consolidating into the second and third calendar quarters that correspond to the end and beginning of the school district operating budget years. This typical seasonality may be impacted by slower than expected renewal and payment as a result of COVID-19 disruptions. The COVID-19 pandemic has created uncertainty surrounding the pressure on school budgets given the economic downturn.

The Literacy segment contribution dollar and margin increases were primarily due to higher revenues, partially offset by higher direct expenses related to sales and marketing, research and development, and cost of sales. Direct sales and marketing and cost of sales expenses increased due to the increase in the direct sales team, investments made to improve the Literacy product portfolio and infrastructure and higher implementation and training services costs in support of Literacy sales growth. Lower amounts were capitalized as internal-use software during 2020 due to the completion and release of several large projects in the prior year.

E&E Language Segment

E&E Language segment revenue was down year over year. The North America K-12 business was down $0.6 million and the Enterprise business was down $0.3 million. Before shared Language research and development expense, the E&E Language segment contribution dollar and margin slightly decreased on lower revenue and higher cost of sales associated with increases in headount. We believe the enterprise portion of E&E Language is the most economically sensitive to the COVID-19 crisis and has been negatively affected by the impact of the pandemic on businesses and the international response to the pandemic. In connection with this, we also no longer expect new custom content bookings in 2020 as Native American tribes, which have historically been our largest customers for these bookings, have been especially affected by the pandemic. We expect to continue to balance investments and adjust our cost structure to align scale.

Consumer Language Segment

Consumer Language segment revenue increased compared to the prior year period. Revenue growth naturally lags bookings growth and that was the case in the second quarter of 2020 as we built deferred revenue through the sale of products such as our Lifetime Unlimited offering in what has seasonally been our slowest quarter. A large portion of sales in the second quarter of 2020 were attributable to our Lifetime offering, which is recognized as revenue over 24 months, resulting in only a small amount of revenue recognized within the second quarter. We expect Lifetime sales, which are collected in cash up front, will continue to be a significant portion of Consumer Language bookings this year. The COVID-19 pandemic has created demand for our consumer offerings as learners use their time at home to invest in a new language, however, a prolonged economic downturn may create uncertainty for future sales.

Typically, our Consumer business is seasonal with consumer sales peaking in the fourth quarter during the holiday shopping season. This typical seasonality has been impacted by the recent Lifetime Unlimited offering launch, as well as the demand for our consumer offerings as a result of the COVID-19 pandemic. As a result, we expect our first and second quarter Consumer Language bookings to be higher than the fourth quarter holiday shopping season.

Before shared Language research and development expense, the Consumer Language segment contribution dollar and margin increases were primarily driven by higher revenues. In the event of a prolonged economic downturn, we will be able to manage our customer acquisition costs.

Revenue by Geographic Area

The following table sets forth revenue by geographic area and the corresponding percent of total revenue for the three months ended June 30, 2020 and 2019 (in thousands, except percentages):

	Three months ended June 30,				2020 versus 2019	
	2020		2019		Change	% Change
	(in thousands, except percentages)					
United States	$ 44,415	90.3%	$ 41,179	89.6%	$ 3,236	7.9%
International	4,780	9.7%	4,763	10.4%	17	0.4%
Total revenue	$ 49,195	100.0%	$ 45,942	100.0%	$ 3,253	7.1%

United States Revenue

United States revenue increased primarily due to the increase in Literacy revenue from our Lexia business, which is predominately recorded as domestic revenue. Additionally, app store revenue in the US increased $0.6 million as compared to prior year.

International Revenue

International revenue was nearly flat year over year.

Cost of Revenue and Gross Profit

The following table sets forth cost of revenue and gross profit for the three months ended June 30, 2020 and 2019 (in thousands, except percentages):

	Three months ended June 30,				2020 versus 2019	
	2020		2019		Change	% Change
	(in thousands, except percentages)					
Revenue	$ 49,195	100.0%	$ 45,942	100.0%	$ 3,253	7.1%
Cost of revenue	11,436	23.2%	8,861	19.3%	2,575	29.1%
Gross profit	$ 37,759	76.8%	$ 37,081	80.7%	$ 678	1.8%

Cost of Revenue

The increase in cost of revenue was primarily due to an increase of $1.2 million in payroll and benefits primarily resulting from headcount changes in the customer support and operations teams as well as higher variable compensation expense on higher funding levels as compared to 2019. Additionally, amortization of previously capitalized software costs increased $0.9 million related to projects that were recently placed into service.

Gross Profit

Gross profit was nearly flat year over year while gross margin declined on the higher cost of revenue discussed above.

Operating Expenses

The following table sets forth operating expenses and the corresponding percentage of total revenue for the three months ended June 30, 2020 and 2019 (in thousands, except percentages):

	Three months ended June 30,				2020 versus 2019	
	2020		2019		Change	% Change
	(in thousands, except percentages, which reflect expense as a percentage of total revenue)					
Sales and marketing	$ 25,974	52.8%	$ 25,800	56.2%	$ 174	0.7%
Research and development	6,177	12.6%	5,776	12.6%	401	6.9%
General and administrative	8,945	18.2%	8,566	18.6%	379	4.4%
Total operating expenses	$ 41,096		$ 40,142		$ 954	2.4%

Sales and Marketing Expenses

Sales and marketing expense was essentially flat as a $0.9 million increase in payroll and benefits due to higher variable compensation expense on higher funding levels as compared to 2019 and a $0.6 million increase in commission expense was partially offset by a decrease in travel related expenses of $1.0 million.

Research and Development Expenses

Research and development expenses increased as we continued to invest in the growth of the business. The increase was primarily due to higher payroll and benefits expense of $0.9 million driven by lower capitalized labor costs during 2020 due to the completion and release of several large projects in the prior year as well as higher variable compensation expense on higher funding levels as compared to 2019, offset by lower travel related expenses of $0.2 million and lower professional fees of $0.1 million.

General and Administrative Expenses

General and administrative expenses were slightly up due to a $0.7 million increase in payroll and benefits due to higher variable compensation expense on higher funding levels as compared to 2019, partially offset by lower travel related expenses of $0.1 million.

Interest and Other Income (Expense)

	Three months ended June 30,		2020 versus 2019	
	2020	2019	Change	% Change
	(in thousands, except percentages)			
Interest income	$ 10	$ 9	$ 1	11.1%
Interest expense	(54)	(99)	45	45.5%
Other income and (expense)	18	519	(501)	(96.5)%
Total other income and (expense)	$ (26)	$ 429	$ (455)	(106.1)%

Interest income represents interest earned on our cash and cash equivalents. Interest expense primarily represents interest on our financing leases, interest on our short term borrowing associated with our credit facility, and the recognition of our deferred financing fees associated with our credit facility. The change in other income and (expense) was primarily attributable to foreign exchange fluctuations.

Income Tax Expense

	Three months ended June 30,		2020 versus 2019	
	2020	2019	Change	% Change
	(in thousands, except percentages)			
Income tax expense	$ 223	$ 175	$ 48	27.4%

Income tax expense was flat year over year. Income tax expense in the second quarter of 2020 was related to profits of operations for foreign jurisdictions in the U.K., Germany, Canada, France and China and deferred tax expense related to the impact of amortization of indefinite lived intangible assets. For the three months ended June 30, 2020, our worldwide effective tax rate was (6.6)%.

Comparison of the six months ended June 30, 2020 and the six months ended June 30, 2019:

The following table sets forth revenue for our three operating segments for the six months ended June 30, 2020 and 2019 (in thousands, except percentages):

	Six months ended June 30,				2020 versus 2019	
	2020		2019		Change	% Change
	(in thousands, except percentages)					
Revenue and Revenue as a Percent of Total Revenue						
Literacy	$ 35,300	36.6%	$ 29,907	33.0%	$ 5,393	18.0%
Enterprise & Education Language	27,192	28.2%	28,945	32.0%	(1,753)	(6.1)%
Consumer Language	33,882	35.2%	31,701	35.0%	2,181	6.9%
Total Revenue	96,374	100.0%	90,553	100.0%	5,821	6.4%
Segment Contribution and Segment Contribution Margin						
Literacy	$ 5,865	16.6%	$ 5,384	18.0%	$ 481	8.9%
Enterprise & Education Language	10,984	40.4%	11,955	41.3%	(971)	(8.1)%
Consumer Language	7,422	21.9%	8,197	25.9%	(775)	(9.5)%
Language Shared Services	(5,847)		(7,067)		1,220	17.3%
Total Segment Contribution	$ 18,424		$ 18,469		$ (45)	(0.2)%

Literacy Segment

The increase in Literacy segment revenue reflects continued demand for its product portfolio and the concentrated efforts of a direct sales team and strong renewal and retention rates. As an impact of the COVID-19 disruptions, our Literacy customers could renew their sales contracts later, which could result in lower revenue recognized in period. In the second quarter, we built deferred revenue partially through the sale of multi-year new sales in a US state that only recently became available to purchase our Literacy services, as well as the conversion of free licenses that had been provided to our Literacy customers as part of our Learn From Home initiative. Our Literacy business is seasonal with sales consolidating into the second and third calendar quarters that correspond to the end and beginning of the school district operating budget years. This typical seasonality may be impacted by slower than expected renewal and payment as a result of the COVID-19 disruptions. The COVID-19 pandemic has created uncertainty surrounding the pressure on school budgets given the economic downturn.

The Literacy segment contribution dollar increase was primarily due to higher revenues, partially offset by higher direct expenses related to sales and marketing, research and development, and cost of sales. Direct sales and marketing and cost of sales expenses increased due to the increase in the direct sales team, investments made to improve the Literacy product portfolio and infrastructure and higher implementation and training services costs in support of Literacy sales growth. Lower amounts were capitalized as internal-use software during 2020 due to the completion and release of several large projects in the prior year which contributed to the decrease in segment contribution margin.

E&E Language Segment

E&E Language segment revenue was down year over year across the reseller, North America K-12 and affiliate channels. Before shared Language research and development expense, the E&E Language segment contribution dollar and margin decreased on lower revenue. We believe the enterprise portion of E&E Language is the most economically sensitive to the COVID-19 crisis and has been negatively affected by the impact of the pandemic on businesses and the international response to the pandemic. In connection with this, we also no longer expect new custom content bookings in 2020 as Native American tribes, which have historically been our largest customers for these bookings, have been especially affected by the pandemic. We expect to continue to balance investments and adjust our cost structure to align scale.

Consumer Language Segment

Consumer Language segment revenue increased as global app store revenue was higher by $1.5 million as compared to the prior year period. Revenue growth naturally lags bookings growth and that was the case in the second quarter of 2020 as we built deferred revenue through the sale of products such as our Lifetime Unlimited offering in what has seasonally been our slowest quarter. A large portion of sales in the first half of 2020 were attributable to our Lifetime offering, which is recognized as revenue over 24 months. We expect Lifetime sales, which are collected in cash up front, will continue to be a significant portion of Consumer Language bookings this year. The COVID-19 pandemic has created demand for our consumer offerings as learners use their time at home to invest in a new language, however, a prolonged economic downturn may create uncertainty for future sales. Typically, our Consumer business is seasonal with consumer sales peaking in the fourth quarter during the holiday shopping season. This typical seasonality has been impacted by the recent Lifetime Unlimited offering launch as well as the demand for our consumer offerings as a result of the COVID-19 pandemic. As a result, we expect our first and second quarter Consumer Language bookings to be higher than the fourth quarter holiday shopping season.

Before shared Language research and development expense, the Consumer Language segment contribution dollar and margin declines were primarily driven by $1.5 million in higher direct first quarter sales and marketing expenses related to increased media expenses related to targeted streaming television and native content campaigns to drive sales. Any resulting increase in bookings may be recognized as revenue over periods up to 24 months, while the sales and marketing expense will be recognized as incurred, which may cause the segment contribution to decline. In the event of a prolonged economic downturn, we will be able to manage our customer acquisition costs.

Revenue by Geographic Area

The following table sets forth revenue by geographic area and the corresponding percent of total revenue for the six months ended June 30, 2020 and 2019 (in thousands, except percentages):

	Six months ended June 30,				2020 versus 2019	
	2020		2019		Change	% Change
	(in thousands, except percentages)					
United States	$ 86,944	90.2%	$ 81,009	89.5%	$ 5,935	7.3%
International	9,430	9.8%	9,544	10.5%	(114)	(1.2)%
Total revenue	$ 96,374	100.0%	$ 90,553	100.0%	$ 5,821	6.4%

United States Revenue

United States revenue increased primarily due to the increase in Literacy revenue from our Lexia business, which is predominately recorded as domestic revenue. Additionally, app store revenue in the US increased $0.9 million as compared to prior year.

International Revenue

International revenue was nearly flat year over year.

Cost of Revenue and Gross Profit

The following table sets forth cost of revenue and gross profit for the six months ended June 30, 2020 and 2019 (in thousands, except percentages):

	Six months ended June 30,				2020 versus 2019	
	2020		2019		Change	% Change
	(in thousands, except percentages)					
Revenue	$ 96,374	100.0%	$ 90,553	100.0%	$ 5,821	6.4%
Cost of revenue	22,537	23.4%	17,287	19.1%	5,250	30.4%
Gross profit	$ 73,837	76.6%	$ 73,266	80.9%	$ 571	0.8%

Cost of Revenue

The increase in cost of revenue was primarily due to an increase of $2.9 million in payroll and benefits primarily resulting from headcount changes in the customer support and operations teams as well as higher variable compensation expense on higher funding levels as compared to 2019. Additionally, amortization of previously capitalized software costs increased $1.8 million related to projects that were recently placed into service.

Gross Profit

Gross profit was flat year over year while gross margin declined on the higher cost of revenue discussed above.

Operating Expenses

The following table sets forth operating expenses and the corresponding percentage of total revenue for the six months ended June 30, 2020 and 2019 (in thousands, except percentages):

	Six months ended June 30,						2020 versus 2019		
	2020			2019			Change		% Change
	(in thousands, except percentages, which reflect expense as a percentage of total revenue)								
Sales and marketing	$	51,408	53.3%	$	49,038	54.2%	$	2,370	4.8%
Research and development		13,094	13.6%		11,514	12.7%		1,580	13.7%
General and administrative		18,507	19.2%		17,258	19.1%		1,249	7.2%
Total operating expenses	$	83,009		$	77,810		$	5,199	6.7%

Sales and Marketing Expenses

The increase in sales and marketing expense was primarily due to $1.5 million in higher first quarter sales and marketing expenses related to increased media expenses related to targeted streaming television and native content campaigns to drive Consumer Language sales, $1.2 million in higher payroll and benefits due to higher variable compensation expense on higher funding levels as compared to 2019, and a $0.7 million increase in commission expense, partially offset by a decrease in travel related expenses of $1.0 million.

Research and Development Expenses

Research and development expenses increased primarily due to increased payroll and benefits expense of $2.1 million driven by lower capitalized labor costs during 2020 due to the completion and release of several large projects in the prior year as well as higher variable compensation expense on higher funding levels as compared to 2019, partially offset by lower travel related expenses of $0.2 million.

General and Administrative Expenses

General and administrative expenses were up due to a $1.2 million increase in payroll and benefits due to higher variable compensation expense on higher funding levels as compared to 2019, an increase of $0.2 million in bad debt expense due to the increase in bookings and the accounts receivable balance year over year, partially offset by lower travel related expenses of $0.1 million.

Interest and Other Income (Expense)

	Six months ended June 30,				2020 versus 2019		
	2020		2019		Change		% Change
	(in thousands, except percentages)						
Interest income	$	26	$	42	$	(16)	(38.1)%
Interest expense		(107)		(159)		52	32.7%
Other income and (expense)		89		1,315		(1,226)	(93.2)%
Total other income and (expense)	$	8	$	1,198	$	(1,190)	(99.3)%

Interest income represents interest earned on our cash and cash equivalents. Interest expense primarily represents interest on our financing leases, interest on our short term borrowing associated with our credit facility, and the recognition of our deferred financing fees associated with our credit facility. The change in other income and (expense) was primarily attributable to the first quarter 2019 $1.4 million gain on the sale of certain idle assets that did not recur in 2020 and foreign exchange fluctuations.

Income Tax Expense

	Six months ended June 30,				2020 versus 2019	
	2020		2019		Change	% Change
	(in thousands, except percentages)					
Income tax expense	$	603	$	5	598	11960.0%

The increase in income tax expense was related to the Virginia state adoption of an indefinite carry forward of net operating losses that resulted in a release of our state valuation allowance and recognition of $0.6 million in state tax benefit in the first quarter of 2019 which did not recur in 2020. Income tax expense in the year to date period of 2020 was related to profits of operations for foreign jurisdictions in the U.K., Germany, Canada, France and China and deferred tax expense related to the impact of amortization of indefinite lived intangible assets. For the six months ended June 30, 2020, our worldwide effective tax rate was (6.6)%.

Liquidity and Capital Resources

Liquidity

Our principal source of liquidity at June 30, 2020, consisted of $31.3 million in cash and cash equivalents and short-term investments. Our primary operating cash requirements include the payment of salaries, employee benefits and other personnel related costs, as well as direct advertising expenses, costs of office facilities, and costs of information technology systems. Historically, we have primarily funded these requirements through cash flows from our operating activities.

Our operating segments are affected by different sales-to-cash patterns. Within our E&E Language and Literacy segments, revenue in our education, government, and corporate sales channels are seasonally stronger in the second half of the calendar year due to purchasing and budgeting cycles. Our Consumer Language revenue is affected by seasonal trends associated with the holiday shopping season. Consumer Language sales typically turn to cash more quickly than E&E Language and Literacy sales, which tend to have longer collection cycles. Historically, in the first half of the year we have been a net user of cash and in the second half of the year we have been a net generator of cash. We expect the trend to use cash in the first half of the year and generate cash in the second half of the year to continue.

On October 28, 2014, we executed a Loan and Security Agreement with Silicon Valley Bank ("Bank") to obtain a credit facility. Since the original date of execution, we have executed several amendments to the credit facility to reflect updates to our financial outlook, expand availability, and extend the credit facility. Under the eighth amendment executed on March 10, 2020, we may borrow up to $25.0 million. The credit facility has a term that expires on April 1, 2023, during which time we may borrow and re-pay loan amounts and re-borrow the loan amounts subject to customary borrowing conditions. However, we must have less than $5.0 million in outstanding borrowings for 30 consecutive days during each twelve month period beginning as of the date of execution. Interest will accrue at the greater of Prime Rate or 1.5% and must be paid quarterly.

As of June 30, 2020, there were no borrowings outstanding under the credit facility. We are subject to certain financial and restrictive covenants as defined in the credit facility As of June 30, 2020, we were in compliance with all of the covenants under the credit facility and we expect to be in compliance with these covenants in the future. We did not make any short term borrowings under our credit facility during our typical mid-year seasonal cash low point due to an increase in Consumer language bookings which turn to cash quickly because they are paid up front via credit card transactions and had a positive impact on our liquidity during the first half of 2020. We do not expect to make any short term borrowings under the credit facility for the remainder of 2020. The credit facility is available to provide additional liquidity if necessary. See the section at the beginning of this Item 2 titled “COVID-19 Update” for a discussion of the COVID-19 impact to liquidity.

The total amount of cash that was held by foreign subsidiaries as of June 30, 2020 was $7.2 million. As of June 30, 2020, if we were to repatriate this foreign cash, no tax liability would result due to the current period and carryforward net operating losses.

During the last three years, inflation has not had a material effect on our business and we do not expect that inflation or changing prices will materially affect our business in the foreseeable future.

Capital Resources

We believe our current cash and cash equivalents, short-term investments, borrowings under our credit facility, and funds generated from our sales will be sufficient to meet our cash needs for at least the next twelve months from the date of issuance of this report. We have generated significant operating losses as reflected in our accumulated loss and we may continue to incur operating losses in the future that may continue to require additional working capital to execute strategic initiatives. Our future capital requirements will depend on many factors, including development of new products, market acceptance of our products, the levels of advertising and promotion required to launch additional products and improve our competitive position in the marketplace, the expansion of our sales, support and marketing organizations, the optimization of office space in the U.S. and worldwide, building the infrastructure necessary to support our growth, the response of competitors to our products and services, and our relationships with suppliers. We extend payments to certain vendors in order to minimize the amount of working capital deployed in the business. In order to maximize our cash position, we will continue to manage our existing inventory, accounts receivable, and accounts payable balances. Borrowings under our credit facility can be utilized to meet working capital requirements, anticipated capital expenditures, and other obligations. We expect the trends experienced with revenue and expenses during 2019 will continue for 2020.

Cash Flow Analysis

	Six months ended June 30,		2020 versus 2019	
	2020	2019	Change	% Change
	(in thousands, except percentages)			
Net cash used in operating activities	$ (3,805)	$ (21,414)	$ 17,609	82.2%
Net cash used in investing activities	$ (7,592)	$ (8,313)	$ 721	8.7%
Net cash provided by financing activities	$ 173	$ 12,518	$ (12,345)	(98.6)%

Net Cash Used in Operating Activities

Net cash used in operating activities improved in the first half of 2020 as compared to the same period in 2019. Operating cash flow was impacted by the overall increase in year-over-year bookings of $16.8 million, which resulted in an increase in deferred revenue. Partially offsetting the increase in bookings were higher selling-related cash outflows.

Net Cash Used in Investing Activities

Net cash used in investing activities slightly improved in the first half of 2020 as compared to the same period of 2019. Lower amounts were capitalized as internal-use software during 2020 due to the completion and release of several large projects in the prior year. Additionally, there was a $1.4 million cash inflow in 2019 related to the sale of non-current idle assets that did not recur in 2020.

Net Cash Provided by Financing Activities

Net cash provided by financing activities decreased in the first half of 2020 as compared to the same period of 2019. A net $9.9 million of borrowings were made under the credit facility in 2019 in order to provide additional cash during the seasonal cash low point. No borrowings were made in 2020 as an unseasonal increase in cash sales in Consumer offset the seasonal low point of cash. A $2.5 million decrease in proceeds from stock option exercises also contributed to the decline in financing cash flow.

Off-Balance Sheet Arrangements

We do not engage in any off-balance sheet financing arrangements. We do not have any material interest in entities referred to as variable interest entities, which include special purpose entities and other structured finance entities.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

Foreign Currency Exchange Risk

The functional currency of our foreign subsidiaries is their local currency. Accordingly, our results of operations and cash flows are subject to fluctuations due to changes in foreign currency exchange rates. The volatility of the prices and applicable rates are dependent on many factors that we cannot forecast with reliable accuracy. In the event our foreign sales and expenses increase, our operating results may be more greatly affected by fluctuations in the exchange rates of the currencies in which we do business. At this time, we do not, but we may in the future, invest in derivatives or other financial instruments in an attempt to hedge our foreign currency exchange risk.

Interest Rate Sensitivity

Interest income and expense are sensitive to changes in the general level of U.S. interest rates. However, based on the nature and current level of our marketable securities, which are primarily short-term investment grade and government securities and our notes payable, we believe that there is no material risk of interest rate exposure.

Credit Risk

Accounts receivable and cash and cash equivalents present the highest potential concentrations of credit risk. We reserve for credit losses and do not require collateral on our trade accounts receivable. In addition, we maintain cash and investment balances in accounts at various banks and brokerage firms. We have not experienced any losses on cash and cash equivalent accounts to date. We sell products to retailers, resellers, government agencies, and individual consumers and extend credit based on an evaluation of the customer's financial condition, without requiring collateral. Exposure to losses on accounts receivable is principally dependent on each customer's financial condition. We monitor exposure for credit losses and maintain allowances for anticipated losses. We maintain trade credit insurance for certain customers to provide coverage, up to a certain limit, in the event of insolvency of some customers.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Management, with the participation of our Chief Executive Officer and our Chief Financial Officer, evaluated the effectiveness of our disclosure controls and procedures as of June 30, 2020. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the Company's management, including its principal executive and principal financial officers, as appropriate to allow timely decisions regarding required disclosure. Management recognizes that any controls and procedures, no matter how well designed and operated, can provide only reasonable assurance of achieving their objectives, and management necessarily applies its judgment in evaluating the cost-benefit relationship of possible controls and procedures. Based on the evaluation of our disclosure controls and procedures as of June 30, 2020, our Chief Executive Officer and Chief Financial Officer concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control over Financial Reporting

There were no changes in our internal control over financial reporting identified in connection with the evaluation required by Rule 13a-15(d) or 15d-15(d) of the Exchange Act that occurred during the quarter ended June 30, 2020 that had materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

See Note 11 "Commitments and Contingencies" of Part I – Item 1, Financial Statements – for information about our legal proceedings.

Item 1A. Risk Factors

The following description of risk factors includes any material changes to, and supersedes the description of, risk factors associated with our business previously disclosed in our Annual Report on Form 10-K filed on March 11, 2020 with the SEC for the period ended December 31, 2019. An investment in our common stock involves a substantial risk of loss. Investors should carefully consider these risk factors, together with all of the other information included herewith, before deciding to purchase shares of our common stock. If any of the following risks actually occur, our business, financial condition, or results of operations could be materially adversely affected. In such case, the market price of our common stock could decline and all or part of an investment may be lost.

The risks described below are not the only ones facing us. Our business is also subject to the risks that affect many other companies, such as general economic conditions and geopolitical events. Further, additional risks not currently known to us or that we currently believe are immaterial could have a material adverse effect on our business, financial condition, cash flows and results of operations. In addition to the other information set forth in this quarterly report on Form 10-Q, you should carefully consider the risk factors discussed below and in other documents we file with the SEC that could materially affect our business, financial condition, cash flows or future results.

Our business, results of operations and financial condition may be adversely affected by pandemic infectious diseases, particularly the novel coronavirus strain known as COVID-19.

In late 2019, a novel strain of coronavirus that causes the disease COVID-19 surfaced. In January 2020, the World Health Organization declared the COVID-19 outbreak to be a public health emergency. Since that time, COVID-19 has quickly spread, causing a global pandemic. To combat the spread of COVID-19, governmental authorities have taken a variety of steps to protect their citizens, including closing schools and workplaces and requiring people to stay at home and practice social distancing. These actions have had significant negative impacts on the global economy. While all of our solutions can be used by learners remotely, and we are capable of providing our services to our customers while following social distancing protocols, there is uncertainty in our business surrounding:

- unprecedented levels of disruption that may distract our customers and delay purchasing decisions;
- customers, particularly in our Enterprise business and with our custom content deals that support language preservation for Native American tribes, that may be facing financial difficulties that may lead to delayed purchase decisions, slower cash collection or non-renewal due to lack of funds;
- the length of the economic downturn and the impact on local K-12 school budgets and consumer discretionary spending; and
- productivity disruptions caused by the distraction of our workforce in a remote work environment.

These uncertainties and the extent to which COVID-19 impacts our operations will depend on future developments. Such developments are highly uncertain and cannot be predicted with confidence, including the duration of the outbreak, new information which may emerge concerning the severity of COVID-19, and the actions to contain COVID-19 or treat its impact, among others. Furthermore, the success of our business depends to a significant extent upon spending by K-12 schools, governments, organizations and consumers, which is subject to a number of factors including general economic conditions, K-12 school budgets, consumer confidence, employment levels, business conditions, interest rates, availability of credit, inflation, and taxation. Adverse trends in any of these economic indicators, which may be impacted by COVID-19, may cause spending to decline, which could adversely affect our business, results of operations and financial condition. We continue to monitor the effects of COVID-19 on our business.

We might not be successful in executing our strategy of focusing on learners who need to speak and read English and passionate language learners who are mobile.

We are continuing to implement our strategy to emphasize the development of products and solutions for learners who need to speak and read English. This focus extends to the Consumer Language segment, where we continue to make product investments serving the needs of passionate language learners who are mobile, results-focused and value a quality language-learning experience. If we do not successfully execute our strategy, our revenue and profitability could decline, which could have an adverse effect on our business and financial results.

Our actual operating results may differ significantly from our guidance. As a result, we may fail to meet or exceed the expectations of research analysts or investors, which could cause our stock price to decline.

Historically, our practice has been to release guidance regarding our future performance that represents management's estimates as of the date of release. This guidance, which includes forward-looking statements, is based on projections prepared by management. These projections are not prepared with a view toward compliance with published guidelines of the American Institute of Certified

Public Accountants, and neither our registered public accountants nor any other independent expert or outside party confirms or examines the projections and, accordingly, no such person expresses any opinion or any other form of assurance with respect thereto.

Projections are based upon a number of assumptions and estimates that, while presented with numerical specificity, are inherently subject to significant business, economic and competitive uncertainties and contingencies, many of which are beyond our control and are based upon specific assumptions with respect to future business decisions, some of which will change. We generally state possible outcomes as high and low ranges or as single point estimates, but actual results could differ materially. The principal reason that we release guidance is to provide a basis for management to discuss our business outlook with analysts and investors. We do not accept any responsibility for any projections or reports published by any such persons.

Guidance is necessarily speculative in nature, and it can be expected that some or all of the assumptions in the guidance furnished by us will not materialize or will vary significantly from actual results. Accordingly, our guidance is only an estimate of what management believes is realizable as of the date of release. Actual results may vary from our guidance and the variations may be material. We expressly disclaim any obligations to update or revise any guidance, whether as a result of new information, future events or otherwise, except as required by law. In light of the foregoing, investors are urged not to rely upon, or otherwise consider, our guidance in making an investment decision in respect of our common stock.

Any failure to successfully implement our strategy or the occurrence of any of the events or circumstances set forth in these "Risk Factors" and elsewhere in this quarterly report on Form 10-Q could result in the actual operating results being different from our guidance, and such differences may be adverse and material.

Intense competition in our industry may hinder our ability to attract and retain customers and generate revenue, and may diminish our margins.

The business environment in which we operate is rapidly evolving, highly fragmented and intensely competitive, and we expect competition to persist and intensify. Increased competition could adversely affect operating results by causing lower demand for our products and services, reduced revenue, more product returns, price reductions or concessions, reduced gross margins and loss of customers.

Many of the current and potential competitors in our Literacy and E&E Language segments have substantially greater financial, technical, sales, marketing and other resources than we do, as well as greater name recognition in some locations, as well as in some cases, lower costs. Some competitors offer more differentiated products (for example, online learning as well as physical classrooms and textbooks) that may allow them to more flexibly meet changing customer preferences. The resources of our competitors also may enable them to respond more rapidly to new or emerging technologies and changes in customer requirements and preferences and to offer lower prices than ours or to offer free language-learning software or online services. We may not be able to compete successfully against current or future competitors.

There are a number of free online language-learning opportunities to learn grammar, pronunciation, vocabulary (including specialties in areas such as medicine and business), reading, and conversation by means of podcasts and MP3s, mobile applications, audio courses and lessons, videos, games, stories, news, digital textbooks, and through other means, which compete with our Consumer Language segment. We estimate that there are thousands of free mobile applications on language-learning; free products are provided in at least 50 languages by private companies, universities, and government agencies. Low barriers to entry allow start-up companies with lower costs and less pressure for profitability to compete with us. Competitors that are focused more on user acquisition rather than profitability and funded by venture capital may be able to offer products at significantly lower prices or for free. As free online translation services improve and become more widely available and used, people may generally become less interested in language learning. Although we also offer free products such as mobile apps, if we cannot successfully attract users of these free products and convert a sufficient portion of these free users into paying customers, our business could be adversely affected. If free products become more engaging and competitive or gain widespread acceptance by the public, demand for our products could decline or we may have to lower our prices, which could adversely impact our revenue and other results.

Historically a substantial portion of our revenue has been generated from our Consumer Language business. If we fail to accurately anticipate consumer demand and trends in consumer preferences, our brands, sales and customer relationships may be harmed.

Demand for our consumer focused language-learning software products and related services is subject to rapidly changing consumer demand and trends in consumer preferences. Therefore, our success depends upon our ability to:

- identify, anticipate, understand and respond to these trends in a timely manner;
- introduce appealing new products and performance features on a timely basis;
- provide appealing solutions that engage our customers;
- adapt and offer our products and services using rapidly evolving, widely varying and complex technologies;
- anticipate and meet consumer demand for additional languages, learning levels and new platforms for delivery;
- effectively position and market our products and services;

- identify and secure cost-effective means of marketing our products to reach the appropriate consumers;
- identify cost-effective sales distribution channels and other sales outlets where interested consumers will buy our products;
- anticipate and respond to consumer price sensitivity and pricing changes of competitive products; and
- identify and successfully implement ways of building brand loyalty and reputation.

We anticipate having to make investments in new products in the future and we may incur significant expenses without achieving the anticipated benefits of our investment or preserving our brand and reputation. Investments in new products and technology are speculative, the development cycle for products may exceed planned estimates and commercial success depends on many factors, including innovativeness, developer support, and effective distribution and marketing. Customers might not perceive our latest offerings as providing significant new value and may reduce their purchases of our offerings, unfavorably impacting revenue. We might not achieve significant revenue from new product and service investments for a number of years, if at all. We also might not be able to develop new solutions or enhancements in time to capture business opportunities or achieve sustainable acceptance in new or existing marketplaces. Furthermore, consumers may defer purchases of our solutions in anticipation of new products or new versions from us or our competitors. A decline in consumer demand for our solutions, or any failure on our part to satisfy such changing consumer preferences, could harm our business and profitability.

If the recognition by schools and other organizations of the value of technology-based education does not continue to grow, our ability to generate revenue from organizations could be impaired.

Our success depends in part upon the continued adoption by organizations and potential customers of technology-based education initiatives. Some academics and educators oppose online education in principle and have expressed concerns regarding the perceived loss of control over the education process that could result from offering courses online. If the acceptance of technology-based education does not continue to grow, our ability to continue to grow our Literacy and E&E Language businesses could be impaired.

We depend on discretionary consumer spending in the Consumer Language segment of our business. Adverse trends in general economic conditions, including retail and online shopping patterns or consumer confidence, as well as other external consumer dynamics may compromise our ability to generate revenue.

The success of our business depends to a significant extent upon discretionary consumer spending, which is subject to a number of factors, including general economic conditions, consumer confidence, employment levels, business conditions, interest rates, availability of credit, inflation, and taxation. Adverse trends in any of these economic indicators may cause consumer spending to decline, which could adversely affect our sales and profitability.

Because a portion of our Consumer Language sales are made to or through retailers and distributors, none of which has any obligation to sell our products, the failure or inability of these parties to sell our products effectively could reduce our revenue and profitability.

We rely on retailers and distributors, together with our direct sales force, to sell our products. Our sales to retailers and distributors are concentrated on a key group that is comprised of a mix of websites, such as Amazon.com, app stores, such as the Apple App Store, Google Play Store, Amazon App Store for Android, and Samsung Galaxy App Store, select retail resellers, such as Barnes & Noble, Target, and Best Buy, and consignment distributors such as Software Packaging Associates.

We have no control over the quantity of products that retailers and distributors purchase from us or sell on our behalf, we do not have long-term contracts with any of them, and they have no obligation to offer or sell our products or to give us any particular shelf space or product placement within their stores. Thus, there is no guarantee that this source of revenue will continue at the same level as it has in the past or that these retailers and distributors will not promote competitors' products over our products or enter into exclusive relationships with our competitors. Any material adverse change in the principal commercial terms, material decrease in the volume of sales generated by our larger retailers or distributors or major disruption or termination of a relationship with these retailers and distributors could result in a significant decline in our revenue and profitability. Furthermore, product display locations and promotional activities that retailers, websites and app stores undertake can affect the sales of our products. The fact that we also sell our products directly could cause retailers, websites, app stores or distributors to reduce their efforts to promote our products or stop selling our products altogether.

Many traditional physical retailers are experiencing diminished foot traffic and sales. For our retail business, even though online sales have increased in popularity and are growing in importance, we continue to depend on sales that take place in physical stores and shopping malls. Reduced customer foot traffic in these stores and malls is likely to reduce their sales of our products. In addition, if one or more of these retailers or distributors are unable to meet their obligations with respect to accounts payable to us, we could be forced to write off accounts receivable with such accounts. Any bankruptcy, liquidation, insolvency or other failure of any of these retailers or distributors could result in significant financial loss and cause us to lose revenue in future periods.

Price changes, varying subscription terms, and other concessions could reduce our revenue.

We continue to test and offer changes to the pricing of our products. If we reduce our prices in an effort to increase our sales, this could have an adverse impact on our revenue to the extent that unit sales do not increase in a sufficient amount to compensate for the lower pricing. Reducing our pricing to individual consumers could also cause us to have to lower pricing to our E&E Language customers. Any increase in the taxation of online sales could have the effect of a price increase to consumers and could cause us to have to lower our prices or could cause sales to decline. It is uncertain whether we will need to lower prices to effectively compete and what other short-term or long-term impacts could be.

Additionally, our online and app-based products are sold under different subscription terms, from short-term (less than one year) to long-term (typically 12 to 24 months) subscriptions with a corresponding license term, and lifetime subscriptions without a fixed duration. Online and app-based subscription customers could be less likely to renew their subscriptions beyond the initial term and lifetime subscribers have no need to renew. Consequently, we could earn less revenue over time from each customer than historically, which could have a substantially negative impact on our revenue, results of operations and cash flow in any quarterly reporting period.

In the U.S. and Canada, we offer consumers who purchase our web-based software directly from us a 30-day, unconditional, full money-back refund. We also permit some of our retailers and distributors to return products, subject to certain limitations. We establish revenue reserves for product returns based on historical experience, estimated channel inventory levels, the timing of new product introductions and other factors. If product returns exceed our reserve estimates, the excess would offset reported revenue, which could adversely affect our reported financial results.

Our future growth and profitability will depend in large part upon the effectiveness and efficiency of our marketing.

Our future growth and profitability will depend in large part upon the effectiveness and efficiency of our marketing, including our ability to:

- appropriately and efficiently allocate our marketing for multiple products;
- accurately identify, target and reach our audience of potential customers with our marketing messages;
- select the right marketplace, media and specific media vehicle in which to advertise;
- identify the most effective and efficient level of spending in each marketplace, media and specific media vehicle;
- determine the appropriate creative message and media mix for advertising, marketing and promotional expenditures;
- effectively manage marketing costs, including creative and media expenses, in order to maintain acceptable customer acquisition costs;
- differentiate our products as compared to other products;
- create greater awareness of our new products, our brands and learning solutions;
- drive traffic to our e-commerce website, call centers, distribution channels and retail partners; and
- convert customer inquiries into actual orders.

Our planned marketing may not result in increased revenue or generate sufficient levels of product and brand name awareness, and we may not be able to increase our net sales at the same rate as we increase our advertising expenditures.

We engage in an active public relations program, including through social media sites such as Facebook and Twitter. We also seek new customers through our online marketing efforts, including paid search listings, banner ads, text links and permission-based e-mails, as well as our affiliate and reseller programs. If one or more of the search engines or other online sources on which we rely for website traffic were to modify their general methodology for how they display our websites, resulting in fewer consumers clicking through to our websites, our sales could suffer. If any free search engine on which we rely begins charging fees for listing or placement, or if one or more of the search engines or other online sources on which we rely for purchased listings, modifies or terminates its relationship with us, our expenses could rise, we could lose customers and traffic to our websites could decrease.

We dynamically adjust our mix of marketing programs to acquire new customers at a reasonable cost with the intention of achieving overall financial goals. If we are unable to maintain or replace our sources of customers with similarly effective sources, or if the cost of our existing sources increases, our customer levels and marketing expenses may be adversely affected.

Our business depends on our strong brands, and failing to maintain or enhance the Rosetta Stone brands in a cost-effective manner could harm our operating results.

Maintaining and enhancing our brands is an important aspect of our efforts to attract new customers and expand our business. We believe that maintaining and enhancing our brands will depend largely on our ability to provide high-quality, innovative products, and services, which we might not do successfully. Our brands may be negatively impacted by a number of factors such as service outages, product malfunctions, data protection and security issues, and exploitation of our trademarks by others without permission.

Further, while we attempt to ensure that the quality of our brands is maintained by our licensees, our licensees might take actions that could impair the value of our brands, our proprietary rights, or the reputation of our products. If we are unable to maintain or enhance our brands in a cost-effective manner, or if we incur excessive expenses in these efforts, our business, operating results and financial condition could be harmed.

Our international businesses may not succeed and may impose additional and unique risks.

The success of our international operations depends on our ability to successfully market, sell, deliver and support our products and services internationally. In 2016, we decided to eliminate our direct sales presence in almost all of our non-U.S. and non-northern European geographies related to the distribution of the E&E Language offerings, relying instead on indirect sales channels through reseller and other arrangements with third parties in those geographies. We also have optimized certain of our website sales channels in Europe, Asia and Latin America. In addition, our international businesses expose us to risks including, but not limited to:

- tariffs and trade barriers;
- currency fluctuations, which could decrease our revenues or increase our costs in the United States;
- regulations related to customs and import/export matters;
- tax issues, such as tax law changes and variations in tax laws;
- restrictions on the repatriation of profits or payment of dividends;
- inadequate banking systems;
- crime, strikes, riots, civil disturbances, terrorist attacks or wars;
- impacts of public health epidemics on employees, consumers, and the global economy, such as the current COVID-19 pandemic;
- law enforcement authorities and courts that are weak or inexperienced in commercial matters; and
- deterioration of political relations among countries.

If we are unable to conduct our international operations successfully and market, sell, deliver and support our products and services internationally to the extent we expect, our business, revenue and financial results could be harmed.

If we are unable to continually adapt our products and services to mobile devices and technologies other than personal computers and laptops, and to adapt to other technological changes and customer needs generally, we may be unable to attract and retain customers, and our revenue and business could suffer.

We need to anticipate, develop and introduce new products, services and applications on a timely and cost-effective basis that keeps pace with technological developments and changing customer needs. The process of developing new high technology products, services and applications and enhancing existing products, services and applications is complex, costly and uncertain, and any failure by us to anticipate customers' changing needs and emerging technological trends accurately could significantly harm our ability to attract and retain customers and our results of operations. For example, the number of individuals who access the Internet through devices other than a personal computer, such as tablet computers, mobile devices, televisions and set-top box devices, has increased dramatically and this trend is likely to continue. Our products and services may not work or be viewable on these devices because each manufacturer or distributor may establish unique technical standards for such devices. Accordingly, we may need to devote significant resources to the creation, support and maintenance of such versions. If we fail to develop or sell products and services on a cost-effective basis that respond to these or other technological developments and changing customer needs, we may be harmed in our ability to attract and retain customers, and our revenue and business could suffer. Furthermore, our customers who view our advertising via mobile devices might not buy our products to the same extent that they do when viewing our advertising via personal computers or laptops. Accordingly, if we cannot convince customers to purchase our products via mobile devices, our business and results of operations could be harmed to the extent that the trend to mobile devices continues.

We offer our software products on operating systems and platforms including Windows, Macintosh, Apple OS, Android, and Amazon apps. The demand for traditional desktop computers has been declining, while the demand for mobile devices such as notebook computers, smartphones and tablets has been increasing, which means that we must be able to market to potential customers and to provide customers with access to and use of our products and services on many platforms and operating systems, as they may be changed from time to time. To the extent new releases of operating systems, including for mobile and non-PC devices, or other third-party products, platforms or devices make it more difficult for our products to perform, and our customers use alternative technologies, our business could be harmed.

Our software products must interoperate with computer operating systems of our customers. If we are unable to ensure that our products interoperate properly with customer systems, our business could be harmed.

Our products must interoperate with our customers' computer systems, including the network, security devices and settings, and student learning management systems of our E&E Language and Literacy customers. As a result, we must continually ensure that our products interoperate properly with these varied and customized systems. Changes in operating systems, the technologies we incorporate into our products or the computer systems our customers use may damage our business.

Our products and internal systems rely on software that is highly technical and maintained by third parties. If such third-party software contains undetected errors or vulnerabilities, or if it is not supported or updated to keep pace with current computer hardware, our business could be adversely affected.

Our products and internal systems rely on software, including software developed or maintained internally and/or by third parties, that is highly technical and complex. In addition, our products and internal systems depend on the ability of such software to store, retrieve, process, and manage immense amounts of data. Such software has contained, and may now or in the future contain, undetected errors, bugs, or vulnerabilities. Some errors may only be discovered after the code has been released for external or internal use. Errors, vulnerabilities, or other design defects within the software on which we rely may result in a negative experience for users and marketers who use our products, delay product introductions or enhancements, result in measurement or billing errors, compromise our ability to protect the data of our users and/or our intellectual property or lead to reductions in our ability to provide some or all of our services.

For example, although we have modified our products to eliminate reliance on Adobe Flash, we still have customers who use older versions of our products that rely on Adobe Flash. In July 2015, certain vulnerabilities discovered in Adobe Flash led to temporary interruption of support for Adobe Flash by popular web browsers. If similar interruptions occur in the future and disrupt our ability to provide our products to some or all of our users, our ability to generate revenue would be harmed. Additionally, if Adobe Flash were to become deleted from Adobe's product line or become not supported or updated to keep pace with current computer hardware, then our software products that continue to rely on Adobe Flash would become obsolete very quickly. Any errors, bugs, vulnerabilities, or defects discovered in the software on which we rely, and any associated degradations or interruptions of service, could result in damage to our reputation, loss of users, loss of revenue, or liability for damages, any of which could adversely affect our business and financial results.

If there are changes in the spending policies or budget priorities for government funding of colleges, universities, schools, other education providers, or government agencies, we could lose revenue.

Many of our E&E Language and Literacy customers are colleges, universities, primary and secondary schools and school districts, other education providers, armed forces and government agencies that depend substantially on government funding. Accordingly, any general decrease, delay or change in federal, state or local funding for colleges, universities, primary and secondary schools and school districts, or other education providers or government agencies that use our products and services, including in response to the COVID-19 pandemic, could cause our current and potential customers to reduce their purchases of our products and services, to exercise their right to terminate licenses, or to decide not to renew licenses, any of which could cause us to lose revenue. In addition, a specific reduction in governmental funding support for products such as ours would also cause us to lose revenue and could adversely affect our overall gross margins.

Some of our E&E Language and Literacy business is characterized by a lengthy and unpredictable sales cycle, which could delay new sales.

We face a lengthy sales cycle between our initial contact with some potential E&E Language and Literacy customers and the signing of license agreements with these customers. As a result of this lengthy sales cycle, we have only a limited ability to forecast the timing of such E&E Language and Literacy sales. A delay in or failure to complete license transactions could cause us to lose revenue, and could cause our financial results to vary significantly from quarter to quarter. Our sales cycle varies widely, reflecting differences in our potential E&E Language and Literacy customers' decision-making processes, procurement requirements and budget cycles, and is subject to significant risks over which we have little or no control, including:

- customers' budgetary constraints and priorities;
- the timing of our customers' budget cycles;
- the need by some customers for lengthy evaluations that often include administrators and faculties; and
- the length and timing of customers' approval processes.

Our revenue is subject to seasonal and quarterly variations, which could cause our financial results to fluctuate significantly.

We have experienced, and we believe we will continue to experience, substantial seasonal and quarterly variations in our revenue, cash flows and net income. These variations are primarily related to increased sales of our Consumer Language products and services in the fourth quarter, especially during the holiday selling season, as well as higher sales to governmental, educational institutions, and corporations in the second half of the calendar year. We sell to a significant number of our retailers, distributors and E&E Language customers on a purchase order basis and we receive orders when these customers need products and services. As a result, their orders are typically not evenly distributed throughout the year. Our quarterly results of operations also may fluctuate significantly as a result of a variety of other factors, including the COVID-19 pandemic, timing of holidays and advertising initiatives, changes in our products, services and advertising initiatives and changes in those of our competitors. Budgetary constraints of our E&E Language and Literacy customers may also cause our quarterly results to fluctuate.

As a result of these seasonal and quarterly fluctuations, we believe that comparisons of our results of operations between different quarters are not necessarily meaningful and that these comparisons are not reliable as indicators of our future performance. In addition, these fluctuations could result in volatility and adversely affect our cash flows. Any seasonal or quarterly fluctuations that we report in the future may differ from the expectations of market analysts and investors, which could cause the price of our common stock to fluctuate significantly.

Acquisitions, joint ventures and strategic alliances may have an adverse effect on our business.

We have made and may continue to make acquisitions or enter into joint ventures and strategic alliances as part of our long-term business strategy. Such transactions may result in use of our cash resources, dilutive issuances of our equity securities, or incurrence of debt. Such transactions also involve significant challenges and risks including that the transaction does not advance our business strategy, that we do not realize a satisfactory return on our investment, that we experience difficulty integrating new technology, employees, and business systems, that we divert management's attention from our other businesses or that we acquire undiscovered liabilities such as patent infringement claims or violations of the U.S. Foreign Corrupt Practices Act and similar worldwide anti-bribery laws. It may take longer than expected to realize the full benefits, such as increased revenue, enhanced efficiencies, or more customers, or those benefits may ultimately be smaller than anticipated, or may not be realized. These events and circumstances could harm our operating results or financial condition.

The possession and use of personal, financial and other information by us and our third party service providers presents risks and expenses that could harm our business. If we or our service providers are unable to protect our information technology networks against service interruption or failure, misappropriation or unauthorized disclosure or manipulation of data, whether through breach of our network security or otherwise, we could be subject to costly government enforcement actions and litigation and our reputation may be damaged.

Our business involves the collection, storage and transmission of personal, financial or other information that is entrusted to us by our customers and employees. Our information systems also contain the Company's proprietary and other confidential information related to our business. Our efforts to protect such information may be unsuccessful due to the actions of third parties, computer viruses, physical or electronic break-ins, catastrophic events, employee error or malfeasance or other attempts to harm our systems. Possession and use of personal information in conducting our business subjects us to legislative and regulatory obligations that could require notification of data breaches, restrict our use of personal information, and hinder our ability to acquire new customers or market to existing customers. Our use of new and emerging technologies such as cloud-based services and mobile applications continues to evolve, presenting new and additional risks in managing access to our data, including relying on third parties to manage and safeguard data. These third party service providers receive or store information provided by us, our users or our employees. If these third parties fail to adopt or adhere to adequate information security practices, or fail to comply with our online policies, or in the event of a breach of their networks, our customers' or employees' data may be improperly accessed, used or disclosed. As our business and the regulatory environment evolve in the U.S. and internationally, we may become subject to additional and even more stringent legal obligations concerning our treatment of customer information. We have incurred, and will continue to incur, expenses to comply with privacy and security standards and protocols imposed by law, regulation, industry standards or contractual obligations.

Despite our precautions and significant ongoing investments to protect against security risks, data protection breaches, cyber-attacks and other intentional disruptions of our products and offerings, we may be a target of attacks specifically designed to impede the performance of our products and offerings and harm our reputation as a company. If our systems are harmed or fail to function properly or if third parties improperly obtain and use the personal information of our customers or employees, we may be required to expend significant resources to repair or replace systems or to otherwise protect against security breaches or to address problems caused by the breaches. A major breach of our network security and systems could have serious negative consequences for our businesses, including possible fines, penalties and damages, reduced customer demand for our products and services, harm to our reputation and brand, and loss of our ability to accept and process customer credit card orders. Any such access, disclosure or loss of information could result in legal claims or proceedings and regulatory penalties, disrupt our operations or result in a loss of confidence in our products and services, which could lead to a material and adverse effect on our business, reputation or financial results.

We may incur significant costs related to maintaining data security and in the event of any data security breaches that could compromise our information technology network security, trade secrets and customer data.

The secure processing, maintenance and transmission of personal, financial or other information that is entrusted to us by our customers is critical to our operations and business strategy, and we devote significant resources to protecting such information. The expenses associated with protecting such information could reduce our operating margins. Additionally, threats to our information technology network security can take a variety of forms. Individual hackers and groups of hackers, and sophisticated organizations or individuals may threaten our information technology network security. Cyber attackers may develop and deploy malicious software to attack our services and gain access to our networks or data centers, hold access to critical systems or information for ransom, or act in a coordinated manner to launch distributed denial of service or other coordinated attacks. Cyber threats and attacks are constantly evolving, thereby increasing the difficulty of detecting and successfully implementing measures to defend against them. We may be unable to anticipate potential techniques or implement adequate preventative measures in time. Cyber threats and attacks can have cascading impacts that unfold with increasing speed across internal networks and systems. Breaches of our network, credit card processing information, or data security could disrupt the security of our internal systems and business applications, impair our ability to provide services to our customers and protect the privacy of their data, cause product development delays, compromise confidential or technical business information harming our competitive position, result in theft or misuse of our intellectual property or other assets, expose us to contractual or regulatory audit or investigation, require us to allocate additional resources to alternative and potentially more costly technologies more frequently than anticipated, or otherwise adversely affect our business. We maintain cyber risk insurance, but our policy coverage limits may not be sufficient to cover all of our losses caused by any future information security-related breaches or events.

Our business is subject to complex and evolving U.S. and foreign laws and regulations regarding privacy and data protection. Changes in regulations or customer concerns regarding privacy and protection of customer data, or any failure to comply with such laws, could adversely affect our business.

Federal, state, and international laws and regulations govern the collection, use, retention, disclosure, sharing and security of data that we receive from and about our customers. The use of personal data by online service providers and advertising networks is a topic of active interest among federal, state, and international regulatory bodies, as well as among data subjects, and the regulatory environment is unsettled and rapidly evolving. Many jurisdictions have passed new laws impacting technical and organizational measures to be put in place and require notifications to data subjects and/or state agencies where there is a security breach involving personal data, such as California's Information Practices Act. Despite the technical and organizational measures we have in place, we could suffer successful breaches, employee malfeasance, or human or technological error which could result in, for example, unauthorized access to, disclosure, modification, misuse, loss, or destruction of company, customer, or other third party data or systems; theft of sensitive, regulated, or confidential data including personal information; the loss of access to critical data or systems through ransomware, destructive attacks or other means; and business delays, service or system disruptions or denials of service.

We also face similar risks in international markets where our products, services and apps are offered. Foreign data protection, privacy, competition, and other laws and regulations can impose different obligations or be more restrictive than those in the U.S. We are subject to international laws and regulations that dictate whether, how, and under what circumstances we can transfer, process and/or receive transnational data that is critical to our operations and ability to provision our products and perform services for our customers, including data relating to users, customers, employees, or partners outside the U.S, and those laws and regulations are uncertain and subject to change.

Ongoing legal developments in Europe have created complexity and compliance uncertainty regarding certain transfers of information from Europe to the U.S. For example, in October 2015, the European Court of Justice (ECJ) invalidated the 2000 U.S.-EU Safe Harbor program as a legitimate and legally authorized basis on which U.S. companies, including Rosetta Stone, could rely for the transfer of personal data from the European Union to the U.S. In light of the invalidation, the European Union and U.S. agreed to an alternative transfer framework for data transferred from the European Union to the U.S., called the EU-U.S. Privacy Shield Framework (Privacy Shield). Following its inception and continuing since, Rosetta Stone has participated in and has certified to its compliance to Privacy Shield. However, in July 2020, citing concerns over U.S. government access to EU personal data and insufficient recourse of EU subjects to challenge such U.S. government access, the ECJ released a ruling that invalidated Privacy Shield as a valid mechanism for transferring personal data from the European Economic Area (EEA) to the U.S. In doing so, the ECJ confirmed that the EU Standard Contractual Clauses (SCCs) remain a valid mechanism for the cross-border transfer of EU personal data, however, the ECJ also indicated that the SCCs are subject to increased due diligence on the part of data exporters to determine that the privacy laws of the importing country are adequate to protect data subjects right to privacy, which is considered a fundamental right in the EU. This ruling has resulted in uncertainty as to an appropriate and viable data transfer mechanism for companies looking to transfer personal data of EU subjects into the U.S. At this time, it is unclear whether any further guidance may be issued by EEA supervisory authorities, including any grace periods. Resulting compliance and contract obligations could cause us to incur costs or require us to change our business practices in a manner adverse to our business. Additionally, while the United Kingdom's Information Commissions Office has released guidance following the ECJ ruling that data transfers from the U.K. to the U.S. under Privacy Shield may continue for some period of time, the U.K.'s decision to withdraw from the European Union also has resulted in uncertainty with regard to compliance obligations for data transfers between the European Union and the United Kingdom and the U.S.

If we are unable to transfer personal data between and among countries and regions in which Rosetta Stone operates, it could affect the manner in which we provide our services or adversely affect our financial results. Any failure, or perceived failure, by us to comply with or make effective modifications to our policies, or to comply with any federal, state, or international privacy, data-protection-related laws, regulations, orders or industry self-regulatory principles could result in proceedings or actions against us by governmental entities or others, a loss of customer confidence, damage to the Rosetta Stone brands, and a loss of customers, which could potentially have an adverse effect on our business.

In addition, various federal, state and foreign legislative or regulatory bodies may enact new or additional laws and regulations concerning privacy, data-protection issues, including laws or regulations mandating disclosure to domestic or international law enforcement bodies, which could adversely impact our business, our brand or our reputation with customers. For example, some countries are considering laws mandating that personal data regarding customers in their country be maintained solely in their country. Having to maintain local data centers and design product, service and business operations to limit personal data processing within individual countries could increase our operating costs significantly. In addition, the European Commission approved a data protection regulation, known as the General Data Protection Regulation (GDPR), which became effective in May 2018. The GDPR includes additional operational and other requirements for companies that receive or process personal data of residents of the European Union as well as significant penalties for non-compliance. California recently enacted the Consumer Privacy Act of 2018, effective January 1, 2020, which greatly expands the definition of what constitutes personal data and requires companies, among other things, to give California consumers information about what data they collect and delete data about consumers if requested.

The interpretation and application of privacy and data protection laws and regulations are often uncertain and in flux in the U.S. and internationally. Complying with these varying international requirements could cause us to incur substantial costs or require us to change our business practices in a manner adverse to our business and operating results. In addition, these laws may be interpreted and applied inconsistently from country to country and inconsistently with our current policies and practices, complicating long-range business planning decisions. If privacy or data protection laws are interpreted and applied in a manner that is inconsistent with our current policies and practices we may be deemed non-compliant, subject to legal or regulatory process, fined or ordered to change our business practices in a manner that could cause use to incur substantial costs, or that adversely impacts our business or operating results.

We are subject to U.S. and foreign government regulation of online services which could subject us to claims, judgments, and remedies, including monetary liabilities and limitations on our business practices.

We are subject to regulations and laws directly applicable to providers of online services. The application of existing domestic and international laws and regulations to us relating to issues such as user privacy and data protection, data security, defamation, promotions, billing, consumer protection, accessibility, content regulation, quality of services, and intellectual property ownership and infringement is unclear or unsettled in many instances. Also, the collection and protection of information from children under the age of 13 is subject to the provisions of the Children's Online Privacy Protection Act (COPPA), which is particularly relevant to our learning solutions focused on children. In addition, we will also be subject to any new laws and regulations directly applicable to our domestic and international activities. Internationally, we may also be subject to laws regulating our activities in foreign countries and to foreign laws and regulations that are inconsistent from country to country. We may incur substantial liabilities for expenses necessary to defend litigation in connection with such regulations and laws or to comply with these laws and regulations, as well as potential substantial penalties for any failure to comply.

Changes in how network operators handle and charge for access to data that travel across their networks could adversely impact our business.

We rely upon the ability of customers to access many of our products through the Internet. To the extent that network operators implement usage based pricing, including meaningful bandwidth caps, or otherwise try to monetize access to their networks by data providers, we could incur greater operating expenses and our customer acquisition and retention could be negatively impacted. Furthermore, to the extent network operators were to create tiers of Internet access service and either charge us for or prohibit us from being available through these tiers, our business could be negatively impacted.

We are exposed to risks associated with credit card and payment fraud, and with our obligations under rules on credit card processing and alternative payment methods, which could cause us to lose revenue or incur costs. We depend upon our credit card processors and payment card associations.

As an e-commerce provider that accepts debit and credit cards for payment, we are subject to the Payment Card Industry Data Security Standard ("PCI DSS"), issued by the PCI Council. PCI DSS contains compliance guidelines and standards with regard to our network security surrounding the physical and electronic storage, processing and transmission of individual cardholder data. Despite our compliance with these standards and other information security measures, we cannot guarantee that all our information technology systems are able to prevent, contain or detect any cyber attacks, cyber terrorism, or security breaches from currently known viruses or malware, or viruses or malware that may be developed in the future. To the extent any disruption results in the loss, damage or misappropriation of information, we may be adversely affected by claims from customers, financial institutions, regulatory authorities, payment card associations and others. In addition, the cost of complying with stricter privacy and information security laws and standards could be significant.

We are subject to rules, regulations and practices governing our accepted payment methods which could change or be reinterpreted to make it difficult or impossible for us to comply. A failure to comply with these rules or requirements could make us subject to fines and higher transaction fees and we could lose our ability to accept these payment methods. We depend upon our credit card processors to carry out our sales transactions and remit the proceeds to us. At any time, credit card processors have the right to withhold funds otherwise payable to us to establish or increase a reserve based on their assessment of the inherent risks of credit card processing and their assessment of the risks of processing our customers' credit cards. If our credit card processors exercise their right to establish or increase a reserve, it may adversely impact our liquidity. Our business and results of operations could be adversely affected if these changes were to occur.

The uncertainty surrounding the terms of the United Kingdom's withdrawal from the European Union and its consequences could cause disruptions to, and create uncertainty in, to our businesses.

The United Kingdom formally left the European Union on January 31, 2020, immediately entering an eleven month transition period running until the end of December 2020. During this transition period, the United Kingdom's trading relationship with the European Union will remain unchanged, allowing time to agree and implement a new future trading relationship. However, the terms of the United Kingdom's relationship with the European Union after the end of the transition period remain subject to negotiations yet to come, and there is substantial uncertainty about the terms of the final agreements. Therefore, the ultimate effects of Brexit on us are difficult to predict, but because we currently conduct business in the United Kingdom and in Europe, the results of the withdrawal could cause disruptions and create uncertainty to our businesses, including affecting the business of and/or our relationships with our customers and suppliers, as well as altering the relationship among tariffs and currencies, including the value of the British pound and the

Euro relative to the U.S. dollar. Such disruptions and uncertainties could adversely affect our financial condition, operating results, and cash flows. Additionally, Brexit could result in legal uncertainty and potentially divergent national laws and regulations as new legal relationships between the United Kingdom and the European Union and between the United Kingdom and countries outside the European Union, including the United States of America, are established. The ultimate effects of Brexit on us will also depend on the terms of agreements, if any, the United Kingdom and the European Union make to retain access to each other's respective markets either during an additional transitional period or more permanently. There is also the risk that other countries may decide to leave the European Union. Any of these effects, among others, may have a materially adverse effect on global economic conditions and the stability of global financial markets, which in turn could materially adversely affect our business, business opportunities, results of operations, and financial condition.

The United States government may make substantial changes to fiscal, political, regulatory and other federal or foreign policies that may adversely affect our business, financial condition, operating results and cash flows.

Changes or uncertainty in general economic or political conditions in the United States or other regions could adversely affect our business. For example, the administration under President Donald Trump has made, or has indicated that it may propose, significant changes with respect to a variety of issues, including education standards and funding, international trade agreements, import and export regulations, tariffs and customs duties, foreign relations, and immigration laws, that could have a materially adverse effect on our business, business opportunities, results of operations and financial condition.

Furthermore, there is uncertainty as to the position the United States government will take with respect to world affairs and events. This uncertainty may include such issues as U.S. support for existing treaty and trade relationships with other countries. This uncertainty, together with other key global events during recent years (such as the COVID-19 pandemic, continuing uncertainty arising from the United Kingdom’s withdrawal from the EU as well as ongoing terrorist activity), may adversely impact (i) the ability or willingness of non-U.S. companies to transact business in the U.S., including with the Company (ii) regulation and trade agreements affecting U.S. companies, (iii) global stock markets (including the New York Stock Exchange on which our common stock is traded), and (iv) general global economic conditions. All of these factors are outside of our control, but may nonetheless cause us to adjust our strategy in order to compete effectively in global markets. Any change in strategy may not be successful, and could have a materially adverse effect on our business, business opportunities, results of operations and financial condition.

Natural disasters, public health crises, political crises, and other catastrophic events or other events outside of our control may impact our facilities or the facilities of third parties on which we depend, and could impact consumer spending.

If any of our facilities, facilities of third parties on which we depend, or our customers are affected by natural disasters, such as earthquakes, tsunamis, power shortages or outages, floods, public health crises, such as pandemics and epidemics, political crises, such as terrorism, war, political instability or other conflict, or other events outside of our control, our business and operating results could suffer. Disasters or public health crises or political crises affecting or occurring at our or our third party facilities could also impact our operations, our reputation and our customers’ perception of our brands. Moreover, these types of events could negatively impact consumer and business spending in the impacted regions or depending upon the severity, globally, which could adversely impact our operating results. For example, the COVID-19 global pandemic has had a significant negative effect on the global economy, which could have an adverse impact on our business and operating results.

Any significant interruptions in the operations of our website, call center or third-party call centers, especially during the holiday shopping season, could cause us to lose sales and disrupt our ability to process orders and deliver our solutions in a timely manner.

We rely on our website, an in-house call center and third-party call centers, over which we have little or no control, to sell our solutions, respond to customer service and technical support requests and process orders. These activities are especially important during the holiday season and in particular the period beginning on Black Friday through the end of the calendar year. Any significant interruption in the operation of these facilities, including an interruption caused by our failure to successfully expand or upgrade our systems or to manage these expansions or upgrades, or a failure of third-party call centers to handle higher volumes of use, could reduce our ability to receive and process orders and provide products and services, which could result in cancelled sales and loss of revenue and damage to our brand and reputation. These risks are more important during the holiday season, when many sales of our products and services take place.

We structure our marketing and advertising to drive potential customers to our website and call centers to purchase our solutions. If we experience technical difficulties with our website or if our call center operators do not convert inquiries into sales at expected rates, our ability to generate revenue could be impaired. Training and retaining qualified call center operators is challenging due to the expansion of our product and service offerings and the seasonality of our business. If we do not adequately train our call center operators, they may not convert inquiries into sales at an acceptable rate.

If any of our products or services contain defects or errors or if new product releases or services are delayed, our reputation could be harmed, resulting in significant costs to us and impairing our ability to sell our solutions.

If our products or services contain defects, errors or security vulnerabilities, our reputation could be harmed, which could result in significant costs to us and impair our ability to sell our products in the future. In the past, we have encountered product development delays due to errors or defects. We would expect that, despite our testing, errors could be found in new products and product enhancements in the future. Significant errors in our products or services could lead to, among other things:

- delays in or loss of marketplace acceptance of our products and services;
- diversion of our resources;
- a lower rate of license renewals or upgrades for Consumer Language, Literacy and E&E Language customers;
- injury to our reputation;
- increased service expenses or payment of damages; or
- costly litigation.

If we fail to effectively upgrade our information technology systems, we may not be able to accurately report our financial results or prevent fraud.

As part of our efforts to continue improving our internal control over financial reporting, we may decide to upgrade our existing financial information technology systems in order to automate controls that are currently performed manually. We may experience difficulties in transitioning to these upgraded systems, including loss of data and decreases in productivity, as personnel become familiar with these new systems. In addition, our management information systems will require modification and refinement as our business needs change, which could prolong difficulties we experience with systems transitions, and we may not always employ the most effective systems for our purposes. If we experience difficulties in implementing new or upgraded information systems or experience significant system failures, or if we are unable to successfully modify our management information systems or respond to changes in our business needs, we may not be able to effectively manage our business and we may fail to meet our reporting obligations. In addition, as a result of the automation of these manual processes, the data produced may cause us to question the accuracy of previously reported financial results.

Failure to maintain the availability of the systems, networks, databases and software required to operate and deliver our Internet-based products and services could damage our reputation and cause us to lose revenue.

We rely on internal and external systems, networks and databases maintained by us and third-party providers to process customer orders, handle customer service requests, and host and deliver our Internet-based learning solutions. Any damage, interruption or failure of our systems, networks and databases could prevent us from processing customer orders and result in degradation or interruptions in delivery of our products and services. Notwithstanding our efforts to protect against interruptions in the availability of our e-commerce websites and Internet-based products and services, we do occasionally experience unplanned outages or technical difficulties. In addition, we do not have complete redundancy for all of our systems. In the event of an interruption or system event we may be unable to meet contract service level requirements, or we could experience an unrecoverable loss of data which could cause us to lose customers and could harm our reputation and cause us to face unexpected liabilities and expenses. If we continue to expand our business, we will put additional strains on these systems. As we continue to move additional product features to online systems or place more of our business online, all of these considerations will become more significant.

We may also need to grow, reconfigure or relocate our data centers in response to changing business needs, which may be costly and lead to unplanned disruptions of service.

We may incur losses associated with currency fluctuations and may not be able to effectively hedge our exposure, which could impair our financial performance.

Our operating results are subject to fluctuations in foreign currency exchange rates. We currently do not attempt to mitigate a portion of these risks through foreign currency hedging, based on our judgment of the appropriate trade-offs among risk, opportunity and expense. In the future, we might choose to engage in foreign currency hedging transactions, which would involve different risks and uncertainties.

Our credit facility contains financial and other restrictive covenants and the failure to comply with such covenants could prevent us from borrowing funds, and could cause any outstanding debt to become immediately payable, which might adversely impact our business.

Our credit facility contains a number of restrictive covenants, including restrictions on incurring additional debt, making investments and other restricted payments, selling assets, paying dividends and redeeming or repurchasing capital stock and debt, subject to certain exceptions. Collectively, these covenants could constrain our ability to grow our business through acquisition or engage in other transactions. During the term of our $25.0 million credit facility, we are also subject to certain financial covenants that require us to maintain a minimum liquidity coverage ratio and minimum financial performance requirements, as defined in the credit facility. If we are not able to comply with all of these covenants, for any reason, we would not be able to borrow funds under the facility, and some or all of any outstanding debt could become immediately due and payable which could have a material adverse effect on our liquidity and ability to conduct our business.

We might be required to raise additional funds from the capital markets and/or renegotiate our banking covenants to support our business, which might not be available on acceptable terms or at all.

To the extent we face economic difficulties, our revenue, profitability and cash flows could be significantly reduced. A liquidity shortfall may delay certain development initiatives or may expose us to a need to negotiate further funding. While we anticipate that our existing cash and cash equivalents, together with availability under our existing credit facility, cash balances and cash from operations, will be sufficient to fund our operations for at least the next 12 months, we may need to raise additional capital in order to meet our business objectives in the future. Such objectives may include, among other things, developing or enhancing future technologies and services, funding expansion, increasing working capital, acquiring businesses, products or technologies, and responding to competitive pressures. To the extent we face economic difficulties, our revenue, profitability, and cash flows could be significantly reduced. A lack of sufficient capital resources could significantly limit our ability to take advantage of business and strategic opportunities, require us to reduce costs, requiring a renegotiation of our banking covenants or require us to raise additional funds through public or private financings or borrowings in order to maintain our operations at their current level. If we seek to raise additional capital in order to meet various objectives additional financing might not be available on terms that are favorable to us, if at all. If we raise additional funds through the issuance of debt, equity or convertible debt securities, these securities might have rights, preferences and privileges senior to those of our current stockholders. Any additional capital raised through the sale of equity securities would also dilute our stock ownership. If adequate additional funds are not available, our business, business opportunities, results of operations and financial condition may be harmed.

If our goodwill or indefinite-lived intangible assets become impaired, we may be required to record a significant non-cash charge to earnings.

Under accounting principles generally accepted in the U.S. ("GAAP"), we review our goodwill and indefinite lived intangible assets for impairment at least annually and when there are changes in circumstances. Factors that may be considered a change in circumstances include a decline in stock price and market capitalization, expected future cash flows and slower growth rates in our industry. We may be required to record significant charges to earnings in our financial statements during the period in which any impairment of our goodwill or indefinite lived intangible assets is determined, resulting in a negative effect on our results of operations.

We may have exposure to greater than anticipated tax liabilities.

We are subject to income and indirect tax in the U.S. and many foreign jurisdictions. The application of indirect taxes (such as sales and use tax, value-added tax, goods and services tax, business tax and gross receipt tax) to our businesses and to our users is complex, uncertain and evolving, in part because many of the fundamental statutes and regulations that impose indirect taxes were established before the adoption and growth of the Internet and e-commerce. We are subject to audit by multiple tax authorities throughout the world. Although we believe our tax estimates are reasonable and accurate, the final determination of tax audits and any related litigation could be materially different from our historical tax provisions and accruals. The results of an audit or litigation could have a material adverse effect on our financial statements in the period or periods for which that determination is made.

In addition, the United States government and other governments may adopt tax measures that could impact future effective tax rates favorably or unfavorably affected by changes in tax rates, changes in the valuation of our deferred tax assets or liabilities, or changes in tax laws or their interpretation. Although we cannot predict whether or in what form any other legislation changes may pass, if enacted it could have a material adverse impact on our tax expense, deferred tax assets and cash flows.

Our deferred tax assets may not be fully realizable.

We record tax valuation allowances to reflect uncertainties about whether we will be able to realize some of our deferred tax assets before they expire. Our tax valuation allowance is based on our estimates of taxable income for the jurisdictions in which we operate and the period over which our deferred tax assets will be realizable. In the future, we could be required to increase the valuation allowance to take into account additional deferred tax assets that we may be unable to realize. An increase in the valuation allowance would have an adverse impact, which could be material, on our income tax provision and net income in the period in which we record the increase.

Protection of our intellectual property is limited, and any misuse of our intellectual property by others, including software piracy, could harm our business, reputation and competitive position.

Our intellectual property is important to our success. We believe our trademarks, copyrights, trade secrets, patents, pending patent applications, trade dress and designs are valuable and integral to our success and competitive position. To protect our proprietary rights, we rely on a combination of patents, copyrights, trademarks, trade dress, trade secret laws, confidentiality procedures, contractual provisions and technical measures. However, even if we are able to secure such rights in the United States, the laws of other countries in which our products are sold may not protect our intellectual property rights to the same extent as the laws of the United States.

In addition to issued patents, we have several patent applications on file in the U.S. and other countries. However, we do not know whether any of our pending patent applications will result in the issuance of patents or whether the examination process will require us to narrow our claims. Even if patents are issued from our patent applications, which are not certain, they may be challenged, circumvented or invalidated in the future. Moreover, the rights granted under any issued patents may not provide us with proprietary protection or competitive advantages, and, as with any technology, competitors may be able to develop similar or superior technologies now or in the future. In addition, we have not emphasized patents as a source of significant competitive advantage and have instead sought to primarily protect our proprietary rights under laws affording protection for trade secrets, copyright and trademark protection of our products, brands, and other intellectual property where available and appropriate. These measures afford only limited protection and may be challenged, invalidated or circumvented by third parties. In addition, these protections may not be adequate to prevent our competitors or customers from copying or reverse-engineering our products. Third parties could copy all or portions of our products or otherwise obtain, use, distribute and sell our proprietary information without authorization. Third parties may also develop similar or superior technology independently by designing around our intellectual property, which would decrease demand for our products. In addition, our patents may not provide us with any competitive advantages and the patents of others may seriously impede our ability to conduct our business.

We protect our products, trade secrets and proprietary information, in part, by requiring all of our employees to enter into agreements providing for the maintenance of confidentiality and the assignment of rights to inventions made by them while employed by us. We also enter into non-disclosure agreements with our technical consultants, customers, vendors and resellers to protect our confidential and proprietary information. We cannot guarantee that our confidentiality agreements with our employees, consultants and other third parties will not be breached, that we will be able to effectively enforce these agreements, that we will have adequate remedies for any breach, or that our trade secrets and other proprietary information will not be disclosed or will otherwise be protected.

We rely on contractual and license agreements with third parties in connection with their use of our products and technology. There is no guarantee that such parties will abide by the terms of such agreements or that we will be able to adequately enforce our rights, in part because we rely, in many instances, on "click-wrap" and "shrink-wrap" licenses, which are not negotiated or signed by individual licensees. Accordingly, some provisions of our licenses, including provisions protecting against unauthorized use, copying, transfer, resale and disclosure of the licensed software program, could be unenforceable under the laws of several jurisdictions.

Protection of trade secret and other intellectual property rights in the places in which we operate and compete is highly uncertain and may involve complex legal questions. The laws of countries in which we operate may afford little or no protection to our trade secrets and other intellectual property rights. Although we defend our intellectual property rights and combat unlicensed copying and use of software and intellectual property rights through a variety of techniques, preventing unauthorized use or infringement of our intellectual property rights is inherently difficult. Despite our enforcement efforts against software piracy, we could lose significant revenue due to illegal use of our software and from counterfeit copies of our software. If piracy activities increase, it could further harm our business.

We also suspect that competitors might try to illegally use our proprietary information and develop products that are similar to ours, which may infringe on our proprietary rights. In addition, we could potentially lose trade secret protection for our source code if any unauthorized disclosure of such code occurs. The loss of trade secret protection could make it easier for third parties to compete with our products by copying functionality. In addition, any changes in, or unexpected interpretations of, the trade secret and other intellectual property laws in any country in which we operate may compromise our ability to enforce our trade secret and intellectual property rights. Costly and time-consuming litigation could be necessary to enforce and determine the scope of our confidential information and trade secret protection. If we are unable to protect our proprietary rights or if third parties independently develop or gain access to our or similar technologies, our business, revenue, reputation and competitive position could be harmed.

Third-party use of our trademarks as keywords in Internet search engine advertising programs may direct potential customers to competitors' websites, which could harm our reputation and cause us to lose sales.

Competitors and other third parties, including counterfeiters, purchase our trademarks and confusingly similar terms as keywords in Internet search engine advertising programs in order to divert potential customers to their websites. Preventing such unauthorized use is inherently difficult. If we are unable to protect our trademarks and confusingly similar terms from such unauthorized use, competitors and other third parties may drive potential online customers away from our websites to competing and unauthorized websites, which could harm our reputation and cause us to lose sales.

Our trademarks are limited in scope and geographic coverage and might not significantly distinguish us from our competition.

We own several U.S. trademark registrations, including registrations of *Rosetta Stone*, the Blue Stone logo, *Lexia*, *Lexia PowerUP Literacy*, and *TruAccent* trademarks, as well as U.S. registrations of the color yellow as a trademark. In addition, we hold common law trademark rights and have trademark applications pending in the U.S. and abroad for additional trademarks. Even if federal registrations and registrations in other countries are granted to us, our trademark rights may be challenged. It is also possible that our competitors will adopt trademarks similar to ours, thus impeding our ability to build brand identity and possibly leading to customer confusion. In fact, various third parties have registered trademarks that are similar to ours in the U.S. and overseas. Furthermore, notwithstanding the fact that we may have secured trademark rights for our various trademarks in the U.S. and in some countries where we do business, in other countries we may not have secured similar rights and, in those countries there may be third parties who have prior use and prior or superior rights to our own. That prior use, prior or superior right could limit use of our trademarks and we could be challenged in our efforts to use our trademarks. We could incur substantial costs in prosecuting or defending trademark infringement suits. If we fail to effectively enforce our trademark rights, our competitive position and brand recognition may be diminished.

We must monitor and protect our Internet domain names to preserve their value. We may be unable to prevent third parties from acquiring domain names that are similar to, infringe on or otherwise decrease the value of our trademarks.

We own several domain names related to our business. Third parties may acquire substantially similar domain names or Top Level Domains ("TLDs") that decrease the value of our domain names and trademarks and other proprietary rights which may adversely affect our business. Third parties also may acquire country-specific domain names in the form of Country Code TLDs that include our trademarks or similar terms and which prevent us from operating country-specific websites from which customers can view our products and engage in transactions with us. Moreover, the regulation of domain names in the U.S. and foreign countries is subject to change. Governing bodies could appoint additional domain name registrars, modify the requirements for holding domain names or release additional TLDs. As a result, we may have to incur additional costs to maintain control over potentially relevant domain names or may not maintain exclusive rights to all potentially relevant domain names in the U.S. or in other countries in which we conduct business, which could harm our business or reputation. Moreover, attempts may be made to register our trademarks as new TLDs or as domain names within new TLDs and we will have to make efforts to enforce our rights against such registration attempts.

Claims that we misuse the intellectual property of others could subject us to significant liability and disrupt our business.

As we expand our business and develop new technologies, products and services, we may become subject to material claims of infringement by competitors and other third parties with respect to current or future products, e-commerce and other web-related technologies, online business methods, trademarks or other proprietary rights. Our competitors, some of which may have made significant investments in competing products and technologies, and may have, or seek to apply for and obtain, patents, copyrights or trademarks that will prevent, limit or interfere with our ability to make, use and sell our current and future products and technologies, and we may not be successful in defending allegations of infringement of these patents, copyrights or trademarks. Further, we may not be aware of all of the patents and other intellectual property rights owned by third parties that may be potentially adverse to our interests. We may need to resort to litigation to enforce our proprietary rights or to determine the scope and validity of a third-party's patents or other proprietary rights, including whether any of our products, technologies or processes infringe the patents or other proprietary rights of third parties. We may incur substantial expenses in defending against third-party infringement claims regardless of the merit of such claims. The outcome of any such proceedings is uncertain and, if unfavorable, could force us to discontinue advertising and sale of the affected products or impose significant penalties, limitations or restrictions on our business. We do not conduct comprehensive patent searches to determine whether the technologies used in our products infringe upon patents held by others. In addition, product development is inherently uncertain in a rapidly evolving technological environment in which there may be numerous patent applications pending, many of which are confidential when filed, with regard to similar technologies.

We do not own all of the software, other technologies and content used in our products and services, and the failure to obtain rights to use such software, other technologies and content could harm our business.

Some of our products and services contain intellectual property owned by third parties, including software that is integrated with internally developed software and voice recognition software, which we license from third parties. From time to time we may be required to renegotiate with these third parties or negotiate with new third parties to include their technology or content in our existing products, in new versions of our existing products or in wholly new products. We may not be able to negotiate or renegotiate licenses on commercially reasonable terms, or at all, and the third-party software may not be appropriately supported, maintained or enhanced by the licensors. If we are unable to obtain the rights necessary to use or continue to use third-party technology or content in our products and services, this could harm our business, by resulting in increased costs, or in delays or reductions in product shipments until equivalent software could be developed, identified, licensed and integrated.

Our use of open source software could impose limitations on our ability to commercialize our products.

We incorporate open source software into our products and may use more open source software in the future. The use of open source software is governed by license agreements. The terms of many open source licenses have not been interpreted by U.S. courts, and there is a risk that these licenses could be construed in a manner that could impose unanticipated conditions or restrictions on our ability to commercialize our products. Therefore, we could be required to seek licenses from third parties in order to continue offering our products, make generally available, in source code form, proprietary code that links to certain open source modules, re-engineer our products, discontinue the sale of our products if re-engineering could not be accomplished on a cost-effective and timely basis, or become subject to other consequences. In addition, open source licenses generally do not provide warranties or other contractual protections regarding infringement claims or the quality of the code. Thus, we may have little or no recourse if we become subject to infringement claims relating to the open source software or if the open source software is defective in any manner.

We offer Consumer language-learning packages that bundle software and online services that have increased our costs as a percentage of revenue, and these and future product introductions may not succeed and may harm our business, financial results and reputation.

Our Consumer language-learning packages integrate our language-learning software solutions with online services, which provide opportunities for practice with dedicated language conversation coaches and other language learners to increase language socialization. The costs associated with the online services included with these software packages decrease margins. Customers may choose to not engage with conversation coaches or be willing to pay higher prices to do so. We cannot provide assurances that our future software package offerings will be successful or profitable, or if they are profitable, that they will provide an adequate return on invested capital. If our software package offerings are not successful, our business, financial results and reputation may be harmed.

Substantially all of our inventory is managed by a single third party logistics company. A disagreement with, or production disruption at, this entity could cause financial loss, including loss of revenue and harm to our reputation.

Substantially all of our inventory, which consists primarily of boxes for our language learning product and reference materials, is produced by a single third party logistics company. We could experience an interruption in our operations if we have a disagreement with this company or if this company suffers a production disruption or event that results in the damage or destruction of our inventory. We might be unable to meet our contractual obligations as a result of such an interruption, which could cause us financial loss, including loss of revenue and harm to our reputation. As our business has moved online, we expect that this risk will diminish over time.

We rely on highly skilled personnel and, if we are unable to retain or motivate key personnel or hire qualified personnel, we may not be able to achieve results or grow effectively.

Our performance is largely dependent on the talents and efforts of highly skilled individuals. Our future success depends on our continuing ability to identify, hire, develop, motivate and retain highly skilled personnel for all areas of our organization.

We compete with other companies both within and outside of our industry for talented employees, and we may lose talented employees or fail to attract, train, and retain other talented employees. Any such loss or failure could adversely affect our product sales, financial condition, and operating results. In addition, we may not be able to locate suitable replacements for certain critical employees who leave, or offer employment to potential replacements on reasonable terms, all of which could adversely affect our product sales, financial condition, and operating results.

Our stock price is volatile and purchasers of our common stock could incur substantial losses.

The market price of our common stock could fluctuate significantly for many reasons, including in response to the risks described in this "Risk Factors" section, or for reasons unrelated to our operations, such as reports by media or industry analysts, investor perceptions or negative announcements about our performance, as well as industry conditions and general financial, economic and political instability. From January 1,2019 through June 30, 2020, our common stock has traded as high as $26.33 per share and as low as $10.46 per share. The stock market in general has experienced extreme volatility that has often been unrelated to the operating performance of particular companies. The market price of our common stock may be influenced by many factors, including, among others:

- announcements of acquisitions, collaborations, financings or other strategic business transactions by us;
- termination or delay of a product;
- public concern as to the efficacy of our products;
- the recruitment or departure of key personnel; and
- the other factors described in this “Risk Factor” section.

Our business could be impacted as a result of actions by activist stockholders or others.

We may be subject, from time to time, to legal and business challenges in the operation of our company due to proxy contests, stockholder proposals, media campaigns and other such actions instituted by activist stockholders or others. Responding to such actions could be costly and time-consuming, disrupt our operations, may not align with our business strategies and could divert the attention of our Board of Directors and senior management from the pursuit of current business strategies. Perceived uncertainties as to our future direction as a result of stockholder activism or potential changes to the composition of the Board of Directors may lead to the perception of a change in the direction of the business or other instability that may make it more difficult to attract and retain qualified personnel and business partners, and could have a materially adverse effect on the Company’s stock price.

If securities or industry analysts do not publish research or reports, or publish inaccurate or unfavorable research or reports about our business, our share price and trading volume could decline.

The trading market for our shares of common stock depends, in part, on the research and reports that securities or industry analysts publish about us or our business. We do not have any control over these analysts. If securities or industry analysts do not continue to cover us, the trading price for our shares of common stock may be negatively impacted. If one or more of the analysts who covers us downgrades our shares of common stock, changes their opinion of our shares or publishes inaccurate or unfavorable research about our business, our share price would likely decline. If one or more of these analysts ceases coverage of us or fails to publish reports on us regularly, demand for our shares of common stock could decrease and we could lose visibility in the financial markets, which could cause our share price and trading volume to decline.

Provisions in our organizational documents and in the Delaware General Corporation Law may prevent takeover attempts that could be beneficial to our stockholders.

Provisions in our second amended and restated certificate of incorporation and third amended and restated bylaws, and in the Delaware General Corporation Law, may make it difficult and expensive for a third party to pursue a takeover attempt we oppose even if a change in control of our Company would be beneficial to the interests of our stockholders. Any provision of our second amended and restated certificate of incorporation or third amended and restated bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock. Our Board of Directors has the authority to issue up to

10,000,000 shares of preferred stock in one or more series and to fix the powers, preferences and rights of each series without stockholder approval. The ability to issue preferred stock could discourage unsolicited acquisition proposals or make it more difficult for a third party to gain control of our Company, or otherwise could adversely affect the market price of our common stock. Further, as a Delaware corporation, we are subject to Section 203 of the Delaware General Corporation Law. This section generally prohibits us from engaging in mergers and other business combinations with stockholders that beneficially own 15% or more of our voting stock, or with their affiliates, unless our directors or stockholders approve the business combination in the prescribed manner.

Our bylaws designate the Court of Chancery of the State of Delaware as the sole and exclusive forum for certain types of actions and proceedings that may be initiated by our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, employees or agents.

Pursuant to the Company's bylaws, unless the Company consents in writing to the selection of an alternative forum, the Court of Chancery of the State of Delaware shall be the sole and exclusive forum for (i) any derivative action or proceeding brought on behalf of the Company, (ii) any action asserting a claim for breach of a fiduciary duty owed by an director, officer, employee or agent of the Company to the Company or the Company's stockholders, (iii) any action asserting a claim arising pursuant to any provision of the DGCL, the certificate of incorporation or the bylaws of the Company or (iv) any action asserting a claim governed by the internal affairs doctrine, in each case subject to the Court of Chancery having personal jurisdiction over the indispensable parties named as defendants therein. Any person of entity purchasing or otherwise acquiring any interest in shares of capital stock of the Company shall be deemed to have notice of and consented to these provisions of the Company's bylaws. This choice of forum provision may limit the Company's stockholders' ability to bring a claim in a judicial forum that they find favorable for disputes with the Company or the Company's directors, officers, employees or agents, which may discourage such lawsuits against the Company and the Company's directors, officers, employees and agents even though an action, if successful, might benefit the Company's stockholders. Stockholders who do bring a claim in the Court of Chancery could face additional litigation costs in pursuing any such claim, particularly if they do not reside in or near Delaware. The Court of Chancery may also reach different judgments or results than would other courts, including courts where a stockholder considering an action may be located or would otherwise choose to bring the action, and such judgments or results may be more favorable to the Company than to the Company's stockholders. Alternatively, if a court were to find these provisions of the Company's bylaws inapplicable to, or unenforceable in respect of, one or more of the specified types of actions or proceedings, the Company may incur additional costs associated with resolving such matters in other jurisdictions, which could have a material adverse effect on the Company's business, financial condition or results of operations.

Section 27 of the Exchange Act creates exclusive federal jurisdiction over all suits brought to enforce any duty or liability created by the Exchange Act or the rules and regulations thereunder. As a result, the exclusive forum provision will not apply to suits brought to enforce any duty or liability created by the Exchange Act or any other claim for which the federal courts have exclusive jurisdiction. In addition, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all suits brought to enforce any duty or liability created by the Securities Act or the rules and regulations thereunder. As a result, the exclusive forum provision will not apply to suits brought to enforce any duty or liability created by the Securities Act or any other claim for which the federal and state courts have concurrent jurisdiction.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

None.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

Exhibits	
3.1	Fourth Amended and Restated Bylaws (incorporated herein by reference to Exhibit 3.1 to the Company's Current Report on Form 8-K filed on June 22, 2020).
31.1*	Certification of Principal Executive Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, with respect to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020.
31.2*	Certification of Principal Financial Officer pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, with respect to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020.
32**	Certification of Principal Executive Officer and Principal Financial Officer pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, with respect to the Registrant's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020.
101.INS*	Inline XBRL Instance Document.
101.SCH*	Inline XBRL Taxonomy Extension Schema.
101.CAL*	Inline XBRL Taxonomy Extension Calculation Linkbase.
101.DEF*	Inline XBRL Taxonomy Extension Definition Linkbase.
101.LAB*	Inline XBRL Taxonomy Extension Label Linkbase.
101.PRE*	Inline XBRL Taxonomy Extension Presentation Linkbase.
104*	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

* Filed herewith

** Furnished herewith

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.

ROSETTA STONE INC.

/s/ THOMAS PIERNO

Thomas Pierno
Chief Financial Officer

Date: August 6, 2020

Exhibit 31.1

CERTIFICATIONS

I, A. John Hass, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the quarter ending June 30, 2020 of Rosetta Stone Inc. (the "Registrant");

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

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

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

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

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

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

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

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

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

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

Date: August 6, 2020

By: /s/ A. JOHN HASS

A. John Hass

Chief Executive Officer and Chairman of the Board

Exhibit 31.2

CERTIFICATIONS

I, Thomas Pierno, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q for the quarter ending June 30, 2020 of Rosetta Stone Inc. (the "Registrant");

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

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

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

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

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

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

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

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

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

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

Date: August 6, 2020

By: /s/ THOMAS PIERNO
Thomas Pierno
Chief Financial Officer

Exhibit 32

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

In connection with the Quarterly Report on Form 10-Q of Rosetta Stone Inc. (the "Company") for the quarter ended June 30, 2020 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned officers of the Company certifies pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that, to his respective knowledge:

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

/s/ A. JOHN HASS
A. John Hass
Chief Executive Officer and Chairman of the Board

/s/ THOMAS PIERNO
Thomas Pierno
Chief Financial Officer

Date: August 6, 2020