UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, DC 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: 000-20728

QUMU CORPORATION
(Exact name of registrant as specified in its charter)

Minnesota	**41-1577970**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
510 1st Avenue North, Suite 305	
Minneapolis, Minnesota	**55403**
(Address of principal executive offices)	**(Zip Code)**

(612) 638-9100
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, $0.01 par value	QUMU	The Nasdaq Stock Market LLC

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15 (d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. **Yes** ☒ **No** ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). **Yes** ☒ **No** ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company (as defined in Rule 12b-2 of the Exchange Act):

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

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

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

As of July 30, 2020, the registrant had 13,529,596 outstanding shares of $.01 par value common stock.

QUMU CORPORATION
FORM 10-Q
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FOR THE QUARTER ENDED JUNE 30, 2020

PART 1 – FINANCIAL INFORMATION
Item 1. Financial Statements (unaudited)

QUMU CORPORATION
CONDENSED CONSOLIDATED BALANCE SHEETS
(in thousands, except share data)

	June 30, 2020	December 31, 2019
Assets	(unaudited)	
Current assets:		
Cash and cash equivalents	$ 9,887	$ 10,639
Receivables, net of allowance for doubtful accounts of $44 and $45, respectively	8,224	4,586
Contract assets	948	1,089
Income tax receivable	515	338
Prepaid expenses and other current assets	1,719	1,981
Total current assets	21,293	18,633
Property and equipment, net of accumulated depreciation of $2,651 and $2,520, respectively	464	596
Right of use assets – operating leases	1,490	1,746
Intangible assets, net	2,537	3,075
Goodwill	6,718	7,203
Deferred income taxes, non-current	12	21
Other assets, non-current	478	442
Total assets	$ 32,992	$ 31,716
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable and other accrued liabilities	$ 3,744	$ 2,816
Accrued compensation	1,329	1,165
Deferred revenue	11,142	10,140
Operating lease liabilities	600	587
Financing obligations	203	157
Note payable	1,735	—
Derivative liability	35	—
Warrant liability	1,482	2,939
Total current liabilities	20,270	17,804
Long-term liabilities:		
Deferred revenue, non-current	3,979	1,449
Income taxes payable, non-current	597	585
Operating lease liabilities, non-current	1,256	1,587
Financing obligations, non-current	39	83
Other liabilities, non-current	151	—
Total long-term liabilities	6,022	3,704
Total liabilities	26,292	21,508
Commitments and contingencies (Note 3)		
Stockholders' equity:		
Preferred stock, $0.01 par value, authorized 250,000 shares, no shares issued and outstanding	—	—
Common stock, $0.01 par value, authorized 29,750,000 shares, issued and outstanding 13,529,221 and 13,553,409, respectively	135	136
Additional paid-in capital	78,416	78,061
Accumulated deficit	(68,492)	(65,128)
Accumulated other comprehensive loss	(3,359)	(2,861)
Total stockholders' equity	6,700	10,208
Total liabilities and stockholders' equity	$ 32,992	$ 31,716

See accompanying notes to unaudited condensed consolidated financial statements.

QUMU CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(unaudited – in thousands, except per share data)

	Three Months Ended June 30, 2020	Three Months Ended June 30, 2019	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019
Revenues:				
Software licenses and appliances	$ 4,061	$ 689	$ 5,601	$ 1,694
Service	5,273	4,676	9,960	10,769
Total revenues	9,334	5,365	15,561	12,463
Cost of revenues:				
Software licenses and appliances	1,477	336	2,125	647
Service	1,463	1,227	2,902	2,453
Total cost of revenues	2,940	1,563	5,027	3,100
Gross profit	6,394	3,802	10,534	9,363
Operating expenses:				
Research and development	2,088	1,838	3,868	3,512
Sales and marketing	2,181	2,212	4,399	4,564
General and administrative	2,320	1,579	4,913	3,325
Amortization of purchased intangibles	163	201	327	419
Total operating expenses	6,752	5,830	13,507	11,820
Operating loss	(358)	(2,028)	(2,973)	(2,457)
Other income (expense):				
Interest expense, net	(22)	(214)	(5)	(419)
Decrease in fair value of derivative liability	105	—	105	—
Increase in fair value of warrant liability	(434)	(1,436)	(398)	(1,725)
Other, net	(37)	66	(197)	35
Total other expense, net	(388)	(1,584)	(495)	(2,109)
Loss before income taxes	(746)	(3,612)	(3,468)	(4,566)
Income tax benefit	(54)	(11)	(104)	(15)
Net loss	$ (692)	$ (3,601)	$ (3,364)	$ (4,551)
Net loss per share – basic:				
Net loss per share – basic	$ (0.05)	$ (0.37)	$ (0.25)	$ (0.47)
Weighted average shares outstanding – basic	13,534	9,861	13,543	9,775
Net loss per share – diluted:				
Loss attributable to common shareholders	$ (820)	$ (3,601)	$ (3,658)	$ (4,551)
Net loss per share – diluted	$ (0.06)	$ (0.37)	$ (0.27)	$ (0.47)
Weighted average shares outstanding – diluted	13,538	9,861	13,573	9,775

See accompanying notes to unaudited condensed consolidated financial statements.

QUMU CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE LOSS
(unaudited - in thousands)

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	**2019**	**2020**	**2019**
Net loss	$ (692)	$ (3,601)	$ (3,364)	$ (4,551)
Other comprehensive loss:				
Net change in foreign currency translation adjustments	(18)	(278)	(498)	(35)
Total other comprehensive loss	(18)	(278)	(498)	(35)
Total comprehensive loss	$ (710)	$ (3,879)	$ (3,862)	$ (4,586)

See accompanying notes to unaudited condensed consolidated financial statements.

QUMU CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(unaudited – in thousands)

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total
	Shares	Amount				
Balance at December 31, 2018	9,624	$ 96	$ 69,072	$ (58,875)	$ (3,288)	$ 7,005
Adoption of ASC Topic 842	—	—	—	190	—	190
Net loss	—	—	—	(950)	—	(950)
Other comprehensive income, net of taxes	—	—	—	—	243	243
Issuance of stock under employee stock plan, net of forfeitures	156	2	(1)	—	—	1
Redemption of stock related to tax withholdings on employee stock plan issuances	(15)	—	(36)	—	—	(36)
Stock-based compensation	—	—	231	—	—	231
Balance at March 31, 2019	9,765	$ 98	$ 69,266	$ (59,635)	$ (3,045)	$ 6,684
Net loss	—	—	—	(3,601)	—	(3,601)
Other comprehensive loss, net of taxes	—	—	—	—	(278)	(278)
Issuance of stock under employee stock plan, net of forfeitures	146	1	41	—	—	42
Redemption of stock related to tax withholdings on employee stock plan issuances	(4)	—	(17)	—	—	(17)
Stock-based compensation	—	—	194	—	—	194
Balance at June 30, 2019	9,907	$ 99	$ 69,484	$ (63,236)	$ (3,323)	$ 3,024

	Common Stock		Additional Paid-in Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total
	Shares	Amount				
Balance at December 31, 2019	13,553	$ 136	$ 78,061	$ (65,128)	$ (2,861)	$ 10,208
Net loss	—	—	—	(2,672)	—	(2,672)
Other comprehensive loss, net of taxes	—	—	—	—	(480)	(480)
Issuance of stock under employee stock plan, net of forfeitures	4	—	—	—	—	—
Redemption of stock related to tax withholdings on employee stock plan issuances	(29)	—	(53)	—	—	(53)
Stock-based compensation	—	—	245	—	—	245
Balance at March 31, 2020	13,528	$ 136	$ 78,253	$ (67,800)	$ (3,341)	$ 7,248
Net loss	—	—	—	(692)	—	(692)
Other comprehensive loss, net of taxes	—	—	—	—	(18)	(18)
Issuance of stock under employee stock plan, net of forfeitures	1	(1)	—	—	—	(1)
Redemption of stock related to tax withholdings on employee stock plan issuances	—	—	(1)	—	—	(1)
Stock-based compensation	—	—	164	—	—	164
Balance at June 30, 2020	13,529	$ 135	$ 78,416	$ (68,492)	$ (3,359)	$ 6,700

See accompanying notes to unaudited condensed consolidated financial statements.

QUMU CORPORATION
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(unaudited – in thousands)

	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019
Operating activities:		
Net loss	$ (3,364)	$ (4,551)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	618	809
Stock-based compensation	409	425
Accretion of debt discount and issuance costs	20	263
Gain on lease modification	—	(21)
Decrease in fair value of derivative liability	(105)	—
Increase in fair value of warrant liability	398	1,725
Deferred income taxes	9	7
Changes in operating assets and liabilities:		
Receivables	(3,685)	3,290
Contract assets	140	(1,010)
Income taxes receivable / payable	(184)	(15)
Prepaid expenses and other assets	394	586
Accounts payable and other accrued liabilities	1,030	(397)
Accrued compensation	177	(711)
Deferred revenue	3,709	(1,445)
Other non-current liabilities	151	(24)
Net cash used in operating activities	(283)	(1,069)
Investing activities:		
Purchases of property and equipment	(29)	(43)
Net cash used in investing activities	(29)	(43)
Financing activities:		
Proceeds from issuance of common stock under employee stock plans	—	42
Principal payments on financing obligations	(185)	(158)
Common stock repurchases to settle employee withholding liability	(54)	(53)
Net cash used in financing activities	(239)	(169)
Effect of exchange rate changes on cash	(201)	(6)
Net decrease in cash and cash equivalents	(752)	(1,287)
Cash and cash equivalents, beginning of period	10,639	8,636
Cash and cash equivalents, end of period	$ 9,887	$ 7,349
Supplemental disclosures of net cash paid (received) during the period:		
Income taxes, net	$ 27	$ (12)
Interest, net	$ 7	$ 8
Non-cash investing and financing activities:		
Issuance of note payable and derivative liability for cancellation of warrant	$ 1,855	$ —

See accompanying notes to unaudited condensed consolidated financial statements.

QUMU CORPORATION
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)

(1) Nature of Business and Basis of Presentation

Qumu Corporation ("Qumu" or the "Company") provides the software solutions to create, manage, secure, distribute and measure the success of live and on-demand video for enterprises. The Qumu platform enables global organizations to drive employee engagement, increase access to video, and modernize the workplace by providing a more efficient and effective way to share knowledge. The world's largest organizations leverage the Qumu platform for a variety of cloud, on-premise and hybrid deployments. Use cases including self-service webcasting, sales enablement, internal communications, product training, regulatory compliance and customer engagement. The Company markets its products to customers primarily in North America, Europe and Asia.

The Company views its operations and manages its business asone segment and one reporting unit. Factors used to identify the Company's single operating segment and reporting unit include the financial information available for evaluation by the chief operating decision maker in making decisions about how to allocate resources and assess performance. The Company manages the marketing of its products and services through regional sales representatives and independent distributors in the United States and international markets.

The condensed consolidated financial statements include the accounts of the Company and its wholly-owned subsidiaries. All intercompany accounts and transactions have been eliminated.

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

The accompanying condensed consolidated financial statements are unaudited and have been prepared by the Company in accordance with accounting principles generally accepted in the United States of America for interim financial information, pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC"). Pursuant to such rules and regulations, certain financial information and footnote disclosures normally included in a complete set of financial statements have been condensed or omitted. However, in the opinion of management, the financial statements include all adjustments, consisting of normal recurring accruals, necessary for a fair presentation of the financial position and results of operations and cash flows of the interim periods presented. These condensed consolidated financial statements should be read in conjunction with the consolidated financial statements and notes thereto included in the Company's Annual Report on Form 10-K as of and for the year ended December 31, 2019.

Recently Adopted Accounting Standards

In August 2018, the FASB issued ASU 2018-13, *Disclosure Framework – Changes to the Disclosure Requirements for Fair Value Measurement (Topic 820)*, which changes the fair value measurement disclosure requirements of ASC 820. The ASU is effective for all entities for fiscal years beginning after December 15, 2019, including interim periods therein. The Company adopted ASU 2018-13 effective January 1, 2020. The impact of adopting this standard was not material to the Company's consolidated financial statements or disclosures.

Accounting Standards Not Yet Adopted

In December 2019, the FASB issued ASU 2019-12, *Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes*, which simplifies the accounting for income taxes by removing exceptions within the general principles of Topic 740 regarding the calculation of deferred tax liabilities, the incremental approach for intraperiod tax allocation, and calculating income taxes in an interim period. In addition, the ASU adds clarifications to the accounting for franchise tax (or similar tax) which is partially based on income, evaluating tax basis of goodwill recognized from a business combination, and reflecting the effect of any enacted changes in tax laws or rates in the annual effective tax rate computation in the interim period that includes the enactment date. The ASU is effective for fiscal years beginning after December 15, 2020, and will be applied either retrospectively or prospectively based upon the applicable amendments. Early adoption is permitted. The Company does not believe the impact of adopting this standard will be material to its consolidated financial statements and related disclosures.

In January 2017, the FASB issued ASU 2017-04, *Intangibles – Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*. The purpose of the amendment is to simplify how an entity is required to test goodwill for impairment by eliminating Step 2 from the goodwill impairment test. Step 2 measures a goodwill impairment loss by comparing the implied fair value of a reporting unit's goodwill with the carrying amount of that goodwill. This standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2022. Early adoption is permitted. The Company does not believe the impact of adopting this standard will be material to its consolidated financial statements.

In June 2016, the FASB issued ASU 2016-13, *Measurement of Credit Losses on Financial Instruments*, which supersedes current guidance requiring recognition of credit losses when it is probable that a loss has been incurred. The standard requires the establishment of an allowance for estimated credit losses on financial assets, including trade and other receivables, at each reporting date. The ASU will result in earlier recognition of allowances for losses on trade and other receivables and other contractual rights to receive cash. This standard is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2022. Early adoption is permitted. The Company does not believe the impact of adopting this standard will be material to its consolidated financial statements and related disclosures.

(2) Intangible Assets and Goodwill

Intangible Assets

The Company's amortizable intangible assets consisted of the following (in thousands):

	June 30, 2020			
	Customer Relationships	Developed Technology	Trademarks / Trade Names	Total
Original cost	$ 4,750	$ 7,902	$ 2,178	$ 14,830
Accumulated amortization	(3,470)	(7,670)	(1,153)	(12,293)
Intangibles assets, net	$ 1,280	$ 232	$ 1,025	$ 2,537

	December 31, 2019			
	Customer Relationships	Developed Technology	Trademarks / Trade Names	Total
Original cost	$ 4,878	$ 8,135	$ 2,182	$ 15,195
Accumulated amortization	(3,293)	(7,741)	(1,086)	(12,120)
Intangibles assets, net	$ 1,585	$ 394	$ 1,096	$ 3,075

Changes to the carrying amount of net amortizable intangible assets consisted of the following (in thousands):

	Six Months Ended June 30, 2020
Balance, beginning of period	$ 3,075
Amortization expense	(467)
Currency translation	(71)
Balance, end of period	$ 2,537

Amortization expense of intangible assets consisted of the following (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Amortization expense associated with the developed technology included in cost of revenues	$ 68	$ 114	$ 140	$ 231
Amortization expense associated with other acquired intangible assets included in operating expenses	163	201	327	419
Total amortization expense	$ 231	$ 315	$ 467	$ 650

Goodwill

On October 3, 2014, the Company completed the acquisition of Kulu Valley, Ltd., subsequently renamed Qumu Ltd., and recognized $8.8 million of goodwill and $6.7 million of intangible assets. The goodwill balance of $6.7 million at June 30, 2020 reflects the impact of foreign currency exchange rate fluctuations since the acquisition date.

As of June 30, 2020, the Company's market capitalization, without a control premium, was greater than its book value and, as a result, the Company concluded there was no goodwill impairment. Sustained declines in the Company's market capitalization or a downturn in its future financial performance and/or future outlook could require the Company to record goodwill and other impairment charges. While a goodwill impairment charge is a non-cash charge, it would have a negative impact on the Company's results of operations.

(3) Commitments and Contingencies

Leases

The Company is obligated under finance leases covering certain IT equipment that expire at various dates over the nextthree years. The Company also has non-cancellable operating leases, primarily for office space, that expire at various dates over the next four years. The Company has two leases that each contain a renewal option for a period of five years. Because the Company is not reasonably certain to exercise this option, the option is not considered in determining the lease term.

The components of lease cost were as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Operating lease cost	$ 98	$ 85	$ 194	$ 278
Finance lease cost:				
Amortization of right of use assets	31	31	62	44
Interest on lease liabilities	2	3	4	5
Total finance cost	33	34	66	49
Total lease cost	$ 131	$ 119	$ 260	$ 327

Future payments used in the measurement of lease liabilities on the condensed consolidated balance sheet as ofJune 30, 2020 are as follows (in thousands):

	Operating leases	Finance leases
Remainder of 2020	$ 411	$ 45
2021	707	80
2022	668	5
2023	290	—
2024	112	—
Thereafter	—	—
Total undiscounted lease payments	2,188	130
Less amount representing interest	(332)	(5)
Present value of lease liabilities	$ 1,856	$ 125

Subleases

On January 17, 2019, the Company terminated a sublease agreement related to its Minneapolis, Minnesota headquarters and contemporaneously modified the Company's primary lease agreement. Upon modification, the Company recognized a gain of $21,000, which is reported in other income (expense) in the Company's condensed consolidated statement of operations for the six months ended June 30, 2019. Sublease income was $35,000 and $73,000 for the three and six months ended June 30, 2019, respectively, which is reported in other income (expense) in the Company's condensed consolidated statement of operations. The Company reported no sublease income for the three and six months ended June 30, 2020.

Note Payable and Derivative Liability

On May 1, 2020, the Company canceled its outstanding warrant to ESW Holdings, Inc., which was for the purchase of up to925,000 shares of Qumu's common stock at an exercise price of $1.96 per share and expiring January 2028. Additionally, the terms of the warrant provided for a cash settlement in the event of a change of control transaction referred to as a Fundamental Transaction, computed using a Black-Scholes option pricing model with specified inputs stipulated in the warrant agreement. The fair value of the warrant instrument has historically been reported as a liability in Qumu's consolidated financial statements, and, for certain historical reporting periods since its issuance, the shares underlying the warrant instrument were dilutive in the calculation of earnings per share.

As consideration for the warrant cancellation, the Company entered into a secured promissory note to ESW Holdings, Inc. ("note payable"), having a face amount of $1,833,000, which was less than the cash settlement amount of $1,983,000 computed under the terms of the warrant agreement, due on April 1, 2021 and bearing no interest. The payment obligations of the note will be accelerated upon a Fundamental Transaction, and Qumu would be required to pay an additional $150,000 to ESW Holdings, Inc. upon the closing of a Fundamental Transaction. The note to ESW Holdings, Inc. may be prepaid at any time without penalty.

The note payable was recorded at its present value of future cash flows of $1,833,000 discounted at 7.25% (prime plus 4.0%), which was $1,715,000 at May 1, 2020. The value of the note payable will be accreted up to its face value at maturity. As of June 30, 2020, the carrying value of the note payable was $1,735,000, which also approximated its fair value (Level 2).

The note payable contains a $150,000 contingent payment obligation due upon the closing of a Fundamental Transaction on or prior to the April 1, 2021 maturity date. This contingent payment obligation qualifies as an embedded derivative in accordance with ASC Topic 815, *Derivatives and Hedging*. The embedded derivative is measured at fair value and is remeasured at fair value each subsequent reporting period and reported on the Company's consolidated balance sheet as a derivative liability. Changes in fair value are recognized in other income (expense) in the consolidated statement of operations as "Decrease (increase) in fair value of derivative liability." See Note 4–"Fair Value Measurements."

In connection with the note, the Company and ESW Holdings, Inc. entered into a security agreement dated May 1, 2020 providing for a future security interest in certain assets of the Company that would not attach unless and until the occurrence of the Triggering Event specified therein. The termination of the merger agreement with Synacor, Inc. represented a Triggering Event, resulting in ESW Holdings, Inc. securing an interest in certain of Qumu's cash deposit accounts.

Contingencies

In connection with the termination of merger agreement with Synacor, Inc. on June 29, 2020, Qumu is contingently obligated to pay Synacor, Inc $1,450,000 upon the occurrence of certain events with respect to an Acquisition Transaction during the 15 months following the termination. The Company has not accrued a liability related to this contingent obligation as the payment is not triggered until an Acquisition Transaction occurs. See Note 9–"Termination of Merger Agreement with Synacor, Inc."

The Company is exposed to asserted and unasserted claims encountered in the normal course of business. Legal costs related to loss contingencies are expensed as incurred. In the opinion of management, the resolution of these matters will not have a material adverse effect on the Company’s financial position or results of operations.

The Company’s standard arrangements include provisions indemnifying customers against liabilities if the Company's products infringe a third-party’s intellectual property rights. The Company has not incurred any costs in its continuing operations as a result of such indemnifications and has not accrued any liabilities related to such contingent obligations in the accompanying condensed consolidated financial statements.

(4) Fair Value Measurements

Assets and liabilities measured at fair value are classified into the following categories:

- Level 1: Inputs are unadjusted quoted prices in active markets for identical assets and liabilities.
- Level 2: Inputs include data points that are observable such as quoted prices for similar assets or liabilities in active markets, quoted prices for identical or similar assets or liabilities in markets that are not active, and inputs (other than quoted prices) such as interest rates and yield curves that are observable for the asset or liability, either directly or indirectly.
- Level 3: Inputs are generated from model-based techniques that use significant assumptions not observable in the market. These unobservable assumptions reflect an entity’s own estimates of assumptions that market participants would use in pricing the asset or liability.

As of June 30, 2020, the following warrants for the purchase of Qumu's common stock were outstanding and exercisable:

Description	Number of underlying warrant shares	Warrant exercise price (per share)	Warrant expiration date
Warrant issued in conjunction with October 2016 debt financing ("Hale warrant")	314,286	$ 2.80	October 21, 2026
Warrant issued to sales partner, iStudy Co., Ltd. ("iStudy warrant")	100,000	$ 2.43	August 31, 2028
Total warrants outstanding	414,286		

The warrant liability was recorded in the Company's consolidated balance sheets at its fair value on the respective dates of issuance and is revalued on each subsequent balance sheet date until such instrument is exercised or expires, with any changes in the fair value between reporting periods recorded in other income (expense) of the consolidated statement of operations as "Decrease (increase) in fair value of warrant liability." The Company recorded non-cash expense of $434,000 and $1.4 million for the three months ended June 30, 2020 and 2019, respectively, and non-cash expense of $398,000 and $1.7 million for the six months ended June 30, 2020 and 2019, respectively, resulting from the change in fair value of the warrant liability.

On May 1, 2020, the Company canceled the ESW warrant in exchange for a note payable (see Note 3–"Commitments and Contingencies") which contained an embedded derivative liability that is measured on a recurring basis at fair value. The Company recorded non-cash income of $105,000 for both the three and six months ended June 30, 2020 resulting from the change in fair value of the derivative liability.

The Company’s liabilities measured at fair value on a recurring basis and the fair value hierarchy utilized to determine such fair values is as follows at June 30, 2020 and December 31, 2019 (in thousands):

		Fair Value Measurements Using		
	Total Fair Value at June 30, 2020	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Liabilities:				
Warrant liability - Hale	$ 1,224	$ —	$ —	$ 1,224
Warrant liability - iStudy	258	—	—	258
Warrant liability	$ 1,482	$ —	$ —	$ 1,482
Derivative liability	$ 35	$ —	$ —	$ 35
Total	$ 1,517	$ —	$ —	$ 1,517

		Fair Value Measurements Using		
	Total Fair Value at December 31, 2019	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Liabilities:				
Warrant liability - ESW	$ 2,149	$ —	$ —	$ 2,149
Warrant liability - Hale	645	—	—	645
Warrant liability - iStudy	145	—	—	145
Total	$ 2,939	$ —	$ —	$ 2,939

The Company's evaluation of the probability and timing of a change in control represents an unobservable input (Level 3) that shortens or lengthens the expected term input of the option pricing model for all warrants, and generally correspondingly increases or decreases, respectively, the discounted value of the minimum cash payment component of the Hale warrant and, prior to its cancellation, the ESW warrant. Consequently, as of June 30, 2020 and December 31, 2019, the liability related to each warrant was classified as a Level 3 liability.

The Company's evaluation of the probability and timing of a change in control represents an unobservable input (Level 3) that increases or decreases the likelihood of triggering the note payable agreement's Fundamental Transaction contingency, resulting in Level 3 classification of the derivative liability.

The following table represents the significant unobservable input used in the fair value measurement of Level 3 warrant liability instruments:

	June 30, 2020
Probability-weighted timing of change in control	5.2 years

The following table summarizes the changes in fair value measurements for thesix months ended June 30, 2020:

	Warrant liability	Derivative liability	Total
Balance at December 31, 2019	$ 2,939	$ —	$ 2,939
Cancellation of ESW warrant liability (Note 3)	(1,855)	—	(1,855)
Issuance of derivative liability upon cancellation of ESW warrant	—	140	140
Change in fair value	398	(105)	293
Balance at June 30, 2020	$ 1,482	$ 35	$ 1,517

(5) Revenue

The Company generates revenue through the sale of enterprise video content management software, hardware, maintenance and support, and professional and other services. Software sales may take the form of a perpetual software license, a cloud-hosted software as a service (SaaS) or a term software license. Software licenses and appliances revenue includes sales of perpetual software licenses and hardware. Service revenue includes SaaS, term software licenses, maintenance and support, and professional and other services.

Revenues by product category and geography

The Company combines its products and services into three product categories and three geographic regions, based on customer location, as follows (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Software licenses and appliances	$ 4,061	$ 689	$ 5,601	$ 1,694
Service				
Subscription, maintenance and support	4,673	4,154	8,833	9,717
Professional services and other	600	522	1,127	1,052
Total service	5,273	4,676	9,960	10,769
Total revenues	$ 9,334	$ 5,365	$ 15,561	$ 12,463

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
North America	$ 7,513	$ 3,192	$ 11,563	$ 7,500
Europe	1,616	1,904	3,490	4,145
Asia	205	269	508	818
Total	$ 9,334	$ 5,365	$ 15,561	$ 12,463

Contract Balances

The Company's balances for contract assets totaled$948,000 and $1.1 million as of June 30, 2020 and December 31, 2019, respectively. The Company's balances for contract liabilities, which are included in deferred revenue, totaled $15.1 million and $11.6 million as of June 30, 2020 and December 31, 2019, respectively.

During the three and six months ended June 30, 2020, the Company recognized $3.9 million and $6.6 million, respectively, of revenue that was included in the deferred revenue balance at the beginning of the period. During the three and six months ended June 30, 2019, the Company recognized $3.7 million and $6.3 million, respectively, of revenue that was included in the deferred revenue balance at the beginning of the period. All other activity in deferred revenue is due to the timing of invoices in relation to the timing of recognizable revenue as described above.

Revenue allocated to remaining performance obligations represents the transaction price allocated to the performance obligations that are unsatisfied, or partially unsatisfied, which includes unearned revenue and amounts that will be invoiced and recognized as revenue in future periods. Contracted but unsatisfied performance obligations were approximately $24.2 million as of June 30, 2020, of which the Company expects to recognize $12.9 million of revenue over the next 12 months and the remainder thereafter. During the six months ended June 30, 2020 and 2019, no revenue was recognized from performance obligations satisfied in previous periods.

(6) Stock-Based Compensation

The Company granted the following stock-based awards in the periods indicated:

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Stock options	—	8,000	—	25,000
Restricted stock awards and restricted stock units	—	98,196	53,600	196,688

The stock options, restricted stock awards and restricted stock units granted during the six months ended June 30, 2020 and 2019 were granted under the Company's Second Amended and Restated 2007 Stock Incentive Plan (the "2007 Plan"), a shareholder approved plan.

In settlement of vested performance stock units granted in 2018, during the six months ended June 30, 2019 the Company issued 98,492 shares of restricted stock, which was equal to the number of vested 2018 performance stock units multiplied by the performance goals achievement of 100.0%. At December 31, 2019, there were 40,599 shares of common stock underlying the outstanding 2018 performance stock units that were subject to vesting upon the achievement of performance goals for the performance period of January 1, 2019 to December 31, 2019. The outstanding unvested 2018 performance stock units were canceled on February 10, 2020 upon determination by the Compensation Committee of the Company's Board of Directors that the performance metric for the 2019 performance period was not achieved. Accordingly, as of June 30, 2020, there were no performance stock units outstanding.

The Company recognized the following expense related to its share-based payment arrangements (in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Stock-based compensation cost, before income tax benefit:				
Stock options	$ 69	$ 76	$ 138	$ 170
Restricted stock awards and restricted stock units	95	118	271	250
Performance stock units	—	—	—	5
Total stock-based compensation	$ 164	$ 194	$ 409	$ 425

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Stock-based compensation cost included in:				
Cost of revenues	$ 5	$ 6	$ 10	$ 14
Operating expenses	159	188	399	411
Total stock-based compensation	$ 164	$ 194	$ 409	$ 425

(7) Income Taxes

As of both June 30, 2020 and December 31, 2019, the Company’s liability for gross unrecognized tax benefits (excluding interest and penalties) totaled $1.8 million. The Company had accrued interest and penalties relating to unrecognized tax benefits of $39,000 and $28,000 on a gross basis at June 30, 2020 and December 31, 2019, respectively. The change in the liability for gross unrecognized tax benefits reflects an increase in reserves established for federal and state uncertain tax positions. The Company does not currently expect significant changes in the amount of unrecognized tax benefits during the next twelve months.

(8) Computation of Net Loss Per Share of Common Stock

The following table identifies the components of net loss per basic and diluted share (in thousands, except for per share data):

	Three Months Ended June 30, 2020	Three Months Ended June 30, 2019	Six Months Ended June 30, 2020	Six Months Ended June 30, 2019
Net loss per share – basic				
Net loss	$ (692)	$ (3,601)	$ (3,364)	$ (4,551)
Weighted average shares outstanding	13,534	9,861	13,543	9,775
Net loss per share – basic	$ (0.05)	$ (0.37)	$ (0.25)	$ (0.47)
Net loss per share – diluted				
Loss attributable to common shareholders:				
Net loss	$ (692)	$ (3,601)	$ (3,364)	$ (4,551)
Numerator effect of dilutive securities				
Warrants	(128)	—	(294)	—
Loss attributable to common shareholders	$ (820)	$ (3,601)	$ (3,658)	$ (4,551)
Weighted average shares outstanding – diluted:				
Weighted average shares outstanding – basic	13,534	9,861	13,543	9,775
Denominator effect of dilutive securities				
Warrants	4	—	30	—
Diluted potential common shares	4	—	30	—
Weighted average shares outstanding – diluted	13,538	9,861	13,573	9,775
Net loss per share – diluted	$ (0.06)	$ (0.37)	$ (0.27)	$ (0.47)

Stock options, warrants and restricted stock units to acquire common shares that were excluded from the computation of diluted weighted-average common shares as their effect is anti-dilutive were as follows (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
Stock options	1,054	1,328	1,055	1,372
Warrants	414	1,339	414	1,339
Restricted stock units	172	115	164	132
Total anti-dilutive	1,640	2,782	1,633	2,843

(9) Termination of Merger Agreement with Synacor, Inc.

As previously disclosed, on February 11, 2020, Qumu Corporation (“Qumu) entered into an Agreement and Plan of Merger and Reorganization (the “Merger Agreement”) with Synacor, Inc. (“Synacor”) and Quantum Merger Sub I, Inc., a direct, wholly owned subsidiary of Synacor (“Merger Sub”).

On June 29, 2020, Qumu, Synacor and Merger Sub entered into an agreement to terminate the Merger Agreement (the “Mutual Termination Agreement”). Pursuant to the Mutual Termination Agreement, the Merger Agreement was terminated and the parties provided a mutual release of claims relating to the Merger Agreement and related agreements.

Pursuant to the terms of the Mutual Termination Agreement, Qumu paid Synacor$250,000 on June 29, 2020 and is obligated to pay an additional$1,450,000 if (a) within 15 months following June 29, 2020, an Acquisition Transaction in respect of Qumu is consummated with a Person other than Synacor or (b) (i) within15 months following June 29, 2020, Qumu enters into a binding definitive agreement for an Acquisition Transaction with a Person other than Synacor and (ii) such Acquisition Transaction is ultimately consummated (whether or not during the foregoing 15 months period). For the purposes of the Mutual Termination Agreement, all references to15% or 85% in the definition of “Acquisition Transaction” of the Merger Agreement shall be replaced by 50%.

During the three and six months ended June 30, 2020, the Company recognized transaction-related expenses related to the Company's Merger Agreement with Synacor, Inc. totaling $699,000 and $1.5 million, which are included within general and administrative expenses in the Company's condensed consolidated statement of operations.

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

The following discussion and analysis of our financial condition and results of operations should be read together with the section titled "Financial Information" and our audited financial statements and related notes which are included in our most recent Annual Report on Form 10-K. Our actual results could differ materially from those anticipated in the forward-looking statements included in this discussion as a result of certain factors, including, but not limited to, those discussed in "Risk Factors" included in Part II. Other Information, Item 1A. Risk Factors of this Quarterly Report on Form 10-Q.

Overview

Qumu Corporation ("Qumu" or the "Company") provides the software solutions to create, manage, secure, distribute and measure the success of live and on-demand video for enterprises. Qumu's platform enables global organizations to drive employee engagement, increase access to video, and modernize the workplace by providing a more efficient and effective way to share knowledge.

Impact of COVID-19

In March 2020, the World Health Organization declared the outbreak of COVID-19 as a pandemic, which continues to be spread throughout the U.S. and the world. The COVID-19 pandemic has changed the businesses of Qumu's customers and prospective customers in a number of ways. As part of these changes, enterprises of all sizes are implementing technology plans to virtualize customer meetings, employee communications and major events – as well as record and store video assets for on-demand viewing.

Widespread adoption and use of video in the enterprise is critical to our future growth and success. Qumu believes that the COVID-19 crisis will act as a tipping point for the use and acceptance of video as a primary communication channel within the enterprise. As video content and software to manage video content achieve high levels of acceptance within the enterprise, we believe this will drive demand and market adoption for Qumu's video platform and tools. Qumu received early evidence of this expected increase in adoption and use of video in the enterprise due to COVID-19 in the first quarter 2020 ended March 31, 2020. During the last weeks of March 2020, Qumu received customer orders of $9.7 million total contract value, which were directly attributable to the new working environment caused by the pandemic COVID-19. Other customer orders and sales opportunities have also accelerated due to the customers' COVID-19-driven video needs. Revenue increased 74% in the second quarter 2020 to $9.3 million from $5.4 million in the second quarter 2019. The increase in revenue was primarily due to a large customer order received at the end of the first quarter 2020, which the customer identified as specifically driven by COVID-19.

Continuing into the second quarter ended June 30, 2020, Qumu believes that COVID-19 travel restrictions, work-from-home requirements and social distancing protocols are continuing factors motivating customers' consideration of Qumu's live and on-demand video for the enterprise software solutions. In particular, customers have expressed increased interest in our cloud and cloud-hybrid offering, evidenced by the addition in the second quarter ended June 30, 2020 of five new cloud or cloud-hybrid customers as well as the expansion or conversion of two existing enterprise customers to cloud or cloud-hybrid deployment.

Additionally, the significantly higher than historic usage of Qumu's cloud-based enterprise video solution that experienced in the last weeks of the first quarter of 2020 continued into the second quarter 2020. The dramatic increase is the result of Qumu's Global 2000 customer base mobilizing to support thousands of concurrent video users, as they operate under travel restrictions and mandatory work-at-home policies due to COVID-19. Through the second quarter 2020, Qumu continued to experience higher than average usage among its customers and anticipates this will continue at least for the duration of widespread travel restrictions and mandatory work-at-home policies due to COVID-19. Qumu anticipates these usage patterns will continue at least for the duration of widespread travel restrictions and mandatory work-at-home policies due to COVID-19, as well as generally following this period as customers increase their use of video as a primary communication channel in the enterprise.

The factors that initially drove demand for Qumu's solutions in the first quarter ended March 31, 2020 continue to impact the Company's business. Qumu expects to capture additional revenue opportunities presented by the widespread adoption and use of video in the enterprise. On May 5, 2020, Qumu announced that it expected 2020 revenue to be approximately $28.0 million as compared to 2019 revenue of $25.4 million. Given Qumu's visibility to customer contracts and pipeline activity, Qumu announced on July 15, 2020 that it expects 2020 revenue to be approximately $29.0.

Qumu is continuing to adapt to the COVID-19 pandemic environment, with a focus on mitigating the near-term impact while positioning Qumu's business for success during and coming out of the crisis. Actions being taken include:

- Protecting Employees: While shelter-in-place and stay-at-home executive orders and similar requirements have continued to evolve since initially enacted in March 2020, Qumu's employees in each of its locations – Minneapolis, Minnesota; Burlingame, California; London, England; and Hyderabad, India – continue to work remotely and support

Qumu's operations globally. Qumu has not experienced any layoffs or furloughs and, due to expected revenue performance in 2020, does not expect future layoffs or furloughs. In the second half of 2020, Qumu expects to increase headcount to allow the Company to capitalize on the revenue opportunities presented by COVID-19 and enhance its product-related features and R&D efforts.

- Prioritizing Services and Supplies: For the significant majority of customers, Qumu is able to provide remote support and service. Due to customer demand, Qumu has and may in the future rely upon outsourced professional services, which generally will negatively impact margins. For customers that require on-site performance of support and services, Qumu has been working with the customers to defer on-site activities until mutually agreed with primary consideration for the health and safety of employees. Given the role of Qumu's products in global communications, Qumu believes that its products are essential in the support of the world's critical infrastructure under the CISA (Cybersecurity and Infrastructure Security Agency) guidelines from the U.S. Department of Homeland Security. Qumu's operations team has been working closely with our suppliers to secure hardware to fulfill customer orders and with our logistics partners to manage and mitigate any potential disruption to supply. To date, Qumu has not experienced supply or personnel issues that have materially impacted Qumu's ability to maintain service levels and deliver on our commitments to Qumu customers.

- Enhanced Financial Diligence: Considering the scale of the COVID-19 pandemic and the corresponding economic crisis it has created, Qumu has continued to diligently evaluate the nature and extent of the financial impact of COVID-19 on Qumu's customers. To date, Qumu has not experienced any material collections issues stemming from COVID-19 impacts on Qumu's customers. At this time, Qumu believes it has limited risk credit or collection risk given its Global 2000 customer base and given that non-payment may lead to termination of access to cloud or hybrid deployed solutions or termination of technical support and updates for on-premise solutions.

  In the second half of 2020, Qumu expects cash flows from operating activities to be affected by those factors that have historically impacted operating cash flows – fluctuations in revenues, timing of customer payments, personnel costs, outside service providers, and the amount and timing of royalty payments and equipment purchases as Qumu continues to support the growth of its business. Other than as described in this section, Qumu does not expect cash flows from operating activities to be specifically affected by COVID-19 impacts.

  Qumu has not applied for any loan program under the Coronavirus Aid, Relief and Economic Security (CARES) Act, such as the Paycheck Protection Program, which requires an applicant to certify that the loan is necessary to support its ongoing operations. Due to Qumu's current and expected future financial performance, Qumu does not believe a Paycheck Protection Program loan is necessary to support its ongoing operations.

  For those entities such as Qumu not participating in the Paycheck Protection Program, the CARES Act provides companies the option to defer the payment of the employer's portion of social security taxes that would otherwise be required to be made during the period beginning on March 27, 2020 and ending December 31, 2020 (Payroll Tax Deferral Period). The first half of the deferred payments are due to be paid by December 31, 2021, and the second half of the deferred payments are due to be paid by December 31, 2022. Qumu intends to defer approximately $300,000 of payments related to the employer's portion of employees' social security taxes throughout the Payroll Tax Deferral Period in accordance with the CARES Act.

Our actual results could differ materially from those anticipated in the forward-looking statements included in this discussion of the impact of COVID-19 as a result of certain factors, including, but not limited to, those discussed in "Risk Factors" included our most recent Annual Report on Form 10-K and those additional factors discussed in Part II. Other Information, Item 1A. Risk Factors of this Quarterly Report on Form 10-Q.

Critical Accounting Policies

The discussion of the Company's financial condition and results of operations is based upon its financial statements, which are prepared in accordance with accounting principles generally accepted in the United States of America, or GAAP. The preparation of the Company's financial statements requires management to make estimates, judgments and assumptions that affect the reported amounts of assets, liabilities, revenues, costs and expenses and related disclosures. On an ongoing basis, management evaluates its estimates and assumptions. Management bases its estimates of the carrying value of certain assets and liabilities on historical experience and on various other assumptions that management believes to be reasonable. The Company's actual results may differ from these estimates under different assumptions or conditions.

Management utilizes its technical knowledge, cumulative business experience, judgment and other factors in the selection and application of the Company's accounting policies. The accounting policies considered by management to be the most critical to the presentation of the condensed consolidated financial statements because they require the most difficult, subjective and complex judgments include revenue recognition, accounting for leases, and derivative liabilities for outstanding warrants. Our significant accounting policies applicable to the six months ended June 30, 2020 are discussed in Item 7. "Management's Discussion and Analysis of Financial Condition and Results of Operations" of the Company's Annual Report on Form 10-K for the year ended December 31, 2019.

Results of Operations

The percentage relationships to revenues of certain income and expense items for the three and six months ended June 30, 2020 and 2019, and the percentage changes in these income and expense items relative to the prior year period, are contained in the following table:

	Three Months Ended June 30,			Six Months Ended June 30,		
	Percentage of Revenues		Percent Increase (Decrease)	Percentage of Revenues		Percent Increase (Decrease)
	2020	2019	2019 to 2020	2020	2019	2019 to 2020
Revenues	100.0 %	100.0 %	74 %	100.0 %	100.0 %	25 %
Cost of revenues	(31.5)	(29.1)	88	(32.3)	(24.9)	62
Gross profit	68.5	70.9	68	67.7	75.1	13
Operating expenses:						
Research and development	22.4	34.3	14	24.8	28.2	10
Sales and marketing	23.4	41.2	(1)	28.3	36.6	(4)
General and administrative	24.8	29.5	47	31.6	26.7	48
Amortization of purchased intangibles	1.7	3.7	(19)	2.1	3.3	(22)
Total operating expenses	72.3	108.7	16	86.8	94.8	14
Operating loss	(3.8)	(37.8)	(82)	(19.1)	(19.7)	21
Other expense, net	(4.2)	(29.5)	(76)	(3.2)	(16.9)	(77)
Loss before income taxes	(8.0)	(67.3)	(79)	(22.3)	(36.6)	(24)
Income tax benefit	(0.6)	(0.2)	391	(0.7)	(0.1)	593
Net loss	(7.4)%	(67.1)%	(81)%	(21.6)%	(36.5)%	(26)%

Revenues

The Company generates revenue through the sale of enterprise video content management software, hardware, maintenance and support, and professional and other services. Software sales may take the form of a perpetual software license, a cloud-hosted software as a service (SaaS) or a term software license. Software licenses and appliances revenue includes sales of perpetual software licenses and hardware. Service revenue includes SaaS, term software licenses, maintenance and support, and professional and other services.

The table below describes Qumu's revenues by product category (dollars in thousands):

	Three Months Ended June 30,				Six Months Ended June 30,			
			Increase (Decrease)	Percent Increase (Decrease)			Increase (Decrease)	Percent Increase (Decrease)
	2020	2019	2019 to 2020	2019 to 2020	2020	2019	2019 to 2020	2019 to 2020
Software licenses and appliances	$ 4,061	$ 689	$ 3,372	489%	$ 5,601	$ 1,694	$ 3,907	231 %
Service								
Subscription, maintenance and support	4,673	4,154	519	12	8,833	9,717	(884)	(9)
Professional services and other	600	522	78	15	1,127	1,052	75	7
Total service	5,273	4,676	597	13	9,960	10,769	(809)	(8)
Total revenues	$ 9,334	$ 5,365	$ 3,969	74%	$ 15,561	$ 12,463	$ 3,098	25 %

Revenues can vary period to period based on the type of contract the Company enters into with each customer. The quarterly software licenses and appliances revenues are also subject to the timing of fulfillment of products, which can result in large fluctuations when compared to the prior quarters. The increase in software licenses and appliances revenues in the three and six months ended June 30, 2020 and the increase in subscription, maintenance and support revenues in the three months ended June 30, 2020, compared to the corresponding 2019 periods, was primarily driven by revenue attributable to a large customer order received at the end of the first quarter 2020, which the customer identified as specifically driven by the change in working environment due to COVID-19.

The decrease in subscription, maintenance and support revenues in the six months ended June 30, 2020, compared to the corresponding 2019 period, primary resulted from significant term software license sales in the six months ended June 30, 2019 for which revenue is recognized up front in accordance with the revenue recognition provisions of ASC 606.

Professional services revenues for the three and six months ended June 30, 2020 were generally consistent with the corresponding 2019 periods.

Future consolidated revenues will be dependent upon many factors, including the rate of adoption of the Company's software solutions in its targeted markets and whether arrangements with customers are structured as a perpetual, term or SaaS licenses, which impacts the timing of revenue recognition. Other factors that will influence future consolidated revenues include the timing of customer orders and renewals, the product and service mix of customer orders, the impact of changes in economic conditions and the impact of foreign currency exchange rate fluctuations.

Due to the impact COVID-19 has had on working environments, Qumu generally expects increased demand for Qumu’s enterprise video as a service and Qumu’s other video software offerings both in the short-term and in the long-term, as well as increased usage of its video platform among existing and future customers.

Qumu expects to capture additional revenue opportunities presented by the widespread adoption and use of video in the enterprise. Given Qumu’s current visibility to customer contracts and pipeline activity, Qumu expects 2020 revenue to be approximately $29.0 million as compared to 2019 revenue of $25.4 million.

Gross Profit and Gross Margin

A comparison of gross profit and gross margin by revenue category is as follows (dollars in thousands):

	Three Months Ended June 30,				Six Months Ended June 30,			
	2020	2019	Increase 2019 to 2020	Percent Increase 2019 to 2020	2020	2019	Increase (Decrease) 2019 to 2020	Percent Increase (Decrease) 2019 to 2020
Gross profit:								
Software licenses and appliances	$ 2,584	$ 353	$ 2,231	632%	$ 3,476	$ 1,047	$ 2,429	232 %
Service	3,810	3,449	361	10	7,058	8,316	(1,258)	(15)
Total gross profit	$ 6,394	$ 3,802	$ 2,592	68%	$ 10,534	$ 9,363	$ 1,171	13 %
Gross margin:								
Software licenses and appliances	63.6%	51.2%	12.4 %		62.1%	61.8%	0.3 %	
Service	72.3%	73.8%	(1.5)%		70.9%	77.2%	(6.3)%	
Total gross margin	68.5%	70.9%	(2.4)%		67.7%	75.1%	(7.4)%	

The total gross margin percentage decreased 2.4% and 7.4% in the three and six months ended June 30, 2020, respectively, compared to the corresponding 2019 periods, resulting from sales mix in the current year periods that included more appliance revenue, which generally has lower margins. The 12.4% and 0.3% increase in software licenses and appliances gross margin in the three and six months ended June 30, 2020, respectively, compared to the corresponding 2019 periods, was due primarily to higher sales volume and sales mix that included a higher proportion of perpetual software revenue, for which the related costs are generally fixed. The 1.5% and 6.3% decrease in service gross margin in the three and six months ended June 30, 2020, respectively, compared to the corresponding 2019 periods, was primarily due to a decrease in higher margin term software license revenue, partially offset by decreased amortization expense as certain purchased intangible assets became fully amortized at the end of 2019. Additionally, the six months ended June 30, 2020 included outsourced professional services expenses for certain customer-specific projects, which negatively impacted services gross margin.

Gross profit includes $68,000 and $114,000 for the three months ended June 30, 2020 and 2019, respectively, and $140,000 and $231,000 for the six months ended June 30, 2020 and 2019, respectively, for the amortization of intangible assets acquired as a result of the acquisition of Qumu, Inc. in the fourth quarter of 2011 and the acquisition of Kulu Valley in the fourth quarter of 2014. Cost of revenues for the full year 2020 is expected to include approximately $0.3 million of amortization expense for purchased intangibles, compared to $0.5 million for the full year 2019. Included in cost of revenues are the costs related to the Company's service personnel, of which there were 22 and 19 at June 30, 2020 and 2019, respectively.

Future gross profit margins are expected fluctuate quarter to quarter and will be impacted by the rate of growth and mix of the Company's product and service offerings, utilization of service personnel, fixed and variable royalty expense, and foreign currency exchange rate fluctuations.

Operating Expenses

The following is a summary of operating expenses (dollars in thousands):

	Three Months Ended June 30,				Six Months Ended June 30,			
	2020	2019	Increase (Decrease) 2019 to 2020	Percent Increase (Decrease) 2019 to 2020	2020	2019	Increase (Decrease) 2019 to 2020	Percent Increase (Decrease) 2019 to 2020
Operating expenses:								
Research and development	$ 2,088	$ 1,838	$ 250	14 %	$ 3,868	$ 3,512	$ 356	10 %
Sales and marketing	2,181	2,212	(31)	(1)	4,399	4,564	(165)	(4)
General and administrative	2,320	1,579	741	47	4,913	3,325	1,588	48
Amortization of purchased intangibles	163	201	(38)	(19)	327	419	(92)	(22)
Total operating expenses	$ 6,752	$ 5,830	$ 922	16 %	$ 13,507	$ 11,820	$ 1,687	14 %

Total operating expenses as a percent of revenues decreased to72% for the three months ended June 30, 2020, compared to 109% for the three months ended June 30, 2019, decreased to 87% for the six months ended June 30, 2020, compared to 95% for the six months ended June 30, 2019, with the decrease primarily driven by higher revenue for the three and six months ended June 30, 2020. This decrease was partially offset by transaction-related expenses totaling$699,000 and $1.5 million for the three and six months ended June 30, 2020, respectively, related to the Company's merger agreement with Synacor, Inc. that were included in general and administrative expense. On June 29, 2020, Qumu and Synacor terminated the merger agreement and Qumu incurred a $250,000 termination fee, included in transaction-related expenses in general and administrative expense for the three and six months ended June 30, 2020. The Company had 86 and 80 personnel in operating activities at June 30, 2020 and 2019, respectively.

Research and development

Research and development expenses were as follows (dollars in thousands):

	Three Months Ended June 30,				Six Months Ended June 30,			
	2020	2019	Increase (Decrease) 2019 to 2020	Percent Increase (Decrease) 2019 to 2020	2020	2019	Increase (Decrease) 2019 to 2020	Percent Increase (Decrease) 2019 to 2020
Compensation and employee-related	$ 1,453	$ 1,217	$ 236	19 %	$ 2,701	$ 2,414	$ 287	12 %
Overhead and other expenses	407	385	22	6	801	720	81	11
Outside services and consulting	203	202	1	—	316	310	6	2
Depreciation and amortization	2	1	1	100	2	2	—	—
Equity-based compensation	23	33	(10)	(30)	48	66	(18)	(27)
Total research and development expenses	$ 2,088	$ 1,838	$ 250	14 %	$ 3,868	$ 3,512	$ 356	10 %

Total research and development expenses as a percent of revenues were22% and 34% for the three months ended June 30, 2020 and 2019, respectively, and 25% and 28% for the six months ended June 30, 2020 and 2019, respectively. The Company had 38 and 34 research and development personnel as of June 30, 2020 and 2019, respectively.

The increase in total research and development expenses of$250,000 and $356,000 in the three and six months ended June 30, 2020, compared to the corresponding 2019 periods, was primarily due to increased costs related to additional research and development personnel and increased incentive compensation costs. Qumu expects to incur increased research and development expenses in the second half of 2020 for additional projects to support customers' increased usage of Qumu's cloud-based enterprise video solution due to COVID-19.

Sales and marketing

Sales and marketing expenses were as follows (dollars in thousands):

	Three Months Ended June 30,				Six Months Ended June 30,			
	2020	2019	Increase (Decrease) 2019 to 2020	Percent Increase (Decrease) 2019 to 2020	2020	2019	Increase (Decrease) 2019 to 2020	Percent Increase (Decrease) 2019 to 2020
Compensation and employee-related	$ 1,818	$ 1,695	$ 123	7 %	$ 3,589	$ 3,521	$ 68	2 %
Overhead and other expenses	190	253	(63)	(25)	427	544	(117)	(22)
Outside services and consulting	145	270	(125)	(46)	317	479	(162)	(34)
Depreciation and amortization	5	2	3	150	16	3	13	433
Equity-based compensation	23	(8)	31	(388)	50	17	33	194
Total sales and marketing expenses	$ 2,181	$ 2,212	$ (31)	(1)%	$ 4,399	$ 4,564	$ (165)	(4)%

Total sales and marketing expenses as a percent of revenues were23% and 41% for the three months ended June 30, 2020 and 2019, respectively, and 28% and 37% for the six months ended June 30, 2020 and 2019, respectively. The Company had 31 and 27 sales and marketing personnel at June 30, 2020 and 2019, respectively.

The decrease in sales and marketing expenses of $31,000 and $165,000 in the three and six months ended June 30, 2020, respectively, compared to the corresponding 2019 periods, was primarily driven by cost savings resulting from sales activities and customer marketing events that were conducted virtually rather than in person and the inclusion of severance expense in the 2019 period, partially offset by higher costs associated with an increase in sales and marketing personnel, increased commissions expense, and increased incentive compensation expense. Additionally, expenses for the three and six months ended June 30, 2020, compared to the corresponding 2019 periods, were favorably impacted by cost reductions in overhead and other expenses in connection with the Company's consolidation of cloud hosting providers. Qumu expects higher sales and marketing expense for the full year 2020 as compared to the full year 2019 driven primarily by expected increased compensation and employee-related costs due to higher commissions expense, consistent with Qumu's higher expected revenue in 2020 due to COVID-19.

General and administrative

General and administrative expenses were as follows (dollars in thousands):

	Three Months Ended June 30,				Six Months Ended June 30,			
	2020	2019	Increase (Decrease) 2019 to 2020	Percent Increase (Decrease) 2019 to 2020	2020	2019	Increase (Decrease) 2019 to 2020	Percent Increase (Decrease) 2019 to 2020
Compensation and employee-related	$ 877	$ 739	$ 138	19 %	$ 1,575	$ 1,458	$ 117	8 %
Overhead and other expenses	252	239	13	5	560	580	(20)	(3)
Outside services and consulting	312	355	(43)	(12)	834	805	29	4
Depreciation and amortization	67	83	(16)	(19)	133	154	(21)	(14)
Equity-based compensation	113	163	(50)	(31)	301	328	(27)	(8)
Transaction-related expenses	699	—	699	n/m	1,510	—	1,510	n/m
Total general and administrative expenses	$ 2,320	$ 1,579	$ 741	47 %	$ 4,913	$ 3,325	$ 1,588	48 %

Total general and administrative expenses as a percent of revenues were25% and 30% for the three months ended June 30, 2020 and 2019, respectively, and 32% and 27% for the six months ended June 30, 2020 and 2019, respectively. The Company had 17 and 19 general and administrative personnel at June 30, 2020 and 2019, respectively.

The increase in expenses of $741,000 and $1.6 million in the three and six months ended June 30, 2020, respectively, compared to the corresponding 2019 periods, was driven primarily by transaction-related expenses related to the Company's merger agreement and subsequent merger termination with Synacor, Inc. totaling $699,000 and $1.5 million. Additionally, compensation and employee-related expenses increased due to incentive compensation costs incurred in the three andsix months ended June 30, 2020.

Amortization of Purchased Intangibles

Operating expenses include $163,000 and $201,000 for the three months ended June 30, 2020 and 2019, respectively, $327,000 and $419,000 for the six months ended June 30, 2020 and 2019, respectively, for the amortization of intangible assets acquired as part of the Company's acquisition of Qumu, Inc. in October 2011 and the acquisition of Kulu Valley in October 2014. Operating expenses for the full year 2020 are expected to include approximately $0.7 million of amortization expense associated with purchased intangibles, exclusive of the portion classified in cost of revenue, compared to $0.8 million for the full year 2019.

Other Income (Expense), Net

Other income (expense), net was as follows (dollars in thousands):

	Three Months Ended June 30,		Six Months Ended June 30,	
	2020	2019	2020	2019
Interest expense, net	(22)	(214)	$ (5)	$ (419)
Decrease in fair value of derivative liability	105	—	105	—
Increase in fair value of warrant liability	(434)	(1,436)	(398)	(1,725)
Other, net	(37)	66	(197)	35
Total other expense, net	$ (388)	$ (1,584)	$ (495)	$ (2,109)

The Company recognized interest expense of $22,000 and $214,000 for the three months ended June 30, 2020 and 2019, respectively, and interest expense of $5,000 and $419,000 for the six months ended June 30, 2020 and 2019, respectively, which in 2019 included the accrual of interest on the Company's term loan, as well as the amortization of deferred financing costs. Additionally, interest expense was lower in the three and six months ended June 30, 2020, compared to the corresponding 2019 period, due to the Company's $4.0 million payoff on its term loan principal balance in November 2019.

The Company recorded non-cash expense of $434,000 and $1.4 million for the three months ended June 30, 2020 and 2019, respectively, and $398,000 and $1.7 million for the six months ended June 30, 2020 and 2019, respectively, resulting from the change in the fair value of the Company's warrant liability. For both the three and six months ended June 30, 2020, the Company recognized non-cash income of $105,000 on the change in the fair value of the Company's derivative liability related to a note payable agreement the Company entered into on May 1, 2020.

Other expense included net gains (losses) on foreign currency transactions of $(37,000) and $31,000 for the three months ended June 30, 2020 and 2019, respectively, and $(196,000) and $(63,000) for the six months ended June 30, 2020 and 2019, respectively. See "Liquidity and Capital Resources" below for a discussion of changes in cash levels.

Income Taxes

The provision for income taxes represents federal, state, and foreign income taxes or income tax benefit on income or loss. Net income tax benefit was $54,000 and $11,000 for the three months ended June 30, 2020 and 2019, respectively, and $104,000 and $15,000 for the six months ended June 30, 2020 and 2019, respectively. The net income tax benefit for the three and six months ended June 30, 2020 and 2019, was impacted by the tax benefit for refundable research credits from United Kingdom operations offset by an increase in reserves for unrecognized tax benefits.

Liquidity and Capital Resources

The following table sets forth certain relevant measures of the Company's liquidity and capital resources (in thousands):

	June 30, 2020	December 31, 2019
Cash and cash equivalents	$ 9,887	$ 10,639
Working capital	$ 1,023	$ 829
Financing obligations	$ 242	$ 240
Operating lease liabilities	1,856	2,174
Note payable	1,735	—
Financing obligations, operating lease liabilities and note payable	$ 3,833	$ 2,414

Management expects the Company will be able to maintain current operations and anticipated capital expenditure requirements for at least the next 12 months through its cash reserves, as well as any cash flows that may be generated from current operations. Management also expects that the Company's financial resources will allow it to manage the anticipated impact of COVID-19 on its business operations for the foreseeable future, which could include delays in payments from customers and partners. The challenges posed by COVID-19 to the Company are expected to evolve rapidly. Consequently, management will continue to evaluate its financial position in light of future developments, particularly those relating to COVID-19.

At June 30, 2020, the Company had aggregate working capital of $1.0 million, compared to working capital of $829,000 at December 31, 2019. Working capital includes current deferred revenue of $11.1 million and $10.1 million at June 30, 2020 and December 31, 2019, respectively. The primary contributor to the change in working capital was the increase in accounts receivable of $3.6 million, offset by cash used to fund the Company's operating loss during the six months ended June 30, 2020, including $1.5 million of transaction-related expenses related to the Company's merger agreement and subsequent merger termination with Synacor, Inc.

Financing obligations as of June 30, 2020 and December 31, 2019 primarily consist of finance leases related to the acquisition of computer and network equipment and furniture. Operating lease liabilities consists of liabilities primarily related to the Company's office leases. The note payable is non-interest bearing with a face amount of $1.83 million and maturing on April 1, 2021.

The Company's primary source of cash from operating activities has been cash collections from sales of products and services to customers. The Company expects cash inflows from operating activities to be affected by increases or decreases in sales and timing of collections. The Company's primary use of cash for operating activities has been for personnel costs and outside service providers, payment of royalties associated with third-party software licenses and purchases of equipment to fulfill customer orders. The Company expects cash flows from operating activities to be affected by fluctuations in revenues, personnel costs, outside service providers, and the amount and timing of royalty payments and equipment purchases as the Company continues to support the growth of the business. The amount of cash and cash equivalents held by the Company's international subsidiaries that is not available to fund domestic operations unless repatriated was $1.1 million as of June 30, 2020. The repatriation of cash and cash equivalents held by the Company's international subsidiaries would not result in an adverse tax impact on cash given that the future tax consequences of repatriation are expected to be insignificant.

Summary of Cash Flows

A summary of cash flows is as follows (in thousands):

	Six Months Ended June 30,	
	2020	**2019**
Cash flows used in:		
Operating activities	$ (283)	$ (1,069)
Investing activities	(29)	(43)
Financing activities	(239)	(169)
Effect of exchange rate changes on cash	(201)	(6)
Net change in cash and cash equivalents	$ (752)	$ (1,287)

Operating activities

Net cash used in operating activities was $283,000 for the six months ended June 30, 2020 compared to $1.1 million for the corresponding 2019 period. The operating cash flows for the 2020 period were unfavorably impacted by the net loss for the period and change in receivables, offset by the favorable change in deferred revenue. The operating cash flows for the 2019 period were favorably impacted by the change in receivables, offset by unfavorable changes in contract assets, deferred revenue and contract assets.

Investing activities

Net cash used in investing activities for the purchases of property and equipment totaled $29,000 for the six months ended June 30, 2020 compared to $43,000 in the corresponding 2019 period.

Financing activities

Financing activities used net cash of $239,000 for the six months ended June 30, 2020 and $169,000 in the comparable 2019 period. Primarily impacting the current period use of cash were principal payments of $185,000 on finance leases and other financing obligations.

In October 2010, the Company’s Board of Directors approved a common stock repurchase program of up to 3,500,000 shares. Shares may be purchased at prevailing market prices in the open market or in private transactions, subject to market conditions, share price, trading volume and other factors. The repurchase program has been funded to date using cash on hand and may be discontinued at any time. The Company did not repurchase any shares of its common stock under the repurchase program during the six months ended June 30, 2020 and 2019. As of June 30, 2020, the Company had 778,365 shares available for repurchase under the authorizations. While the current authorization remains in effect, the Company expects its primary use of cash will be to fund operations in support of the Company’s goals for revenue growth and operating margin improvement.

Cautionary Note Regarding Forward-Looking Statements

This report contains forward-looking statements that involve risks and uncertainties. For this purpose, any statements contained in this report that are not statements of historical fact may be deemed to be forward-looking statements. Without limiting the foregoing, words such as “may,” “will,” “expect,” “believe,” “anticipate,” “estimate” or “continue” or comparable terminology are intended to identify forward-looking statements. These statements by their nature involve substantial risks and uncertainties. The Company's actual results could differ significantly from those discussed in the forward-looking statements.

Factors that could cause or contribute to such differences include, but are not limited to, those discussed in Part II. Other Information, Item 1A. Risk Factors of this Quarterly Report on Form 10-Q, as well as other factors not now identified. These forward-looking statements are made as of the date of this report and the Company assumes no obligation to update such forward-looking statements, or to update the reasons why actual results could differ materially from those anticipated in such forward-looking statements.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

As a smaller reporting company, the Company is not required to provide information typically disclosed under this item.

Item 4. Controls and Procedures

Evaluation of Disclosure Controls and Procedures

The Company’s Chief Executive Officer, TJ Kennedy, and the Company’s Chief Financial Officer, David G. Ristow, have evaluated the Company’s disclosure controls and procedures as of June 30, 2020. Based upon such evaluation, they have concluded that these disclosure controls and procedures are effective. The Company’s Chief Executive Officer and Chief Financial Officer used the definition of “disclosure controls and procedures” as set forth in Rule 13a-15(e) under the Exchange Act in making their conclusion as to the effectiveness of such controls and procedures.

Changes in Internal Control Over Financial Reporting

No changes in internal controls over financial reporting have occurred during the quarter ended June 30, 2020 that have materially affected, or are reasonable likely to materially affect, the Company’s internal control over financial reporting.

PART II — OTHER INFORMATION

Item 1. Legal Proceedings

Not Applicable.

Item 1A. Risk Factors

Below is a full restatement of the most significant risk factors applicable to Qumu. These risk factors supersede the risk factors described in Part I, Item 1A “Risk Factors” of our Annual Report on Form 10-K for the year ended December 31, 2019 and the risk factors described in Part II, Item 1A “Risk Factors” of our Quarterly Report on Form 10-Q for the quarter ended March 31, 2020.

If any of the following risks actually occur, our business, results of operations and financial condition and the market price of our common stock could be negatively impacted. Although we believe that we have identified and discussed below the most significant risk factors affecting our business, there may be additional risks and uncertainties that are not presently known or that are not currently believed to be significant that may adversely affect our performance or financial condition. Any forecast regarding our future performance, including, but not limited to, forecasts regarding future revenue, product mix, cash flow and cash balances, are forward-looking statements. These forward-looking statements reflect various assumptions and are subject to significant uncertainties and risks that could cause the actual results to differ materially from those described in the forward-looking statement, including the risks reflected in the risk factors set forth below. Consequently, the future results expressed or implied by any forward-looking statement are not guaranteed and the variation of actual results or events from such statements may be material and adverse.

The COVID-19 pandemic has significantly impacted worldwide business practices and economic conditions and could have a material effect on Qumu’s business, financial condition and operating results.

As a result of the COVID-19 pandemic, governmental authorities have implemented and are continuing to implement numerous and constantly evolving measures to try to contain the virus, such as travel bans and restrictions, limits on gatherings, quarantines, shelter-in-place orders, and business shutdowns.

In response to these developments, we have modified our business practices by restricting employee travel, moving to remote work, cancelling attendance at events and conferences, and implementing social distancing. The resources available to our employees working remotely may not enable them to maintain the same level of productivity and efficiency, particularly our sales employees whose in-person access to our customers and customer prospects has been significantly limited. While we have experienced only limited absenteeism from employees, absenteeism may increase in the future and may harm our productivity. Due to customer demand, Qumu has and may in the future rely upon outsourced professional services, which generally will negatively impact margins.

The COVID-19 pandemic also has changed worldwide business practices as companies have implemented COVID-19 travel restrictions, work-from-home requirements and social distancing protocols. As part of these changes, enterprises of all sizes are implementing technology plans to virtualize customer meetings, employee communications and major events – as well as record and store video assets for on-demand viewing.

Qumu believes that the COVID-19 crisis will act as a tipping point for the use and acceptance of video as a primary communication channel within the enterprise. As video content and software to manage video content achieve high levels of acceptance within the enterprise, we believe this will drive demand and market adoption for Qumu’s video platform and tools. Widespread adoption and use of video in the enterprise is critical to Qumu’s future growth and success. However, there is no assurance that the COVID-19 crisis will result in substantial and sustained increased in use and acceptance of video as a primary communication channel or that this increased in use and acceptance of video will result in an increased demand among customers for Qumu’s video platform and tools.

Restrictions on the manufacturing, operations or workforce of our vendors and suppliers could limit our ability to meet customer demand for hardware purchased as a component of the overall Qumu solution, which would harm our ability to meet our delivery and installation obligations to customers and result in delayed or lost revenue and cash flow from collections. Furthermore, restrictions or disruptions of transportation, such as reduced availability of air transport, port closures and increased border controls or closures, may result in higher costs and delays for supply of hardware, which could reduce our margins on hardware.

The current spread of COVID-19 across many countries is expected to cause a significant global recession with a high proportion of economies of many nations experiencing the recession. Unfavorable changes in economic conditions, including recession, inflation, lack of access to capital, or other changes, have in the past resulted in and may in the future result in lower corporate spending among our customers and target customer. At this time, it is uncertain whether the COVID-19 driven recession would result in lower spending by our customers and target customers on video technologies or soften the demand for our products. Further, challenging economic conditions also may impair the ability of our customers to pay for products and services they have purchased. As a result, our cash flow may be negatively impacted and our allowance for doubtful accounts and write-offs of accounts receivable may increase.

The degree to which COVID-19 impacts our results will depend on future developments, which are highly uncertain and cannot be predicted, including, but not limited to, the duration and geographic spread of the outbreak, its severity, the actions to contain the virus and address its impact, travel restrictions imposed, business closures or business disruption, and the actions taken throughout the world, to contain COVID-19 or treat its impact.

The markets for video content and software to manage video content are each in early stages of development. If this market does not develop or develops more slowly than Qumu expects, including as a result of COVID-19 impacts, Qumu's revenues may decline or fail to grow.

The use of video as a mainstream communication and collaboration platform and the market for video content management software is in an early stage of development, and it is uncertain whether this use of video will achieve high levels of acceptance. Widespread adoption and use of video in the enterprise is critical to Qumu's future growth and success. Likewise, it is uncertain whether video content management software will achieve high levels of demand and market adoption. Qumu's success will depend on enterprises adopting video as a platform and upon enterprise demand for software to help them capture, organize and distribute this content. Qumu believes that the COVID-19 crisis will act as a tipping point for the use and acceptance of video as a primary communication channel within the enterprise. As video content and software to manage video content achieve high levels of acceptance within the enterprise, we believe this will drive demand and market adoption for Qumu's video platform and tools. In particular, we have noted a trend toward new customers choosing Qumu's cloud-based enterprise video solution or existing customers converting to a cloud-based solution.

Despite the changes in business practices caused by the COVID-19 pandemic, some customers may be reluctant or unwilling to use video as a medium within the enterprise for a number of reasons, including lack of perceived benefit of this new method of communication and existing investments in other enterprise-wide communications tools. Further, even if customers are using video as a medium, these customers may choose to rely upon their own IT infrastructure and resources to manage their video content. Because many companies generally are predisposed to maintaining control of their IT systems and infrastructure, there may be resistance to using software as a service provided by a third party. Privacy concerns and transition costs are also factors that may affect a potential customer's decision to subscribe to an external solution.

Additional factors that may limit market acceptance of Qumu's video content management software include:

- competitive dynamics may cause pricing levels to change as the market matures and cause customers to seek out lower priced alternatives to Qumu's video content management software or force Qumu to reduce the prices Qumu charges for its products or services; or

- existing and new market participants may introduce new types of solutions and different approaches to enable enterprises to address their enterprise communications or video communications needs and these disruptive technologies may reduce demand for Qumu's video content management software.

If customers do not perceive the benefits of Qumu's video content management software, or if customers are unwilling to accept video content as an alternative to other more traditional forms of enterprise communication, the market for Qumu's software might not continue to develop or might develop more slowly than Qumu expects, either of which would significantly adversely affect Qumu's financial results and prospects.

Further, there is no assurance that the COVID-19 crisis will result in substantial and sustained increased in use and acceptance of video as a primary communication channel or that this increased in use and acceptance of video will result in an increased demand among customers for Qumu's video platform and tools, either of which would significantly adversely affect Qumu's financial results and prospects.

If we are unable to attract new customers, retain existing customers and sell additional products and services to our existing and new customers, our revenue growth and profitability will be adversely affected.

To increase our revenues and achieve profitability, we must regularly add new customers, retain our existing customers, ensure high rates of renewals among our existing customers, sell additional products and services to new and existing customers, or convert existing customers to our latest SaaS solution.

We intend to grow our business by developing and improving our product offerings, ensuring high levels of customer satisfaction, competing effectively with products and services offered by others, retaining and attracting talent, developing relationships with channel partners and increasing our marketing activities.

If we fail to add new customers or lose existing customers, or if our existing customers do not renew their subscriptions at the same levels or do not increase their purchases of products and services, we will not grow our revenue as expected and our operating results will suffer.

We have a history of losses, and while our goal is to become cash flow breakeven in late 2020, we may not achieve that goal or achieve or sustain cash flows or profitability in the future.

We experienced consolidated net losses of $6.4 million, $3.6 million and $11.7 million for the years ended December 31, 2019, 2018 and 2017, respectively. Moreover, we have historically not generated sufficient operating cash flow to fund our operations and expect to incur additional operating losses through 2020. Over the last several years, including into 2019, we have implemented an ongoing expense reduction program that, when combined with expected revenue performance in 2020, we believe will allow us to attain our goal of becoming cash flow breakeven in late 2020.

In order to achieve our goal of becoming cash flow breakeven and to achieve cash flow positivity and profitability in the future, we must increase the revenues received from the sale of our enterprise video content management software solutions, hardware, maintenance and support, and professional and other services, as well as achieve and maintain an expense structure that is aligned with our forecasted revenue and cash flows. Our ability to increase revenues depends upon increasing the number of new customers and expanding our sales to existing customers, maintaining high renewal rates among our existing customers, and maintaining our prices (despite pricing pressure due to competition). In the second half of 2020, Qumu expects cash flows from operating activities to be affected by those factors that have historically impacted operating cash flows – fluctuations in revenues, timing of customer payments, personnel costs, outside service providers, and the amount and timing of royalty payments and equipment purchases as Qumu continues to support the growth of its business.

We cannot assure you that we will achieve our goal of becoming cash flow breakeven in late 2020. We cannot assure you that we will generate increases in our revenues, attain a level of profitable operations, or successfully implement our business plan or future business opportunities. Our business plan and financing needs are subject to change depending on, among other things, success of our efforts to grow revenue and our efforts to continue to effectively manage expenses. If we are ultimately unable to generate sufficient revenue to meet our financial targets, become profitable and have sustainable positive cash flows, we may be required to further reduce expenses, which could have a further negative effect on our ability to generate revenue.

We encounter long sales cycles with our enterprise video solutions, which could adversely affect our operating results in a given period.

Our ability to increase revenues and achieve profitability depends, in large part, on widespread adoption of our enterprise video content management software products by large businesses and other organizations. As we target our sales efforts at these customers, we face greater costs, longer sales cycles and less predictability in completing sales. In the large enterprise market, the customer's decision to use our products may be an enterprise-wide decision and, therefore, these types of sales require us to provide greater levels of education regarding the use and benefits of our applications. Further, given the constant innovation with our industry and our products, customers may delay purchasing decisions until certain features or products in development are brought to market. Longer sales cycles could cause our operating and financial results to suffer in a given period.

To compete effectively, we must continually improve existing products and introduce new products that achieve market acceptance.

In order to remain competitive and increase sales to customers, we must anticipate and adapt to the rapidly changing technologies in the enterprise video content management market, enhance our existing products and introduce new products to address the changing demands of our customers. If we fail to anticipate or respond to technological developments or customer requirements, or if we are significantly delayed in developing and introducing products, our revenues will decline.

If we fail to accurately predict customers' changing needs and emerging technological trends, our business could be harmed. We must commit significant resources and may incur obligations (such as royalty obligations) to develop new products and features before knowing whether our investments will result in products the market will accept and without knowing the levels of revenue, if any, that may be derived from these products. Some of our competitors have greater engineering and product development resources than we have, allowing them to develop a greater number of products or improvements or to develop them more quickly.

If we fail to anticipate or respond in a cost-effective and timely manner to technological developments, changes in industry standards or customer requirements, or if we experience any significant delays in the development or introduction of new products or improvements to existing products, our business, operating results and financial condition could be affected adversely.

We face intense competition and such competition may result in price reductions, lower gross profits and loss of market share.

Our products face intense competition, both from other products and from other technologies, both in the U.S. and in international markets. We compete with others such as Kaltura, Brightcove, MediaPlatform, Vbrick and Panopto who deliver video solutions to businesses. Qumu also encounters organizations utilizing Zoom and Microsoft's Skype and Stream technologies. While some view Zoom and Microsoft as competitors to Qumu and some customers view their products as a complete alternative to Qumu's technology, we believe that the Zoom, Microsoft and Qumu technologies can be seamlessly integrated and provide the customer with greater flexibility and improved manageability than use of their technologies alone. Further, because some prospective customers may choose to rely upon their own IT infrastructure and resources to manage their video content, we compete with customer-created solutions for video content management. We expect the intensity of competition we face to increase in the future from other established and emerging companies.

Many of our competitors have greater resources than we do, including greater sales, product development, marketing, financial, technical or engineering resources. In addition, because our enterprise video content management software business is operating within an evolving marketplace, our target customers may prefer to purchase software products that are critical to their business from one of our larger, more established competitors.

To remain competitive, we believe that we must continue to provide:

- technologically advanced products and solutions that anticipate and satisfy the demands of end-users;
- continuing advancements or innovations in our product offerings, including products with price-performance advantages or value-added features in security, reliability or other key areas of customer interest;
- innovations in video content creation, management, delivery and user experience;
- a responsive and effective sales force;
- a dependable and efficient sales distribution network;
- superior customer service; and
- high levels of quality and reliability.

We cannot assure you that we will be able to compete successfully against our current or future competitors. Competition may result in price reductions, lower gross profit margins, increased discounts to customers and loss of market share, and could require increased spending by us on research and development, sales and marketing and customer support.

Economic and market conditions, particularly those affecting our customers, have harmed and may continue to harm our business.

Unfavorable changes in economic conditions, including recession, inflation, lack of access to capital, lack of consumer confidence or other changes have resulted and may continue to result in lower spending among our customers and target customers.

Further, we sell our products throughout the United States, as well as in several international countries to commercial and government customers. Our business may be adversely affected by factors in the United States and other countries such as disruptions in financial markets, reductions in government spending, or downturns in economic activity in specific countries or regions, or in the various industries in which we operate; social, political or labor conditions in specific countries or regions; or adverse changes in the availability and cost of capital, interest rates, tax rates, or regulations. These factors are beyond our control but may result in further decreases in spending among customers and softening demand for our products.

Further, challenging economic conditions also may impair the ability of our customers to pay for products and services they have purchased. As a result, our cash flow may be negatively impacted and our allowance for doubtful accounts and write-offs of accounts receivable may increase.

Our sales will decline, and our business will be materially harmed, if our sales and marketing efforts are not effective.

We will need to continue to optimize our sales infrastructure in order to grow our customer base and our business. Identifying and recruiting qualified personnel and training them in the use and functionality of our software requires significant time, expense and attention. It can take six months or longer before our sales representatives are fully-trained and productive. If we are unable to hire, develop and retain talented sales personnel or if new sales personnel are unable to achieve desired productivity levels in a reasonable period of time, we may not be able to realize the expected benefits of this investment or increase our revenues. We also intend to expand new sales models that focus on different sales strategies tailored to different customer types. Our business may be adversely affected if our efforts to train our internal sales force or execute our selling strategies do not generate a corresponding increase in revenues.

For sales that are made to customers through our channel partners, we depend on these businesses to provide effective sales and marketing support to our products. Our channel partners are independent businesses that we do not control. Our agreements with channel partners do not contain requirements that a certain percentage of such parties' sales are of our products. These channel partners may choose to devote their efforts to other products in different markets or reduce or fail to devote the resources to provide effective sales and marketing support of our products, any of which could harm our business by reducing sales to customers.

We believe that our future growth and success will depend upon the success of our internal sales and marketing efforts as well as those of our channel partners.

We may experience significant quarterly and annual fluctuations in our results of operations due to a number of factors and these fluctuations may negatively impact the market price of our common stock.

Our quarterly and annual results of operations may fluctuate significantly due to a variety of factors, many of which are outside of our control. This variability may lead to volatility in our stock price as research analysts and investors respond to quarterly fluctuations and this volatility may be exacerbated by the relatively illiquid nature of our common stock. In addition, comparing our results of operations on a period-to-period basis, particularly on a sequential quarterly basis, may not be meaningful. You should not rely on our past results as an indication of our future performance.

Factors that may affect our results of operations include:

- the number and mix of products and solutions sold in the period;
- the timing and amount of our recorded revenue, which will depend upon the mix of products and solutions selected by our customers with revenue from paid-up perpetual software licenses being recognized upon delivery, revenue from term software licenses recognized over the term of the contract, and revenue from cloud-hosted services recognized over the term of the subscription agreement;
- timing of customer purchase commitments, including the impact of long sales cycles and seasonal buying patterns;
- timing of customer payments, including customer decisions to pre-pay;
- variability in the size of customer purchases and the impact of large customer orders on a particular period;
- the timing of major development projects and market launch of new products or improvements to existing products;
- reductions in our customers' budgets for information technology purchases and delays in their purchasing cycles, due to changing global economic or market conditions;
- the impact to the marketplace of competitive products and pricing;
- the timing and level of operating expenses;
- the impact on revenue and expenses of acquisitions by us or by our competitors or the proposed merger with Synacor, Inc. that was terminated by mutual agreement June 29, 2020;
- future accounting pronouncements or changes in our accounting policies; and
- the impact of a recession or any other adverse global economic conditions on our business, including uncertainties that may cause a delay in entering into or a failure to enter into significant customer agreements.

The foregoing factors are difficult to forecast, and these, as well as other factors, could adversely affect our quarterly and annual results of operations. Failure to achieve our quarterly or annual forecasts or to meet or exceed the expectations of research analysts or investors may cause our stock price to decline abruptly and significantly.

Competition for highly skilled personnel is intense, and if we fail to attract and retain talented employees, we may fail to compete effectively.

Our future success depends, in significant part, on our continuing ability to identify, hire, develop, motivate, and retain highly skilled personnel for all areas of our organization. Competition in our industry for qualified employees, particularly in senior management, product development and sales, is intense. In addition, our compensation arrangements may not be successful in attracting new employees and retaining and motivating our existing employees given the high demand for these employees from other employers. Our ability to compete effectively depends on our ability to attract new employees and to retain and motivate our existing employees.

Our enterprise video content management software products must be successfully integrated into our customers' information technology environments and workflows, and changes to these environments, workflows or unforeseen combinations of technologies may harm our customers' experience in using our software products.

A significant portion of our sales are made into applications that require our enterprise video content management software products to be integrated into other enterprise workflows, enterprise information technology environments or software functionalities. Any significant changes to enterprise workflows, IT environments or software programs may limit the use or functionality of or demand for our products. As our customers advance technologically, we must be able to effectively integrate our products to remain competitive. Further, current and potential customers may choose to use products offered by our competitors or may not purchase our products if our products would require changes in their existing enterprise workflows, IT environments or software.

The growth and functionality of our enterprise video content management software products depend upon the solution's effective operation with mobile operating systems and computer networks.

Our products are currently compatible with various mobile operating systems including the iOS, Windows Mobile and Android operating systems. The functionality of our products depends upon the continued interoperability of these products with popular mobile operating systems. Any changes in these systems that degrade our products' functionality or give preferential treatment to competitive offerings could adversely affect the operability and usage of our video management software products on mobile devices. Additionally, in order to deliver a high-quality user experience, it is important that our products work well with a range of mobile technologies, systems, and networks. We may not be successful in keeping pace with changes in mobile technologies, operating systems, or networks or in developing products that operate effectively within existing or future technologies, systems, and networks. Further, any significant changes to mobile operating systems by their respective developers may prevent our products from working properly or at all on these systems. In the event that it is more difficult for users to access content delivered by our solutions to their mobile devices, if our products do not operate effectively within the most popular operating systems or if popular mobile devices do not offer a high-quality user experience, sales of and customer demand for our software products could be harmed.

Any failure of major elements of our products could lead to significant disruptions in our ability to serve customers, which could damage our reputation, reduce our revenues or otherwise harm our business.

Our business is dependent upon providing customers with fast, efficient and reliable services. A reduction in the performance, reliability or availability of required network infrastructure may harm our ability to distribute content to our customers, as well as our reputation and ability to attract and retain customers. Our content management software solutions and operations are susceptible to, and could be damaged or interrupted by, outages caused by fire, flood, power loss, telecommunications failure, Internet or mobile network breakdown, earthquake and similar events. Our solutions are also subject to human error, security breaches, power losses, computer viruses, break-ins, "denial of service" attacks, sabotage, intentional acts of vandalism and tampering designed to disrupt our computer systems and network communications. Our failure to protect our network against damage from any of these events could have a material adverse effect on our business, results of operations and financial condition.

Our operations also depend on web browsers, ISPs (Internet service providers) and mobile networks to provide our customers' end-users with access to websites, streaming and mobile content. Many of these providers have experienced outages in the past, and could experience outages, delays and other difficulties due to system failures unrelated to our solutions. Any such outage, delay or difficulty could adversely affect our ability to effectively provide our products and services, which would harm our business.

If we lose access to third-party licenses, our software product development and production may be delayed or we may incur additional expense to modify our products or products in development.

Some of our solutions contain software licensed from third parties. Third-party licensing arrangements are subject to a number of risks and uncertainties, including:

- undetected errors or unauthorized use of another person's code in the third-party's software;
- disagreement over the scope of the license and other key terms, such as royalties payable;
- infringement actions brought by third-party licensees;
- that third parties will create solutions that directly compete with our products; and
- termination or expiration of the license.

Because of these risks, some of these licenses may not be available to us in the future on terms that are acceptable to us or allow our products to remain competitive. The loss of these licenses or the inability to maintain any of them on commercially acceptable terms could delay development of future products or impair the functionality or enhancement of existing products, leading to increased expense associated with licenses of third-party software or development of alternative software to provide comparable functionality for our existing products and modification of our existing products. Further, if we lose or are unable to maintain any of these third-party licenses or are required to modify software obtained under third-party licenses, it could delay the release of new products, delay enhancements to our existing products or delay sales of our existing products. Any delays could result in loss of competitive position, loss of sales and loss of customer confidence, which could have a material adverse effect on our business, results of operations and financial condition.

If the limited amount of open source software that is incorporated into our products were to become unavailable or if we violate the terms of open source licenses, it could adversely affect sales of our products, which could disrupt our business and harm our financial results.

Our products incorporate a limited amount of "open source" software. Open source software is made available to us and to the public by its authors or other third parties under licenses that impose certain obligations on licensees that re-distribute or make derivative works of the open source software. We may not be able to replace the functionality provided by the open source software currently incorporated in our products if that software becomes unavailable, obsolete or incompatible with future versions of our products. In addition, we must carefully monitor our compliance with the licensing requirements applicable to that open source software. If we have failed or if in the future we fail to comply with the applicable license requirements, we might lose the right to use the subject open source software. The terms of some open source licenses would require us to give our customers significant rights to open source software that is subject to those licenses and is incorporated in our products. This would include the right to obtain from us the source code form of that open source software, and the right to use, modify and distribute that open source software to others. We may be required to provide these rights to customers on a royalty-free basis. Those rights might also extend to modifications and additions we make to the subject open source software. That open source software, and those modifications and additions, also might be obtained by our competitors and used in competing products.

The enforceability and interpretation of open source licenses remains uncertain under applicable law. Unfavorable court decisions could require us to replace open source software incorporated in our products. In some cases this might require us to obtain licenses to commercial software under terms that restrict our use of that commercial software and require us to pay royalties. In some cases we might need to redesign our software products, or to discontinue the sale of our software products if a redesign could not be accomplished on a timely basis. These same consequences result if our use of any open source software or commercial software is found to infringe any intellectual property right of another party. Any of these occurrences would harm our business, operating results and financial condition.

We sell a significant portion of our products internationally, which exposes us to risks associated with international operations.

We sell a significant amount of our products to customers outside the United States, particularly in Europe and Asia. We expect that sales to international customers, including customers in Europe and Asia, will continue to account for a significant portion of our net sales. Sales outside the United States involve the following risks, among others:

- international governments may impose tariffs, quotas and taxes;
- public health emergencies, such as the recent coronavirus outbreak and the subsequent public health measures, may affect our employees, suppliers, customers and our ability to provide services and maintenance in the affected regions;
- the demand for our products will depend, in part, on local economic health;
- political and economic instability may reduce demand for our products;
- restrictions on the export or import of technology may reduce or eliminate our ability to sell in certain markets;
- potentially limited intellectual property protection in certain countries may limit our recourse against infringing products or cause us to refrain from selling in certain markets;
- potential difficulties in managing our international operations;
- the burden and cost of complying with a variety of international laws, including those relating to data security and privacy;
- we may decide to price our products in foreign currency denominations;
- our contracts with international channel partners cannot fully protect us against political and economic instability;
- potential difficulties in collecting receivables; and
- we may not be able to control our international channel partners' efforts on our behalf.

The financial results of our non-U.S. subsidiaries are translated into U.S. dollars for consolidation with our overall financial results. Currency translations and fluctuations may adversely affect the financial performance of our consolidated operations. Currency fluctuations may also increase the relative price of our product in international markets and thereby could also cause our products to become less affordable or less price competitive than those of international manufacturers. These risks associated with international operations may have a material adverse effect on our revenue from or costs associated with international sales.

If our domestic or international intellectual property rights are not adequately protected, others may offer products similar to ours or independently develop the same or similar technologies or otherwise obtain access to our technology and trade secrets, which could depress our product selling prices and gross profit or result in loss of market share.

We believe that protecting our proprietary technology is important to our success and competitive positioning. In addition to common law intellectual property rights, we rely on patents, trade secrets, trademarks, copyrights, know-how, license agreements and contractual provisions to establish and protect our intellectual property rights. However, these legal means afford us only limited protection and may not adequately protect our rights or remedies to gain or keep any advantages we may have over our competitors.

Our competitors, who may have or could develop or acquire significant resources, may make substantial investments in competing technologies, or may apply for and obtain patents that will prevent, limit or interfere with our ability to develop or market our products. Further, although we do not believe that any of our products infringe on the rights of others, third parties have claimed, and may claim in the future, that our products infringe on their rights, and these third parties may assert infringement claims against us in the future.

Costly litigation may be necessary to enforce patents issued to us, to protect trade secrets or "know-how" we own, to defend us against claimed infringement of the rights of others or to determine the ownership, scope, or validity of our proprietary rights and the rights of others. Any claim of infringement against us may involve significant liabilities to third parties, could require us to seek licenses from third parties, and could prevent us from manufacturing, selling, or using our products. The occurrence of this litigation, or the effect of an adverse determination in any of this type of litigation, could have a material adverse effect on our business, financial condition and results of operations. Further, the laws of some of the countries in which our products are or may be sold may not protect our products and intellectual property to the same extent as the United States or at all. Our failure to protect or enforce our intellectual property rights could have a material adverse effect on our business, results of operations and financial condition.

Changes in laws and regulations related to the Internet or changes in the Internet infrastructure itself may diminish the demand for our products, and could have a negative impact on our business.

The future success of our business depends in part upon the continued use of the Internet as a primary medium for commerce, communication and business applications. Federal, state or international government bodies or agencies have in the past adopted, and may in the future adopt, laws or regulations affecting the use of the Internet as a commercial medium. Changes in these laws or regulations could require us to modify our products in order to comply with these changes. In addition, government agencies or private organizations may begin to impose taxes, fees or other charges for accessing the Internet or commerce conducted via the Internet. These laws or charges could limit the growth of Internet-related commerce or communications generally, or result in reductions in the demand for Internet-based applications such as ours. The adoption of any laws or regulations that adversely affect the growth, popularity or use of the Internet could limit the growth of the video as a mainstream communication and collaboration tool, limit the market for video content management software generally, and limit the demand for our products.

Expanding laws, regulations and customer requirements relating to data security and privacy may adversely affect sales of our products and result in increased compliance costs.

Our customers can use our products to collect, use and store personal or identifying information regarding their employees, customers and suppliers. Federal, state and international government bodies and agencies have adopted, are considering adopting, or may adopt laws and regulations regarding data security, privacy and the collection, use, storage and disclosure of personal information obtained from consumers and individuals. These laws and regulations could reduce the demand for our software products if we fail to design or enhance our products to enable our customers to comply with the privacy and security measures required by the legislation.

We also must comply with the policies, procedures and business requirements of our customers relating to data privacy and security, which can vary based upon the customer, the customer's industry or location, and the product the customer selects, and which may be more restrictive than the privacy and security measures required by law or regulation. In particular, the European Union and many countries in Europe have stringent privacy laws and regulations, which may impact our ability to profitably operate in certain European countries or to offer products that meet the needs of customers subject to European Union privacy laws and regulations. Likewise, the California Consumer Privacy Act is a state law intended to enhance privacy rights and consumer protection that may impact our ability to profitably operate across the United States given that our customers' employees may be resident in California or to offer products that meet the needs of customers subject to California privacy laws and regulations.

The costs of compliance with, and other burdens imposed by, our customers' own requirements and the privacy and security laws and regulations that are applicable to our customers' businesses may limit the use and adoption of our products and reduce overall demand. Non-compliance with our customers' specific requirements may lead to termination of contracts with these customers or liabilities to the customers; non-compliance with applicable laws and regulations may lead to significant fines, penalties or liabilities.

Furthermore, privacy concerns may cause our customers' workers to resist providing the personal data necessary to allow our customers to use our products effectively. If a customer experiences a significant data security breach involving our software products, our customers could lose confidence in our software's ability to protect the personal information of their employees, customers and suppliers, which could cause our customers to discontinue use of our products. The loss of confidence from a significant data security breach involving our software products could hurt our reputation, cause sales and marketing challenges to existing and new customers, cause loss of market share or exacerbate competitive pressures, result in an increase in our development costs to address any potential vulnerabilities in our software products, and may result in reduced demand and revenue. Even the perception of privacy concerns, whether or not valid, may inhibit market adoption of our products in certain industries.

Domestic and international legislative and regulatory initiatives and our customers' privacy policies and practices may adversely affect our customers' ability to process, handle, store, use and transmit demographic and personal information from their employees, customers and suppliers, which could reduce demand for our products.

In addition to government activity, privacy advocacy groups and the technology and other industries are considering various new, additional or different self-regulatory standards that may place additional burdens on our software products. If the processing of personal information were to be curtailed in this manner, our software products would be less effective, which may reduce demand for our products and adversely affect our business.

Computer malware, viruses, hacking, phishing attacks, spamming, and other cyber-threats could harm our business and cause customers to lose confidence in us and our products, which could significantly impact our business and results of operations.

Computer malware, viruses, computer hacking, phishing attacks, social engineering, and other electronic threats have become more prevalent, have occurred on our systems in the past, and may occur on our systems in the future. While we are taking measures to safeguard our solutions and services from cybersecurity threats and vulnerabilities, cyber-attacks and other security incidents continue to evolve in sophistication and frequency. The connection of our software solutions to our customers and their information technology environments could present the opportunity for an attack on our systems to serve as a way to obtain access into our customers' systems, which could have a material adverse effect on our financial condition and growth prospects. Our security measures may also be breached due to employee or other error, intentional malfeasance and other third-party acts, and system errors or vulnerabilities, including vulnerabilities of our third party vendors, customers, or otherwise. Businesses have experienced material sales declines after discovering data breaches, and our business could be similarly impacted. The costs to continuously improve the security of our solutions and reduce the likelihood of a successful attack are high and may continue to increase. Furthermore, some U.S. states and international jurisdictions have enacted laws requiring companies to notify consumers of data security breaches involving their personal data. These mandatory disclosures regarding a security breach often lead to widespread negative publicity, which may cause our customers to lose confidence in the effectiveness of the data security measures of our solutions. Any negative incidents can quickly erode trust and confidence, particularly if they result in adverse mainstream and social media publicity, governmental investigations or litigation. Though it is difficult to determine what, if any, harm may directly result from any specific interruption or attack, any failure to maintain performance, reliability, security and availability of our products and technical infrastructure to the satisfaction of our customers may harm our reputation, impair our ability to retain existing customers and attract new customers and expose us to legal claims and government action, each of which could have a material adverse impact on our business, results of operations and financial condition.

We may face circumstances in the future that could result in impairment charges, including, but not limited to, significant goodwill impairment charges.

If the fair value of any of our long-lived assets decreases as a result of an economic slowdown, a downturn in the markets where we sell products and services or a downturn in our financial performance and/or future outlook, we may be required to record an impairment charge on such assets, including goodwill.

We are required to test intangible assets with indefinite life periods for potential impairment annually and on an interim basis if there are indicators of a potential impairment. We also are required to evaluate amortizable intangible assets and fixed assets for impairment if there are indicators of a possible impairment. One potential indicator of impairment is the value of our market capitalization, or enterprise value, as compared to our net book value.

As of December 31, 2019, the Company's market capitalization, without a control premium, was greater than its book value, and the Company concluded there was no goodwill impairment. Declines in the Company's market capitalization or a downturn in our future financial performance and/or future outlook could require the Company to record goodwill and other impairment charges. While a goodwill impairment charge is a non-cash charge, it would have a negative impact on our results of operations.

The limited trading volume of our common stock could affect your ability to sell your shares at a satisfactory price.

We have historically experienced a limited trading volume in our common stock. A more active public market for our common stock may not develop, which could adversely affect the trading price and liquidity of our common stock. Moreover, a thin trading market for our stock could cause the market price for our common stock to fluctuate significantly more than the stock market as a whole. Without a larger float, our common stock is less liquid than the stock of companies with broader public ownership. As a result, the trading prices of our common stock have been and may continue to be more volatile. In addition, in the absence of an active public trading market, shareholders may be unable to liquidate their shares of our common stock at a satisfactory price.

Provisions of Minnesota law, our bylaws and other agreements may deter a change of control of our company and may have a possible negative effect on our stock price.

Certain provisions of Minnesota law, our bylaws and other agreements may make it more difficult for a third-party to acquire, or discourage a third-party from attempting to acquire, control of our company, including:

- the provisions of Minnesota law relating to business combinations and control share acquisitions;
- the provisions of our bylaws regarding the business properly brought before shareholders;
- the right of our board of directors to establish more than one class or series of shares and to fix the relative rights and preferences of any such different classes or series;
- the provisions of our stock incentive plan allowing for the acceleration of vesting or payments of awards granted under the plan in the event of specified events that result in a “change in control” and the provisions of our outstanding awards requiring acceleration of vesting or payments of those awards in the event of a “change in control”;
- the provisions of our agreements provide for severance payments to our executive officers in the event of certain terminations following a “change in control”; and
- the provisions of our mutual termination agreement dated June 29, 2020 with Synacor, Inc. that requires the payment to Synacor of $1,450,000 in the event of certain acquisitions of Qumu and the provisions of our secured promissory note dated May 1, 2020 to ESW Holdings, Inc. that accelerates the payment of the note in the event of certain acquisitions of Qumu and increases the amount of the required note payment by $150,000 to a total of $1,982,888.

These measures could discourage or prevent a takeover of our company or changes in our management, even if an acquisition or such changes would be beneficial to our shareholders. This may have a negative effect on the price of our common stock.

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

Issuer Purchases of Equity Securities

In October 2010, the Company’s Board of Directors approved a common stock repurchase program of up to 3,500,000 shares of the Company’s common stock. Shares may be purchased at prevailing market prices in the open market or in private transactions, subject to market conditions, share price, trading volume and other factors. The repurchase program may be discontinued at any time. The repurchase program has been funded to date using cash on hand. During the three months ended June 30, 2020, no repurchases were made under the repurchase program. While the current authorization remains in effect, the Company expects its primary use of cash will be to fund operations in support of the Company’s goals for revenue growth and operating margin improvement.

In addition to shares that may be purchased under the Board authorization, the Company purchases shares of common stock held by employees who wish to tender owned shares to satisfy the exercise price or tax withholding on stock option exercises or vesting of restricted awards and performance stock units. All of the share repurchase activity included in the table below for the three months ended June 30, 2020 was associated with satisfaction of employee tax withholding requirements on vesting of restricted stock and restricted stock units.

Information on the Company’s repurchases of its common stock during each month of the quarter ended June 30, 2020 is as follows:

Monthly Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as part of Publicly Announced Plans or Programs	Maximum Number of Shares that may yet be Purchased under the Plans or Programs (at end of period)
April 2020	306	$2.44	—	778,365
May 2020	—	$—	—	778,365
June 2020	75	$2.37	—	778,365

Item 3. Defaults Upon Senior Securities

Not Applicable.

Item 4. Mine Safety Disclosures

Not Applicable.

Item 5. Other Information

Not Applicable.

Item 6. Exhibits

(a) The following exhibits are included herein:

31.1‡	Certificate of Chief Executive Officer pursuant to Rules 13a-14(a) and 15d-14(a) of the Exchange Act.
31.2‡	Certificate of Chief Financial Officer pursuant to Rules 13a-14(a) and 15d-14(a) of the Exchange Act.
32†	Certifications pursuant to 18 U.S.C. §1350.
101‡	Interactive Data Files Pursuant to Rule 405 of Regulation S-T, formatted in Inline XBRL: (i) Condensed Consolidated Balance Sheets as of June 30, 2020 and December 31, 2019, (ii) Condensed Consolidated Statements of Operations for the three and six months ended June 30, 2020 and 2019, (iii) Condensed Consolidated Statements of Comprehensive Loss for the three and six months ended June 30, 2020 and 2019, (iv) Condensed Consolidated Statements of Stockholders' Equity for the three and six months ended June 30, 2020 and 2019, (v) Condensed Consolidated Statements of Cash Flows for the six months ended June 30, 2020 and 2019 and (vi) Notes to Condensed Consolidated Financial Statements
104‡	The cover page from the Company's Quarterly Report on Form 10-Q for the quarter ended June 30, 2020, formatted in Inline XBRL

† Filed herewith.

‡ Furnished herewith.

SIGNATURES

In accordance with the Exchange Act, the registrant has duly caused this report to be signed on its behalf by the undersigned thereto duly authorized.

			QUMU CORPORATION
			Registrant
Date:	August 4, 2020	By:	/s/ TJ Kennedy
			TJ Kennedy President and Chief Executive Officer (Principal Executive Officer)
Date:	August 4, 2020	By:	/s/ David G. Ristow
			David G. Ristow Chief Financial Officer (Principal Financial Officer) (Principal Accounting Officer)

EXHIBIT 31.1

CERTIFICATION

I, TJ Kennedy, certify that:

1. I have reviewed this Form 10-Q of Qumu Corporation;

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

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

4. The registrant's other certifying officer(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 4, 2020

/s/ TJ Kennedy
TJ Kennedy
President and Chief Executive Officer

EXHIBIT 31.2

CERTIFICATION

I, David G. Ristow, certify that:

1. I have reviewed this Form 10-Q of Qumu Corporation;

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

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

4. The registrant's other certifying officer(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 4, 2020

/s/ David G. Ristow
David G. Ristow
Chief Financial Officer

EXHIBIT 32

CERTIFICATION

The undersigned certify pursuant to 18 U.S.C. § 1350, that:

(1) The accompanying Quarterly Report on Form 10-Q for the period endedJune 30, 2020 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 accompanying report fairly presents, in all material respects, the financial condition and results of operations of the Company.

Date:	August 4, 2020	/s/ TJ Kennedy
		TJ Kennedy
		President and Chief Executive Officer
Date:	August 4, 2020	/s/ David G. Ristow
		David G. Ristow
		Chief Financial Officer