UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

☒ **Quarterly Report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

For the quarterly period ended: September 30, 2019

☐ **Transition report pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

Commission File Number: 1-33026

Commvault Systems, Inc.

(Exact name of registrant as specified in its charter)

Delaware	**22-3447504**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**

1 Commvault Way
Tinton Falls, New Jersey
07724
(Address of principal executive offices)
(Zip Code)
(732) 870-4000
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol(s)	Name of each exchange on which registered
Common Stock	CVLT	NASDAQ

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by the Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such 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 x 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 registrant was required to submit such files.) Yes x No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See definition of "large accelerated filer", "accelerated filer", "smaller reporting company" and "emerging growth company" in rule 12b-2 of the Exchange Act. (Check one):

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

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

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

As of October 25, 2019, there were 45,711,386 shares of the registrant's common stock, $0.01 par value, outstanding.

COMMVAULT SYSTEMS, INC.
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Commvault Systems, Inc.

Consolidated Balance Sheets
(In thousands, except per share data)
(Unaudited)

	September 30, 2019	March 31, 2019
ASSETS		
Current assets:		
Cash and cash equivalents	$ 377,625	$ 327,992
Short-term investments	97,619	130,338
Trade accounts receivable	127,593	176,836
Other current assets	21,916	19,836
Total current assets	624,753	655,002
Property and equipment, net	118,022	122,716
Operating lease assets	16,255	—
Deferred commissions cost	31,364	33,619
Other assets	11,372	11,116
Total assets	$ 801,766	$ 822,453
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$ 1,744	$ 2,186
Accrued liabilities	83,601	85,721
Current portion of operating lease liabilities	7,832	—
Deferred revenue	226,932	238,439
Total current liabilities	320,109	326,346
Deferred revenue, less current portion	94,411	99,257
Deferred tax liabilities, net	2,230	2,594
Long-term operating lease liabilities	10,486	—
Other liabilities	2,416	2,953
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, $0.01 par value: 50,000 shares authorized, no shares issued and outstanding	—	—
Common stock, $0.01 par value: 250,000 shares authorized, 45,409 shares and 45,582 shares issued and outstanding at September 30, 2019 and March 31, 2019, respectively	452	454
Additional paid-in capital	916,899	887,907
Accumulated deficit	(532,504)	(485,490)
Accumulated other comprehensive loss	(12,733)	(11,568)
Total stockholders' equity	372,114	391,303
Total liabilities and stockholders' equity	$ 801,766	$ 822,453

See accompanying unaudited notes to consolidated financial statements

Commvault Systems, Inc.

Consolidated Statements of Operations
(In thousands, except per share data)
(Unaudited)

	Three Months Ended September 30,		Six Months Ended September 30,	
	2019	2018	2019	2018
Revenues:				
Software and products	$ 68,595	$ 69,504	$ 132,269	$ 144,554
Services	98,987	99,574	197,516	200,701
Total revenues	167,582	169,078	329,785	345,255
Cost of revenues:				
Software and products	8,831	5,049	14,861	9,169
Services	22,410	21,824	45,100	45,310
Total cost of revenues	31,241	26,873	59,961	54,479
Gross margin	136,341	142,205	269,824	290,776
Operating expenses:				
Sales and marketing	80,960	89,494	168,345	187,110
Research and development	23,227	23,649	46,807	47,746
General and administrative	24,753	24,862	47,260	48,101
Restructuring	12,851	494	16,930	8,389
Depreciation and amortization	2,719	2,700	5,325	5,233
Total operating expenses	144,510	141,199	284,667	296,579
Income (loss) from operations	(8,169)	1,006	(14,843)	(5,803)
Interest income	1,561	1,148	3,484	2,039
Income (loss) before income taxes	(6,608)	2,154	(11,359)	(3,764)
Income tax expense	476	1,263	2,571	3,912
Net income (loss)	$ (7,084)	$ 891	$ (13,930)	$ (7,676)
Net income (loss) per common share:				
Basic	$ (0.16)	$ 0.02	$ (0.31)	$ (0.17)
Diluted	$ (0.16)	$ 0.02	$ (0.31)	$ (0.17)
Weighted average common shares outstanding:				
Basic	45,277	45,880	45,363	45,666
Diluted	45,277	47,798	45,363	45,666

See accompanying unaudited notes to consolidated financial statements

Commvault Systems, Inc.

Consolidated Statements of Comprehensive Loss
(In thousands)
(Unaudited)

	Three Months Ended September 30,		Six Months Ended September 30,	
	2019	**2018**	**2019**	**2018**
Net income (loss)	(7,084)	891	(13,930)	$ (7,676)
Other comprehensive loss:				
Foreign currency translation adjustment	(1,138)	(1,151)	(1,165)	$ (6,320)
Comprehensive loss	$ (8,222)	$ (260)	$ (15,095)	$ (13,996)

See accompanying unaudited notes to consolidated financial statements

Commvault Systems, Inc.

Consolidated Statements of Stockholders' Equity
(In thousands)
(Unaudited)

	Common Stock		Additional Paid – In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total
	Shares	Amount				
Balance as of June 30, 2019	45,077	$ 449	$ 896,383	$ (525,420)	$ (11,595)	$ 359,817
Stock-based compensation			14,857			14,857
Share issuances related to stock-based compensation	332	3	5,659			5,662
Repurchase of common stock						—
Net loss				(7,084)		(7,084)
Other comprehensive loss					(1,138)	(1,138)
Balance as of September 30, 2019	45,409	$ 452	$ 916,899	$ (532,504)	$ (12,733)	$ 372,114

	Common Stock		Additional Paid – In Capital	Accumulated Deficit	Accumulated Other Comprehensive Loss	Total
	Shares	Amount				
Balance as of March 31, 2019	45,582	$ 454	$ 887,907	$ (485,490)	$ (11,568)	$ 391,303
Stock-based compensation			29,607			29,607
Share issuances related to stock-based compensation	657	6	6,319			6,325
Repurchase of common stock	(830)	(8)	(6,934)	(33,084)		(40,026)
Net loss				(13,930)		(13,930)
Other comprehensive loss					(1,165)	(1,165)
Balance as of September 30, 2019	45,409	$ 452	$ 916,899	$ (532,504)	$ (12,733)	$ 372,114

See accompanying unaudited notes to consolidated financial statements

Commvault Systems, Inc.

Consolidated Statements of Stockholders' Equity
(In thousands)
(Unaudited)

	Common Stock				Additional Paid – In Capital		Accumulated Deficit		Accumulated Other Comprehensive Loss		Total
	Shares		Amount								
Balance as of June 30, 2018	45,580	$	454	$	811,271	$	(404,369)	$	(10,641)	$	396,715
Stock-based compensation					17,750						17,750
Share issuances related to stock-based compensation	655		6		16,222						16,228
Repurchase of common stock	(201)		(2)		(1,621)		(11,665)				(13,288)
Net income							891				891
Other comprehensive loss									(1,151)		(1,151)
Balance as of September 30, 2018	46,034	$	458	$	843,622	$	(415,143)	$	(11,792)	$	417,145

	Common Stock				Additional Paid – In Capital		Accumulated Deficit		Accumulated Other Comprehensive Loss		Total
	Shares		Amount								
Balance as of March 31, 2018	45,118	$	450	$	782,764	$	(373,678)	$	(5,472)	$	404,064
Stock-based compensation					35,754						35,754
Share issuances related to stock-based compensation	1,483		14		29,612						29,626
Repurchase of common stock	(567)		(6)		(4,508)		(33,789)				(38,303)
Net loss							(7,676)				(7,676)
Other comprehensive loss									(6,320)		(6,320)
Balance as of September 30, 2018	46,034	$	458	$	843,622	$	(415,143)	$	(11,792)	$	417,145

See accompanying unaudited notes to consolidated financial statements

Commvault Systems, Inc.

Consolidated Statements of Cash Flows
(In thousands)
(Unaudited)

	Six Months Ended September 30,	
	2019	**2018**
Cash flows from operating activities		
Net loss	$ (13,930)	$ (7,676)
Adjustments to reconcile net loss to net cash provided by operating activities:		
Depreciation and amortization	6,054	6,072
Noncash stock-based compensation	29,607	35,754
Deferred income taxes	—	(273)
Amortization of deferred commissions cost	8,730	8,916
Impairment of operating lease assets	2,050	—
Changes in operating assets and liabilities:		
Trade accounts receivable	45,625	21,495
Operating lease assets and liabilities, net	42	—
Other current assets and Other assets	(1,796)	4,884
Deferred commissions cost	(6,962)	(8,866)
Accounts payable	(425)	(382)
Accrued liabilities	(1,015)	(13,736)
Deferred revenue	(12,079)	(3,796)
Other liabilities	(782)	138
Net cash provided by operating activities	55,119	42,530
Cash flows from investing activities		
Purchase of short-term investments	(32,800)	(65,519)
Proceeds from maturity of short-term investments	65,519	66,237
Purchase of property and equipment	(1,457)	(3,998)
Net cash provided by (used in) investing activities	31,262	(3,280)
Cash flows from financing activities		
Repurchase of common stock	(40,026)	(38,303)
Proceeds from stock-based compensation plans	6,325	29,626
Net cash used in financing activities	(33,701)	(8,677)
Effects of exchange rate — changes in cash	(3,047)	(8,176)
Net increase in cash and cash equivalents	49,633	22,397
Cash and cash equivalents at beginning of period	327,992	330,784
Cash and cash equivalents at end of period	$ 377,625	$ 353,181

See accompanying unaudited notes to consolidated financial statements

1. Basis of Presentation

Commvault Systems, Inc. and its subsidiaries ("Commvault" or the "Company") is a provider of data and information management software applications and related services. The Company develops, markets and sells a suite of software applications and services, primarily in North America, Europe, Australia and Asia, that provides its customers with data protection solutions supporting all major operating systems, applications, and databases on virtual and physical servers, NAS shares, cloud-based infrastructures, and mobile devices; management through a single console; multiple protection methods including backup and archive, snapshot management, replication, and content indexing for eDiscovery; efficient storage management using deduplication for disk, tape and cloud; integration with the industry's top storage arrays; complete virtual infrastructure management supporting multiple hypervisors; security capabilities to limit access to critical data; policy based data management; and an end-user experience that allows them to protect, find and recover their own data using common tools such as web browsers, Microsoft Outlook and File Explorer. The Company also sells appliances that integrate the Company's software with hardware and address a wide-range of business needs and use cases, ranging from support for remote or branch offices with limited IT staff up to large corporate data centers. The Company also provides its customers with a broad range of professional and customer support services.

The consolidated financial statements as of September 30, 2019 and for the three and six months ended September 30, 2019 and 2018 are unaudited, and in the opinion of management, include all adjustments (consisting only of normal recurring adjustments) necessary for a fair presentation of the results for the interim periods. Accordingly, they do not include all of the information and footnotes required by U.S. generally accepted accounting principles ("U.S. GAAP") for complete financial statements and should be read in conjunction with the financial statements and notes in the Company's Annual Report on Form 10-K for fiscal 2019. The results reported in these financial statements should not necessarily be taken as indicative of results that may be expected for the entire fiscal year.

The preparation of financial statements and related disclosures in conformity with U.S. GAAP requires management to make judgments and estimates that affect the amounts reported in the Company's consolidated financial statements and the accompanying notes. The Company bases its estimates and judgments on historical experience and on various other assumptions that it believes are reasonable under the circumstances. The amounts of assets and liabilities reported in the Company's balance sheets and the amounts of revenues and expenses reported for each of its periods presented are affected by estimates and assumptions, which are used for, but not limited to, the accounting for revenue recognition, income taxes and related reserves, stock-based compensation and accounting for research and development costs. Actual results could differ from those estimates.

2. Summary of Significant Accounting Policies

Correction of an Immaterial Error in Previously Issued Financial Statements

Subsequent to the issuance of the financial statements for the year ended March 31, 2018 and for the interim periods in fiscal 2019, the Company concluded that the Statement of Operations for fiscal 2018 and the interim periods contained an immaterial error related to the classification of legal fees related to intellectual property as Research and Development expenses and not General and Administrative expenses. These immaterial errors have been corrected for the comparative period shown by reclassifying $858 and $1,555 from Research and Development expense to General and Administrative expense for the three and six months ended September 30, 2018. This immaterial error did not have any impact on our financial position, net loss or cash flow.

(In thousands, except per share data)

Recently Issued Accounting Standards

Leases

In February 2016, the Financial Accounting Standards Board ("FASB") issued accounting standards update ("ASU") No. 2016-02, Leases. Under the new guidance, the Company is required to recognize a lease liability and a right-of-use asset for leases. The Company adopted the new guidance on April 1, 2019 using the optional transition method, which allows for the prospective application of the standard, and as a result, the Company did not record an adjustment to retained earnings. In addition, the Company elected the package of practical expedients, for all of its leases, permitted under the transition guidance within the standard, which allowed the Company to carry forward its historical lease classification, to not reassess prior conclusions related to initial direct costs and to not reassess whether any expired or existing contracts are or contain leases. The Company also elected the lessee practical expedient to combine lease and non-lease components for new leases and modified leases. The Company also made an accounting policy election in accordance with the new standard to apply accounting similar to ASC 840 to short-term leases, which are defined as leases that have a term of twelve months or less. The new guidance does not have any impact on the Statement of Operations or Statement of Cash Flows.

Credit Losses on Financial Instruments

In June 2016, the FASB issued ASU 2016-13 "Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments" (ASU 2016-13). The standard amends guidance on the impairment of financial instruments. The ASU estimates credit losses based on expected losses and provides for a simplified accounting model for purchased financial assets with credit deterioration. The standard requires a modified retrospective basis adoption through a cumulative-effect adjustment to retained earnings as of the beginning of the period of adoption. The amendments of this ASU are effective for the Company's fiscal 2021. The Company is currently assessing the impact the adoption of ASU 2016-13 will have on the financial statements.

There have been no other additional significant changes in the Company's accounting policies during the six months ended September 30, 2019 as compared to the significant accounting policies described in its Annual Report on Form 10-K for the year ended March 31, 2019 and to the changes disclosed above.

Concentration of Credit Risk

The Company grants credit to customers in a wide variety of industries worldwide and generally does not require collateral. Credit losses relating to these customers have been minimal.

Sales through the Company's distribution agreement with Arrow Enterprise Computing Solutions, Inc. ("Arrow") totaled 37% and 36% of total revenues for the six months ended September 30, 2019 and 2018, respectively. Arrow accounted for 31% of total accounts receivable as of September 30, 2019 and 38% of total accounts receivable as of March 31, 2019.

Fair Value of Financial Instruments

The carrying amounts of the Company's cash and cash equivalents, accounts receivable and accounts payable approximate their fair values due to the short-term maturity of these instruments. The Company's cash equivalents balance consists primarily of money market funds. The Company's short-term investments balance consists of U.S. Treasury Bills with maturities of one year or less. The Company accounts for its short-term investments as held to maturity.

The following table summarizes the composition of the Company's financial assets measured at fair value at September 30, 2019 and March 31, 2019:

September 30, 2019	Level 1	Level 2	Level 3	Total
Cash equivalents	$ —	—	—	$ —
Short-term investments	$ —	97,619	—	$ 97,619

March 31, 2019	Level 1	Level 2	Level 3	Total
Cash equivalents	$ 102,702	—	—	$ 102,702
Short-term investments	$ —	131,937	—	$ 131,937

3. Revenue

The Company derives revenues from two primary sources: software and products, and services. Software and products revenue includes the Company's software and integrated appliances that combine the Company's software with hardware. Services include customer support (software updates and technical support), consulting, assessment and design services, installation services and customer education. A typical contract includes both licenses and services.

Historically, the Company's software licenses typically provide for a perpetual right to use the Company's software. The Company also sells term-based software licenses that expire, which are referred to as subscription arrangements. The Company does not customize its software and installation services are not required. The software is delivered before related services are provided and is functional without professional services, updates and technical support. The Company has concluded that its software license is functional intellectual property that is distinct as the user can benefit from the software on its own. Software revenue is typically recognized when the software is delivered and/or made available for download as this is the point the user of the software can direct the use of, and obtain substantially all of the remaining benefits from the functional intellectual property. The Company does not recognize software revenue related to the renewal of subscription software licenses earlier than the beginning of the subscription period.

Services revenue includes revenue from customer support and other professional services. Customer support includes software updates on a when-and-if-available basis, telephone support, integrated web-based support and bug fixes or patches. The Company sells its customer support contracts as a percentage of net software purchases the support is related to. Customer support revenue is recognized ratably over the term of the customer support agreement, which is typically one year.

The Company's other professional services include consulting, assessment and design services, installation services and customer education. Customer education services include courses taught by the Company's instructors or third-party contractors. Revenue related to other professional services and customer education services is typically recognized as the services are performed.

Most of the Company's contracts with customers contain multiple performance obligations. For these contracts, the Company accounts for individual performance obligations separately if they are distinct. The transaction price is allocated to the separate performance obligations on a relative standalone selling price basis. Standalone selling prices of software and appliances are typically estimated using the residual approach. Standalone selling prices of services are typically estimated based on observable transactions when these services are sold on a standalone basis.

The Company's typical performance obligations include the following:

Performance Obligation	When Performance Obligation is Typically Satisfied	When Payment is Typically Due	How Standalone Selling Price is Typically Estimated
Software and Products Revenue			
Software Licenses	Upon shipment or made available for download (point in time)	Within 90 days of shipment except for certain subscription licenses which are paid for over time	Residual approach
Appliances	When control of the appliances passes to the customer; typically upon delivery	Within 90 days of delivery	Residual approach
Customer Support Revenue			
Software Updates	Ratably over the course of the support contract (over time)	At the beginning of the contract period	Observable in renewal transactions
Customer Support	Ratably over the course of the support contract (over time)	At the beginning of the contract period	Observable in renewal transactions
Professional Services			
Other Professional Services (except for education services)	As work is performed (over time)	Within 90 days of services being performed	Observable in transactions without multiple performance obligations
Education Services	When the class is taught (point in time)	Within 90 days of services being performed	Observable in transactions without multiple performance obligations

(In thousands, except per share data)

Disaggregation of Revenue

The Company disaggregates revenue from contracts with customers into the nature of the products and services and geographical regions. The geographic regions that are tracked are the Americas (United States, Canada, Latin America), EMEA (Europe, Middle East, Africa) and APAC (Australia, New Zealand, Southeast Asia, China). The Company operates in one segment.

	Three Months Ended September 30, 2019			
	Americas	EMEA	APAC	Total
Software and Products Revenue	$ 35,863	$ 21,440	$ 11,292	$ 68,595
Customer Support Revenue	57,864	21,906	10,233	90,003
Professional Services	4,430	2,680	1,874	8,984
Total Revenue	$ 98,157	$ 46,026	$ 23,399	$ 167,582

	Three Months Ended September 30, 2018			
	Americas	EMEA	APAC	Total
Software and Products Revenue	$ 41,376	$ 17,526	$ 10,602	$ 69,504
Customer Support Revenue	59,675	20,443	9,489	89,607
Professional Services	5,489	2,705	1,773	9,967
Total Revenue	$ 106,540	$ 40,674	$ 21,864	$ 169,078

	Six Months Ended September 30, 2019			
	Americas	EMEA	APAC	Total
Software and Products Revenue	$ 67,084	$ 42,815	$ 22,370	$ 132,269
Customer Support Revenue	115,594	43,573	20,318	179,485
Professional Services	9,296	5,362	3,373	18,031
Total Revenue	$ 191,974	$ 91,750	$ 46,061	$ 329,785

	Six Months Ended September 30, 2018			
	Americas	EMEA	APAC	Total
Software and Products Revenue	$ 83,492	$ 39,551	$ 21,511	$ 144,554
Customer Support Revenue	120,101	40,802	19,110	180,013
Professional Services	11,274	5,931	3,483	20,688
Total Revenue	$ 214,867	$ 86,284	$ 44,104	$ 345,255

Information about Contract Balances

Amounts collected in advance of services being provided are accounted for as deferred revenue. Nearly all of the Company's deferred revenue balance is related to services revenue, primarily customer support contracts.

In certain contracts the Company allows customers to pay for term-based, or subscription, software licenses and products over the term of the license. Amounts recognized as revenue in excess of amounts billed are recorded as unbilled receivables. Unbilled receivables which are anticipated to be invoiced in the next twelve months are included in Accounts receivable on the consolidated balance sheet. Long term unbilled receivables are included in Other assets. The opening and closing balances of the Company’s accounts receivable, unbilled receivables, and deferred revenues are as follows:

(In thousands, except per share data)

	Accounts Receivable	Unbilled Receivable (current)	Unbilled Receivable (long-term)	Deferred Revenue (current)	Deferred Revenue (long-term)
Opening Balance as of March 31, 2019	$ 161,570	$ 15,266	$ 7,216	$ 238,439	$ 99,257
Increase/(decrease), net	(48,377)	(866)	727	(11,507)	(4,846)
Ending Balance as of September 31, 2019	$ 113,193	$ 14,400	$ 7,943	$ 226,932	$ 94,411

The decrease in accounts receivable is primarily a result of a concentration of customer support renewals in the second half of the prior year, a decrease in software and products revenue relative to the fourth quarter of the prior year and improved linearity in software and products revenue relative to the fourth quarter. The decrease in deferred revenue is primarily the result of a strengthening of the U.S. dollar and a decrease in deferred customer support revenue related to software and products revenue transactions and customer support renewals relative to the fourth quarter of fiscal 2019.

The amount of revenue recognized in fiscal 2020 that was included in the March 31, 2019 balance of deferred revenue was $68,273 and $156,185 for the three and six months ended September 30, 2019, respectively. The vast majority of this revenue consists of customer support arrangements. The amount of software and products revenue recognized in the three and six months ended September 30, 2019 related to performance obligations from prior periods was not significant.

Remaining Performance Obligations

In addition to the amounts included in deferred revenue as of September 30, 2019, $26,543 of revenue may be recognized from remaining performance obligations, of which $3,090 was related to software and products. The Company expects the majority of this software and products revenue to be recognized next quarter. The vast majority of the services revenue is related to other professional services which may be recognized over the next twelve months but is contingent upon a number of factors, including customers' needs and schedules.

4. Net Income per Common Share

The diluted weighted average shares outstanding exclude outstanding stock options, restricted stock units, performance restricted stock units and shares to be purchased under the employee stock purchase plan totaling 4,780 and 1,024 for the three months ended September 30, 2019 and 2018, respectively, and 4,810 and 5,874 for the six months ended September 30, 2019 and 2018, because the effect would have been anti-dilutive.

5. Commitments and Contingencies

From time to time, the Company is subject to claims in legal proceedings arising in the normal course of business. The Company does not believe that it is currently party to any pending legal action that could reasonably be expected to have a material adverse effect on its business or operating results.

6. Capitalization

As of September 30, 2019, $159,974 remained in the Company's current stock repurchase authorization which expires on March 31, 2020.

(In thousands, except per share data)

7. Stock Plans

The following table presents the stock-based compensation expense included in Cost of services revenue, Sales and marketing, Research and development, General and administrative and Restructuring expenses for the three and six months ended September 30, 2019 and 2018. Stock-based compensation is attributable to stock options, restricted stock units, performance based awards and the employee stock purchase plan.

	Three Months Ended September 30,		Six Months Ended September 30,	
	2019	2018	2019	2018
Cost of services revenue	$ 698	$ 756	$ 1,388	$ 1,512
Sales and marketing	7,359	9,071	15,005	18,595
Research and development	2,011	2,274	4,004	4,489
General and administrative	4,184	5,345	8,237	9,944
Restructuring	605	304	973	1,214
Stock-based compensation expense	$ 14,857	$ 17,750	$ 29,607	$ 35,754

As of September 30, 2019, there was $72,944 of unrecognized stock-based compensation expense related to non-vested stock option and restricted stock unit awards that is expected to be recognized over a weighted average period of 1.75 years. The Company accounts for forfeitures as they occur. To the extent that awards are forfeited, stock-based compensation will be different from the Company’s current estimate.

Restricted Stock Units

Restricted stock unit activity for the six months ended September 30, 2019 is as follows:

Non-vested Restricted Stock Units	Number of Awards	Weighted Average Grant Date Fair Value
Non-vested as of March 31, 2019	1,831	$ 62.58
Awarded	508	48.17
Vested	(475)	60.66
Forfeited	(127)	63.86
Non-vested as of September 30, 2019	1,737	$ 58.75

The weighted average fair value of restricted stock units awarded was $43.39 and $48.17 per unit during the three and six months ended September 30, 2019, and $67.41 and $71.11 per unit during the three and six months ended September 30, 2018. The weighted average fair value of awards includes the awards with a market condition described below.

Performance Based Awards

In the six months ended September 30, 2019, the Company granted 88 performance restricted stock units ("PSU") to certain executives. Vesting of these awards is contingent upon i) the Company meeting certain company-wide revenue and non-GAAP performance goals (performance-based) in fiscal 2020 and ii) the Company's customary service periods. The awards vest over three years and have a maximum potential to vest at 200% (176 shares) based on actual fiscal 2020 performance. The related stock-based compensation expense is determined based on the value of the underlying shares on the date of grant and is recognized over the vesting term using the accelerated method. During the interim financial periods, management estimates the probable number of PSU’s that would vest until the ultimate achievement of the performance goals is known. The awards are included in the restricted stock unit table.

(In thousands, except per share data)

Awards with a Market Condition

In the six months ended September 30, 2019, the Company granted 88 market performance stock units to certain executives. The vesting of these awards is contingent upon the Company meeting certain total shareholder return ("TSR") levels as compared to the Russell 3000 market index over the next three years. The awards vest in three annual tranches and have a maximum potential to vest at 200% (176 shares) based on TSR performance. The related stock-based compensation expense is determined based on the estimated fair value of the underlying shares on the date of grant and is recognized using the accelerated method over the vesting term. The estimated fair value was calculated using a Monte Carlo simulation model. The fair value of the awards granted during the six months ended September 30, 2019 was $48.26 per unit. The awards are included in the restricted stock unit table.

8. Income Taxes

Income tax expense was $2,571 in the six months ended September 30, 2019 compared to an expense of $3,912 in the six months ended September 30, 2018. In fiscal 2018 the Company determined that it was more likely than not that it will not realize the benefits of its gross deferred tax assets and therefore recorded a valuation allowance to reduce the carrying value of these gross deferred tax assets, net of the impact of the reversal of taxable temporary differences, to zero. The Company's position remains unchanged as of the period ending September 30, 2019. The tax expense for the six months ended September 30, 2019 relates primarily to current foreign taxes.

9. Restructuring

In fiscal 2019, the Company initiated a restructuring plan to increase efficiency in its sales, marketing and distribution functions as well as reduce costs across all functional areas. During the quarter, the Company incurred total restructuring charges of $12,851. These restructuring charges relate primarily to severance and related costs associated with headcount reductions and lease abandonment charges associated with three office leases. These charges include $605 of stock-based compensation related to modifications of existing unvested awards granted to certain employees impacted by the restructuring plan.

The activity in the Company's restructuring accruals for the three and six months ended September 30, 2019 and 2018 is summarized as follows:

	Three Months Ended September 30,	
	2019	2018
Balance at June 30	$ 2,218	$ 3,319
Restructuring charges(1)	11,737	494
Payments	(3,597)	(2,050)
Accrual reversals	—	—
Balance at September 30	$ 10,358	$ 1,763

	Six Months Ended September 30,	
	2019	2018
Balance at March 31	$ 1,089	$ —
Restructuring charges(1)	14,880	8,389
Payments	(5,611)	(6,626)
Accrual reversals	—	—
Balance at September 30	$ 10,358	$ 1,763

(In thousands, except per share data)

(1) Restructuring charges of $11,737 and $14,880 in the tables above do not include restructuring charges for one of the Company's leases in the amount of $1,114 and three in the amount of $2,050 for the three and six months ended September 30, 2019, respectively. Under the new lease standard (ASC 842) the Company is now required to account for the impairment as charge to the Statement of Operations and a reduction in the carrying amount of the right-of-use asset.

As of September 30, 2019, the outstanding restructuring accruals primarily relate to future severance payments.

10. Leases

The Company’s lease liabilities relate primarily to operating leases for its global office infrastructure. These operating leases expire at various dates through fiscal 2026. The Company records lease liabilities at the present value of the lease payments not yet paid, discounted at the rate of interest that the Company would have to pay to borrow on a collateralized basis over a similar term. As the Company's leases do not provide an implicit rate, the Company uses an incremental borrowing rate based on the information available at commencement date in determining the present value of lease payments.

The Company recognizes operating lease costs over the estimated term of the lease, which includes options to extend lease terms that are reasonably certain of being exercised, starting when possession of the property is taken from the landlord. When a lease contains a predetermined fixed escalation of the minimum rent, the Company recognizes the related operating lease cost on a straight-line basis over the lease term.

In addition, certain of the Company’s lease agreements include variable lease payments, such as estimated tax and maintenance charges. These variable lease payments are excluded from minimum lease payments and are included in the determination of lease cost when it is probable that the expense has been incurred and the amount can be reasonably estimated.

As of September 30, 2019, the Company did not have any finance leases.

Net lease cost recognized on our Condensed Consolidated Statement of Operations is summarized as follows:

	Three Months Ended September 30, 2019	Six Months Ended September 30, 2019
Operating Lease Cost	$ 2,302	$ 4,843
Short-term Lease Cost	118	237
Variable Lease Cost	507	749
Net Lease Cost	$ 2,927	$ 5,829

(In thousands, except per share data)

As of September 30, 2019, the maturities of lease liabilities based on the total minimum lease commitment amount including options to extend lease terms that are reasonably certain of being exercised are as follows:

Remainder of FY 2020	$	3,856
FY 2021		7,241
FY 2022		4,227
FY 2023		1,964
FY 2024		1,362
Thereafter		1,714
Total Minimum Lease Payments	$	20,364
Less: Imputed Interest		(2,046)
Present value of operating lease liabilities	$	18,318
Less: Current Portion of operating lease liabilities		7,832
Long-term operating lease liabilities	$	10,486

During the three and six months ended September 30, 2019, additions of operating lease assets were $3,705 and $5,305, respectively. As of September 30, 2019 the minimum lease commitment amount for operating leases signed but not yet commenced, was immaterial.

As of September 30, 2019, the weighted-average remaining operating lease term was 3.35 years and the weighted-average discount rate was 4% for operating leases recognized in the Condensed Consolidated Balance Sheet.

11. Subsequent Events

On September 3, 2019, a wholly owned subsidiary of the Company, entered into a definitive purchase agreement to acquire substantially all the assets of Hedvig, Inc., a California based software-defined storage (SDS) innovator for total consideration of approximately $225 million, subject to customary transaction adjustments, which includes the purchase price and ongoing employee retention in the form of cash and stock-based compensation. The transaction closed on October 1, 2019. As the transaction occurred subsequent to period-end, the Company is still evaluating the purchase price allocation of the transaction but expects the primary assets acquired to be intangible assets and goodwill. Acquired tangible assets and assumed liabilities are expected to be immaterial. The allocation is expected to be finalized during the third quarter of fiscal 2020.

Item 2 - Management’s Discussion and Analysis of Financial Condition and Results of Operations

You should read the following discussion and analysis along with our consolidated financial statements and the related notes included elsewhere in this quarterly report on Form 10-Q. The statements in this discussion regarding our expectations of our future performance, liquidity and capital resources, and other non-historical statements are forward-looking statements. These forward-looking statements are subject to numerous risks and uncertainties, including, but not limited to, the risks and uncertainties described under “Risk Factors” in our Annual Report on Form 10-K for the fiscal year ended March 31, 2019. Our actual results may differ materially from those contained in or implied by any forward-looking statements.

Overview

Commvault is a provider of data and information management software applications and related services. Commvault was incorporated in 1996 as a Delaware corporation. The Commvault software platform is an enterprise level, integrated data and information management solution, built from the ground up on a single platform and unified code base. All software functionality share the same back-end technologies to deliver the benefits of a holistic approach to protecting, managing, and accessing data. The software addresses many aspects of data management in the enterprise, while providing scalability and control of data and information. In fiscal 2018, we also started selling appliances that integrate our software with hardware and address a wide-range of business needs and use cases, ranging from support for remote or branch offices with limited IT staff up to large corporate data centers. We also provide our customers with a broad range of professional services that are delivered by our worldwide support and field operations. As of September 30, 2019, we had licensed our software applications to over 29,000 registered customers.

Sources of Revenues

We derive a significant portion of our total revenues from sales of licenses of our software applications and products. We do not customize our software for a specific end-user customer. We sell our software applications and products to end-user customers both directly through our sales force and indirectly through our global network of value-added reseller partners, systems integrators, corporate resellers and original equipment manufacturers. Our software and products revenue was 40% and 42% of our total revenues for the six months ended September 30, 2019 and 2018, respectively.

In recent fiscal periods, we have generated approximately three-quarters of our software and products revenue from our existing customer base and approximately one-quarter of our software and products revenue from new customers. In addition, our total software and products revenue in any particular period is, to a certain extent, dependent upon our ability to generate revenues from large customer software and products deals, which we refer to as enterprise transactions. Enterprise transactions (transactions greater than $0.1 million) represented 63% and 62% of our total software and products revenue in the six months ended September 30, 2019 and 2018, respectively.

Software and products revenue generated through indirect distribution channels was 95% of total software and products revenue in the six months ended September 30, 2019 and was 87% of total software revenue in the six months ended September 30, 2018. Software and products revenue generated through direct distribution channels was 5% of total software and products revenue in the six months ended September 30, 2019 and was 13% of total software revenue in the six months ended September 30, 2018. The dollar value of software and products revenue generated through indirect distribution channels decreased $0.5 million in the six months ended September 30, 2019 compared to the six months ended September 30, 2018. The dollar value of software and products revenue generated through direct distribution channels decreased $11.8 million in the six months ended September 30, 2019 compared to the six months ended September 30, 2018. Deals initiated by our direct sales force are sometimes transacted through indirect channels based on end-user customer requirements, which are not always in our control and can cause this overall percentage split to vary from period-to-period. As such, there may be fluctuations in the dollars and percentage of software and products revenue generated through our direct distribution channels from time-to-time. We believe that the growth of our software and products revenue, derived from both our indirect channel partners and direct sales force, are key attributes to our long-term growth strategy. We will continue to invest in both our channel relationships and direct sales force in the future, but we continue to expect more revenue to be generated through indirect distribution channels over the long term. The failure of our indirect distribution channels or our direct sales force to effectively sell our software applications could have a material adverse effect on our revenues and results of operations.

We also have a non-exclusive distribution agreement covering our North American commercial markets and our U.S. Federal Government market with Arrow Enterprise Computing Solutions, Inc. ("Arrow"), a subsidiary of Arrow Electronics, Inc. Pursuant to this distribution agreement, Arrow's primary role is to enable a more efficient and effective distribution channel for our products and services by managing our reseller partners and leveraging their own industry experience. We generated 37% and 36% of our total revenues through Arrow in the six months ended September 30, 2019 and 2018, respectively. If Arrow were to discontinue or reduce the sales of our products or if our agreement with Arrow was terminated, and if we were unable to take back the management of our reseller channel or find another North American distributor to replace Arrow, then it would have a material adverse effect on our future business.

Our services revenue was 60% of our total revenues for the six months ended September 30, 2019 and 58% of our total revenues for the six months ended September 30, 2018. Our services revenue is made up of fees from the delivery of customer support and other professional services, which are typically sold in connection with the sale of our software applications. Customer support agreements provide technical support and unspecified software updates on a when-and-if-available basis for an annual fee based on licenses purchased and the level of service subscribed. Other professional services include consulting, assessment and design services, installation services and customer education.

Most of our customer support agreements are priced as a percentage of the related net software purchased and are for a one year term. As the end of the annual period approaches, we pursue the renewal of the agreement with the customer. Historically, customer support renewals have represented a significant portion of our total revenue. Because of this characteristic of our business, if our customers choose not to renew their support agreements with us on beneficial terms, or at all, our business, operating results and financial condition could be harmed.

Foreign Currency Exchange Rates' Impact on Results of Operations

Sales outside the United States were 49% of our total revenue for the six months ended September 30, 2019 and 46% of our total revenue for the six months ended September 30, 2018. The results of our non-U.S. operations are translated into U.S. dollars at the average exchange rates for each applicable month in a period. To the extent the U.S. dollar weakens against foreign currencies, the translation of these foreign currency denominated transactions generally results in increased revenue, operating expenses and income from operations for our non-U.S. operations. Similarly, our revenue, operating expenses and net income will generally decrease for our non-U.S. operations if the U.S. dollar strengthens against foreign currencies.

Using the average foreign currency exchange rates from the three months ended September 30, 2018 our software and products revenue would have been higher by $1.5 million, our services revenue would have been higher by $1.7 million, our cost of sales would have been higher by $0.5 million and our operating expenses would have been higher by $2.0 million from non-U.S. operations for the three months ended September 30, 2019. Using the average foreign currency rates from the six months ended September 30, 2018 our software revenue would have been higher by $3.0 million, our services revenue would have been higher by $4.0 million, our cost of sales would have been higher by $1.1 million and our operating expenses would have been higher by $4.3 million from non-U.S. operations for the six months ended September 30, 2019.

In addition, we are exposed to risks of foreign currency fluctuation primarily from cash balances, accounts receivables and intercompany accounts denominated in foreign currencies and are subject to the resulting transaction gains and losses, which are recorded as a component of general and administrative expenses. We recognized a net foreign currency transaction gain of $0.1 million in the three months ended September 30, 2019, and a loss of less than $0.1 million in the six months ended September 30, 2019. We recognized net foreign currency transaction gains of $0.2 million and $0.7 million in the three and six months ended September 30, 2018, respectively.

Critical Accounting Policies

Our condensed consolidated financial statements are prepared in accordance with U.S. GAAP. The preparation of these condensed consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenue, costs and expenses and related disclosures. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances. In many instances, we could have reasonably used different accounting estimates, and in other instances changes in the accounting estimates are reasonably likely to occur from period-to-period. Accordingly, actual results could differ significantly from the estimates made by our management. To the extent that there are material differences between these estimates and actual results, our future financial statement presentation, financial condition, results of operations and cash flows will be affected.

In many cases, the accounting treatment of a particular transaction is specifically dictated by GAAP and does not require management's judgment in its application, while in other cases, significant judgment is required in selecting among available alternative accounting standards that allow different accounting treatment for similar transactions. We consider these policies requiring significant management judgment to be critical accounting policies. These critical accounting policies are:

- Revenue Recognition;
- Accounting for Income Taxes

There have been no significant changes in our critical accounting policies during the six months ended September 30, 2019 as compared to the critical accounting policies and estimates disclosed in "Management's Discussion and Analysis of

Financial Condition and Results of Operations - Critical Accounting Policies" included in our Annual Report on Form 10-K for the year ended March 31, 2019. In addition, please see Note 2 of Notes to the Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q and Note 2 of the Notes to Consolidated Financial Statements included in our fiscal 2019 Annual Report on Form 10-K filed for a description of our accounting policies.

Results of Operations

Three months ended September 30, 2019 compared to three months ended September 30, 2018

Revenues

Total revenues decreased $1.5 million, or 1%, from $169.1 million in the three months ended September 30, 2018 to $167.6 million in the three months ended September 30, 2019.

Software and Products Revenue. Software and products revenue decreased $0.9 million, or 1%, from $69.5 million in the three months ended September 30, 2018 to $68.6 million in the three months ended September 30, 2019. Software and products revenue represented 41% of our total revenues in both the three months ended September 30, 2019 and 2018.

We track software and products revenue on a geographic basis. The geographic regions that are tracked are the Americas (United States, Canada, Latin America), EMEA (Europe, Middle East, Africa) and APAC (Australia, New Zealand, Southeast Asia, China, Japan). Americas, EMEA and APAC represented 52%, 31% and 17% of total software and products revenue, respectively, for the three months ended September 30, 2019. The year over year decline of software and products revenue in the Americas was 13% while EMEA and APAC increased 22% and 7%, respectively.

- The decrease in Americas software and products revenue was primarily the result of a decrease in the number of enterprise revenue transactions partially offset by an increase in the average enterprise transaction selling price.
- EMEA software and products revenue increased primarily as a result of an increase in both the number and average selling price of enterprise revenue transactions. Using exchange rates from the prior year quarter, the increase in software and products revenue would have been 28%.
- The increase in APAC software and products revenue was primarily the result of an increase in both the number and average selling price of enterprise revenue transactions, which was partially offset by a decrease in non-enterprise revenue. Using exchanges rates from the prior year quarter, the increase in software and products revenue would have been 10%.

Software and products revenue derived from enterprise transactions (transactions greater than $0.1 million) represented 64% of our software and products revenue in the three months ended September 30, 2019 and 66% of our software and products revenue in the three months ended September 30, 2018. Enterprise transactions decreased by $1.5 million, or 3%, in the three months ended September 30, 2019 compared to the three months ended September 30, 2018. This was driven by a 16% decrease in the number of enterprise transactions. The average dollar amount of such transactions was approximately $328 thousand in the three months ended September 30, 2019 and approximately $284 thousand in the three months ended September 30, 2018.

Services Revenue. Services revenue decreased $0.6 million, or 1%, from $99.6 million in the three months ended September 30, 2018 to $99.0 million in the three months ended September 30, 2019. Services revenue represented 59% of our total revenues in both the three months ended September 30, 2019 and September 30, 2018. The decrease in services revenue is due to a $1.0 million decrease in training and consulting service revenue partially offset by a $0.4 million increase in revenue from customer support agreements.

Cost of Software and Products Revenues. Total cost of software and products revenues increased $3.8 million, from $5.0 million in the three months ended September 30, 2018 to $8.8 million in the three months ended September 30, 2019. Cost of software and product revenue represented 13% of software and product revenue in the three months ended September 30, 2019 compared to 7% in the three months ended September 30, 2018. The increase in cost of software and products revenue is related to additional hardware and software royalty costs associated with our appliance and hyperscale product offerings. As sales of our appliances and hyperscale products continue to ramp, we expect the cost of software and products as a percentage of software and products revenue will increase.

Cost of Services Revenues. Total cost of services revenues increased $0.6 million, or 3%, from $21.8 million in the three months ended September 30, 2018 to $22.4 million in the three months ended September 30, 2019. The gross margin of our services revenue was 77% and 78% for the three months ended September 30, 2019 and 2018.

Operating Expenses

Sales and Marketing. Sales and marketing expenses decreased $8.5 million, or 10%, from $89.5 million in the three months ended September 30, 2018 to $81.0 million in the three months ended September 30, 2019. The decrease is due to a $7.5 million decrease in employee compensation and related expenses mainly attributable to our restructuring and reorganization initiatives. Sales and marketing expenses as a percentage of total revenues was 48% and 53% in the three months ended September 30, 2019 and 2018, respectively.

Research and Development. Research and development expenses decreased $0.4 million, or 2%, from $23.6 million in the three months ended September 30, 2018 to $23.2 million in the three months ended September 30, 2019. The decrease is primarily due to a decline in employee related costs. Research and development expenses as a percentage of total revenues was 14% in both the three months ended September 30, 2019 and 2018.

General and Administrative. General and administrative expenses decreased $0.1 million, from $24.9 million in the three months ended September 30, 2018 to $24.8 million in the three months ended September 30, 2019. General and administrative expenses in the three months ended September 30, 2019 includes $4.3 million of costs related to a non-routine shareholder matter and $1.3 million of acquisition costs related to the Company's acquisition of Hedvig, Inc. in October 2019. General and administrative expenses as a percentage of total revenues was 15% in both the three months ended September 30, 2019 and 2018.

Restructuring. In fiscal 2019 we initiated a restructuring plan to increase efficiency in our sales, marketing and distribution functions as well as reduce costs across all functional areas. Restructuring expenses were $12.9 million in the three months ended September 30, 2019. These restructuring charges relate primarily to severance and related costs associated with headcount reductions as well as a lease abandonment charges related to the closure of three offices. These charges include $0.6 million of stock-based compensation related to modifications of existing awards granted to certain employees included in the restructuring. We cannot guarantee the restructuring program will achieve its intended result. Risks associated with this restructuring program also include additional unexpected costs, adverse effects on employee morale and the failure to meet operational and growth targets due to the loss of key employees, any of which may impair our ability to achieve anticipated results of operations or otherwise harm our business.

Income Tax Expense

Income tax expense was $0.5 million in the three months ended September 30, 2019 compared to expense of $1.3 million in the three months ended September 30, 2018. The income tax expense for the three months ended September 30, 2019 relates primarily to current foreign taxes.

Six months ended September 30, 2019 compared to six months ended September 30, 2018

Revenues

Total revenues decreased $15.5 million, or 4%, from $345.3 million in the six months ended September 30, 2018 to $329.8 million in the six months ended September 30, 2019.

Software and Products Revenue. Software and products revenue decreased $12.3 million, or 8%, from $144.6 million in the six months ended September 30, 2018 to $132.3 million in the six months ended September 30, 2019. Software and products revenue represented 40% of our total revenues in the six months ended September 30, 2019 and 42% in the six months ended September 30, 2018.

We track software and products revenue on a geographic basis. The geographic regions that are tracked are the Americas (United States, Canada, Latin America), EMEA (Europe, Middle East, Africa) and APAC (Australia, New Zealand, Southeast Asia, China, Japan). Americas, EMEA and APAC represented 51%, 32% and 17% of total software and products revenue, respectively, for the six months ended September 30, 2019. The year over year decline of software and products revenue in the Americas was 20% while EMEA and APAC increased 8% and 4%, respectively.

- The decrease in Americas software and products revenue was primarily the result of a decrease in the number of enterprise revenue transactions partially offset by an increase in the average enterprise transaction selling price.

- EMEA software and products revenue increased primarily as a result of an increase in both the number and average selling price of enterprise revenue transactions. Using exchange rates from the prior year, the increase in software and products revenue would have been 13%.

- The increase in APAC software and products revenue was primarily due to an increase in enterprise revenue driven by an increase in both the number of enterprise revenue transactions and in the average enterprise revenue transaction size. Using exchange rates from the prior year, the increase in software and products revenue would have been 9%.

Software and products revenue derived from enterprise transactions (transactions greater than $0.1 million) represented 63% of our software and products revenue in the six months ended September 30, 2019 and 62% of our software and products revenue in the six months ended September 30, 2018. Enterprise transactions decreased by $6.3 million, or 7%, in the six months ended September 30, 2019 compared to the six months ended September 30, 2018. This was driven by a 22% decrease in the number of enterprise transactions. The average dollar amount of such transactions was approximately $313 thousand in the six months ended September 30, 2019 and $262 thousand in the six months ended September 30, 2018.

Services Revenue. Services revenue decreased $3.2 million, or 2%, from $200.7 million in the six months ended September 30, 2018 to $197.5 million in the six months ended September 30, 2019. Services revenue represented 60% of our total revenues in the six months ended September 30, 2019 and 58% in the six months ended September 30, 2018. The decrease in services revenue is due to a $2.7 million decrease in training and consulting service revenue and a $0.5 million decreased in revenue from customer support agreements.

Cost of Software and Products Revenues. Total cost of software and products revenues increased $5.7 million, from $9.2 million in the six months ended September 30, 2018 to $14.9 million in the six months ended September 30, 2019. Cost of software and product revenue represented 11% of software and product revenue in the six months ended September 30, 2019 compared to 6% in the six months ended September 30, 2018. The increase in cost of software and products revenue is related to additional hardware and software royalty costs associated with our appliance and hyperscale product offerings. As sales of our appliances and hyperscale products continue to ramp, we expect the cost of software and products as a percentage of software and products revenue will increase.

Cost of Services Revenues. Total cost of services revenues decreased $0.2 million, from $45.3 million in the six months ended September 30, 2018 to $45.1 million in the six months ended September 30, 2019. The gross margin of our services revenue was 77% for the both the six months ended September 30, 2019 and 2018.

Operating Expenses

Sales and Marketing. Sales and marketing expenses decreased $18.8 million, or 10%, from $187.1 million in the six months ended September 30, 2018 to $168.3 million in the six months ended September 30, 2019. The decrease is due to a $22.1 million decrease in employee compensation and related expenses mainly attributable to our restructuring and reorganization initiatives. The decrease was partially offset by an increase in marketing related expenses. Sales and marketing expenses as a percentage of total revenues was 51% and 54% in the six months ended September 30, 2019 and 2018, respectively.

Research and Development. Research and development expenses decreased $0.9 million, or 2% , from $47.7 million in the six months ended September 30, 2018 to $46.8 million in the six months ended September 30, 2019. The decrease is primarily due to a decline in employee related costs. Research and development expenses as a percentage of total revenues was 14% in both the six months ended September 30, 2019 and 2018.

General and Administrative. General and administrative expenses decreased $0.8 million, or 2%, from $48.1 million in the six months ended September 30, 2018 to $47.3 million in the six months ended September 30, 2019. General and administrative expenses in the six months ended September 30, 2019 includes $7.6 million of costs related to a non-routine shareholder matter and $1.3 million in acquisition costs. General and administrative expenses as a percentage of total revenues was 14% in both the six months ended September 30, 2019 and 2018.

Restructuring. In fiscal 2019 we initiated a restructuring plan to increase efficiency in our sales, marketing and distribution functions as well as reduce costs across all functional areas. Restructuring expenses were $16.9 million in the six months ended September 30, 2019. These restructuring charges relate primarily to severance and related costs associated with headcount reductions as well as a lease abandonment charges related to the closure of 3 offices. These charges include $1.0 million of stock-based compensation related to modifications of existing awards granted to certain employees included in the restructuring. We cannot guarantee the restructuring program will achieve its intended result. Risks associated with this restructuring program also include additional unexpected costs, adverse effects on employee morale and the failure to meet operational and growth targets due to the loss of key employees, any of which may impair our ability to achieve anticipated results of operations or otherwise harm our business.

Income Tax Expense

Income tax expense was $2.6 million in the six months ended September 30, 2019 compared to expense of $3.9 million in the six months ended September 30, 2018. The income tax expense for the six months ended September 30, 2019 relates primarily to current foreign taxes.

Liquidity and Capital Resources

As of September 30, 2019, our cash and cash equivalents balance of $377.6 million primarily consisted of cash. In addition, as of September 30, 2019 we have short-term investments invested in U.S. Treasury Bills totaling $97.6 million. In recent fiscal years, our principal source of liquidity has been cash provided by operations.

On October 1, 2019, we closed on the acquisition of Hedvig, Inc. In connection with the closing we made $165.5 million of payments from our cash balance.

As of September 30, 2019, the amount of cash and cash equivalents held outside of the United States by our foreign legal entities was approximately $164.1 million. These balances are dispersed across many international locations around the world. We believe that such dispersion meets the current and anticipated future liquidity needs of our foreign legal entities. In the event we needed to repatriate funds from outside of the United States, such repatriation would likely be subject to restrictions by local laws and/or tax consequences including foreign withholding taxes.

During the six months ended September 30, 2019, we repurchased $40.0 million of common stock shares under our share repurchase program. Under our stock repurchase program, repurchased shares are constructively retired and returned to unissued status. Our stock repurchase program has been funded by our existing cash and cash equivalent balances as well as cash flows provided by our operations. As of September 30, 2019, $160.0 million remained in the Company's current stock repurchase authorization which expires March 31, 2020.

Our future stock repurchase activity is subject to the business judgment of our management and Board of Directors, taking into consideration our historical and projected results of operations, financial condition, cash flows and other anticipated capital requirements or investment alternatives. Our stock repurchase program reduces the dilutive impact on our common shares outstanding associated with stock option exercises and our previous public and private stock offerings through the repurchase of common stock.

Our summarized cash flow information is as follows (in thousands):

	Six Months Ended September 30,	
	2019	**2018**
Net cash provided by operating activities	$ 55,119	$ 42,530
Net cash provided by (used in) investing activities	31,262	(3,280)
Net cash used in financing activities	(33,701)	(8,677)
Effects of exchange rate-changes in cash	(3,047)	(8,176)
Net increase in cash and cash equivalents	$ 49,633	$ 22,397

Net cash provided by operating activities was $55.1 million in the six months ended September 30, 2019 and $42.5 million in the six months ended September 30, 2018. In the six months ended September 30, 2019, cash provided by operating activities was primarily due to net loss adjusted for the impact of non-cash charges and collection of accounts receivable, partially offset by decreases in deferred revenue and accrued expenses.

Net cash provided by investing activities was $31.3 million for the six months ended September 30, 2019 and net cash used in investing activities was $3.3 million in the six months ended September 30, 2018. In the six months ended September 30, 2019, cash provided by investing activities was related to the net proceeds from the maturity of short-term investments of $32.7 million partially offset by $1.5 million of capital expenditures.

Net cash used in financing activities was $33.7 million in the six months ended September 30, 2019 and $8.7 million in the six months ended September 30, 2018. The cash used in financing activities in the six months ended September 30, 2019 was the result of $40.0 million of repurchases of common shares partially offset by $6.3 million of proceeds from the exercise of stock options and purchases related to our employee stock purchase program.

Working capital decreased $24.0 million from $328.7 million as of March 31, 2019 to $304.6 million as of September 30, 2019. The net decrease in working capital is due primarily to our use of cash to repurchase common shares partially offset by the collection of trade receivables and a decrease in deferred revenue.

We believe that our existing cash, cash equivalents and our cash from operations will be sufficient to meet our anticipated cash needs for working capital, income taxes, capital expenditures and potential stock repurchases for at least the next twelve months. We may seek additional funding through public or private financings or other arrangements during this period. Adequate funds may not be available when needed or may not be available on terms favorable to us, or at all. If additional funds are raised by issuing equity securities, dilution to existing stockholders will result. If we raise additional funds by obtaining loans from third parties, the terms of those financing arrangements may include negative covenants or other restrictions on our business that could impair our operational flexibility, and would also require us to fund additional interest expense. If funding is insufficient at any time in the future, we may be unable to develop or enhance our products or services, take advantage of business opportunities or respond to competitive pressures, any of which could have a material adverse effect on our business, financial condition and results of operations.

Off-Balance Sheet Arrangements

As of September 30, 2019 we do not have off-balance sheet financing arrangements, including any relationships with unconsolidated entities or financial partnerships, such as entities often referred to as structured finance or special purpose entities.

Indemnifications

Certain of our software licensing agreements contain certain provisions that indemnify our customers from any claim, suit or proceeding arising from alleged or actual intellectual property infringement. These provisions continue in perpetuity along with our software licensing agreements. We have never incurred a liability relating to one of these indemnification provisions in the past and we believe that the likelihood of any future payout relating to these provisions is remote. Therefore, we have not recorded a liability during any period related to these indemnification provisions.

Impact of Recently Issued Accounting Standards

See Note 2 of the unaudited consolidated financial statements for a discussion of the impact of recently issued accounting standards.

Item 3 - Quantitative and Qualitative Disclosures about Market Risk

Interest Rate Risk

As of September 30, 2019, our cash and cash equivalents and short-term investments consisted primarily of money market funds and U.S. Treasury Bills. Due to the short-term nature of these investments, we are not subject to any material interest rate risk on these balances.

Foreign Currency Risk

Economic Exposure

As a global company, we face exposure to adverse movements in foreign currency exchange rates. Our international sales are generally denominated in foreign currencies and this revenue could be materially affected by currency fluctuations. Approximately 49% of our sales were outside the United States for the six months ended September 30, 2019. Our primary exposures are to fluctuations in exchange rates for the U.S. dollar versus the Euro, and to a lesser extent, the Australian dollar, British pound sterling, Canadian dollar, Chinese yuan, Indian rupee, Korean won and Singapore dollar. Changes in currency exchange rates could adversely affect our reported revenues and require us to reduce our prices to remain competitive in foreign markets, which could also have a material adverse effect on our results of operations. Historically, we have periodically reviewed and revised the pricing of our products available to our customers in foreign countries and we have not maintained excess cash balances in foreign accounts.

Transaction Exposure

Our exposure to foreign currency transaction gains and losses is primarily the result of certain net receivables due from our foreign subsidiaries and customers being denominated in currencies other than the functional currency of the subsidiary. Our foreign subsidiaries conduct their businesses in local currency and we generally do not maintain excess U.S. dollar cash balances in foreign accounts.

Foreign currency transaction gains and losses are recorded in “General and administrative expenses” in the Consolidated Statements of Operations. We recognized a net foreign currency transaction gain of $0.1 million and a loss of less than $0.1 million in the three and six months ended September 30, 2019. We recognized net foreign currency transaction gains of $0.2 million and $0.7 million in the three and six months ended September 30, 2018. The net foreign currency transaction gains and losses recorded in “General and administrative” expenses include settlement gains and losses on forward contracts disclosed below.

Item 4 - Controls and Procedures

Evaluation of Disclosure Controls and Procedures

Our management, with the participation of the Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) of the Securities Exchange Act of 1934, as of September 30, 2019. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective as of September 30, 2019.

Changes in Internal Control over Financial Reporting

There was no change in our internal control over financial reporting that occurred during the second quarter of fiscal 2020 that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Inherent Limitations on Internal Controls

Our management, including our Chief Executive Officer and Chief Financial Officer, do not expect that our disclosure controls and procedures or our internal controls over financial reporting will prevent or detect all error and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control objectives of the control system are met. Further, the design of a control system must reflect the fact that there are resource constraints, and the benefits of controls must be considered relative to their costs. Because of inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that all control issues and instances of fraud, if any, within the company have been detected. These inherent limitations include the realities that judgments in decision-making can be faulty, and that breakdowns can occur because of a simple error or mistake. Additionally, controls can be circumvented by the individual acts of some persons, by collusion of two or more people, or by management override of the controls. The design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions. Over time, controls may become inadequate because of changes in conditions, or the degree of compliance with the policies or procedures may deteriorate. Because of inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

From time to time, we are subject to claims in legal proceedings arising in the normal course of our business. We do not believe that we are currently party to any pending legal action that could reasonably be expected to have a material adverse effect on our business or operating results.

Item 1A. Risk Factors

In addition to the other information set forth in this report, you should carefully consider the factors discussed in Part I, “Item 1A. Risk Factors” in our Annual Report on Form 10-K for the year ended March 31, 2019, which could materially affect our business, financial condition or future results. Additional risks and uncertainties not currently known to us or that we currently deem to be immaterial also may materially adversely affect our business, financial condition and/or operating results. If any of the risks actually occur, our business, financial conditions or results of operations could be negatively affected. In that case, the trading price of our stock could decline, and our stockholders may lose part or all of their investment.

We may engage in strategic acquisitions or transactions, which could have a material adverse effect on our business, results of operations, financial condition and cash flows.

On October 1, 2019, we completed the acquisition of Hedvig, Inc., a California based software-defined storage (SDS) innovator for total consideration of approximately $225 million, subject to customary transaction adjustments, which includes the purchase price and ongoing employee retention in the form of cash and stock-based compensation. The transaction closed on October 1, 2019.

Acquisitions, including complete acquisitions, involve a number of risks, including diversion of management’s attention, ability to finance the acquisition on attractive terms, failure to retain key personnel or valuable customers, legal liabilities and the need to amortize acquired intangible assets, any of which could have a material adverse effect on our business, results of operations, financial condition and cash flows. Any additional future acquisitions may also result in the incurrence of indebtedness or the issuance of additional equity securities.

The intellectual property of an acquired business may be an important component of the value that we agree to pay for such a business. Although we conduct due diligence in connection with each of our acquisitions, such acquisitions are subject to the risks that the acquired business may not own the intellectual property that we believe we are acquiring, that the intellectual property is dependent upon licenses from third parties, that the acquired business infringes upon the intellectual property rights of others or that the technology does not have the acceptance in the marketplace that we anticipated.

We could also experience financial or other setbacks if transactions encounter unanticipated problems, including problems related to execution, integration or underperformance relative to prior expectations. Our management may not be able to successfully integrate any acquired business into our operations or maintain our standards, controls and policies, which could have a material adverse effect on our business, results of operations and financial condition. Consequently, any acquisition we complete may not result in long-term benefits to us or we may not be able to further develop the acquired business in the manner we anticipated.

Following the completion of acquisitions, we may have to rely on the seller to provide administrative and other support, including financial reporting and internal controls, and other transition services to the acquired business for a period of time. There can be no assurance that the seller will do so in a manner that is acceptable to us.

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

Purchases of Equity Securities by the Issuer

There were no purchases of our common stock during the three months ended September 30, 2019.

Item 3. Defaults upon Senior Securities

None

Item 4. Mine Safety Disclosures

Not Applicable

Item 5. Other Information

As reported reported in our 8-K filed on August 23, 2019, at our fiscal 2019 Annual Meeting of Stockholders held on August 22, 2019, the stockholders approved the Commvault Systems, Inc. Omnibus Incentive Plan as amended by the Third Amendment (the “Incentive Plan”), pursuant to which we may grant awards to its officers, employees, directors, consultants, independent contractors and agents and those of its affiliates. Awards that may be granted under the Incentive Plan include stock options, stock appreciation rights, full value awards (including restricted stock, restricted stock units, performance shares or units and other stock-based awards) and cash-based awards. The Third Amendment increased the number of shares available for issuance under the Incentive Plan by 1,500,000 shares for a total of 7,050,000 shares of Common Stock.

A more complete description of the Incentive Plan is contained in our proxy statement, dated July 3, 2019, as filed with the Securities and Exchange Commission (“Proxy Statement”), under the heading “Proposal 3 - Approval of Commvault Systems, Inc. Omnibus Incentive Plan, as amended by the Third Amendment” which is incorporated herein by reference. The descriptions of the Incentive Plan set forth herein and in the Proxy Statement are qualified in their entirety by reference to the complete text of the Commvault Systems, Inc. Omnibus Incentive Plan (as amended by the Third Amendment Thereof), which is incorporated by reference to Exhibit 10.1 to Form 8-K filed August 23, 2019.

Item 6. Exhibits

Exhibit No.	Description
3.1	Amended and Restated Certificate of Incorporation of Commvault Systems, Inc., as amended
3.2	Second Amended and Restated Bylaws of Commvault Systems, Inc. (incorporated by reference to Exhibit 3.1 to the Registrant’s Form 8-K filed May 7, 2019)
10.1	Commvault Systems, Inc. Omnibus Incentive Plan (as amended by the Third Amendment Thereof), which is incorporated by reference to Exhibit 10.1 to the Company’s Form 8-K filed August 23, 2019
31.1	Certification of Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32.1	Certification of Chief Executive Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
32.2	Certification of Chief Financial Officer Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
101.INS	XBRL Instance Document - the instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
101.SCH	XBRL Taxonomy Extension Schema Document
101.CAL	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB	XBRL Taxonomy Extension Label Linkbase Document
101.PRE	XBRL Taxonomy Extension Presentation Linkbase Document
104	Cover Page Interactive Data File (formatted as Inline XBRL and contained in Exhibit 101)

Signatures

Pursuant to the requirements of the Securities Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

Commvault Systems, Inc.

Dated:	October 30, 2019	By:	/s/ Sanjay Mirchandani
			Sanjay Mirchandani
			President and Chief Executive Officer
Dated:	October 30, 2019	By:	/s/ Brian Carolan
			Brian Carolan
			Vice President and Chief Financial Officer

Delaware

The First State

I, JEFFREY W. BULLOCK, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED ARE TRUE AND CORRECT COPIES OF ALL DOCUMENTS FILED FROM AND INCLUDING THE RESTATED CERTIFICATE OR A MERGER WITH A RESTATED CERTIFICATE ATTACHED OF "COMMVAULT SYSTEMS, INC." AS RECEIVED AND FILED IN THIS OFFICE.

THE FOLLOWING DOCUMENTS HAVE BEEN CERTIFIED:

RESTATED CERTIFICATE, FILED THE TWENTY-SIXTH DAY OF SEPTEMBER, A.D. 2006, AT 5:22 O`CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID RESTATED CERTIFICATE IS THE TWENTY-SEVENTH DAY OF SEPTEMBER, A.D. 2006 AT 9 O'CLOCK A.M.

CERTIFICATE OF DESIGNATION, FILED THE FOURTEENTH DAY OF NOVEMBER, A.D. 2008, AT 9:30 O`CLOCK A.M.

CERTIFICATE OF OWNERSHIP, FILED THE SEVENTEENTH DAY OF DECEMBER, A.D. 2014, AT 12:57 O`CLOCK P.M.

Jeffrey W. Bullock, Secretary of State

2615869 8100X Authentication: 203783291
SR# 20197523360 Date: 10-14-19

Delaware

The First State

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF OWNERSHIP IS THE FIRST DAY OF JANUARY, A.D. 2015 AT 12:01 O'CLOCK A.M.

CERTIFICATE OF AMENDMENT, FILED THE TWENTY-FOURTH DAY OF JULY, A.D. 2017, AT 10:07 O`CLOCK A.M.

Jeffrey W. Bullock, Secretary of State

2615869 8100X   Authentication: 203783291
SR# 20197523360   Date: 10-14-19

State of Delaware
Secretary of State
Division of Corporations
Delivered 05:22 PM 09/26/2006
FILED 05:22 PM 09/26/2006
SRV 060887260 - 2615869 FILE

AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF COMMVAULT SYSTEMS, INC.

CommVault Systems, Inc., a corporation organized and existing under the laws of the State of Delaware, hereby certifies as follows:

A. The name of the corporation is CommVault Systems, Inc. The Corporation was originally incorporated under the name CV Systems, Inc. and the original Certificate of Incorporation was filed with the Secretary of State of the State of Delaware on April 19, 1996.

B. This Certificate of Incorporation has been duly adopted in accordance with Sections 228, 242 and 245 of the General Corporation Law of the State of Delaware by the Board of Directors and the Stockholders of the Corporation.

C. This Amended and Restated Certificate of Incorporation shall be effective at 9 a.m. Delaware time on September 27, 2006.

D. This Amended and Restated Certificate of Incorporation restates, integrates and amends the Amended and Restated Certificate of Incorporation of this Corporation such that the text of the Amended and Restated Certificate of Incorporation shall now read in its entirety as follows:

Article I

The name of the Corporation is CommVault Systems, Inc.

Article II

The address of the Corporation's registered office in the State of Delaware is 2711 Centerville Road, Suite 400, in the City of Wilmington, County of New Castle, Delaware 19808. The name of its registered agent at such address is The Prentice-Hall Corporation System, Inc.

Article III

The purpose of the Corporation is to engage in any lawful act or activity for which a corporation may be organized under the General Corporation Law of Delaware.

Article IV

Authorized Capital. The Corporation is authorized to issue two classes of stock, designated "Preferred. Stock" and "Common Stock." The total number of shares which the Corporation shall have authority to issue is 300,000,000, of which 250,000,000 shares shall be Common Stock, with a par value of $0.01 per share, and 50,000,000 shares shall be Preferred Stock, with a par value of $0.01 per, share.

Preferred Stock. The Preferred Stock may be issued from time to time in one or more series pursuant to a resolution or resolutions providing for such issue duly adopted by the Board of

Directors (authority to do so being hereby expressly vested in the Board of Directors). The Board of Directors is further authorized to, by filing a certificate pursuant to the General Corporation Law of the State of Delaware, determine or alter the designation, powers, privileges, preferences and rights of the shares of each such series and the qualifications, limitations and restrictions granted to or imposed upon any wholly unissued series of Preferred Stock and to fix the number of shares of any series of Preferred Stock and the designation of any such series of Preferred Stock. The Board of Directors, within the limits and restrictions stated in any resolution or resolutions of the Board of Directors originally fixing the number of shares constituting any series, may increase or decrease (hut not below the number of shares in any such series then outstanding) the number of shares of any series subsequent to the issue of shares of that series.

Common Stock. Except as otherwise provided in this Certificate of Incorporation or by applicable law, the holders of Common Stock shall be entitled to vote on each matter on which the stockholders of the Corporation shall be entitled to vote, and each holder of Common Stock shall be entitled to one vote for each share of such stock held by such holder. Each share of Common Stock issued and outstanding shall be identical in all respects one with the other, and no dividends shall be paid on any shares of Common Stock unless the same dividend is paid on all shares of Common Stock outstanding at the time of such payment. Except for and subject to those rights expressly granted to the holders of shares of Preferred Stock, or except as may be provided by the laws of the State of Delaware, the holders of Common Stock shall have exclusively all other rights of stockholders including, but not by way of limitation, (a) the right to receive dividends, when and as declared by the Board of Directors out of assets lawfully available therefor, and (b) in the event of any distribution of assets upon a liquidation or otherwise, the right to receive ratably and equally all the assets and funds of the Corporation remaining after the payment to the holders of shares of Preferred Stock of the specific amounts which they are entitled to receive upon such liquidation.

Ownership. The Corporation shall be entitled to treat the person in whose name any share of its stock is registered as the owner thereof for all purposes and shall not be bound to recognize any equitable or other claim to, or interest in, such share on the part of any other person, whether or not the Corporation shall have notice thereof, except as expressly provided by applicable law.

Article V

Elections of directors need not be by written ballot unless the Bylaws of the Corporation shall so provide.

Article VI

(a) The management of the business and the conduct of the affairs of the Corporation shall be vested in its Board of Directors. The number of directors which constitute the whole Board of Directors of the Corporation shall be designated in the Bylaws of the Corporation.

(b) The Board of Directors shall be divided into three classes, as nearly equal in size as possible, designated as Class I, Class II and Class III, respectively. Directors shall initially be assigned to each class in accordance with a resolution or resolutions adopted by the Board of Directors. At the first annual meeting of stockholders following the date hereof, the term of

office of the Class I directors shall expire and Class I directors shall be elected for a full term of three years. At the second annual meeting of stockholders following the date hereof, the term of office of the Class II directors shall expire and Class II directors shall be elected for a full term of three years. At the third annual meeting of stockholders following the date hereof, the term of office of the Class III directors shall expire and Class III directors shall be elected for a full term of three years. At each succeeding annual meeting of stockholders, directors shall be elected for a full term of three years to succeed the directors of the class whose terms expire at such annual meeting.

(c) Notwithstanding the foregoing provisions of this Article VI, each director shall serve until his or her successor is duly elected and qualified or until his or her death, resignation or removal. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

(d) Any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal or other causes shall be filled by the affirmative vote of a majority of the remaining directors then in office, even though less than a quorum of the Board of Directors and not by the stockholders. Newly created directorships resulting from any increase in the number of directors shall be filled by the affirmative vote of the directors then in office, even though less than a quorum of the Board of Directors and not by the stockholders. Any director elected in accordance with this Article VI (d) shall hold office for the remainder of the full term of the class of directors in which the new directorship was created or the vacancy occurred and until such director's successor shall have been elected and qualified.

(e) Any director, or the entire Board of Directors, may be removed from office at any time only for cause by the affirmative vote of the holders of at least sixty-six and two-thirds percent (66-2/3%) of the voting power of all of the then-outstanding shares of the Voting Stock, voting together as a single class. As used herein, the term "Voting Stock" means the voting power of the then outstanding shares of voting stock of the corporation entitled to vote generally in the election of directors.

Article VII

The Corporation reserves the right to amend, alter, change or repeal any provision contained in this Certificate of Incorporation, in the manner now or hereafter prescribed by statute, and except as provided in the next sentence of this Article VII and Article IX, all rights conferred upon the stockholders, directors or any other persons herein are granted subject to this right. Notwithstanding any other provisions of this Certificate of Incorporation or any provision of law which might otherwise permit a lesser vote or no vote, but in addition to any affirmative vote of die holders of any particular class or series of the Voting Stock required by law, this Certificate of Incorporation or any Preferred Stock Designation, the affirmative vote of the holders of at least sixty-six and two-thirds percent (66-2/3%) of the voting power of all of the then outstanding shares of the Voting Stock, voting together as a single class, shall be required to alter, amend Or repeal Article VI, this Article VII, Article VIII, Article XI, Article XII and Article XIII.

Article VIII

In furtherance and not in limitation of the powers conferred by statute, the Board of Directors is expressly authorized to make, alter, amend or repeal the Bylaws of the Corporation.

Article IX

(a) To the fullest extent permitted by the General Corporation Law of the State of Delaware as the same exists or as may hereafter be amended, no director of the Corporation or any subsidiary of the Corporation shall be personally liable to the Corporation or its stockholders and shall otherwise be indemnified by the Corporation for monetary damages for breach of fiduciary duty as a director of the Corporation, any predecessor of the Corporation or any subsidiary of the Corporation.

(b) The Corporation shall indemnify to the fullest extent permitted by law any person made or threatened to be made a party to an action or proceeding, whether criminal, civil, administrative or investigative, by reason of the fact that such person, such person's testator or intestate is or was a director or officer of the Corporation, any predecessor of the Corporation or any subsidiary of the Corporation or serves or served at any other enterprise as a director or officer at the request of the Corporation, any predecessor to the Corporation or any subsidiary of the Corporation.

(c) Neither any amendment nor repeal of this Article IX, nor the adoption of any provision of the Corporation's Certificate of Incorporation inconsistent with this Article IX shall eliminate or reduce the effect of this Article IX, in respect of any matter occurring, or any action or proceeding accruing or arising or that, but for this Article IX, would accrue or arise, prior to such amendment, repeal, or adoption of an inconsistent provision.

Article X

Meetings of stockholders may be held within or without the state of Delaware, as the Bylaws of the Corporation may provide. The books of the Corporation may be kept (subject to any provision of applicable law) outside of the State of Delaware at such place or places as may be designated from time to time by the Board of Directors or in the Bylaws of the Corporation. No action shall be taken by the stockholders of the Corporation except at an annual or special meeting of the stockholders called in accordance with the Bylaws of the Corporation.

Article XI

Advance notice of new business and stockholder nominations for the election of directors shall be given in the manner and to the extent provided in the Bylaws of the Corporation. Except as otherwise required by law, special meetings of the stockholders may be called only by (i) the Board of Directors pursuant to a resolution approved by the affirmative vote of a majority of the directors then in office, (ii) the Chairman of the Board, if one is elected, or (iii) the Chief Executive Officer. Only those matters set forth in the notice of the special meeting may be considered or acted upon at such special meeting, unless otherwise provided by law,

Article XII

Stockholders shall not be entitled to cumulative voting rights for the election of directors.

Article XIII

The Board of Directors of the Corporation, when evaluating any offer of another person to (A) make a tender or exchange offer for any equity security of the Corporation. (B) merge or consolidate the Corporation with another corporation or entity or (C) purchase or otherwise acquire all or substantially all of the properties and assets of the Corporation, may, in connection with the exercise of its judgment in determining what is in the best interest of the Corporation and its stockholders, give due consideration to all relevant factors, including, without limitation, those factors that Directors of any subsidiary of the Corporation may consider in evaluating any action that may result in a change or potential change in the control of the subsidiary, the social and economic effect of acceptance of such offer on the Corporation's present and future customers, creditors, suppliers and employees and on the communities in which the Corporation operates or is located and the ability of the Corporation to fulfill its corporate objective under applicable laws and regulations and a comparison of the proposed consideration to be received by stockholders in relation to the then current market price of the Corporation's capital stock.

IN WITNESS WHEREOF, said Corporation has caused this Certificate to be signed by N. Robert Hammer, its Chairman and Chief Executive Officer, and attested by Warren H. Mondschein, its Secretary, the 26th day of September, 2006.

COMMVAULT SYSTEMS, INC.

By: /s/ N. Robert Hammer
Name: N. Robert Hammer
Chairman and Chief Executive Officer

ATTEST:

By. /s/ Warren H. Mondschein
Name: Warren H. Mondschein
Secretary

State of Delaware
Secretary of State
Division of Corporations
Delivered 09:32 AM 11/14/2008
FILED 09:30 AM 11/14/2008
SRV 081116307 - 2615869 FILE

CERTIFICATE OF DESIGNATION
OF
SERIES A JUNIOR PARTICIPATING PREFERRED STOCK OF
COMMVAULT SYSTEMS, INC.

Pursuant to Section 151 of the Delaware General Corporation Law

The undersigned duly authorized officers of CommVault Systems, Inc. (the "Corporation"), a Delaware corporation, in accordance with the provisions of Section 103 of the Delaware General Corporation Law (the "DGCL"), DO HEREBY CERTIFY:

That the Board of Directors of the Corporation on November 13, 2008, at a meeting duly called and held, adopted the following resolution creating a series of 150,000 shares of Preferred Stock, par value $0.01 per share, designated as Series A Junior Participating Preferred Stock:

RESOLVED, that pursuant to the authority granted to and vested in the Board of Directors by the Amended and Restated Certificate of Incorporation of the Corporation (as amended from time to time, the "Certificate of Incorporation"), the Board of Directors hereby authorizes that a series of Preferred Stock, par value $0.01 per share, of the Corporation be, and hereby is, created and approved for issuance out of the Preferred Stock authorized in the Certificate of Incorporation, and hereby fixes the designation and amount thereof and the voting powers, preferences and relative, participating, optional or other special rights, and the qualifications, limitations or restrictions thereof, as follows:

1. **Designation and Amount**. There shall be a series of Preferred Stock of the Corporation which shall be designated as "Series A Junior Participating Preferred Stock," par value $0.01 per share, (hereinafter called "Series A Preferred Stock"), and the number of shares constituting such series shall be 150,000. Such number of shares may be increased or decreased by resolution of the Board of Directors and by the filing of a certificate pursuant to the provisions of the DGCL stating that such increase or reduction has been so authorized; provided, however, that no decrease shall reduce the number of shares of Series A Preferred Stock to a number less than the number of shares of Series A Preferred Stock issuable upon exercise of outstanding rights, options or warrants or upon conversion of outstanding securities issued by the Corporation.

2. **Dividends and Distributions**.

(A) Subject to the prior and superior rights of the holders of any shares of any series of Preferred Stock ranking prior and superior to the shares of Series A Preferred Stock with respect to dividends, the holders of shares of Series A Preferred Stock shall be entitled to receive, when, as and if declared by the Board of Directors out of funds legally available for the purpose, quarterly dividends payable in cash to holders of record on the last business day of March, June, September and December in each year (each such date being referred to herein as a "Quarterly Dividend Payment Date"), commencing on the first Quarterly Dividend Payment Date after the first issuance of a share or fraction of a share of Series A Preferred

Stock, in an amount per share (rounded to the nearest cent) equal to 1,000 times the aggregate per share amount of all cash dividends (subject to the provision for adjustment hereinafter set forth), and 1,000 times the aggregate per share amount (payable in kind) of all non-cash dividends or other distributions other than a dividend payable in shares of Common Stock (hereinafter defined) or a subdivision of the outstanding shares of Common Stock (by reclassification or otherwise), declared on the common stock, par value $0.01 per share, of the Corporation (the "Common Stock") since the immediately preceding Quarterly Dividend Payment Date, or, with respect to the first Quarterly Dividend Payment Date, since the first issuance of any share or fraction of a share of Series A Preferred Stock. In the event the Corporation shall at any time (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the amount to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event under the preceding sentence shall be adjusted by multiplying each such amount by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(B) The Corporation shall declare a dividend or distribution on the Series A Preferred Stock as provided in paragraph (A) above at the time it declares a dividend or distribution on the Common Stock (other than a dividend payable in shares of Common Stock).

(C) No dividend or distribution (other than a dividend payable in shares of Common Stock) shall be paid or payable to the holders of shares of Common Stock unless, prior thereto, all accrued but unpaid dividends to the date of such dividend or distribution shall have been paid to the holders of shares of Series A Preferred Stock.

(D) Dividends shall begin to accrue and be cumulative on outstanding shares of Series A Preferred Stock from the Quarterly Dividend Payment Date next preceding the date of issue of such shares of Series A Preferred Stock, unless the date of issue of such shares is prior to the record date for the first Quarterly Dividend Payment Date, in which case dividends on such shares shall begin to accrue from the date of issue of such shares, or unless the date of issue is a Quarterly Dividend Payment Date or is a date after the record date for the determination of holders of shares of Series A Preferred Stock entitled to receive a quarterly dividend and before such Quarterly Dividend Payment Date, in either of which events such dividends shall begin to accrue and be cumulative from such Quarterly Dividend Payment Date. Accrued but unpaid dividends shall not bear interest. Dividends paid on the shares of Series A Preferred Stock in an amount less than the total amount of such dividends at the time accrued and payable on such shares shall be allocated pro rata on a share-by-share basis among all such shares at the time outstanding. The Board of Directors may fix a record date for the determination of holders of shares of Series A Preferred Stock entitled to receive payment of a dividend or distribution declared thereon, which record date shall be no more than 30 days prior to the date fixed for the payment thereof.

3. **Voting Rights**. The holders of shares of Series A Preferred Stock shall have the following voting rights:

(A) Subject to the provision for adjustment hereinafter set forth, each one one-thousandth of a share of Series A Preferred Stock shall entitle the holder thereof to one vote on all matters submitted to a vote of the shareholders of the Corporation. In the event the

Corporation shall at any time (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the number of votes per share to which holders of shares of Series A Preferred Stock were entitled immediately prior to such event shall be adjusted by multiplying such number by a fraction the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

(B) Except as otherwise provided herein or by law, the holders of shares of Series A Preferred Stock and the holders of shares of Common Stock and any other capital stock of the Corporation having general voting rights shall vote together as one class on all matters submitted to a vote of shareholders of the Corporation.

(C) (i) Whenever, at any time or times, dividends payable on any share or shares of Series A Preferred Stock shall be in arrears in an amount equal to at least six full quarterly dividends (whether or not declared and whether or not consecutive), the holders of record of the outstanding Preferred Stock shall have the exclusive right, voting separately as a single class, to elect two directors of the Corporation at a special meeting of shareholders of the Corporation or at the Corporation's next annual meeting of shareholders, and at each subsequent annual meeting of shareholders, as provided below. At elections for such directors, the holders of shares of Series A Preferred Stock shall be entitled to cast one vote for each one one-thousandth of a share of Series A Preferred Stock held.

(ii) Upon the vesting of such right of the holders of the Preferred Stock, the maximum authorized number of members of the Board of Directors shall automatically be increased by two and the two vacancies so created shall be filled by vote of the holders of the outstanding Preferred Stock as hereinafter set forth. A special meeting of the shareholders of the Corporation then entitled to vote shall be called by the Chairman or the President or the Secretary of the Corporation, if requested in writing by the holders of record of not less than 10% of the Preferred Stock then outstanding. At such special meeting, or, if no such special meeting shall have been called, then at the next annual meeting of shareholders of the Corporation, the holders of the shares of the Preferred Stock shall elect, voting as above provided, two directors of the Corporation to fill the aforesaid vacancies created by the automatic increase in the number of members of the Board of Directors. At any and all such meetings for such election, the holders of a majority of the outstanding shares of the Preferred Stock shall be necessary to constitute a quorum for such election, whether present in person or by proxy, and such two directors shall be elected by the vote of at least a plurality of shares held by such shareholders present or represented at the meeting. Any director elected by holders of shares of the Preferred Stock pursuant to this Section may be removed at any annual or special meeting, by vote of a majority of the shareholders voting as a class who elected such director, with or without cause. In case any vacancy shall occur among the directors elected by the holders of the Preferred Stock pursuant to this Section, such vacancy may be filled by the remaining director so elected, or his successor then in office, and the director so elected to fill such vacancy shall serve until the next meeting of shareholders for the election of directors. After the holders of the Preferred Stock shall have exercised

their right to elect directors in any default period and during the continuance of such period, the number of directors shall not be further increased or decreased except by vote of the holders of Preferred Stock as herein provided or pursuant to the rights of any equity securities ranking senior to or pari passu with the Series A Preferred Stock.

(iii) The right of the holders of the Preferred Stock, voting separately as a class, to elect two members of the Board of Directors of the Corporation as aforesaid shall continue until, and only until, such time as all arrears in dividends (whether or not declared) on the Preferred Stock shall have been paid or declared and set apart for payment, at which time such right shall terminate, except as herein or by law expressly provided, subject to revesting in the event of each and every subsequent default of the character above-mentioned. Upon any termination of the right of the holders of the shares of the Preferred Stock as a class to vote for directors as herein provided, the term of office of all directors then in office elected by the holders of Preferred Stock pursuant to this Section shall terminate immediately. Whenever the term of office of the directors elected by the holders of the Preferred Stock pursuant to this Section shall terminate and the special voting powers vested in the holders of the Preferred Stock pursuant to this Section shall have expired, the maximum number of members of the Board of Directors of the Corporation shall be such number as may be provided for in the By-laws of the Corporation or in a resolution of the Board of Directors adopted pursuant thereto, irrespective of any increase made pursuant to the provisions of this Section.

(D) Except as set forth herein, holders of Series A Preferred Stock shall have no special voting rights and their consent shall not be required (except to the extent they are entitled to vote with holders of Common Stock as set forth herein) for taking any corporate action.

4. **Certain Restrictions.**

(A) Whenever quarterly dividends or other dividends or distributions payable on the Series A Preferred Stock as provided in Section 2 are in arrears, thereafter and until all accrued and unpaid dividends and distributions, whether or not declared, on shares of Series A Preferred Stock outstanding shall have been paid in full, the Corporation shall not:

(i) declare or pay dividends on, make any other distributions on, or redeem or purchase or otherwise acquire for consideration any shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Preferred Stock;

(ii) declare or pay dividends on or make any other distributions on any shares of stock ranking on a parity (either as to dividends or upon liquidation, dissolution or winding up) with the Series A Preferred Stock, except dividends paid ratably on the Series A Preferred Stock and all such parity stock on which dividends are payable or in arrears in proportion to the total amounts to which the holders of all such shares are then entitled;

(iii) redeem or purchase or otherwise acquire for consideration shares of any stock ranking on a parity (either as to dividends or upon liquidation, dissolution or

winding up) with the Series A Preferred Stock, provided that the Corporation may at any time redeem, purchase or otherwise acquire shares of any such parity stock in exchange for shares of any stock of the Corporation ranking junior (either as to dividends or upon dissolution, liquidation or winding up) to the Series A Preferred Stock; or

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(iv) purchase or otherwise acquire for consideration any shares of Series A Preferred Stock, except in accordance with a purchase offer made in writing or by publication (as determined by the Board of Directors) to all holders of such shares upon such terms as the Board of Directors, after consideration of the respective annual dividend rates and other relative rights and preferences of the respective series and classes, shall determine in good faith will result in fair and equitable treatment among the respective series or classes.

(B) The Corporation shall not permit any subsidiary of the Corporation to purchase or otherwise acquire for consideration any shares of stock of the Corporation unless the Corporation could, under paragraph (A) of this Section, purchase or otherwise acquire such shares at such time and in such manner.

5. **Reacquired Shares**. Any shares of Series A Preferred Stock purchased or otherwise acquired by the Corporation in any manner whatsoever shall be retired and canceled promptly after the acquisition thereof. All such shares shall upon their cancellation become authorized but unissued shares of Preferred Stock and may be reissued as part of a new series of Preferred Stock to be created by resolution or resolutions of the Board of Directors, subject to the conditions and restrictions on issuance set forth herein.

6. **Liquidation, Dissolution or Winding Up**.

(A) Upon any voluntary liquidation, dissolution or winding up of the Corporation, no distribution shall be made to the holders of shares of stock ranking junior (either as to dividends or upon liquidation, dissolution or winding up) to the Series A Preferred Stock unless, prior thereto, the holders of shares of Series A Preferred Stock shall have received $1.00 per share, plus an amount per share equal to accrued and unpaid dividends and distributions thereon, whether or not declared, to the date of such payment (collectively, the "Series A Liquidation Preference"). Following the payment of the full amount of the Series A Liquidation Preference, no additional distributions shall be made to the holders of shares of Series A Preferred Stock unless, prior thereto, the holders of shares of Common Stock shall have received an amount per share (the "Common Adjustment") equal to the quotient obtained by dividing (i) the Series A Liquidation Preference by (ii) 1,000 (as appropriately adjusted as set forth in subparagraph C below to reflect such events as stock splits, stock dividends and recapitalizations with respect to the Common Stock) (such number in clause (ii), the "Adjustment Number"). Following the payment of the full amount of the Series A Liquidation Preference and the Common Adjustment in respect of all outstanding shares of Series A Preferred Stock and Common Stock, respectively, holders of Series A Preferred Stock and holders of shares of Common Stock shall receive their ratable and proportionate share of the remaining assets to be distributed in the ratio, on a per share basis, of the Adjustment Number to 1 with respect to such Preferred Stock and Common Stock, on a per share basis, respectively.

(B) In the event, however, that there are not sufficient assets available to permit payment in full of the Series A Liquidation Preference and the liquidation preferences of all other series of Preferred Stock, if any, which rank on a parity with the Series A Preferred Stock, then such remaining assets shall be distributed ratably to the holders of such parity shares in proportion to their respective liquidation preferences.

(C) In the event the Corporation shall at any time (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the Adjustment Number in effect immediately prior to such event shall be adjusted by multiplying such Adjustment Number by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

7. **<u>Consolidation, Merger, etc.</u>** In case the Corporation shall enter into any consolidation, merger, combination or other transaction in which the shares of Common Stock are exchanged for or changed into other stock or securities, cash and/or any other property, then in any such case the shares of Series A Preferred Stock shall at the same time be similarly exchanged or changed in an amount per share (subject to the provision for adjustment hereinafter set forth) equal to 1,000 times the aggregate amount of stock, securities, cash and/or any other property (payable in kind), as the case may be, into which or for which each share of Common Stock is changed or exchanged. In the event the Corporation shall at any time (i) declare any dividend on Common Stock payable in shares of Common Stock, (ii) subdivide the outstanding Common Stock or (iii) combine the outstanding Common Stock into a smaller number of shares, then in each such case the amount set forth in the preceding sentence with respect to the exchange or change of shares of Series A Preferred Stock shall be adjusted by multiplying such amount by a fraction, the numerator of which is the number of shares of Common Stock outstanding immediately after such event and the denominator of which is the number of shares of Common Stock that were outstanding immediately prior to such event.

8. **<u>Redemption</u>**. The shares of a Series A Preferred Stock shall not be redeemable by the Corporation. The preceding sentence shall not limit the ability of the Corporation to purchase or otherwise deal in such shares of stock to the extent permitted by law.

9. **<u>Ranking</u>**. The Series A Preferred Stock shall rank junior to all other series of the Corporation's preferred stock (whether with or without par value) as to the payment of dividends and the distribution of assets, unless the terms of any such series shall provide otherwise.

10. **<u>Amendment</u>**. The Certificate of Incorporation of the Corporation, as amended *as* of this date, shall not be amended in any manner which would materially alter or change the powers, preferences or special rights of the Series A Preferred Stock so as to affect them adversely without the affirmative vote of the holders of a majority or more of the outstanding shares of Series A Preferred Stock, voting separately as a class.

11. **Fractional Shares.** Series A Preferred Stock may be issued in fractional shares which shall entitle the holder, in proportion to such holder's fractional shares, to exercise voting rights, receive dividends, participate in distributions and to have the benefit of all other rights of holders of Series A Preferred Stock.

IN WITNESS WHEREOF, the Corporation has caused this Certificate to be signed by N. Robert Hammer, its Chairman, President and Chief Executive Officer, and the same to be attested by Warren H. Mondschein, its Secretary, on this 14th day of November, 2008.

COMMVAULT SYSTEMS, INC.

Name: N. Robert Hammer
Title: Chairman, President and
Chief Executive Officer

Attest:

Name: Warren H. Mondschein
Title: Secretary

State of Delaware
Secretary of State
Division of Corporations
Delivered 01:24 PM 12/17/2014
FILED 12:57 PM 12/17/2014
SRV 141550217 - 2615869 FILE

CERTIFICATE OF OWNERSHIP AND MERGER

OF

COMMVAULT AMERICAS INC.
a Delaware corporation

WITH AND INTO

COMMVAULT SYSTEMS, INC.
a Delaware corporation

December 17, 2014

CommVault Systems, Inc., a Delaware corporation (the "Corporation"), which desires to merge CommVault Americas Inc., a Delaware corporation and a wholly owned subsidiary of the Corporation (the "Subsidiary"), with and into the Corporation on the terms set forth below and in the Plan of Merger (as defined below) (the "Merger"), pursuant to the provisions of Section 253 of the Delaware General Corporation Law, as amended (the "DGCL"), DOES HEREBY CERTIFY AS FOLLOWS:

FIRST: The Corporation owns 100% of the outstanding shares of each class of outstanding capital stock of the Subsidiary.

SECOND: The Corporation's board of directors, by the resolutions attached hereto as Exhibit A, which were duly adopted by unanimous written consent of the Corporation's board of directors on December 16, 2014, determined to effect the plan of merger attached hereto as Exhibit B (the "Plan of Merger").

THIRD: The Corporation does hereby merge the Subsidiary with and into the Corporation on the terms set forth in the Plan of Merger, with the Corporation being the surviving corporation of the Merger.

FOURTH:The name of the surviving corporation in the Merger is CommVault Systems, Inc., which will continue its existence as a corporation governed under the laws of the State of Delaware, under its current name, and the separate existence of the Subsidiary shall terminate effective upon the Merger becoming effective as provided in Paragraph FIFTH below.

FIFTH: The Merger shall become effective at 12:01 a.m. Eastern Standard Time on January I, 2015.

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IN WITNESS WHEREOF, the undersigned has executed this certificate as of the date first written above.

COMMVAULT SYSTEMS, INC.

By: ______________________________
Name: Warren H. Mondschein
Title: VP, General Counsel and Secretary

Exhibit A

Resolutions of the Board of Directors (the "Board") of
CommVault Systems, Inc. (the "Corporation")

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WHEREAS, the Board deems it desirable and in the best interests of the Corporation and its stockholders that the Corporation merge (the "Merger") with CommVault Americas, Inc. ("Subsidiary"), a Delaware corporation and wholly-owned subsidiary of the Corporation, with the Corporation being the surviving entity of the Merger, pursuant to the terms and provisions of that certain Plan of Merger (the "Plan of Merger") the form of which has been submitted to the Board.

NOW THEREFORE, BE 1T RESOLVED, that the Board hereby authorizes, adopts and approves in all respects and declares the advisability of the Plan of Merger and the transactions contemplated thereby, including the Merger, with such terms and provisions (and any changes thereto) as any Authorized Officer (as defined below) shall determine necessary;

FURTHER RESOLVED, that each and every officer of the Corporation (each, an "Authorized Officer") is each hereby authorized, in the name and on behalf of the Corporation, to execute and deliver the Plan of Merger and to execute and deliver any other certificates, instruments or documents, if any, as any of such Authorized Officers may deem necessary or appropriate in connection with the transactions contemplated thereby, including the Merger;

FURTHER RESOLVED, that each and every Authorized Officer is hereby authorized to take, from time to time, in the name and on behalf of the Corporation, such actions and to execute and deliver, from time to time, in the name and on behalf of the Corporation, such certificates, instruments, notices and documents as may be required or as any Authorized Officer may deem necessary, advisable or proper in order to carry out the purposes and intent of the foregoing resolutions; all such acts and things done or caused to be done, and all such certificates, instruments, notices and documents, to be performed, executed and delivered in such form as the Authorized Officer performing or executing the same may approve, such approval shall be conclusively evidenced by the performance or execution thereof by such Authorized Officer;

FURTHER RESOLVED, that each and every Authorized Officer is hereby authorized, in the name of and on behalf of the Corporation, to make any and all necessary filings and to seek any and all other consents and/or regulatory or governmental approvals, both foreign and domestic, with respect to the Merger contemplated by the Plan of Merger as may be required under applicable law or as such Authorized Officer may deem necessary or advisable;

FURTHER RESOLVED, that the Corporation is hereby authorized to pay any and all fees, costs and expenses arising in connection with the negotiation, execution and delivery of the Plan of Merger and the consummation of the transactions contemplated thereby, including the Merger; and

FURTHER RESOLVED, that any and all action heretofore or hereafter taken by each Authorized Officer of the Corporation in accordance with the foregoing resolutions is hereby approved, ratified and confirmed as the act and deed of the Corporation.

Exhibit B

Plan of Merger

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PLAN OF MERGER

OF

COMMVAULT AMERICAS INC.

WITH AND INTO

COMMVAULT SYSTEMS, INC.

December 16, 2014

This Plan of Merger (this "Plan") sets forth the terms of the merger (the "Merger") of CommVault Americas Inc., a Delaware corporation (the "Subsidiary"), with and into CommVault Systems, Inc., a Delaware corporation (the "Parent"), pursuant to the provisions of the Delaware General Corporation Law, as amended (the "DGCL"), including, without limitation, Section 253 of the DGCL.

Immediately prior to the adoption of this Plan and at all times thereafter until the Effective Time (as defined below), the Parent owned and will continue to own 100% of the issued and outstanding shares of the capital stock of the Subsidiary.

1. Effective Time. As used in this Plan, the term "Effective Time" shall mean 12:01 a.m. Eastern Standard Time on January 1, 2015.

2. The Merger. At the Effective Time, the Subsidiary shall merge with and into the Parent, the Parent absolutely and unconditionally assumes all of the liabilities and obligations of the Subsidiary and the separate corporate existence of the Subsidiary shall thereupon cease. The Parent shall be the surviving corporation in the Merger (sometimes referred to as the "Surviving Corporation") and shall continue to be governed by the laws of the State of Delaware, and the separate corporate existence of the Parent with all its rights, privileges, immunities, powers and franchises shall continue unaffected by the Merger. The Merger shall have the effects specified in Section 259 of the DGCL.

3. Terms of the Merger. At the Effective Time, automatically by virtue of the Merger and without any action on the part of any party or other person, each share of capita] stock of the Subsidiary issued and outstanding immediately prior to the Effective Time shall no longer be outstanding, shall be canceled and retired without payment of any consideration therefor, and shall cease to exist.

4. Articles of Incorporation; By-laws. The articles of incorporation and by-laws of the Parent immediately prior to the Effective Time shall be the articles of incorporation and

by-laws of the Surviving Corporation after the Effective Time and thereafter may be amended as provided in accordance with applicable law.

5. Tax Treatment. For U.S. federal income tax purposes, the Merger is intended to qualify as a liquidation of the Subsidiary within the meaning of section 332 of the Internal Revenue Code of 1986, as amended (the "Code"), and this Plan is intended to be, and is adopted as, a separate "plan of liquidation". The Parent and the Subsidiary shall treat and report the Merger in a manner consistent with the preceding sentence for all tax purposes.

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State of Delaware
Secretary of State
Division of Corporations
Delivered 10:07 AM 07/24/2017
FILED 10:07 AM 07/24/2017
SR 20175371861 - File Number 2615869

CERTIFICATE OF AMENDMENT
OF
AMENDED AND RESTATED
CERTIFICATE OF INCORPORATION
OF
COMMVAULT SYSTEMS, INC
July 24, 2017

CommVault Systems, Inc. (the "Corporation"), a corporation organized and existing under and by virtue of the General Corporation Law of the State of Delaware, as amended (the "DGCL"), DOES HEREBY CERTIFY as follows:

FIRST: That the Board of Directors of the Corporation adopted resolutions proposing and declaring advisable the following amendment to the Amended and Restated Certificate of Incorporation of the Corporation.

RESOLVED, that the Amended and Restated Certificate of Incorporation of the Corporation be amended so that Article 1 thereof shall read in its entirety as follows:

"The name of the Corporation is Commvault Systems, Inc."

SECOND: That the aforesaid amendment was duly adopted in. accordance with the applicable provisions of Section 242 of the DGCL.

[REMAINDER OF PAGE INTENTIONALLY BLANK]

IN WITNESS WHEREOF, the Corporation has caused this Certificate of Amendment to be duly executed on its behalf as of the day first indicated above.

COMMVAULT SYSTEMS, INC.

By: ______________________________

Name: Warren H. Mondschein
Title: VP, General Counsel and Secretary

Exhibit 31.1

Certification of Chief Executive Officer
Required by Rule 13a-14(a) (17 CFR 240.13a-14(a))

I, Sanjay Mirchandani, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Commvault Systems, Inc.;

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

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

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

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

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

/s/ Sanjay Mirchandani

Sanjay Mirchandani
President and Chief Executive Officer

Date: October 30, 2019

Exhibit 31.2

Certification of Chief Financial Officer
Required by Rule 13a-14(a) (17 CFR 240.13a-14(a))

I, Brian Carolan, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Commvault Systems, Inc.;

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

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

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

   (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
   (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
   (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
   (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

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

/s/ Brian Carolan

Brian Carolan
Vice President and Chief Financial Officer

Date: October 30, 2019

Exhibit 32.1

Certification Pursuant To
18 U.S.C. Section 1350
As Adopted Pursuant To
Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Quarterly Report of Commvault Systems, Inc. (the “Company”) on Form 10-Q for the period ended September 30, 2019 as filed with the Securities and Exchange Commission (the “Report”), I, Sanjay Mirchandani, President and Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

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

/s/ Sanjay Mirchandani

Sanjay Mirchandani
President and Chief Executive Officer

October 30, 2019

Exhibit 32.2

Certification Pursuant To
18 U.S.C. Section 1350
As Adopted Pursuant To
Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Quarterly Report of Commvault Systems, Inc. (the “Company”) on Form 10-Q for the period ended September 30, 2019 as filed with the Securities and Exchange Commission (the “Report”), I, Brian Carolan, Vice President and Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

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

/s/ Brian Carolan

Brian Carolan
Vice President and Chief Financial Officer

October 30, 2019