



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

FORM 10-Q

(Mark One)

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the quarterly period ended October 31, 2018

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File Number: 0-12456

AMERICAN SOFTWARE, INC.

(Exact name of registrant as specified in its charter)

Georgia
 (State or other jurisdiction of
 incorporation or organization)

470 East Paces Ferry Road, N.E., Atlanta, Georgia
 (Address of principal executive offices)

58-1098795
 (IRS Employer
 Identification Number)

30305
 (Zip Code)

(404) 261-4381
 (Registrant's telephone number, including area code)

None
 (Former name, former address and former fiscal year, if changed since last report)

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

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

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

Large accelerated filer
 Non-accelerated filer

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

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

<u>Classes</u>	<u>Outstanding at December 5, 2018</u>
Class A Common Stock, \$.10 par value	29,135,044 Shares
Class B Common Stock, \$.10 par value	1,821,587 Shares



AMERICAN SOFTWARE, INC. AND SUBSIDIARIES
Form 10-Q

Quarter ended October 31, 2018

Index

	<u>Page No.</u>
<u>Part I—Financial Information</u>	
Item 1. <u>Financial Statements (Unaudited)</u>	
<u>Condensed Consolidated Balance Sheets as of October 31, 2018 and April 30, 2018</u>	3
<u>Condensed Consolidated Statements of Operations for the Three and Six Months ended October 31, 2018 and 2017</u>	4
<u>Condensed Consolidated Statements of Cash Flows for the Six Months ended October 31, 2018 and 2017</u>	5
<u>Notes to Condensed Consolidated Financial Statements – Unaudited</u>	6
Item 2. <u>Management’s Discussion and Analysis of Financial Condition and Results of Operations</u>	23
Item 3. <u>Quantitative and Qualitative Disclosures About Market Risk</u>	36
Item 4. <u>Controls and Procedures</u>	37
<u>Part II—Other Information</u>	
Item 1. <u>Legal Proceedings</u>	38
Item 1A. <u>Risk Factors</u>	38
Item 2. <u>Unregistered Sales of Equity Securities and Use of Proceeds</u>	38
Item 3. <u>Defaults Upon Senior Securities</u>	38
Item 4. <u>Mine Safety Disclosures</u>	38
Item 5. <u>Other Information</u>	38
Item 6. <u>Exhibits</u>	38
<u>Signatures</u>	39



PART I—FINANCIAL INFORMATION

Item 1. Financial Statements

American Software, Inc. and Subsidiaries
Condensed Consolidated Balance Sheets (Unaudited)
(in thousands, except share data)

	October 31, 2018	April 30, 2018
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 50,933	\$ 52,794
Investments	29,816	26,121
Trade accounts receivable, less allowance for doubtful accounts of \$172 at October 31, 2018 and \$159 at April 30, 2018:		
Billed	17,427	18,643
Unbilled	3,104	3,375
Prepaid expenses and other current assets	6,568	6,592
Total current assets	<u>107,848</u>	<u>107,525</u>
Investments—noncurrent	1,925	8,893
Property and equipment, net of accumulated depreciation of \$28,963 at October 31, 2018 and \$28,644 at April 30, 2018	3,609	3,034
Capitalized software, net of accumulated amortization of \$26,311 at October 31, 2018 and \$24,113 at April 30, 2018	9,618	9,728
Goodwill	25,888	25,888
Other intangibles, net of accumulated amortization of \$9,449 at October 31, 2018 and \$8,255 at April 30, 2018	3,926	5,120
Other assets	3,776	2,777
Total assets	<u>\$ 156,590</u>	<u>\$162,965</u>
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	\$ 1,475	\$ 1,974
Accrued compensation and related costs	2,829	6,310
Dividends payable	3,405	3,367
Other current liabilities	1,362	1,246
Deferred revenue	29,395	33,226
Total current liabilities	<u>38,466</u>	<u>46,123</u>
Deferred income taxes	2,929	2,615
Long-term deferred revenue	—	147
Other long-term liabilities	1,107	1,496
Total liabilities	<u>42,502</u>	<u>50,381</u>
Shareholders' equity:		
Common stock:		
Class A, \$.10 par value. Authorized 50,000,000 shares: 33,721,076 and 29,132,444 shares issued and outstanding respectively at October 31, 2018 and 33,141,760 and 28,553,128 shares issued and outstanding respectively at April 30, 2018	3,372	3,314
Class B, \$.10 par value. Authorized 10,000,000 shares: 1,821,587 shares issued and outstanding at October 31, 2018 and 2,057,390 shares issued and outstanding at April 30, 2018; convertible into Class A Common Shares on a one-for-one basis	182	205
Additional paid-in capital	135,150	131,258
Retained earnings	943	3,366
Class A treasury stock, 4,588,632 shares at October 31, 2018 and April 30, 2018, at cost	<u>(25,559)</u>	<u>(25,559)</u>
Total shareholders' equity	<u>114,088</u>	<u>112,584</u>
Commitments and contingencies		
Total liabilities and shareholders' equity	<u>\$ 156,590</u>	<u>\$162,965</u>

See accompanying notes to condensed consolidated financial statements—unaudited.



American Software, Inc. and Subsidiaries
Condensed Consolidated Statements of Operations (Unaudited)
 (in thousands, except per share data)

	Three Months Ended October 31,		Six Months Ended October 31,	
	2018	2017	2018	2017
Revenues:				
License	\$ 2,012	\$ 2,449	\$ 3,714	\$ 6,464
Subscription Fees	3,341	2,041	6,509	3,660
Professional Services and other	11,056	11,008	22,064	21,431
Maintenance	<u>11,624</u>	<u>10,839</u>	<u>23,145</u>	<u>21,667</u>
Total revenues	<u>28,033</u>	<u>26,337</u>	<u>55,432</u>	<u>53,222</u>
Cost of revenues:				
License	1,760	1,651	3,474	2,966
Subscription Fees	1,289	903	2,356	1,749
Professional Services and other	8,103	7,488	16,771	14,761
Maintenance	<u>2,214</u>	<u>2,288</u>	<u>4,412</u>	<u>4,516</u>
Total cost of revenues	<u>13,366</u>	<u>12,331</u>	<u>27,013</u>	<u>23,992</u>
Gross margin	<u>14,667</u>	<u>14,006</u>	<u>28,419</u>	<u>29,230</u>
Research and development	3,332	2,643	7,007	5,151
Sales and marketing	5,304	4,437	10,484	9,670
General and administrative	4,408	3,616	8,601	7,155
Amortization of acquisition-related intangibles	97	68	194	391
Total operating expenses	<u>13,141</u>	<u>10,764</u>	<u>26,286</u>	<u>22,367</u>
Operating income	<u>1,526</u>	<u>3,242</u>	<u>2,133</u>	<u>6,863</u>
Other (expense)/income:				
Interest income	524	354	1,027	717
Other, net	<u>(714)</u>	<u>322</u>	<u>(464)</u>	<u>558</u>
Earnings before income taxes	1,336	3,918	2,696	8,138
Income tax expense	93	1,438	68	2,933
Net earnings	<u>\$ 1,243</u>	<u>\$ 2,480</u>	<u>\$ 2,628</u>	<u>\$ 5,205</u>
Earnings per common share (a):				
Basic	<u>\$ 0.04</u>	<u>\$ 0.08</u>	<u>\$ 0.09</u>	<u>\$ 0.17</u>
Diluted	<u>\$ 0.04</u>	<u>\$ 0.08</u>	<u>\$ 0.08</u>	<u>\$ 0.17</u>
Cash dividends declared per common share	<u>\$ 0.11</u>	<u>\$ 0.11</u>	<u>\$ 0.22</u>	<u>\$ 0.22</u>
Shares used in the calculation of earnings per common share:				
Basic	<u>30,926</u>	<u>29,906</u>	<u>30,825</u>	<u>29,788</u>
Diluted	<u>31,477</u>	<u>30,229</u>	<u>31,412</u>	<u>30,110</u>

(a) Basic per share amounts are the same for Class A and Class B shares. Diluted per share amounts for Class A shares are shown above. Diluted earnings per share for Class B shares under the two-class method are \$0.04 and \$0.08 for the three months ended October 31, 2018 and 2017, and \$0.09 and \$0.17 for the six months ended October 31, 2018 and 2017, respectively. See Note D to the Condensed Consolidated Financial Statements.

See accompanying notes to condensed consolidated financial statements—unaudited.



American Software, Inc. and Subsidiaries
Condensed Consolidated Statements of Cash Flows (Unaudited)
(in thousands)

	Six Months Ended October 31,	
	2018	2017
Cash flows from operating activities:		
Net earnings	\$ 2,628	\$ 5,205
Adjustments to reconcile net earnings to net cash provided by operating activities:		
Depreciation and amortization	3,711	2,705
Stock-based compensation expense	841	793
Net loss (gain) on investments	312	(381)
Deferred income taxes	(265)	761
Changes in operating assets and liabilities:		
Purchases of trading securities	(6,456)	(14,057)
Proceeds from maturities and sales of trading securities	9,417	8,452
Accounts receivable, net	2,162	3,243
Prepaid expenses and other assets	242	(1,758)
Accounts payable and other liabilities	(4,333)	(2,734)
Deferred revenue	(3,457)	(1,709)
Net cash provided by operating activities	<u>4,802</u>	<u>520</u>
Cash flows from investing activities:		
Capitalized computer software development costs	(2,088)	(2,617)
Purchases of property and equipment, net of disposals	(894)	(212)
Net cash used in investing activities	<u>(2,982)</u>	<u>(2,829)</u>
Cash flows from financing activities:		
Proceeds from exercise of stock options	3,086	4,079
Dividends paid	(6,767)	(6,529)
Net cash used in financing activities	<u>(3,681)</u>	<u>(2,450)</u>
Net change in cash and cash equivalents	(1,861)	(4,759)
Cash and cash equivalents at beginning of period	52,794	66,001
Cash and cash equivalents at end of period	<u>\$50,933</u>	<u>\$ 61,242</u>

See accompanying notes to condensed consolidated financial statements—unaudited.



AMERICAN SOFTWARE, INC. AND SUBSIDIARIES
Notes to Condensed Consolidated Financial Statements—Unaudited
October 31, 2018

A. Presentation and Summary of Significant Accounting Policies

Basis of Presentation

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles for interim financial information and the instructions to Form 10-Q and Rule 10-01 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required for complete financial statements. In the opinion of our management, these condensed consolidated financial statements contain all normal recurring adjustments considered necessary for a fair presentation of the Company's financial position at October 31, 2018, results of operations for the three and six months ended October 31, 2018 and 2017 and cash flows for the six months ended October 31, 2018 and 2017. The Company's results for the three and six months ended October 31, 2018 are not necessarily indicative of the results expected for the full year. You should read these statements in conjunction with our audited consolidated financial statements and management's discussion and analysis and results of operations included in our Annual Report on Form 10-K (the "Annual Report") for the fiscal year ended April 30, 2018. The terms "fiscal 2019" and "fiscal 2018" refer to our fiscal years ending April 30, 2019 and 2018, respectively.

The preparation of these consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosures of contingent assets and liabilities, at the date of the condensed consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Note 1 in the Notes to the Consolidated Financial Statements for the fiscal year ended April 30, 2018 contained in the Annual Report describes the significant accounting policies that we have used in preparing our consolidated financial statements. On an ongoing basis, we evaluate our estimates, including but not limited to those related to revenue/collectability, stock-based compensation, income taxes and contingencies. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Our actual results could differ materially from these estimates under different assumptions or conditions. The accompanying condensed consolidated balance sheet as of April 30, 2018 and the condensed consolidated statements of operations for the three and six months and cash flows for the six months ended October 31, 2017 have not been revised for the effects of Topic 606 and are therefore not comparable to the October 31, 2018 period.

Principles of Consolidation

The accompanying unaudited condensed consolidated financial statements include the accounts of American Software, Inc. ("American Software") and its wholly-owned subsidiaries (collectively, the "Company"). All significant intercompany balances and transactions have been eliminated in consolidation.

Recent Accounting Pronouncements

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, *Revenue from Contracts with Customers (Topic 606)*, which replaces the existing revenue recognition guidance. The Company adopted the new revenue standard effective May 1, 2018 using the modified retrospective transition method. Under this method, the Company elected to apply the cumulative effect method to contracts that are not complete as of the adoption date. The Company's total revenue impact is \$1.2 million, with approximately 70% impacting the fiscal year ending April 30, 2019, which is the result of recognizing revenue for the license component of its term licenses and certain perpetual license contracts that were previously recognized over time due to the lack of vendor-specific objective evidence (VSOE) of fair value at the point-in-time at which control of the software license is transferred to the customer, rather than ratably over the term of the contract. In addition, under the new standard, the Company will capitalize a portion of sales commission expenses and recognize them ratably over the associated period of economic benefit which the Company has determined to be six years, which has an impact of \$1.1 million. As a result, the cumulative impact due to the adoption of the new revenue standard on the opening consolidated balance sheet was an increase in opening retained earnings, with a corresponding increase to contract assets and a decrease in deferred revenue.



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The following table presents the cumulative effect of adjustments, net of income tax effects, to beginning consolidated balance sheet accounts for the new accounting standard adopted by the Company on the first day of fiscal 2019:

	April 30, 2018	Topic 606 (in thousands)	May 1, 2018
ASSETS			
Current assets:			
Cash and cash equivalents	\$ 52,794	\$ —	\$ 52,794
Investments	26,121	—	26,121
Trade accounts receivable, net			
Billed	18,643	—	18,643
Unbilled	3,375	440	3,815
Prepaid expenses and other current assets	6,592	126	6,718
Total current assets	107,525	566	108,091
Investments—Noncurrent	8,893	—	8,893
Property and equipment, net	3,034	—	3,034
Capitalized software, net	9,728	—	9,728
Goodwill	25,888	—	25,888
Other intangibles, net	5,120	—	5,120
Other assets	2,777	1,325	4,102
Total assets	<u>\$162,965</u>	<u>\$ 1,891</u>	<u>\$164,856</u>
LIABILITIES AND SHAREHOLDERS' EQUITY			
Current liabilities:			
Accounts payable	\$ 1,974	\$ —	\$ 1,974
Accrued compensation and related costs	6,310	—	6,310
Dividends payable	3,367	—	3,367
Other current liabilities	1,246	80	1,326
Deferred revenue	33,226	(521)	32,705
Total current liabilities	46,123	(441)	45,682
Deferred income taxes	2,615	579	3,194
Long-term deferred revenue	147	—	147
Other long-term liabilities	1,496	—	1,496
Total liabilities	50,381	138	50,519
Shareholders' equity:			
Common stock:			
Class A	3,314	—	3,314
Class B	205	—	205
Additional paid-in capital	131,258	—	131,258
Retained earnings	3,366	1,753	5,119
Class A treasury stock	(25,559)	—	(25,559)
Total shareholders' equity	112,584	1,753	114,337
Total liabilities and shareholders' equity	<u>\$162,965</u>	<u>\$ 1,891</u>	<u>\$164,856</u>



The following table summarizes the effects of adopting Topic 606 on the Company's condensed consolidated balance sheet as of October 31, 2018:

	<u>As reported under Topic 606</u>	<u>Adjustments (in thousands)</u>	<u>Balances under Prior GAAP</u>
ASSETS			
Current assets:			
Cash and cash equivalents	\$ 50,933	\$ —	\$ 50,933
Investments	29,816	—	29,816
Trade accounts receivable, net		—	
Billed	17,427	—	17,427
Unbilled	3,104	(389)	2,715
Prepaid expenses and other current assets	6,568	(251)	6,317
Total current assets	<u>107,848</u>	<u>(640)</u>	<u>107,208</u>
Investments—Noncurrent	1,925	—	1,925
Property and equipment, net	3,609	—	3,609
Capitalized software, net	9,618	—	9,618
Goodwill	25,888	—	25,888
Other intangibles, net	3,926	—	3,926
Other assets	3,776	(1,191)	2,585
Total assets	<u>\$ 156,590</u>	<u>\$ (1,831)</u>	<u>\$ 154,759</u>
LIABILITIES AND SHAREHOLDERS' EQUITY			
Current liabilities:			
Accounts payable	\$ 1,475	\$ —	\$ 1,475
Accrued compensation and related costs	2,829	—	2,829
Dividends payable	3,405	—	3,405
Other current liabilities	1,362	(80)	1,282
Deferred revenue	29,395	619	30,014
Total current liabilities	<u>38,466</u>	<u>539</u>	<u>39,005</u>
Deferred income taxes	2,929	(584)	2,345
Long-term deferred revenue	—	—	—
Other long-term liabilities	1,107	—	1,107
Total liabilities	<u>42,502</u>	<u>(45)</u>	<u>42,457</u>
Shareholders' equity:			
Common stock:			
Class A	3,372	—	3,372
Class B	182	—	182
Additional paid-in capital	135,150	—	135,150
Retained earnings	943	(1,786)	(843)
Class A treasury stock	(25,559)	—	(25,559)
Total shareholders' equity	<u>114,088</u>	<u>(1,786)</u>	<u>112,302</u>
Commitments and contingencies			
Total liabilities and shareholders' equity	<u>\$ 156,590</u>	<u>\$ (1,831)</u>	<u>\$ 154,759</u>



The following table summarizes the effects of adopting Topic 606 on the Company's condensed consolidated statement of operations for the three months ended October 31, 2018:

	As reported under Topic 606	Adjustments (in thousands, except per share amounts)	Balances under Prior GAAP
Revenues:			
License	\$ 2,012	\$ 391	\$ 2,403
Subscription Fees	3,341	2	3,343
Professional Services and other	11,056	46	11,102
Maintenance	11,624	—	11,624
Total revenues	<u>28,033</u>	<u>439</u>	<u>28,472</u>
Cost of revenues:			
License	1,760	—	1,760
Subscription Fees	1,289	—	1,289
Professional Services and other	8,103	—	8,103
Maintenance	2,214	—	2,214
Total cost of revenues	<u>13,366</u>	<u>—</u>	<u>13,366</u>
Gross margin	<u>14,667</u>	<u>439</u>	<u>15,106</u>
Research and development	3,332		3,332
Sales and marketing	5,304	63	5,368
General and administrative	4,408	—	4,408
Amortization of acquisition-related intangibles	97	—	97
Total operating expenses	<u>13,141</u>	<u>63</u>	<u>13,204</u>
Operating income	<u>1,526</u>	<u>376</u>	<u>1,902</u>
Other income:			
Interest income	524	—	524
Other, net	(714)	—	(714)
Earnings before income taxes	<u>1,336</u>	<u>376</u>	<u>1,712</u>
Income tax expense	93	71	164
Net earnings	<u>\$ 1,243</u>	<u>\$ 305</u>	<u>\$ 1,548</u>
Earnings per common share:			
Basic	<u>\$ 0.04</u>	<u>\$ 0.01</u>	<u>\$ 0.05</u>
Diluted	<u>\$ 0.04</u>	<u>\$ 0.01</u>	<u>\$ 0.05</u>



The following table summarizes the effects of adopting Topic 606 on the Company's condensed consolidated statement of operations for the six months ended October 31, 2018:

	As reported under Topic 606	Adjustments (in thousands, except per share amounts)	Balances under Prior GAAP
Revenues:			
License	\$ 3,714	\$ (55)	\$ 3,659
Subscription Fees	6,509	4	6,513
Professional Services and other	22,064	106	22,170
Maintenance	23,145	—	23,145
Total revenues	<u>55,432</u>	<u>55</u>	<u>55,487</u>
Cost of revenues:			
License	3,474	—	3,474
Subscription Fees	2,356	—	2,356
Professional Services and other	16,771	—	16,771
Maintenance	4,412	—	4,412
Total cost of revenues	<u>27,013</u>	<u>—</u>	<u>27,013</u>
Gross margin	<u>28,419</u>	<u>55</u>	<u>28,474</u>
Research and development	7,007		7,007
Sales and marketing	10,484	93	10,577
General and administrative	8,601	—	8,601
Amortization of acquisition-related intangibles	194	—	194
Total operating expenses	<u>26,286</u>	<u>93</u>	<u>26,379</u>
Operating income	<u>2,133</u>	<u>(38)</u>	<u>2,095</u>
Other income:			
Interest income	1,027	—	1,027
Other, net	(464)	—	(464)
Earnings before income taxes	<u>2,696</u>	<u>(38)</u>	<u>2,658</u>
Income tax expense (benefit)	68	(5)	63
Net earnings	<u>\$ 2,628</u>	<u>\$ (33)</u>	<u>\$ 2,595</u>
Earnings per common share:			
Basic	<u>\$ 0.09</u>	<u>\$ —</u>	<u>\$ 0.09</u>
Diluted	<u>\$ 0.08</u>	<u>\$ —</u>	<u>\$ 0.08</u>



The Company’s net cash provided by operating activities for the six months ended October 31, 2018 did not change due to the adoption of Topic 606. The following table summarizes the effects of adopting Topic 606 on the financial statement line items of the Company’s condensed consolidated statement of cash flows for the six months ended October 31, 2018:

	<u>As reported under Topic 606</u>	<u>Adjustments (in thousands)</u>	<u>Balances under Prior GAAP</u>
Net earnings (loss)	\$ 2,628	\$ (33)	\$ 2,595
Deferred income taxes	\$ (265)	\$ (5)	\$ (270)
Changes in operating assets and liabilities:			
Accounts receivable, net	\$ 2,162	\$ (51)	\$ 2,111
Prepaid expenses and other assets	\$ 242	\$ (9)	\$ 233
Accounts payable and other liabilities	\$ (4,333)	\$ —	\$ (4,333)
Deferred revenue	\$ (3,457)	\$ 98	\$ (3,359)
Net cash provided by operating activities	\$ (3,023)	\$ —	\$ (3,023)

In February 2016, the FASB issued ASU No. 2016-02, *Leases (Topic 842)*, to increase transparency and comparability among organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. The ASU is effective for annual periods beginning after December 15, 2018, including interim periods within those fiscal years. Early adoption of the update is permitted. The Company currently expects that most of its operating lease commitments will be subject to the new standard and recognized as operating lease liabilities and right-of-use assets upon adoption.

B. Revenue Recognition

We recognize revenue when we transfer control of the promised goods or services to our customers, in an amount that reflects the consideration we expect to receive in exchange for those goods or services. We derive our revenue from software licenses; maintenance services; consulting, implementation and training services; and software-as-a-service (“SaaS”), which includes a subscription to our software as well as maintenance, hosting and managed services.

The Company determines revenue recognition through the following steps:

- Step 1 – Identification of the Contract with the Customer
- Step 2 – Identification of Promised Goods and Services and Evaluation of Whether the Promised Goods and Services are Distinct Performance Obligations
- Step 3 – Determination of the Transaction Price
- Step 4 – Allocation of the Transaction Price to Distinct Performance Obligations
- Step 5 – Attribution of Revenue for Each Distinct Performance Obligation

Nature of Products and Services.

Licenses. Our perpetual software licenses provide the customer with a right to use the software as it exists at the time of purchase. We recognize revenue for distinct software licenses once the license period has begun and we have made the software available to the customer.

Our perpetual software licenses are sold with maintenance under which we provide customers with telephone consulting, product updates on a when and if available basis, and releases of new versions of products previously purchased by the customer, as well as error reporting and correction services.

Subscription Fees. Subscription fees include SaaS revenues for the right to use the software for a limited period of time in an environment hosted by the Company or by a third party. The customer accesses and uses the software on an as-needed basis over the Internet or via a dedicated line; however, the customer has no right to take delivery of the software without incurring a significant penalty. The underlying arrangements typically include a single fee for the service that is billed monthly, quarterly or annually. The Company’s SaaS solutions represent a series of distinct services that are substantially the same and have the same pattern of transfer to the customer. Revenue from a SaaS solution is generally recognized ratably over the term of the arrangement.

Professional Services and other. Our services revenue consists of fees generated from consulting, implementation and training services, including reimbursements of out-pocket expenses in connection with our services. Services are typically optional to our customers, and are distinct from our software. Fees for our services are separately priced and are generally billed on an hourly basis, and revenue is recognized over time as the services are performed. We believe the output method of hours worked provides the best depiction of the transfer of our services since the customer is receiving the benefit from our services as the



work is performed. The total amount of expense reimbursement included in professional services and other revenue was approximately \$388,000 and \$719,000 for the three and six months ended October 31, 2018, respectively, and approximately \$421,000 and \$947,000 for the three and six months ended October 31, 2017, respectively.

Maintenance. Revenue is derived from maintenance under which we provide customers with telephone consulting, product updates on a when and if available basis, and releases of new versions of products previously purchased by the customer, as well as error reporting and correction services. Maintenance for perpetual licenses is renewable, generally on an annual basis, at the option of the customer. Maintenance terms typically range from one to three years. Revenue related to maintenance is generally paid in advance and recognized ratably over the term of the agreement since the Company is standing ready to provide a series of maintenance services that are substantially the same each period over the term; therefore, time is the best measure of progress.

Indirect Channel Revenue. We record revenues from sales made through the indirect sales channels on a gross basis, because we control the goods or services and act as the principal in the transaction. In reaching this determination, we evaluated sales through our indirect channel on a case-by-case basis and considered a number of factors including indicators of control such as the party having the primary responsibility to provide specified goods or services, and the party having discretion in establishing prices.

Sales Taxes. We account for sales taxes collected from customers on a net basis.

Significant Judgments. Our contracts with customers typically contain promises to transfer multiple products and services to a customer. Judgment is required to determine whether each product and service is considered to be a distinct performance obligation that should be accounted for separately under the contract. We allocate the transaction price to distinct performance obligations based on their relative standalone selling price (“SSP”). We estimate SSP primarily based on the prices charged to customers for products or services sold on a standalone basis, or by using information such as market conditions and other observable inputs. However, the selling prices of our software licenses are highly variable or uncertain. Therefore, we estimate SSP for software licenses using the residual approach, determined based on total transaction price less the SSP of other products and services promised in the contract. When performing relative selling price allocations, we use the contract price as the estimate of SSP if it falls within the Company’s range estimate of SSP since any point within the range would be a valid price point on a standalone basis. If the contract price falls outside of the range of SSP, the Company will use the nearest point in the SSP range in its relative selling price allocation.

Contract Balances. Timing of invoicing to customers may differ from timing of revenue recognition and these timing differences result in receivables, contract assets (unbilled accounts receivable), or contract liabilities (deferred revenue) on the Company’s Condensed consolidated balance sheets. Fees for our software licenses are generally due within 30 days of contract execution. We have an established history of collecting under the terms of our software license contracts without providing refunds or concessions to our customers. SaaS solutions and maintenance are typically billed in advance on a monthly, quarterly, or annual basis. Services are typically billed as performed. In instances where the timing of revenue recognition differs from the timing of invoicing, we have determined that our contracts generally do not include a significant financing component. The primary purpose of our invoicing terms is to provide customers with predictable ways to purchase our software and services, not to provide or receive financing. Additionally, we are applying the practical expedient to exclude any financing component from consideration for any contracts with payment terms of one year or less since we rarely offer terms extending beyond one year. The consideration in our customer contracts is fixed.

We have an unconditional right to consideration for all goods and services transferred to our customers. That unconditional right to consideration is reflected in billed and unbilled accounts receivable in the accompanying condensed consolidated balance sheet in accordance with FASB Accounting Standards Codification (“ASC”) Topic 606.

Deferred revenue consists of amounts collected prior to having completed the performance of maintenance, SaaS, hosting, and managed services. We typically invoice customers for cloud subscription and support fees in advance on a monthly, quarterly or annual basis, with payment due at the start of the cloud subscription or support term. During the six months ended October 31, 2018, we recognized \$13 million of revenue that was included in the deferred revenue balance as of April 30, 2018, as adjusted for Topic 606, at the beginning of the period.

	October 31, 2018	May 1, 2018
Contract Balances:		
Contract assets, current	\$ 3,104	\$ 3,815
Contract assets, long-term	1,394	332
Total contract assets	<u>\$ 4,498</u>	<u>\$ 4,147</u>
Deferred revenue, current	\$ 29,395	\$32,705
Deferred revenue, long-term	—	147
Total deferred revenue	<u>\$ 29,395</u>	<u>\$32,852</u>



Remaining Performance Obligations. A performance obligation is a promise in a contract to transfer a distinct good or service to the customer and is the unit of account under Topic 606. The transaction price is allocated to each distinct performance obligation and recognized as revenue when, or as, the performance obligation is satisfied by transferring the promised good or service to the customer. The Company identifies and tracks the performance obligations at contract inception so that the Company can monitor and account for the performance obligations over the life of the contract. Remaining performance obligations represent the transaction price of orders for which products have not been delivered or services have not been performed. As of October 31, 2018, the aggregate amount of the transaction price allocated to remaining performance obligations was approximately \$54 million. The Company expects to recognize revenue on approximately three-quarters of the remaining performance obligations over the next 12 months, with the remainder recognized thereafter.

Disaggregated Revenue. The Company disaggregates revenue from contracts with customers by geography, as it believes it best depicts how the nature, amount, timing and uncertainty of revenue and cash flows are affected by economic factors.



The Company's revenue by geography is as follows:

	Three Months Ended October 31,		Six Months Ended October 31,	
	2018	2017	2018	2017
Revenues:				
Domestic	\$22,502	\$20,996	\$44,454	\$42,542
International	5,531	5,341	10,978	10,680
	<u>\$28,033</u>	<u>\$26,337</u>	<u>\$55,432</u>	<u>\$53,222</u>

Practical Expedients and Exemptions. There are several practical expedients and exemptions allowed under Topic 606 that impact the timing of revenue recognition and the Company's disclosures. Below is a list of practical expedients the Company applied in the adoption and application of Topic 606:

-The Company does not evaluate a contract for a significant financing component if payment is expected within one year or less from the transfer of the promised items to the customer.

-The Company does not disclose the value of unsatisfied performance obligations for contracts for which the Company recognizes revenue at the amount to which it has the right to invoice for services performed (apply to time-and-material engagements).

Contract costs. The Company capitalizes the incremental costs of obtaining a contract with a customer if the Company expects to recover those costs. The incremental costs of obtaining a contract are those that the Company incurs to obtain a contract with a customer that it would not have incurred if the contract had not been obtained (for example, a sales commission). The Company capitalizes the costs incurred to fulfill a contract only if those costs meet all of the following criteria:

- a. The costs relate directly to a contract or to an anticipated contract that the Company can specifically identify.
- b. The costs generate or enhance resources of the Company that will be used in satisfying (or in continuing to satisfy) performance obligations in the future.
- c. The costs are expected to be recovered.

Certain sales commissions incurred by the Company were determined to be incremental costs to obtain the related contracts, which are deferred and amortized ratably over the economic benefit period. These deferred commission costs are classified as current or non-current based on the timing of when the Company expects to recognize the expense. The current and non-current portions of deferred commissions are included in prepaid expenses and other current assets and other long-term assets, respectively, in the Company's condensed consolidated balance sheets. Total deferred commissions at October 31, 2018 and April 30, 2018 were \$2.3 million and \$2.5 million, respectively. Amortization of sales commissions was \$0.4 million for the three months ended October 31, 2018 and \$0.6 million for the six months ended October 31, 2018, which is included in sales and marketing expense in the accompanying condensed consolidated statements of operations. No impairment losses were recognized during the periods.

C. Declaration of Dividend Payable

On August 22, 2018, our Board of Directors declared a quarterly cash dividend of \$0.11 per share of our Class A and Class B common stock. The cash dividend is payable on December 5, 2018 to Class A and Class B shareholders of record at the close of business on November 19, 2018.

D. Earnings Per Common Share

We have two classes of common stock: Class A Common Shares and Class B Common Shares. Our Class B Common Shares are convertible into Class A Common Shares at any time, on a one-for-one basis. Under our Articles of Incorporation, if we declare dividends, holders of Class A Common Shares shall receive a \$0.05 dividend per share prior to the Class B Common Shares receiving any dividend and holders of Class A Common Shares shall receive a dividend at least equal to Class B Common Shares dividends on a per share basis. As a result, we have computed the earnings per share in accordance with Earnings Per Share within the Presentation Topic of the FASB ASC, which requires companies that have multiple classes of equity securities to use the "two-class" method in computing earnings per share.

For our basic earnings per share calculation, we use the "two-class" method. Basic earnings per share are calculated by dividing net earnings attributable to each class of common stock by the weighted average number of shares outstanding. All undistributed earnings are allocated evenly between Class A and B Common Shares in the earnings per share calculation to the extent that earnings equal or exceed \$0.05 per share. This allocation is based on management's judgment after considering the dividend rights of the two classes of common stock, the control of the Class B shareholders and the convertibility rights of the Class B Common Shares into Class A Common Shares.



The calculation of diluted earnings per share is similar to the calculation of basic earnings per share, except that the calculation includes the dilutive effect of the assumed exercise of options issuable under our stock incentive plans. For our diluted earnings per share calculation for Class A Common Shares, we use the “if-converted” method. This calculation assumes that all Class B Common Shares are converted into Class A Common Shares (if antidilutive) and, as a result, assumes there are no holders of Class B Common Shares to participate in undistributed earnings.

For our diluted earnings per share calculation for Class B Common Shares, we use the “two-class” method. This calculation does not assume that all Class B Common Shares are converted into Class A Common Shares. In addition, this method assumes the dilutive effect if Class A stock options are converted to Class A Common Shares and the undistributed earnings are allocated evenly to both Class A and B Common Shares including Class A Common Shares issued pursuant to those converted stock options. This allocation is based on management’s judgment after considering the dividend rights of the two classes of common stock, the control of the Class B shareholders and the convertibility rights of the Class B Common Shares into Class A Common Shares.

The following tables set forth the computation of basic earnings per common share and diluted earnings per common share (in thousands except for per share amounts):

Basic earnings per common share:

	Three Months Ended October 31, 2018		Six Months Ended October 31, 2018	
	Class A Common Shares	Class B Common Shares	Class A Common Shares	Class B Common Shares
Distributed earnings	\$ 0.11	\$ 0.11	\$ 0.22	\$ 0.22
Undistributed losses	(0.07)	(0.07)	(0.13)	(0.13)
Total	\$ 0.04	\$ 0.04	\$ 0.09	\$ 0.09
Distributed earnings	\$ 3,200	\$ 205	\$ 6,396	\$ 409
Undistributed losses	(2,033)	(129)	(3,927)	(250)
Total	\$ 1,167	\$ 76	\$ 2,469	\$ 159
Basic weighted average common shares outstanding	29,104	1,822	28,959	1,866

	Three Months Ended October 31, 2017		Six Months Ended October 31, 2017	
	Class A Common Shares	Class B Common Shares	Class A Common Shares	Class B Common Shares
Distributed earnings	\$ 0.11	\$ 0.11	\$ 0.22	\$ 0.22
Undistributed losses	(0.03)	(0.03)	(0.05)	(0.05)
Total	\$ 0.08	\$ 0.08	\$ 0.17	\$ 0.17
Distributed earnings	\$ 3,064	\$ 249	\$ 6,078	\$ 505
Undistributed losses	(768)	(65)	(1,269)	(109)
Total	\$ 2,296	\$ 184	\$ 4,809	\$ 396
Basic weighted average common shares outstanding	27,589	2,317	27,448	2,340



Diluted EPS for Class A Common Shares Using the If-Converted Method
Three Months Ended October 31, 2018

	Undistributed & Distributed Earnings to Class A Common Shares	Class A Common Shares	EPS*
Per Basic	\$ 1,167	29,104	\$0.04
Common Stock Equivalents	—	552	—
	<u>1,167</u>	<u>29,656</u>	<u>0.04</u>
Class B Common Share Conversion	76	1,822	—
Diluted EPS for Class A Common Shares	<u>\$ 1,243</u>	<u>31,478</u>	<u>\$0.04</u>

Six Months Ended October 31, 2018

	Undistributed & Distributed Earnings to Class A Common Shares	Class A Common Shares	EPS*
Per Basic	\$ 2,469	28,959	\$0.09
Common Stock Equivalents	—	587	—
	<u>2,469</u>	<u>29,546</u>	<u>0.08</u>
Class B Common Share Conversion	159	1,866	—
Diluted EPS for Class A Common Shares	<u>\$ 2,628</u>	<u>31,412</u>	<u>\$0.08</u>

Three Months Ended October 31, 2017

	Undistributed & Distributed Earnings to Class A Common Shares	Class A Common Shares	EPS*
Per Basic	\$ 2,296	27,589	\$0.08
Common Stock Equivalents	—	323	—
	<u>2,296</u>	<u>27,912</u>	<u>0.08</u>
Class B Conversion	184	2,317	—
Diluted EPS for Class A Common Shares	<u>\$ 2,480</u>	<u>30,229</u>	<u>\$0.08</u>

Six Months Ended October 31, 2017

	Undistributed & Distributed Earnings to Class A Common Shares	Class A Common Shares	EPS*
Per Basic	\$ 4,809	27,448	\$0.17
Common Stock Equivalents	—	322	—
	<u>4,809</u>	<u>27,770</u>	<u>0.17</u>
Class B Conversion	396	2,340	—
Diluted EPS for Class A Common Shares	<u>\$ 5,205</u>	<u>30,110</u>	<u>\$0.17</u>



Diluted EPS for Class B Common Shares Using the Two-Class Method
Three Months Ended October 31, 2018

	Undistributed & Distributed Earnings to Class B Common Shares	Class B Common Shares	EPS*
Per Basic	\$ 76	1,822	\$0.04
Reallocation of undistributed earnings from Class A Common Shares to Class B Common Shares	2	—	—
Diluted EPS for Class B Common Shares	<u>\$ 78</u>	<u>1,822</u>	<u>\$0.04</u>

Six Months Ended October 31, 2018

	Undistributed & Distributed Earnings to Class B Common Shares	Class B Common Shares	EPS*
Per Basic	\$ 159	1,866	\$0.09
Reallocation of undistributed earnings from Class A Common Shares to Class B Common Shares	—	—	—
Diluted EPS for Class B Common Shares	<u>\$ 159</u>	<u>1,866</u>	<u>\$0.09</u>

Three Months Ended October 31, 2017

	Undistributed & Distributed Earnings to Class B Common Shares	Class B Common Shares	EPS*
Per Basic	\$ 184	2,317	\$0.08
Reallocation of undistributed earnings from Class A Common Shares to Class B Common Shares	—	—	—
Diluted EPS for Class B Common Shares	<u>\$ 184</u>	<u>2,317</u>	<u>\$0.08</u>

Six Months Ended October 31, 2017

	Undistributed & Distributed Earnings to Class B Common Shares	Class B Common Shares	EPS*
Per Basic	\$ 396	2,340	\$0.17
Reallocation of undistributed earnings from Class A Common Shares to Class B Common Shares	1	—	—
Diluted EPS for Class B Common Shares	<u>\$ 397</u>	<u>2,340</u>	<u>\$0.17</u>

* Amounts adjusted for rounding



For the three and six months ended October 31, 2018, we excluded options to purchase 12,000 and 6,065 Class A Common Shares, respectively, and for the three and six months ended October 31, 2017, we excluded options to purchase 1,184,124 and 1,105,521 Class A Common Shares, respectively, from the computation of diluted earnings per Class A Common Shares. We excluded these option share amounts because the exercise prices of those options were greater than the average market price of the Class A Common Shares during the applicable period. As of October 31, 2018, we had a total of 4,119,923 options outstanding and as of October 31, 2017, we had a total of 3,440,512 options outstanding.

E. Stock-Based Compensation

During the six months ended October 31, 2018 and 2017, we granted options for 1,189,000 and 884,000 shares of Class A common stock, respectively. The fair value of each option award is estimated on the date of grant using the Black-Scholes option pricing model. The forfeiture rates are estimated using historical data. We recorded stock option compensation cost of approximately \$443,000 and \$477,000 and income tax excess benefits of approximately \$12,000 and shortfall of \$47,000 from option exercises during the three months ended October 31, 2018 and 2017, respectively. We recorded stock option compensation cost of approximately \$841,000 and \$793,000, and income tax excess benefits of approximately \$286,000 and \$80,000 from option exercises during the six months ended October 31, 2018 and 2017, respectively. We record stock-based compensation expense on a straight-line basis over the vesting period directly to additional paid-in capital.

During the six months ended October 31, 2018 and 2017, we issued 343,000 and 482,000 shares of Class A common stock, respectively, resulting from the exercise of stock options. The total intrinsic value of options exercised during the six months ended October 31, 2018 and 2017 based on market value at the exercise dates was approximately \$1.9 million and \$1.3 million, respectively. As of October 31, 2018, unrecognized compensation cost related to unvested stock option awards approximated \$5.4 million, which we expect to recognize over a weighted average period of 2.04 years.

F. Fair Value of Financial Instruments

We measure our investments based on a fair value hierarchy disclosure framework that prioritizes and ranks the level of market price observability used in measuring assets and liabilities at fair value. A number of factors affect market price observability, including the type of asset or liability and its characteristics. This hierarchy prioritizes the inputs into three broad levels as follows:

- Level 1—Quoted prices for identical instruments in active markets.
- Level 2—Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs and significant value drivers are observable in active markets.
- Level 3—Valuations derived from valuation techniques in which one or more significant inputs or significant value drivers are unobservable.

The following is a general description of the valuation methodologies we use for financial assets and liabilities measured at fair value, including the general classification of such assets and liabilities pursuant to the valuation hierarchy.

Cash Equivalents—Cash equivalents include investments in government obligation based money-market funds, other money market instruments and interest-bearing deposits with initial terms of three months or less. The fair value of cash equivalents approximates its carrying value due to the short-term nature of these instruments.

Marketable Securities—Marketable securities utilizing Level 1 inputs include active exchange-traded equity securities and equity index funds, and most U.S. Government debt securities, as these securities all have quoted prices in active markets. Marketable securities utilizing Level 2 inputs include municipal bonds. We value these securities using market-corroborated pricing or other models that use observable inputs such as yield curves.



The following tables present our assets and liabilities that we measured at fair value on a recurring basis as of October 31, 2018 and April 30, 2018, respectively, and indicates the fair value hierarchy of the valuation techniques we used to determine such fair value (in thousands):

	October 31, 2018			Balance
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
Cash equivalents	\$ 43,193	\$ —	\$ —	\$43,193
Marketable securities	9,676	22,065	—	31,741
Total	\$ 52,869	\$ 22,065	\$ —	\$74,934

	April 30, 2018			Balance
	Quoted Prices in Active Markets for Identical Assets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)	
Cash equivalents	\$ 46,972	\$ —	\$ —	\$46,972
Marketable securities	11,125	23,889	—	35,014
Total	\$ 58,097	\$ 23,889	\$ —	\$81,986



G. Stock Repurchases

On August 19, 2002, our Board of Directors authorized the repurchase of up to an additional 2.0 million shares of our Class A common stock. We have made and will make these repurchases through open market purchases at prevailing market prices. The timing of any repurchase will depend upon market conditions, the market price of our Class A common stock and management's assessment of our liquidity and cash flow needs. Under this repurchase plan, through October 31, 2018, we have repurchased 1,053,679 shares of Class A common stock at a cost of approximately \$6.2 million. As of October 31, 2018, under all repurchase plans previously authorized, including this most recent plan, we have repurchased a total of 4,588,632 shares of common stock at a cost of approximately \$25.6 million.

H. Comprehensive Income

We have not included condensed consolidated statements of comprehensive income in the accompanying unaudited condensed consolidated financial statements since comprehensive income and net earnings presented in the accompanying condensed consolidated statements of operations would be substantially the same.

I. Industry Segments

FASB ASC 280, *Segment Reporting*, establishes standards for reporting information about operating segments. Operating segments are defined as components of a public entity about which separate financial information is available that is evaluated regularly by the chief operating decision makers ("CODMs"), or decision making group, in deciding how to allocate resources and in assessing performance. Our CODMs are our Principal Executive Officer ("PEO") and President. While our CODMs are apprised of a variety of financial metrics and information, we manage our business primarily on a segment basis, with the CODMs evaluating performance based upon segment operating profit or loss, with certain corporate and other common expenses included in the Other segment. Our CODMs review the operating results of our three segments, assess performance and allocate resources in a manner that is consistent with the changing market dynamics that we have experienced. We recently updated our operating segments to reflect the fact that we provide our software solutions through three major operating segments, which are further broken down into a total of six major product and service groups. The three operating segments are (1) Supply Chain Management ("SCM"), (2) Information Technology ("IT") Consulting and (3) Other.

The SCM segment primarily consists of Logility, which is a leading provider of collaborative supply chain optimization and advanced retail planning solutions that help medium, large and Fortune 500 companies transform their supply chain operations to gain a competitive advantage and which is recognized for its high-touch approach to customer service, rapid implementations and industry-leading return on investment (ROI). The SCM segment also includes (i) Demand Management, Inc ("DMI"), which delivers affordable, easy-to-use SaaS supply chain planning solutions designed to increase forecast accuracy, improve customer service and reduce inventory to maximize profits and lower costs, (ii) New Generation Computing ("NGC"), which is a leading provider of cloud-based supply chain and product lifecycle management solutions for brands, retailers and consumer products companies, and (iii) Halo Business Intelligence ("Halo"), which is an advanced analytics software provider leveraging an innovative blend of artificial intelligence and machine learning technology to drive greater supply chain performance. The Other segment consists of (i) American Software ERP, which provides purchasing and materials management, customer order processing, financial, e-commerce and traditional manufacturing solutions, and (ii) corporate overhead and other common expenses.

Previously, we maintained three operating segments: (1) SCM, (2) IT and (3) Enterprise Resource Planning ("ERP"). As a result of the organizational realignment during the third quarter of fiscal 2018, NGC was repositioned out of the ERP segment and into the SCM segment. There were no changes to the IT segment. Certain prior year amounts have been recast to conform to fiscal 2019 presentation. The change in reportable segments had no effect on our previously reported consolidated financial position or results of operations.

All of our revenues are derived from external customers. We do not have any intersegment revenue. Our income taxes and dividends are paid at a consolidated level. Consequently, it is not practical to show these items by operating segment.



In the following table, we have broken down the intersegment transactions applicable to the three and six months ended October 31, 2018 and 2017 (in thousands):

	Three Months Ended October 31,		Six Months Ended October 31,	
	2018	2017	2018	2017
Revenues:				
Supply Chain Management	\$22,114	\$21,178	\$43,572	\$43,064
IT Consulting	5,222	4,596	10,579	8,965
Other	697	563	1,281	1,193
	<u>\$28,033</u>	<u>\$26,337</u>	<u>\$55,432</u>	<u>\$53,222</u>
Operating income (loss) before intersegment eliminations:				
Supply Chain Management	\$ 3,973	\$ 4,669	\$ 7,040	\$ 9,582
IT Consulting	396	357	755	591
Other	(2,843)	(1,784)	(5,662)	(3,310)
	<u>\$ 1,526</u>	<u>\$ 3,242</u>	<u>\$ 2,133</u>	<u>\$ 6,863</u>
Intersegment eliminations*:				
Supply Chain Management	—	—	—	—
IT Consulting	—	—	—	—
Other	—	—	—	—
	<u>—</u>	<u>—</u>	<u>—</u>	<u>—</u>
Operating income (loss) after intersegment eliminations:				
Supply Chain Management	\$ 3,973	\$ 4,669	\$ 7,040	\$ 9,582
IT Consulting	396	357	755	591
Other	(2,843)	(1,784)	(5,662)	(3,310)
	<u>\$ 1,526</u>	<u>\$ 3,242</u>	<u>\$ 2,133</u>	<u>\$ 6,863</u>
Capital expenditures:				
Supply Chain Management	\$ 52	\$ 57	\$ 124	\$ 81
IT Consulting	—	4	1	6
Other	128	17	769	125
	<u>\$ 180</u>	<u>\$ 78</u>	<u>\$ 894</u>	<u>\$ 212</u>
Capitalized software:				
Supply Chain Management	\$ 1,204	\$ 1,330	\$ 2,088	\$ 2,617
IT Consulting	—	—	—	—
Other	—	—	—	—
	<u>\$ 1,204</u>	<u>\$ 1,330</u>	<u>\$ 2,088</u>	<u>\$ 2,617</u>
Depreciation and amortization:				
Supply Chain Management	\$ 1,828	\$ 1,273	\$ 3,554	\$ 2,605
IT Consulting	2	2	4	4
Other	83	46	153	96
	<u>\$ 1,913</u>	<u>\$ 1,321</u>	<u>\$ 3,711</u>	<u>\$ 2,705</u>
Earnings (loss) before income taxes:				
Supply Chain Management	\$ 4,008	\$ 4,718	\$ 7,058	\$ 9,792
IT Consulting	396	357	755	591
Other	(3,068)	(1,157)	(5,117)	(2,245)
	<u>\$ 1,336</u>	<u>\$ 3,918</u>	<u>\$ 2,696</u>	<u>\$ 8,138</u>

* Fiscal 2018 recast to adjust for corporate overhead and other common expenses, which were no longer allocated starting in fiscal 2019.



J. Major Customers

No one customer accounted for more than 10% of total revenues for the three and six months ended October 31, 2018 and 2017.

K. Contingencies

We more often than not indemnify our customers against damages and costs resulting from claims of patent, copyright or trademark infringement associated with use of our products. Historically, we have not been required to make any payments under such indemnifications. However, we continue to monitor the conditions that are subject to the indemnifications to identify whether it is probable that a loss has occurred, and would recognize any such losses when those losses are estimable. In addition, we warrant to our customers that our products operate substantially in accordance with the software products' specifications. Historically, we have incurred no costs related to software product warranties and we do not expect to incur such costs in the future, and as such we have made no accruals for software product warranty costs. Additionally, we are involved in various claims arising in the ordinary course of business. In the opinion of management, the ultimate disposition of these matters will not have a material adverse effect on our financial position or results of operations.

L. Subsequent Event

On November 15, 2018, our Board of Directors declared a quarterly cash dividend of \$0.11 per share of our Class A and Class B common stock. The cash dividend is payable on February 22, 2019 to Class A and Class B shareholders of record at the close of business on February 8, 2019.



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

FORWARD-LOOKING STATEMENTS

This quarterly report on Form 10-Q (this "Quarterly Report") contains forward-looking statements relating to our future financial performance, business strategy, financing plans and other future events that involve uncertainties and risks. You can identify these statements by forward-looking words such as "anticipate," "intend," "plan," "continue," "could," "grow," "may," "potential," "predict," "strive," "will," "seek," "estimate," "believe," "expect," and similar expressions that convey uncertainty of future events or outcomes. Any forward-looking statements we make herein are pursuant to the safe harbor provision of the Private Securities Litigation Reform Act of 1995. Forward-looking statements include statements concerning future:

- results of operations;
- liquidity, cash flow and capital expenditures;
- demand for and pricing of our products and services;
- annual contract value ("ACV");
- viability and effectiveness of strategic alliances;
- industry conditions and market conditions;
- acquisition activities and the effect of completed acquisitions; and
- general economic conditions.

Although we believe that the goals, plans, expectations, and prospects that our forward-looking statements reflect are reasonable in view of the information currently available to us, those statements are not guarantees of performance. There are many factors that could cause our actual results to differ materially from those anticipated by forward-looking statements made herein. These factors include, but are not limited to, continuing U.S. and global economic uncertainty, the timing and degree of business recovery, unpredictability and the irregular pattern of future revenues, dependence on particular market segments or customers, competitive pressures, delays, product liability and warranty claims and other risks associated with new product development, undetected software errors, market acceptance of our products, technological complexity, the challenges and risks associated with integration of acquired product lines, companies and services, as well as a number of other risk factors that could affect our future performance. All forward-looking statements included in Quarterly Report are based upon information available to us as of the filing date of this Quarterly Report. We undertake no obligation to update any of these forward-looking statements for any reason. These forward-looking statements involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance, or achievements to differ materially from those expressed or implied by these statements. We discuss certain factors in greater detail in "Business Overview" below.

ECONOMIC OVERVIEW

Corporate capital spending trends and commitments are the primary determinants of the size of the market for business software. Corporate capital spending is, in turn, a function of general economic conditions in the U.S. and abroad and in particular may be affected by conditions in global credit markets.

In October 2018, the International Monetary Fund ("IMF") provided an update to the World Economic Outlook ("WEO") for the 2018 and 2019 world economic growth forecast. The update noted that, *"Global growth is projected at 3.7 percent for 2018–19—0.2 percentage point lower for both years than forecast in April. In the United States, momentum is still strong as fiscal stimulus continues to increase, but the forecast for 2019 has been revised down due to recently announced trade measures, including the tariffs imposed on \$200 billion of US imports from China. Growth projections have been marked down for the euro area and the United Kingdom, following surprises that suppressed activity in early 2018. Among emerging market and developing economies, the growth prospects of many energy exporters have been lifted by higher oil prices, but growth was revised down for Argentina, Brazil, Iran, and Turkey, among others, reflecting country-specific factors, tighter financial conditions, geopolitical tensions, and higher oil import bills. China and a number of Asian economies are also projected to experience somewhat weaker growth in 2019 in the aftermath of the recently announced trade measures."*

For fiscal 2019, we expect the global economy to improve modestly when compared to the prior year. We believe information technology spending will incrementally improve over the long term as increased global competition forces companies to improve productivity by upgrading their technology systems, which could result in an improved selling environment. Although this improvement could slow or regress at any time, due in part to concerns in global capital markets and general economic conditions, we believe that our organizational and financial structure will enable us to take advantage of any sustained economic rebound. Customers continue to take long periods to evaluate discretionary software purchases.



We believe improved economic conditions may be driving some businesses to focus on achieving more process and efficiency enhancements in their operations and to invest in solutions that improve operating margins, rather than make large infrastructure-type technology purchases. If this trend continues, we believe it may tend to favor solutions such as our supply chain solutions, which are designed to provide a more rapid return on investment and are targeted at some of the largest profit drivers in a customer's business.

BUSINESS OVERVIEW

American Software was incorporated as a Georgia corporation in 1970. We develop, market and support a portfolio of software and services that deliver enterprise management and collaborative supply chain solutions to the global marketplace. We have designed our software and services to bring business value to enterprises by supporting their operations over intranets, extranets, client/servers or the Internet. References to "the Company," "our products," "our software," "our services" and similar references include the appropriate business segment actually providing the product or service.

The SCM segment primarily consists of Logility, which is a leading provider of collaborative supply chain optimization and advanced retail planning solutions that help medium, large and Fortune 500 companies transform their supply chain operations to gain a competitive advantage and which is recognized for its high-touch approach to customer service, rapid implementations and industry-leading return on investment (ROI). The SCM segment also includes (i) DMI, which delivers affordable, easy-to-use Software-as-a-Service (SaaS) supply chain planning solutions designed to increase forecast accuracy, improve customer service and reduce inventory to maximize profits and lower costs, (ii) NGC, which is a leading provider of cloud-based supply chain and product lifecycle management solutions for brands, retailers and consumer products companies, and (iii) Halo, which is an advanced analytics software provider leveraging an innovative blend of artificial intelligence and machine learning technology to drive greater supply chain performance. The Other segment consists of (i) American Software ERP, which provides purchasing and materials management, customer order processing, financial, e-commerce and traditional manufacturing solutions, and (ii) corporate overhead and other common expenses.

We derive revenues primarily from four sources: software licenses, subscriptions, professional services and other, and maintenance. We generally determine software license and SaaS fees based on the depth of functionality, contractual term, number of production deployments, users and/or sites licensed and/or subscribed. Professional services and other revenues consist primarily of fees from software implementation, training, and consulting services. We bill primarily under time and materials arrangements and recognize revenues as we perform services. SaaS and maintenance agreements typically are for a one- to three-year term, commencing at the time of the initial contract. We generally bill these fees annually in advance under agreements with terms of one to three years, and then recognize the resulting revenues ratably over the term of the agreement. Deferred revenue represents payments or billings for subscriptions, software licenses, services and maintenance in advance of the time we recognize the related revenues.

Our cost of revenue for licenses includes amortization of capitalized computer software development costs, amortization of acquired developed technology, royalties paid to third-party software vendors, and agent commission expenses related to license revenues generated by the indirect channel, primarily from DMI. Costs for maintenance and services include the cost of personnel to conduct implementations and customer support, consulting, other personnel-related expenses, and agent commission expenses related to maintenance revenues generated by the indirect channel, primarily from DMI. We account for the development costs of software intended for sale in accordance with the Software topic of the FASB ASC. We monitor the net realizable value of our capitalized software on a quarterly basis based on an estimate of future product revenues. We currently expect to fully recover the value of the capitalized software asset recorded on our condensed consolidated balance sheet; however, if future product revenues are less than management's current expectations, we may incur a write-down of capitalized software costs.

Our selling expenses mainly include the salary and commissions paid to our sales professionals, along with marketing, promotional, travel and associated costs. Our general and administrative expenses mainly include the salary and benefits paid to executive, corporate and support personnel, as well as facilities-related costs, utilities, communications expenses, and various professional fees.

We currently view the following factors as the primary opportunities and risks associated with our business:

- Dependence on Capital Spending Patterns. There is risk associated with our dependence on the capital spending patterns of U.S. and international businesses, which in turn are functions of economic trends and conditions over which we have no control.
- Acquisition Opportunities. There are opportunities for selective acquisitions or investments to expand our sales distribution channels and/or broaden our product offering by providing additional solutions for our target markets.
- Acquisition Risks. There are risks associated with acquisitions of complementary companies, products and technologies, including the risks that we will not achieve the financial and strategic goals that we contemplate at the time of the transaction. More specifically, in any acquisition we will face risks and challenges associated with the uncertain value of the acquired business or assets, the difficulty of assimilating operations and personnel, integrating acquired technologies and products and maintaining the loyalty of the customers of the acquired business.



- Competitive Technologies. There is a risk that our competitors may develop technologies that are substantially equivalent or superior to our technology.
- Competition in General. There are risks inherent in the market for business application software and related services, which has been and continues to be intensely competitive; for example, some of our competitors may become more aggressive with their prices and/or payment terms, which may adversely affect our profit margins.

A discussion of a number of additional risk factors associated with our business is included in our Annual Report for the fiscal year ended April 30, 2018. Additional information and other factors that could affect future financial results may be included, from time to time, in our filings with the Securities and Exchange Commission (“SEC”).

Recent Accounting Pronouncements

For information with respect to recent accounting pronouncements, if any, and the impact of these pronouncements on our consolidated financial statements, if any, see Note A in the Notes to Condensed Consolidated Financial Statements included elsewhere in this Quarterly Report.

COMPARISON OF RESULTS OF OPERATIONS

Three-Month Comparisons. The following table sets forth certain revenue and expense items as a percentage of total revenues and the percentage changes in those items for the three months ended October 31, 2018 and 2017:

	Three Months Ended October 31,		
	Percentage of Total Revenues		Pct. Change in Dollars
	2018	2017	2018 vs. 2017
Revenues:			
License	7%	9%	(18)%
Subscription Fees	12%	8%	64%
Professional Services and other	39%	42%	— %
Maintenance	42%	41%	7%
Total revenues	100%	100%	6%
Cost of revenues:			
License	6%	6%	7%
Subscription Fees	5%	3%	43%
Professional Services and other	29%	29%	8%
Maintenance	8%	9%	(3)%
Total cost of revenues	48%	47%	8%
Gross margin	52%	53%	5%
Research and development	12%	10%	26%
Sales and marketing	19%	17%	20%
General and administrative	16%	14%	22%
Amortization of acquisition-related intangibles	— %	— %	43%
Total operating expenses	47%	41%	22%
Operating income	5%	12%	(53)%
Other income:			
Interest income	2%	1%	48%
Other, net	(3)%	1%	(322)%
Earnings before income taxes	4%	14%	(66)%
Income tax expense	— %	5%	(94)%
Net earnings	4%	9%	(50)%



Six-Month Comparisons. The following table sets forth certain revenue and expense items as a percentage of total revenues and the percentage changes in those items for the six months ended October 31, 2018 and 2017:

	Six Months Ended October 31,		
	Percentage of Total Revenues		Pct. Change in Dollars
	2018	2017	2018 vs. 2017
Revenues:			
License	7%	12%	(43)%
Subscription Fees	12%	7%	78%
Professional Services and other	40%	40%	3%
Maintenance	41%	41%	7%
Total revenues	<u>100%</u>	<u>100%</u>	4%
Cost of revenues:			
License	6%	6%	17%
Subscription Fees	4%	3%	35%
Professional Services and other	31%	28%	14%
Maintenance	8%	8%	(2)%
Total cost of revenues	<u>49%</u>	<u>45%</u>	13%
Gross margin	<u>51%</u>	<u>55%</u>	(3)%
Research and development	13%	10%	36%
Sales and marketing	19%	18%	8%
General and administrative	16%	13%	20%
Amortization of acquisition-related intangibles	— %	1%	(50)%
Total operating expenses	<u>48%</u>	<u>42%</u>	18%
Operating income	<u>3%</u>	<u>13%</u>	(69)%
Other income:			
Interest income	2%	1%	43%
Other, net	(1)%	1%	(183)%
Earnings before income taxes	4%	15%	(67)%
Income tax expense	— %	6%	(98)%
Net earnings	<u>4%</u>	<u>9%</u>	(50)%

COMPARISON OF RESULTS OF OPERATIONS FOR THE THREE AND SIX MONTHS ENDED OCTOBER 31, 2018 AND 2017

REVENUES

	Three Months Ended October 31,				
				% of Total Revenue	
	2018	2017	% Change	2018	2017
	(in thousands)				
License	\$ 2,012	\$ 2,449	(18)%	7%	9%
Subscription Fees	3,341	2,041	64%	12%	8%
Professional Services and other	11,056	11,008	— %	39%	42%
Maintenance	11,624	10,839	7%	42%	41%
Total revenues	<u>\$ 28,033</u>	<u>\$ 26,337</u>	6%	100%	100%



	Six Months Ended October 31,				
				% of Total Revenue	
	2018	2017	% Change	2018	2017
	(in thousands)				
License	\$ 3,714	\$ 6,464	(43)%	7%	12%
Subscription Fees	6,509	3,660	78%	12%	7%
Professional Services and other	22,064	21,431	3%	40%	40%
Maintenance	23,145	21,667	7%	41%	41%
Total revenues	\$55,432	\$53,222	4%	100%	100%

For the three months ended October 31, 2018, the 6% increase in revenues over the three months ended October 31, 2017 was attributable primarily to a 64% increase in subscription fees revenues and to a lesser extent a 7% increase in maintenance revenues, when compared to the same period last year. This increase was partially offset by a 18% decrease in license revenues.

For the six months ended October 31, 2018, the 4% increase in revenues over the six months ended October 31, 2017 was attributable primarily to a 78% increase in subscription fees revenues, and to a lesser extent a 7% increase in maintenance revenues and a 3% increase in professional services revenues, when compared to the same period last year. This increase was partially offset by a 43% decrease in license revenues.

Due to intense competition in our industry, we sometimes discount license fees from our published list price. Numerous factors contribute to the amount of the discount provided, such as previous customer purchases, the number of customer sites utilizing the software, the number of modules purchased and the number of users, as well as the overall size of the contract. While all these factors may affect the discount amount of a particular contract, the overall percentage discount has not materially changed in the recent reported fiscal periods.

The change in our revenues from period to period is primarily due to the volume of products and related services sold in any period and the number of products or modules purchased with each sale.

International revenues represented approximately 20% of total revenues in the three and six months ended October 31, 2018 and 2017, respectively. Our revenues, in particular our international revenues, may fluctuate substantially from period to period primarily because we derive most of our license fee revenues from a relatively small number of customers in a given period.

License Revenues

	Three Months Ended October 31,		
	2018	2017	% Change
	(in thousands)		
Supply Chain Management	\$1,932	\$2,438	(21)%
Other	80	11	627%
Total license revenues	\$2,012	\$2,449	(18)%

	Six Months Ended October 31,		
	2018	2017	% Change
	(in thousands)		
Supply Chain Management	\$3,614	\$6,442	(44)%
Other	100	22	355%
Total license revenues	\$3,714	\$6,464	(43)%

For the three and six months ended October 31, 2018, license fee revenues decreased 18% and 43%, respectively, when compared to the same period in the prior year. In the three and six months ended October 31, 2018, license fee revenues from our SCM segment decreased 21% and 44%, respectively, when compared to the corresponding periods in the prior year due to an increase in sales of our products on Logility’s cloud services platform that require revenue to be deferred over the life of the contracted period, which is typically one to three years. For the three months ended October 31, 2018 and 2017, our SCM segment constituted approximately 96% and 100% of total license fee revenues, respectively. For the six months ended October 31, 2018 and 2017, our SCM segment constituted approximately 97% and 100% of total license fee revenues, respectively. Our Other segment license fee revenues increased by 627% and 355%, respectively, for the three and six months ended October 31, 2018 when compared to the same period in the prior year primarily due to timing of additional sales to our existing ERP customers.



The direct sales channel provided approximately 93% and 91% of license fee revenues for the three and six months ended October 31, 2018, compared to approximately 60% and 76% in the comparable periods last year. The increase in the percentage of sales by our direct sales channel was due to our indirect channel selling proportionately more SaaS than license contracts compared to our direct channel. For the three and six months ended October 31, 2018, our margins after commissions on direct sales were approximately 85% and 88%, compared to 91% and 86% in the comparable periods last year. The decrease in margins is due to the mix of sales commission rates based on each individual salesperson’s quotas and related achievement. For the three months ended October 31, 2018 and 2017, our margins after commissions on indirect sales were approximately 60% and 43%, respectively. For the six months ended October 31, 2018 and 2017, our margins after commissions on indirect sales were approximately 55% and 37%, respectively. The indirect channel margins for the current quarter increased compared to the same periods in the prior year due to the mix of value-added reseller (“VAR”) commission rates. These margin calculations include only commission expense for comparative purposes and do not include other costs of license fees such as amortization of capitalized software.

Subscription Fees

	Three Months Ended October 31,		
	2018	2017	% Change
	(in thousands)		
Supply Chain Management	\$3,341	\$2,041	64%
Total Subscription Fees revenues	\$3,341	\$2,041	64%

	Six Months Ended October 31,		
	2018	2017	% Change
	(in thousands)		
Supply Chain Management	\$6,509	\$3,660	78%
Total Subscription Fees revenues	\$6,509	\$3,660	78%

For the three and six months ended October 31, 2018, subscription fees revenues increased by 64% and 78%, respectively, primarily due to the increased subscription fees revenues from our SCM segment which increased sales of our products on our cloud services platform that require revenue to be deferred over the life of the contracted period, which is typically one to three years.

For the six months ended October 31, 2018, cloud services ACV increased approximately 46% to \$14.5 million compared to \$9.9 million in the same period of the prior year due to increased sales of our products on our Cloud Services platform that require revenue to be deferred over the life of the contracted period, which is typically one to three years. ACV is a forward-looking operating measure used by management to better understand cloud services (SaaS and other related cloud services) revenue trends within our business, as it reflects our current estimate of revenue to be generated under existing client contracts in the forward 12-month period.

Professional Services and other revenues

	Three Months Ended October 31,		
	2018	2017	% Change
	(in thousands)		
Supply Chain Management	\$ 5,553	\$ 6,228	(11)%
IT Consulting	5,222	4,596	14%
Other	281	184	53%
Total Professional Services and other revenues	\$11,056	\$11,008	— %



	Six Months Ended October 31,		
	2018	2017	% Change
	(in thousands)		
Supply Chain Management	\$10,999	\$12,068	(9)%
IT Consulting	10,579	8,965	18%
Other	486	398	22%
Total Professional Services and other revenues	<u>\$22,064</u>	<u>\$21,431</u>	3%

For the three and six months ended October 31, 2018, professional services and other revenues were flat and increased by 3%, respectively, due to the increased professional services and other revenues from our Other and IT Consulting segments. This increase was partially offset by a decrease in professional services and other revenues from our SCM segment. For the three and six months ended October 31, 2018, our Other segment's revenues increased 53% and 22% when compared to the same periods last year. For the three and six months ended October 31, 2018, our IT Consulting segment's revenues increased 14% and 18% when compared to the same periods in the prior year due to an increase in project work from existing and new customers. For the three and six months ended October 31, 2018, our SCM segment's revenues decreased 11% and 9%, primarily because certain implementation project work ended during the quarter before new projects could start. We have observed that there is a tendency for services and other revenues, other than from IT Consulting, to lag changes in license and subscription revenues by one to three quarters, as new licenses and subscriptions in one quarter often involve implementation and consulting services in subsequent quarters, for which we recognize revenues only as we perform those services.

Maintenance Revenues

	Three Months Ended October 31,		
	2018	2017	% Change
	(in thousands)		
Supply Chain Management	\$11,288	\$10,471	8%
Other	336	368	(9)%
Total maintenance revenues	<u>\$11,624</u>	<u>\$10,839</u>	7%

	Six Months Ended October 31,		
	2018	2017	% Change
	(in thousands)		
Supply Chain Management	\$22,450	\$20,894	7%
Other	695	773	(10)%
Total maintenance revenues	<u>\$23,145</u>	<u>\$21,667</u>	7%

For the three and six months ended October 31, 2018, maintenance revenues increased 7% when compared to the same periods in the prior year. Our SCM maintenance revenue increased 8% and 7% for the three and six months ended October 31, 2018, when compared to the same periods last year due primarily to our recent Halo acquisition in the third quarter of fiscal 2018 and improved customer retention. The SCM segment accounted for 97% of total maintenance revenues for the three and six months ended October 31, 2018 and accounted for 97% and 93% for the same periods in the prior year. Typically, our maintenance revenues have had a direct relationship to current and historic license fee revenues, since new licenses are the potential source of new maintenance customers.

GROSS MARGIN

The following table provides both dollar amounts (in thousands) and percentage measures of gross margin:

	Three months ended October 31,				Six months ended October 31,			
	2018		2017		2018		2017	
Gross margin on license fees	\$ 252	13%	\$ 798	33%	\$ 240	6%	\$ 3,498	54%
Gross margin on subscription fees	2,052	61%	1,138	56%	4,153	64%	1,911	52%
Gross margin on professional services and other	2,953	27%	3,520	32%	5,293	24%	6,670	31%
Gross margin on maintenance	9,410	81%	8,550	79%	18,733	81%	17,151	79%
Total gross margin	<u>\$14,667</u>	52%	<u>\$14,006</u>	53%	<u>\$28,419</u>	51%	<u>\$29,230</u>	55%



For the three and six months ended October 31, 2018, our total gross margin percentages decreased when compared to the same periods in the prior year primarily due to our lower margins on license fee revenue and professional services and other revenue, partially offset by higher margins on subscription fees and maintenance revenue.

Gross Margin on License Fees

License fee gross margin percentage for the three and six months ended October 31, 2018 decreased when compared to the same period in the prior year. License fee gross margin percentage tends to be directly related to the level of license fee revenues due to the relatively fixed cost of computer software amortization expense, amortization of acquired software and the sales mix between our direct and indirect channels.

Gross Margin on Subscription Fees

Our gross margin percentage on subscription fees revenues increased from 56% and 52% for the three and six months ended October 31, 2017 to 61% and 64% for the three and six months ended October 31, 2018, respectively, primarily due to the increase in subscription revenue, combined with a lower incremental increase in cost.

Gross Margin on Professional Services and Other

Our gross margin percentage on professional services and other revenues decreased from 32% for the three months ended October 31, 2017 to 27% for the three months ended October 31, 2018. Our gross margin percentage on professional services and other revenues decreased from 31% for the six months ended October 31, 2017 to 24% for the six months ended October 31, 2018. This decrease was primarily due to lower gross margins in our SCM segment services of 28% and 32% for the three months ended October 31, 2018 and 2017, and 23% and 31% for the six months ended October 31, 2018 and 2017, respectively, due to lower billing utilization from several large projects ending during the quarter. Our Other segment professional services gross margin increased from 28% to 51% for the three months ended October 31, 2018 and 2017, respectively, and from 33% to 45% for the six months ended October 31, 2018 and 2017, due to higher margin projects in the current quarter. Our IT Consulting segment professional services gross margin increased from 23% to 24% for the three months ended October 31, 2018 and 2017, respectively, and 21% to 24% for the six months ended October 31, 2018 and 2017, due to higher margin projects in the current quarter. Professional services and other gross margin is directly related to the level of services and other revenues. The primary component of cost of services and other revenues is services staffing, which is relatively inelastic in the short term.

Gross Margin on Maintenance

Maintenance gross margin percentage for the three and six months ended October 31, 2018 increased to 81% from 79% when compared to the same periods last year due to an increase in maintenance revenue. The primary cost component is maintenance staffing, which is relatively inelastic in the short term.

EXPENSES

	Three Months Ended October 31,				Six Months Ended October 31,			
	(in thousands)		% of Revenues		(in thousands)		% of Revenues	
	2018	2017	2018	2017	2018	2017	2018	2017
Research and development	\$3,332	\$2,643	12%	10%	\$ 7,007	\$5,151	13%	10%
Sales and marketing	\$5,304	\$4,437	19%	17%	\$10,484	\$9,670	19%	18%
General and administrative	\$4,408	\$3,616	16%	14%	\$ 8,601	\$7,155	16%	13%
Amortization of acquisition-related intangible assets	\$ 97	\$ 68	— %	— %	\$ 194	\$ 391	— %	1%
Other (expense)/income, net	\$ (190)	\$ 676	(1)%	2%	\$ 563	\$1,275	1%	2%
Income tax expense	\$ 93	\$1,438	— %	5%	\$ 68	\$2,933	— %	6%



Research and Development

Gross product research and development costs include all non-capitalized and capitalized software development costs. A breakdown of the research and development costs is as follows:

	Three Months Ended October 31,		
	2018 (in thousands)	2017	% Change
Total capitalized computer software development costs	\$ 1,204	\$ 1,330	(9)%
Percentage of gross product research and development costs	27%	34%	
Total research and development expense	\$ 3,332	\$ 2,643	26%
Percentage of total revenues	12%	10%	
Total gross research and development expense and capitalized computer software development costs	\$ 4,536	\$ 3,973	14%
Percentage of total revenues	16%	15%	
Total amortization of capitalized computer software development costs *	\$ 1,145	\$ 892	28%

	Six Months Ended October 31,		
	2018 (in thousands)	2017	% Change
Total capitalized computer software development costs	\$ 2,088	\$ 2,617	(20)%
Percentage of gross product research and development costs	23%	34%	
Total research and development expense	\$ 7,007	\$ 5,151	36%
Percentage of total revenues	13%	10%	
Total gross research and development expense and capitalized computer software development costs	\$ 9,095	\$ 7,768	17%
Percentage of total revenues	16%	15%	
Total amortization of capitalized computer software development costs *	\$ 2,198	\$ 1,763	25%

* Included in cost of license fees and subscription fees.

For the three and six months ended October 31, 2018, gross product research and development costs increased 14% and 17%, respectively, when compared to the same periods in the previous year due partially to the recent Halo acquisition in the third quarter of fiscal 2018 and increased headcount in our SCM segment. We expect capitalized product development costs to decrease due to timing of projects and we expect capitalized software amortization expense to be relatively stable in coming quarters. Costs included in gross product development are salaries of product development personnel, hardware lease expense, computer software expense, telephone expense and rent.

Sales and Marketing

For the three and six months ended October 31, 2018, sales and marketing expenses increased 20% and 8%, respectively, when compared to the same periods a year ago, primarily due to increased headcount in our SCM segment.

General and Administrative

For the three and six months ended October 31, 2018, general and administrative expenses increased 22% and 20%, respectively, when compared to the same periods a year ago, primarily due to the recent Halo acquisition in the third quarter of fiscal 2018.

At October 31, 2018, the total number of employees was 452 compared to 390 at October 31, 2017.



Operating Income/(Loss)

	Three Months Ended October 31,			Six Months Ended October 31,		
	2018	2017	% Change	2018	2017	% Change
	(in thousands)			(in thousands)		
Supply Chain Management	\$ 3,973	\$ 4,669	(15)%	\$ 7,040	\$ 9,582	(27)%
IT Consulting	396	357	11%	755	591	28%
Other*	(2,843)	(1,784)	59%	(5,662)	(3,310)	71%
Total Operating Income	<u>\$ 1,526</u>	<u>\$ 3,242</u>	(53)%	<u>\$ 2,133</u>	<u>\$ 6,863</u>	(69)%

* Includes all corporate overhead and other common expenses in fiscal 2019.

Our SCM segment operating income decreased by 15% and 27% in the three and six months ended October 31, 2018 compared to the same periods in the prior year primarily due to the recent Halo acquisition in the third quarter of fiscal 2018.

Our IT Consulting segment’s operating income increased by 11% and 28% for the three and six months ended October 31, 2018 compared to same periods last year primarily due to increased revenues and gross margins.

Our Other segment operating loss increased by 59% and 71% for the three and six months ended October 31, 2018 when compared to the same periods in the prior year because all corporate overhead and common expenses are included in this segment in fiscal 2019.

Other Income

Other income is comprised of net interest and dividend income, rental income, exchange rate gains and losses, and realized and unrealized gains and losses from investments. For the three and six months ended October 31, 2018, the decrease in other income is mainly due to higher unrealized losses on investments when compared to the same periods last year. We recorded losses of approximately \$700,000 and \$312,000 for the three and six months ended October 31, 2018, respectively, from our trading securities portfolio. We recorded gains of approximately \$268,000 and \$381,000 the three and six months ended October 31, 2017, respectively, from our trading securities portfolio.

For the three and six months ended October 31, 2018, our investments generated an annualized yield of approximately 1.32% and 1.40%, respectively, compared to approximately 1.30% and 1.38% for the three and six months ended October 31, 2017, respectively.

Income Taxes

We recognize deferred tax assets and liabilities based on the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their tax bases. We measure deferred tax assets and liabilities using statutory tax rates in effect in the year in which we expect the differences to reverse. We establish a deferred tax asset for the expected future benefit of net operating loss and credit carry-forwards. Under the Income Tax Topic of the FASB ASC, we cannot recognize a deferred tax asset for the future benefit of our net operating losses, tax credits and temporary differences unless we can establish that it is “more likely than not” that the deferred tax asset would be realized.

During the three and six months ended October 31, 2018, we recorded income tax expense of \$93,000 and \$68,000, respectively, primarily due to discrete stock compensation benefits of \$12,000 and \$286,000, respectively, net of normal income tax expense from operations. After adjusting for these discrete tax benefits, our effective tax rate would have been 7.9% and 13.1%, respectively, in the three and six months ended October 31, 2018 compared to our tax effective rate of 36.7% and 36.0% in the three and six months ended October 31, 2017. The Tax Cuts and Jobs Act enacted on December 22, 2017, which lowered our U.S. statutory federal income tax rate from 35% to 21%, was the primary driver of the reduction in our effective tax rate. In addition, research and development and foreign tax credits reduced our effective tax rate by 8% and 3%, respectively, in the six months ended October 31, 2018, compared to reductions of 2% and 1%, respectively, in the six months ended October 31, 2017.

Operating Pattern

We experience an irregular pattern of quarterly operating results, caused primarily by fluctuations in both the number and size of software license and subscription contracts received and delivered from quarter to quarter and our ability to recognize revenues in that quarter in accordance with our revenue recognition policies. We expect this pattern to continue.



LIQUIDITY, CAPITAL RESOURCES AND FINANCIAL CONDITION

Sources and Uses of Cash

We have historically funded, and continue to fund, our operations and capital expenditures primarily with cash generated from operating activities. The changes in net cash that our operating activities provide generally reflect the changes in net earnings and non-cash operating items plus the effect of changes in operating assets and liabilities, such as investment trading securities, trade accounts receivable, trade accounts payable, accrued expenses and deferred revenue. We have no debt obligations or off-balance sheet financing arrangements, and therefore, we used no cash for debt service purposes.



The following table shows information about our cash flows and liquidity positions during the six months ended October 31, 2018 and 2017. You should read this table and the discussion that follows in conjunction with our condensed consolidated statements of cash flows contained in “Item 1” in Part I of this Quarterly Report and in our Annual Report for the fiscal year ended April 30, 2018.

	Six Months Ended October 31, (in thousands)	
	2018	2017
Net cash provided by operating activities	\$ 4,802	\$ 520
Net cash used in investing activities	(2,982)	(2,829)
Net cash used in financing activities	(3,681)	(2,450)
Net change in cash and cash equivalents	<u>\$(1,861)</u>	<u>\$(4,759)</u>

For the six months ended October 31, 2018, the net increase in cash provided by operating activities when compared to the same period last year was due primarily to the following:

(1) a decrease in purchases of trading securities, (2) a relative decrease in prepaid expenses when compared to the same period in the prior year due to the timing of purchases, (3) an increase in depreciation and amortization, (4) higher proceeds from the maturity and sales of trading securities, (5) a gain on investments compared to a loss in the same period last year and (6) an increase in stock-based compensation expense.

This increase in cash provided by operating activities was partially offset by: (1) a decrease in net earnings, (2) a relative decrease in deferred revenue due to timing of revenue recognition, (3) a relative decrease in accounts payable and other accruals due to timing of payments, (4) a relative decrease in customer accounts receivables caused by the timing of closing customer sales and related collections and (5) a decrease in deferred income tax.

The increase in cash used in investing activities when compared to the same period in the prior year was due primarily to an increase in purchases of property and equipment, partially offset by lower capitalized computer software development costs.

The increase in cash used in financing activities compared to the prior year was due primarily to an increase in dividends paid, partially offset by a decrease in proceeds from exercise of stock options.

The following table shows net changes in total cash, cash equivalents, and investments, which is one measure management uses to understand net total cash generated by our activities:

	As of October 31, (in thousands)	
	2018	2017
Cash and cash equivalents	\$50,933	\$61,242
Short and long-term investments	31,741	29,773
Total cash and short and long-term investments	<u>\$82,674</u>	<u>\$91,015</u>
Net (decrease) increase in total cash and investments (six months ended October 31)	\$ (5,134)	\$ 1,227

Our total activities used more cash and investments during the six months ended October 31, 2018, when compared to the prior year period, primarily due to normal business operations.

Days Sales Outstanding in accounts receivable were 66 days as of October 31, 2018, compared to 57 days as of October 31, 2017. This increase is primarily due to the timing of cash collections. Our current ratio on October 31, 2018 was 2.8 to 1 and on October 31, 2017 was 2.7 to 1.

Our business in recent periods has generated substantial positive cash flow from operations, excluding purchases and proceeds of sale of trading securities. For this reason, and because we had \$82.7 million in cash and investments with no debt as of October 31, 2018, we believe that our sources of liquidity and capital resources will be sufficient to satisfy our presently anticipated requirements during at least the next twelve months for working capital, capital expenditures and other corporate needs. However, at some future date we may need to seek additional sources of capital to meet our requirements. If such need arises, we may be required to raise additional funds through equity or debt financing. We do not currently have a bank line of credit. We can provide no assurance that bank lines of credit or other financing will be available on terms acceptable to us. If available, such financing may result in dilution to our shareholders or higher interest expense.



On August 19, 2002, our Board of Directors approved a resolution authorizing the repurchase of up to an additional 2.0 million shares of our Class A common stock. We have made and will make these repurchases through open market purchases at prevailing market prices. The timing of any repurchase will depend upon market conditions, the market price of our common stock and management's assessment of our liquidity and cash flow needs. Under this repurchase plan, through October 31, 2018, we have repurchased 1,053,679 shares of common stock at a cost of approximately \$6.2 million. As of October 31, 2018, under all repurchase plans previously authorized, including this most recent plan, we have repurchased a total of 4,588,632 shares of common stock at a cost of approximately \$25.6 million.

CRITICAL ACCOUNTING POLICIES AND ESTIMATES

We have based the foregoing discussion and analysis of financial condition and results of operations on our condensed consolidated financial statements, which we have prepared in accordance with U.S. generally accepted accounting principles. The preparation of these condensed consolidated financial statements requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, and disclosures of contingent assets and liabilities at the date of the condensed consolidated financial statements and the reported amounts of revenues and expenses during the reporting period. Note 1 in the Notes to the Consolidated Financial Statements in our Annual Report for the fiscal year ended April 30, 2018, describes the significant accounting policies that we have used in preparing our consolidated financial statements. On an ongoing basis, we evaluate our estimates, including, but not limited to, those related to revenue/collectability, stock-based compensation and income taxes. We base our estimates on historical experience and on various other assumptions that we believe to be reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Our actual results could differ materially from these estimates under different assumptions or conditions.

We believe the critical accounting policies listed below affect significant judgments and estimates used in the preparation of the condensed consolidated financial statements.

Revenue Recognition. For information with respect to revenue recognition policy, see Notes A and B in the Notes to Condensed Consolidated Financial Statements included elsewhere in this Quarterly Report.

Stock-Based Compensation. We estimate the value of options granted on the date of grant using the Black-Scholes option pricing model. Management's judgments and assumptions related to volatility, the expected term and the forfeiture rate are made in connection with the calculation of stock-based compensation expense. We periodically review all assumptions used in our stock option pricing model. Changes in these assumptions could have a significant impact on the amount of stock-based compensation expense.

Income Taxes. We provide for the effect of income taxes on our financial position and results of operations in accordance with the Income Tax Topic of the FASB ASC. Under this accounting guidance, income tax expense is recognized for the amount of income taxes payable or refundable for the current year and for the change in net deferred tax assets or liabilities resulting from events that are recorded for financial reporting purposes in a different reporting period than recorded in the tax return. Management must make significant assumptions, judgments and estimates to determine our current provision for income taxes and also our deferred tax assets and liabilities and any valuation allowance to be recorded against our net deferred tax asset. Our judgments, assumptions and estimates relative to the current provision for income tax take into account current tax laws, our interpretation of current tax laws, allowable deductions, and projected tax credits. Changes in tax law or our interpretation of tax laws could significantly impact the amounts provided for income taxes in our financial position and results of operations. Our assumptions, judgments and estimates relative to the value of our deferred tax assets take into account our expectations of the amount and category of future taxable income. Actual operating results and the underlying amount and category of income in future years, which could significantly increase tax expense, could render inaccurate our current assumptions, judgments and estimates of recoverable net deferred taxes.



Item 3. Quantitative and Qualitative Disclosures About Market Risk

Foreign Currency. In each of the three and six months ended October 31, 2018, we generated approximately 20% of our revenues outside the United States. We typically make international sales through our foreign branches or Logility and denominate those sales in U.S. dollars, British pounds sterling or euros. However, expenses incurred in connection with these sales are typically denominated in the local currencies. We recorded exchange rate losses of approximately \$108,000 and of \$355,000 for the three and six months ended October 31, 2018, respectively, compared to an exchange rate loss of approximately \$41,000 and a gain of \$400 for the three months and six months ended October 31, 2017, respectively. We estimate that a 10% movement in foreign currency rates would have had the effect of creating up to a \$387,000 exchange rate gain or loss for the three and six months ended October 31, 2018. We have not engaged in any hedging activities.

Interest Rates and Other Market Risks. We have no debt, and therefore limit our discussion of interest rate risk to risk associated with our investment profile. We manage our interest rate risk by maintaining an investment portfolio of trading investments with high credit quality and relatively short average maturities. These instruments include, but are not limited to, money-market instruments, bank time deposits, and taxable and tax-advantaged variable rate and fixed rate obligations of corporations, municipalities, and national, state, and local government agencies, in accordance with an investment policy approved by our Board of Directors. These instruments are denominated in U.S. dollars. The fair market value of these instruments as of October 31, 2018 was approximately \$74.9 million compared to \$86.6 million as of October 31, 2017.

We also hold cash balances in accounts with commercial banks in the United States and foreign countries. These cash balances represent operating balances only and are invested in short-term time deposits of the local bank. Such operating cash balances held at banks outside the United States are denominated in the local currency and are minor.

Many of our investments carry a degree of interest rate risk. When interest rates fall, our income from investments in variable-rate securities declines. When interest rates rise, the fair market value of our investments in fixed-rate securities declines. In addition, our investments in equity securities are subject to stock market volatility. Due in part to these factors, our future investment income may fall short of expectations or we may suffer losses in principal if forced to sell securities, which have seen a decline in market value due to changes in interest rates. We attempt to mitigate risk by holding fixed-rate securities to maturity, but, if our liquidity needs force us to sell fixed-rate securities prior to maturity, we may experience a loss of principal.

Inflation. Although we cannot accurately determine the amounts attributable thereto, we have been affected by inflation through increased costs of employee compensation and other operational expenses. To the extent permitted by the marketplace for our products and services, we attempt to recover increases in costs by periodically increasing prices.



Item 4. Controls and Procedures

Management's Report on Internal Control Over Financial Reporting

Our disclosure controls and procedures (as defined in Rule 13a-15(e) of the Securities Exchange Act of 1934 ("Exchange Act")) are designed to provide reasonable assurance that information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the time periods specified in the SEC rules and forms. Our disclosure controls and procedures are also designed to ensure that such information is accumulated and communicated to our management, including our principal executive officer and principal financial officer, to allow timely decisions regarding disclosure.

Our principal executive officer and principal financial officer, with the assistance of our Disclosure Committee, have conducted an evaluation of the effectiveness of our disclosure controls and procedures as of the end of the period covered by this Quarterly Report. We perform this evaluation on a quarterly basis so that the conclusions concerning the effectiveness of our disclosure controls and procedures can be reported in our annual report on Form 10-K and quarterly reports on Form 10-Q. Based on this evaluation, our principal executive officer and principal financial officer have concluded that our disclosure controls and procedures were effective as of the end of the period covered by this Quarterly Report.

Changes in Internal Control over Financial Reporting

We adopted and implemented Topic 606 in the first quarter of fiscal 2019, which impacted our condensed consolidated balance sheet and our ongoing revenue recognition. See Notes A and B within the Notes to Condensed Consolidated Financial Statements for more information on the impact of adopting Topic 606 and ongoing considerations. In connection with the adoption of Topic 606, we modified our internal control over financial reporting (as this term is defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act), including our accounting policies and procedures, operational processes and documentation practices. These modifications included:

- updates to our policies and procedures for revenue recognition, including assessment of SSP and documentation processes related to meeting the new criteria for revenue recognition;
- changes to our contract review controls to take into account the new criteria for recognizing revenue, with specific focus on assessing whether the allocation objective is met;
- the addition of controls for reviewing recoverability of contract assets and reevaluation of our significant contract judgments and estimates on a periodic basis; and
- the addition of controls to address related required disclosures, including processes to evaluate changes in contract assets and liabilities and disaggregation of revenue.

Other than as described above relating to the adoption of Topic 606, there have been no changes in our internal control over financial reporting during the most recent fiscal quarter that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.



PART II—OTHER INFORMATION

Item 1. Legal Proceedings

We are not currently involved in legal proceedings requiring disclosure under this item.

Item 1A. Risk Factors

In addition to the other information set forth in this Quarterly Report, you should carefully consider the risk factors disclosed in Item 1A, “Risk Factors,” of our Annual Report for the fiscal year ended April 30, 2018. There have been no material changes to the risk factors as previously disclosed in such Annual Report.

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

None

Item 3. Defaults Upon Senior Securities

Not applicable.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

- Exhibit 3.1 Amended and Restated Articles of Incorporation, and amendments thereto. (1) (P)
- Exhibit 3.2 [Amended and Restated By-Laws dated May 18, 2009.](#) (2)
- Exhibits 31.1-31.2. Rule [13a-14\(a\)/15d-14\(a\)](#) Certifications
- Exhibit 32.1. [Section 906 Certifications](#)
- Exhibit 101.INS XBRL Instance Document.
- Exhibit 101.SCH XBRL Taxonomy Extension Schema Document.
- Exhibit 101.CAL XBRL Taxonomy Extension Calculation Linkbase Document.
- Exhibit 101.DEF XBRL Taxonomy Extension Definition Linkbase Document.
- Exhibit 101.LAB XBRL Taxonomy Extension Label Linkbase Document.
- Exhibit 101.PRE XBRL Taxonomy Extension Presentation Linkbase Document.

(1) Incorporated by reference herein. Filed by the Company as an exhibit to its Quarterly Report filed on Form 10-Q for the quarter ended October 31, 1990. (P) Filed in paper format.

(2) Incorporated by reference herein. Filed by the Company as Exhibit 3.1 to its Quarterly Report filed on Form 10-Q for the quarter ended January 31, 2010.



SIGNATURES

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

AMERICAN SOFTWARE, INC.

Date: December 7, 2018

By: /s/ James C. Edenfield
James C. Edenfield
Executive Chairman, Treasurer and Director
(Principal Executive Officer)

Date: December 7, 2018

By: /s/ Vincent C. Klinges
Vincent C. Klinges
Chief Financial Officer
(Principal Financial Officer)

Date: December 7, 2018

By: /s/ Bryan L. Sell
Bryan L. Sell
Controller and Principal Accounting Officer



Exhibit 31.1

RULE 13a-14(a)/15d-14(a) CERTIFICATION

I, James C. Edenfield, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of American Software, 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 we 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 the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 7, 2018

By: /s/ James C. Edenfield
James C. Edenfield
Executive Chairman, Treasurer and Director
(Principal Executive Officer)



Exhibit 31.2

RULE 13a-14(a)/15d-14(a) CERTIFICATION

I, Vincent C. Klinges, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of American Software, 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 we 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 the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: December 7, 2018

By: /s/ Vincent C. Klinges
Vincent C. Klinges
Chief Financial Officer
(Principal Financial Officer)



Exhibit 32.1

**Certifications Pursuant to Section 906 of
The Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350)**

The undersigned, as the Principal Executive Officer of American Software, Inc., certifies that, to the best of his knowledge and belief, this report on Form 10-Q for the fiscal quarter ended October 31, 2018 (the "Report"), which accompanies this certification, fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 and the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of American Software, Inc. at the dates and for the periods indicated. The foregoing certification is made pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350) and shall not be relied upon for any other purpose.

This 7th day of December, 2018

/s/ James C. Edenfield

James C. Edenfield
Executive Chairman, Treasurer and Director
(Principal Executive Officer)

The undersigned, as the Principal Financial Officer of American Software, Inc., certifies that, to the best of his knowledge and belief, this report on Form 10-Q for the fiscal quarter ended October 31, 2018 (the "Report"), which accompanies this certification, fully complies with the requirements of Section 13(a) of the Securities Exchange Act of 1934 and the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of American Software, Inc. at the dates and for the periods indicated. The foregoing certification is made pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. Section 1350) and shall not be relied upon for any other purpose.

This 7th day of December, 2018

/s/ Vincent C. Klinges

Vincent C. Klinges
Chief Financial Officer
(Principal Financial Officer)

A signed original of this written statement required by Section 906, or other document authenticating, acknowledging, or otherwise adopting the signature that appears in typed form within the electronic version of this written statement required by Section 906, has been provided to American Software, Inc. and will be retained by American Software, Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

The information in this Exhibit 32.1 shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933, except as shall be expressly set forth by specific reference in such filing.