UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-Q

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

For the quarterly period ended September 30, 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: 001-38263

ALTAIR ENGINEERING INC.

(Exact name of registrant as specified in its charter)

Delaware

(State or other jurisdiction of incorporation or organization)

1820 East Big Beaver Road, Troy, Michigan (Address of principal executive offices) 38-2591828 (I.R.S. Employer Identification No.)

> 48083 (Zip Code)

(248) 614-2400

(Registrant's telephone number, including area code)

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 \boxtimes No \square

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 \boxtimes No \square

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

Large accelerated filer		Accelerated filer	
Non-accelerated filer	\boxtimes	Smaller reporting company	
		Emerging growth company	X

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 \Box

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.

On October 26, 2018 there were 38,157,669 shares of the registrant's Class A common stock outstanding and 32,170,732 shares of the registrant's Class B common stock outstanding.

ALTAIR ENGINEERING INC. AND SUBSIDIARIES FORM 10-Q FOR THE QUARTER ENDED SEPTEMBER 30, 2018 INDEX

PART I.

PART II.

Page

3

3

4

5

6

7

8

23

40

40

42

42

43

43

43

43

44

45

FINANCIAL INFORMATION Item 1. Financial Statements – Unaudited a) Consolidated balance sheets b) Consolidated statements of operations c) Consolidated statements of comprehensive income (loss) Consolidated statement of changes in stockholders' equity d) e) Consolidated statements of cash flows Notes to consolidated financial statements f) Management's Discussion and Analysis of Financial Condition and Results of Operations Item 2. Quantitative and Qualitative Disclosures About Market Risk Item 3. Item 4. **Controls and Procedures OTHER INFORMATION** Item 1. Legal Proceedings Item 1A. **Risk Factors** Item 2. Unregistered Sales of Equity Securities and Use of Proceeds **Defaults Upon Senior Securities** Item 3. Item 4. Mine Safety Disclosures Item 5. **Other Information** Item 6. **Exhibits SIGNATURES**

PART I – FINANCIAL INFORMATION

ALTAIR ENGINEERING INC. AND SUBSIDIARIES CONSOLIDATED BALANCE SHEETS

		nber 30, 2018	December 31, 2017		
(In thousands, except per share data)	(Ui	naudited)			
ASSETS CURRENT ASSETS:					
Corrent Assers.	\$	197.413	\$	39,213	
Accounts receivable, net	ψ	69,046	Ψ	86,635	
Inventory, net		1,234		1,980	
Income tax receivable		9,841		6,054	
Prepaid expenses and other current assets		12,149		10,006	
Total current assets		289,683		143,888	
Property and equipment, net		29,679		31,446	
Goodwill		62,905		62.706	
Other intangible assets, net		22,329		24,461	
Deferred tax assets		7,837		8,351	
Other long-term assets		15,580		17,019	
TOTAL ASSETS	\$	428,013	\$	287,871	
	φ	420,015	ψ	207,071	
LIABILITIES, MEZZANINE EQUITY AND STOCKHOLDERS' EQUITY					
CURRENT LIABILITIES:	¢	400	¢	222	
Current portion of long-term debt	\$	400	\$	232	
Accounts payable		5,592		4,880	
Accrued compensation and benefits		28,750		26,560	
Obligations for acquisition of businesses		831		13,925	
Other accrued expenses and current liabilities		20,222		21,744	
Deferred revenue		136,991		130,122	
Total current liabilities		192,786		197,463	
Long-term debt, net of current portion		670		178	
Deferred revenue, non-current		9,722		9,640	
Other long-term liabilities		13,036		17,647	
TOTAL LIABILITIES		216,214		224,928	
Commitments and contingencies					
MEZZANINE EQUITY		2,352		2,352	
STOCKHOLDERS' EQUITY:					
Preferred stock (\$0.0001 par value), authorized 45,000 shares, none issued and outstanding		—		—	
Common stock (\$0.0001 par value)					
Class A common stock, authorized 513,797 shares, issued and outstanding 38,120					
and 26,725 shares as of September 30, 2018 and December 31, 2017, respectively		4		2	
Class B common stock, authorized 41,203 shares, issued and outstanding 32,171		2			
and 36,508 shares as of September 30, 2018 and December 31, 2017, respectively		3		4	
Additional paid-in capital		370,402		232,156	
Accumulated deficit		(153,759)		(166,499)	
Accumulated other comprehensive loss		(7,203)	_	(5,072)	
TOTAL STOCKHOLDERS' EQUITY	+	209,447	*	60,591	
TOTAL LIABILITIES, MEZZANINE EQUITY AND STOCKHOLDERS' EQUITY	\$	428,013	\$	287,871	

See accompanying notes to consolidated financial statements.

ALTAIR ENGINEERING INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF OPERATIONS (Unaudited)

Intervenue 2017 2017 2017 2017 Software \$ 71,302 \$ 63,208 \$ 212,258 \$ 176,005 Software related services 8,602 8,574 26,672 25,749 223,749 Total software 79,994 71,782 223,130 202,654 2017 75,749 5,3366 4,741 Total software 93,871 84,938 281,168 243,466 243,466 Cost of revenue 93,871 84,938 261,168 243,466 243,466 Cost of revenue 93,871 84,938 261,168 243,466 243,466 Cost of revenue 93,811 9,166 32,736 20,239 247,029 Total software 9,831 9,166 32,736 20,309 47,029 Other 1,204 1,448 3,416 3,745 79,902 79,74 Total soft revenue 27,204 26,302 85,702 79,74 69,198 Sales and marketing 19,275 </th <th></th> <th>Three Mor Septen</th> <th></th> <th colspan="4">Nine Months Ended September 30,</th>		Three Mor Septen		Nine Months Ended September 30,			
S 71,302 S 63,208 S 212,258 S 176,905 Software related services 8,692 8,574 26,872 25,749 Total software 79,994 77,782 239,130 202,654 Client engineering services 12,155 11,477 36,652 36,071 Other 1,722 1,679 5,386 4,741 Total software 9,831 84,938 281,168 243,466 Cost of revenue 9,831 9,166 32,736 26,239 Software related services 6,352 6,457 19,573 20,230 Other engineering services 9,817 9,231 29,977 29,200 Other 1,204 1,448 3,416 3,745 Total cost of revenue 27,204 26,302 85,702 79,974 Gross profit 66,667 58,636 193,492 79,974 Gross profit 66,667 58,435 58,435 58,435 58,435 Grearal and development 24,301 27,590	(in thousands, except per share data)						
Software related services 8.692 8.574 26.672 25.749 Total software 79,994 71,782 239,130 202,654 Client engineering services 12,125 11,477 36.652 36,071 Other 1,722 1,679 5,386 4,741 Total revenue 93,871 84.938 281,168 243,466 Cost of revenue 9,831 9,166 32,736 26,799 Software related services 6,352 6,457 19,573 20,230 Total software 16,183 15,623 52,309 47,029 Client engineering services 9,817 9,231 29,977 29,200 Other 1,204 1,448 3,416 3,745 Total cost of revenue 27,204 26,302 85,702 79,974 Gross profit 66,667 58,636 195,466 16,429 Operating expenses: 17,234 29,175 51,636 66,465 Amorization of intanguble asets 1,739 1,189	Revenue						
Total software 79,994 71,782 239,130 202,654 Client engineering services 12,155 11,477 36,652 36,071 Other 1,722 1,679 5,386 4,741 Total revenue 93,871 84,938 281,168 243,466 Cost of revenue 9,831 9,166 32,736 26,799 Software related services 6,352 6,457 19,573 20,230 Total software 16,183 15,623 52,309 47,029 Other 1,204 1,448 3,416 3,745 Total cost of revenue 27,204 26,302 85,702 79,974 Gross profit 66,667 58,633 195,466 163,492 Operating expenses: 79,974 21,739 1,189 5,665 3,823 Research and development 24,301 27,590 71,748 69,198 Sales and marketing 19,275 22,345 58,435 58,683 General and administrative 17,739 <t< td=""><td>Software</td><td>\$</td><td>\$ 63,208</td><td>\$</td><td></td><td>\$</td><td>176,905</td></t<>	Software	\$	\$ 63,208	\$		\$	176,905
Client engineering services 12,155 11,477 36,652 36,071 Oher 1,722 1,679 5,386 4,741 Total revenue 93,871 84,938 281,168 243,466 Cost of revenue 9,831 9,166 32,736 26,799 Software related services 6,352 6,457 19,573 20,230 Total software 16,183 15,623 52,309 47,029 Client engineering services 9,817 9,231 29,977 29,200 Other 1,204 1,448 3,416 3,745 Total cost of revenue 27,204 26,302 85,702 79,974 Gross profit 66,667 58,636 195,466 163,492 Operating expenses: 8 19,275 22,345 58,435 58,683 General and administrative 17,234 29,175 51,636 66,465 Amorization of intangible assets 1,739 1,189 5,665 3,287 Other operating expenses 57,699<	Software related services	 8,692	 8,574		26,872		25,749
Other 1,722 1,679 5,386 4,741 Total revenue 93,871 84,938 281,168 243,466 Cost of revenue 9,831 9,166 32,736 26,799 Software related services 6,352 6,457 19,573 20,230 Total software 16,183 115,623 52,309 47,029 Client engineering services 9,817 9,231 29,977 29,200 Other 1,204 1,448 3,416 3,745 Total cost of revenue 27,204 26,302 79,974 Gross profit 66,667 58,636 195,466 163,492 Operating expenses: 7 24,301 27,590 71,748 69,198 Sales and marketing 19,275 22,345 58,435 58,683 General and advelopment 24,301 27,590 71,748 69,198 Sales and marketing 19,275 22,345 58,435 58,683 General and advelopment 24,301 27,590 71,748 69,198 5,665	Total software	79,994	71,782		239,130		202,654
Total revenue 93,871 84,938 281,168 243,466 Cost of revenue 9,831 9,166 32,736 26,799 Software related services 6,352 6,457 19,573 20,230 Total software 16,183 15,623 52,309 47,029 Other engineering services 9,817 9,231 29,977 29,200 Other 1,204 1,448 3,416 3,745 Total cost of revenue 27,204 26,302 85,702 79,974 Gross profit 66,667 56,666 163,492 79,974 Operating expenses: 9,275 22,345 58,435 58,683 General and administrative 17,234 29,175 51,636 66,465 Amortization of intangible assets 1,739 1,189 5,665 3,287 Other operating income (4,850) (733) (4,065) 1733 Other operating income (loss) 8,968 (20,928) 15,415 (30,076) Interst expense 31	Client engineering services	12,155	11,477		36,652		36,071
Cost of revenue 9,831 9,166 32,736 26,799 Software nelated services 6,352 6,457 19,573 20,230 Total software 16,183 15,623 52,309 47,029 Client engineering services 9,817 9,231 29,977 29,200 Other 1,204 1,448 3,416 3,745 Total cost of revenue 27,204 26,302 85,702 79,974 Gross profit 66,667 58,636 195,466 163,492 Operating expenses: 71,214 21,590 71,748 69,198 Sales and marketing 19,275 22,345 58,435 58,683 General and administrative 17,234 29,175 51,636 66,665 Total operating income (4,850) (735) (7,433) (4,065) Total operating income (loss) 8,968 (20,928) 15,415 (30,076) Interest expense 31 634 92 1,793 Other operating income taxes 9,907	Other	1,722	1,679		5,386		4,741
Software 9,831 9,166 32,736 26,799 Software related services 6,352 6,457 19,573 20,230 Total software 16,183 15,623 52,309 47,029 Client engineering services 9,817 9,231 29,977 29,200 Other 1,204 1.448 3,416 3,745 Total cost of revenue 27,204 26,302 65,702 79,974 Gross profit 66,667 58,636 195,466 163,492 Operating expenses: 7 22,345 58,435 56,663 Gross profit 24,301 27,590 71,748 69,198 Sales and marketing 19,275 22,345 58,435 56,665 Amortization of intangible assets 1,739 1,189 5,665 3,287 Other operating income (4,850) (735) (7,433) (4,065) Total operating expense 31 634 92 1,793 Other operating income (loss) \$ 7,307 \$ (29,626	Total revenue	93,871	84,938		281,168		243,466
Software related services 6,352 6,457 19,573 20,230 Total software 16,183 15,623 52,309 47,029 Client engineering services 9,817 9,231 29,977 29,200 Other 1,204 1,448 3,416 3,745 Total cost of revenue 27,204 26,302 85,702 79,974 Gross profit 66,667 58,636 195,466 163,492 Operating expenses: 739 71,748 69,198 5ales and marketing 19,275 22,345 58,435 56,683 General and development 24,301 27,590 71,748 69,198 5ales and marketing 19,275 51,636 66,465 3,287 Other operating income (4,850) (733) (7,433) (4,065) 193,566 3,287 Other operating income (loss) 8,968 (20,28) 15,415 (30,076) Interest expense 31 634 92 1,793 Income (loss) bere income taxes 9,907 (21	Cost of revenue						
Total software 16,183 15,623 52,309 47,029 Client engineering services 9,817 9,231 29,977 29,200 Other 1,204 1,448 3,416 3,745 Total cost of revenue 27,204 26,302 85,702 79,974 Gross profit 66,667 58,636 195,466 163,492 Operating expenses: 24,301 27,590 71,748 69,198 Sales and marketing 19,275 22,345 58,435 58,683 General and administrative 17,739 1,189 5,665 3,287 Other operating income (4,850) (735) (7,433) (4,065) Other operating income (loss) 8,968 (20,928) 15,415 (30,076) Interest expense 31 634 92 1,739 Other income laxes 9,907 (21,614) 17,339 (32,707) Income (loss) bere in come taxes 9,907 (21,614) 17,339 (32,707) Income (loss) per share attributable to co	Software	9,831	9,166		32,736		26,799
Client engineering services 9,817 9,231 29,977 29,200 Other 1,204 1,448 3,416 3,745 Total cost of revenue 27,204 26,302 85,702 79,974 Gross profit 66,667 58,636 195,466 163,492 Operating expenses: 7 22,345 58,435 55,663 General and administrative 17,234 29,175 51,636 66,665 Amortization of intangible assets 1,739 1,189 5,665 3,287 Other operating expenses (4,850) (735) (7,433) (4,065) Total operating expenses 57,699 79,564 180,0051 193,568 Operating income (loss) 8,968 (20,928) 15,415 (30,076) Interest expense 31 634 92 1,793 Other (income) expense, net (970) 52 (2,046) 838 Income (loss) before income taxes 9,907 (21,614) 17,369 (32,707) Income (loss) per share \$ 7,307 \$ (29,626) \$ 12,740	Software related services	6,352	6,457		19,573		20,230
Other 1.204 1.448 3.416 3.745 Total cost of revenue 27.204 26.302 85.702 79.974 Gross profit 66.667 58.636 195.466 163.492 Operating expenses: 19.275 22.345 58.435 58.683 General and administrative 17.234 29,175 51,636 66.665 Amortization of intangible assets 1.739 1,189 5.665 3.287 Other operating income (4.850) (735) (7,433) (4.065) Total operating expenses 57.699 79.564 180.051 193,568 Operating income (loss) 8.968 (20.928) 15.415 (30.076) Interest expense 31 634 92 1.793 Other (loss) before income taxes 9.907 (21.614) 17.369 (32.707) Income (loss) before income taxes 9.907 (21.614) 17.369 (32.707) Income (loss) per share: Net income (loss) per share attributable to common stockholders, basic \$ 0.10 \$ 0.59	Total software	16,183	 15,623		52,309	_	47,029
Total cost of revenue 27,204 26,302 85,702 79,974 Gross profit 66,667 58,636 195,466 163,492 Operating expenses: 79,974 66,667 58,636 195,466 163,492 Research and development 24,301 27,590 71,748 66,183 Sales and marketing 19,275 22,345 58,435 58,683 General and administrative 17,234 29,175 51,636 66,465 Amortization of intangible assets 1,739 1,189 5,665 3,287 Other operating income (4,850) (735) (7,433) (4,065) Total operating expenses 57,699 79,564 180,051 193,568 Operating income (loss) 8,968 (20,928) 15,415 (30,076) Interest expense 31 634 92 1,793 Other (income) expense, net (970) 52 (2,046) 838 Income (loss) before income taxes 9,907 (21,614) 17,369 (32,707)	Client engineering services	9,817	9,231		29,977		29,200
Gross profit 66,667 58,636 195,466 163,492 Operating expenses: 24,301 27,590 71,748 69,198 Sales and marketing 19,275 22,345 58,435 58,683 General and administrative 17,234 29,175 51,636 66,465 Amortization of intangible assets 1,739 1,189 5,665 3,287 Other operating income (4,850) (735) (7,433) (4,065) Total operating expenses 57,699 79,564 180,051 193,568 Operating income (loss) 8,968 (20,928) 15,415 (30,076) Interest expense 31 634 92 1,793 Other (income) expense, net (970) 52 (2,046) 838 Income (loss) before income taxes 9,907 (21,614) 17,369 (32,707) Income (loss) bers hare: 2,600 8,012 4,629 6,353 Net income (loss) per share attributable to common stockholders, basic \$ 0.10 (0.59) \$ 0.19 \$ (0	Other	1,204	1,448		3,416		3,745
Operating expenses: 24,301 27,590 71,748 69,198 Sales and marketing 19,275 22,345 58,435 58,683 General and administrative 17,234 29,175 51,636 66,465 Amortization of intangible assets 17,739 1,189 5,665 3,287 Other operating income (4,850) (735) (7,433) (4,065) Total operating expenses 57,699 79,564 180,051 193,568 Operating income (loss) 8,968 (20,928) 15,415 (30,076) Interest expense 31 634 92 1,793 Other (income) expense, net (970) 52 (2,046) 838 Income (loss) before income taxes 9,907 (21,614) 17,369 (32,707) Income (loss) per share: 2,600 8,012 4,629 6,353 Net income (loss) per share: 2,600 8,012 4,629 6,353 Net income (loss) per share attributable to common stockholders, basic \$ 0,10 \$ 0,59) \$ 0,17 \$ 0,78) Weighted average shares outstanding:	Total cost of revenue	 27,204	26,302		85,702		79,974
Research and development 24,301 27,590 71,748 69,198 Sales and marketing 19,275 22,345 58,435 58,683 General and administrative 17,234 29,175 51,636 66,465 Amortization of intangible assets 1,739 1,189 5,665 3,287 Other operating income (4,850) (7,35) (7,433) (4,065) Total operating expenses 57,699 79,564 180,051 193,568 Operating income (loss) 8,968 (20,928) 15,415 (30,076) Interest expense 31 634 92 1,733 Other (income) expense, net (970) 52 (2,046) 8333 Net income (loss) before income taxes 9,907 (21,614) 17,369 (32,707) Income (loss) per share 2,600 8,012 4,629 6,353 Net income (loss) per share \$ 0,10 \$ (0,59) \$ 0.19 \$ (39,060) Income (loss) per share attributable to common stockholders, basic \$ 0,10 \$ (0,59) \$ 0.17	Gross profit	 66,667	 58,636		195,466		163,492
Research and development 24,301 27,590 71,748 69,198 Sales and marketing 19,275 22,345 58,435 58,683 General and administrative 17,234 29,175 51,636 66,465 Amortization of intangible assets 1,739 1,189 5,665 3,287 Other operating income (4,850) (7,35) (7,433) (4,065) Total operating expenses 57,699 79,564 180,051 193,568 Operating income (loss) 8,968 (20,928) 15,415 (30,076) Interest expense 31 634 92 1,733 Other (income) expense, net (970) 52 (2,046) 8333 Net income (loss) before income taxes 9,907 (21,614) 17,369 (32,707) Income (loss) per share 2,600 8,012 4,629 6,353 Net income (loss) per share \$ 0,10 \$ (0,59) \$ 0.19 \$ (39,060) Income (loss) per share attributable to common stockholders, basic \$ 0,10 \$ (0,59) \$ 0.17	Operating expenses:	,					
Sales and marketing 19,275 22,345 58,435 58,683 General and administrative 17,234 29,175 51,636 66,465 Amortization of intangible assets 1,739 1,189 5,665 3,287 Other operating income (4,850) (7,35) (7,433) (4,065) Total operating expenses 57,699 79,564 180,051 193,568 Operating income (loss) 8,968 (20,928) 15,415 (30,076) Interest expense 31 634 92 1,793 Other (income) expense, net (970) 52 (2,046) 838 Income (loss) before income taxes 9,907 (21,614) 17,369 (32,707) Income (loss) per share: 2,600 8,012 4,629 6,353 Net income (loss) per share attributable to common stockholders, daited \$0,10 \$0,059 \$0,17 \$0,078 Weighted average number of shares used in computing net income (loss) per share, basic 70,001 \$0,606 66,429 50,374		24,301	27,590		71,748		69,198
Amortization of intangible assets 1,739 1,189 5,665 3,287 Other operating income (4,850) (735) (7,433) (4,065) Total operating expenses 57,699 79,564 180,051 193,568 Operating income (loss) 8,968 (20,928) 15,415 (30,076) Interest expense 31 634 92 1,793 Other (income) expense, net (970) 52 (2,046) 838 Income (loss) before income taxes 9,907 (21,614) 17,369 (32,707) Income (loss) before income taxes 2,600 8,012 4,629 6,339 Net income (loss) \$ 7,307 \$ (29,626) \$ 12,740 \$ (39,060) Income (loss) per share:		19,275	22,345		58,435		58,683
Other operating income (4,850) (735) (7,433) (4,065) Total operating expenses 57,699 79,564 180,051 193,568 Operating income (loss) 8,968 (20,928) 15,415 (30,076) Interest expense 31 634 92 1,793 Other (income) expense, net (970) 52 (2,046) 838 Income (loss) before income taxes 9,907 (21,614) 17,369 (32,707) Income (loss) before income taxes 2,600 8,012 4,629 6,353 Net income (loss) per share: \$ 7,307 \$ (29,626) \$ 12,740 \$ (39,060) Income (loss) per share: \$ 0.10 \$ (0.59) \$ 0.19 \$ (0.78) Net income (loss) per share attributable to common stockholders, basic \$ 0.10 \$ (0.59) \$ 0.17 \$ (0.78) Weighted average number of shares used in computing net income (loss) per share, basic \$ 0.10 \$ (0.59) \$ 0.17 \$ (0.78) Weighted average number of shares used in computing net income (loss) per share, basic 70,001 50	General and administrative	17,234	29,175		51,636		66,465
Total operating expenses 57,699 79,564 180,051 193,568 Operating income (loss) 8,968 (20,928) 15,415 (30,076) Interest expense 31 634 92 1,793 Other (income) expense, net (970) 52 (2,046) 838 Income (loss) before income taxes 9,907 (21,614) 17,369 (32,707) Income (loss) before income taxes 2,600 8,012 4,629 6,353 Net income (loss) per share: \$7,307 \$ (29,626) \$ 12,740 \$ (39,060) Income (loss) per share attributable to common stockholders, basic \$ 0.10 \$ (0.59) \$ 0.19 \$ (0.78) Net income (loss) per share attributable to common stockholders, diluted \$ 0.10 \$ (0.59) \$ 0.17 \$ (0.78) Weighted average number of shares used in computing net income (loss) per share, basic \$ 0.10 \$ 0.59) \$ 0.17 \$ (0.78) Weighted average number of shares used in computing net income (loss) per share, basic 70,001 50,606 66,429 50,374	Amortization of intangible assets	1,739	1,189		5,665		3,287
Operating income (loss) 8,968 (20,928) 15,415 (30,076) Interest expense 31 634 92 1,793 Other (income) expense, net (970) 52 (2,046) 838 Income (loss) before income taxes 9,907 (21,614) 17,369 (32,707) Income (loss) before income taxes 2,600 8,012 4,629 6,353 Net income (loss) \$ 7,307 \$ (29,626) \$ 12,740 \$ (39,060) Income (loss) per share: \$ 0.10 \$ (0.59) \$ 0.19 \$ (0.78) Net income (loss) per share attributable to common stockholders, basic \$ 0.10 \$ (0.59) \$ 0.17 \$ (0.78) Net income (loss) per share attributable to common stockholders, diluted \$ 0.10 \$ (0.59) \$ 0.17 \$ (0.78) Weighted average shares outstanding: \$ 0.10 \$ (0.59) \$ 0.17 \$ (0.78) Weighted average number of shares used in computing net income (loss) per share, basic 70,001 50,606 66,429 50,374	Other operating income	(4,850)	(735)		(7,433)		(4,065)
Operating income (loss) 8,968 (20,928) 15,415 (30,076) Interest expense 31 634 92 1,793 Other (income) expense, net (970) 52 (2,046) 838 Income (loss) before income taxes 9,907 (21,614) 17,369 (32,707) Income (loss) before income taxes 2,600 8,012 4,629 6,353 Net income (loss) per share 2,600 8,012 4,629 6,353 Net income (loss) per share attributable to common stockholders, basic \$ 0.10 \$ (0.59) \$ 0.19 \$ (0.78) Net income (loss) per share attributable to common stockholders, diluted \$ 0.10 \$ (0.59) \$ 0.17 \$ (0.78) Weighted average shares outstanding: \$ 0.10 \$ (0.59) \$ 0.17 \$ (0.78) Weighted average number of shares used in computing net income (loss) per share, basic 70,001 50,606 66,429 50,374	Total operating expenses	 57,699	79,564		180,051		193,568
Other (income) expense, net (970) 52 $(2,046)$ 838Income (loss) before income taxes $9,907$ $(21,614)$ $17,369$ $(32,707)$ Income tax expense $2,600$ $8,012$ $4,629$ $6,353$ Net income (loss) $\$$ $7,307$ $\$$ $(29,626)$ $\$$ $12,740$ $\$$ Income (loss) per share: $\$$ $\$$ 0.10 $\$$ (0.59) $\$$ 0.19 $\$$ (0.78) Net income (loss) per share attributable to common stockholders, basic $\$$ 0.10 $\$$ (0.59) $\$$ 0.17 $\$$ (0.78) Net income (loss) per share attributable to common stockholders, diluted $\$$ 0.10 $\$$ (0.59) $\$$ 0.17 $\$$ (0.78) Weighted average shares outstanding: $*$	Operating income (loss)	 8,968	 (20,928)		15,415		(30,076)
Other (income) expense, net(970)52(2,046)838Income (loss) before income taxes9,907(21,614)17,369(32,707)Income tax expense2,6008,0124,6296,353Net income (loss)\$7,307\$(29,626)\$12,740\$Income (loss) per share: v v v v v v v Net income (loss) per share attributable to common stockholders, basic\$0.10\$(0.59)\$0.19\$(0.78)Net income (loss) per share attributable to common stockholders, diluted\$0.10\$(0.59)\$0.17\$(0.78)Weighted average shares outstanding: v <td< td=""><td>Interest expense</td><td>31</td><td>634</td><td></td><td>92</td><td></td><td>1,793</td></td<>	Interest expense	31	634		92		1,793
Income tax expense2,6008,0124,6296,353Net income (loss)\$7,307\$(29,626)\$12,740\$(39,060)Income (loss) per share:Net income (loss) per share attributable to common stockholders, basic\$0.10\$(0.59)\$0.19\$(0.78)Net income (loss) per share attributable to common stockholders, diluted\$0.10\$(0.59)\$0.17\$(0.78)Weighted average shares outstanding:\$0.10\$(0.59)\$0.17\$(0.78)Weighted average number of shares used in computing net income (loss) per share, basic70,00150,60666,42950,374	Other (income) expense, net	(970)	52		(2,046)		838
Income tax expense2,6008,0124,6296,353Net income (loss)\$7,307\$(29,626)\$12,740\$(39,060)Income (loss) per share:Net income (loss) per share attributable to common stockholders, basic\$0.10\$(0.59)\$0.19\$(0.78)Net income (loss) per share attributable to common stockholders, diluted\$0.10\$(0.59)\$0.17\$(0.78)Weighted average shares outstanding:\$0.10\$(0.59)\$0.17\$(0.78)Weighted average number of shares used in computing net income (loss) per share, basic70,00150,60666,42950,374	Income (loss) before income taxes	 9,907	 (21,614)		17,369		(32,707)
Income (loss) per share: Income (loss) per share attributable to common stockholders, basic \$ 0.10 \$ (0.59) \$ 0.19 \$ (0.78) Net income (loss) per share attributable to common stockholders, diluted \$ 0.10 \$ (0.59) \$ 0.17 \$ (0.78) Net income (loss) per share attributable to common stockholders, diluted \$ 0.10 \$ (0.59) \$ 0.17 \$ (0.78) Weighted average shares outstanding: Income (loss) per share, basic 70,001 Weighted average number of shares used in computing net income (loss) per share, basic 70,001 50,606 66,429 50,374 Weighted average number of shares used in computing Income (loss) per share used in computing Income (loss) per share, basic 70,001 50,606 66,429 50,374	Income tax expense	2,600	8,012		4,629		6,353
Net income (loss) per share attributable to common stockholders, basic\$ 0.10\$ (0.59)\$ 0.19\$ (0.78)Net income (loss) per share attributable to common stockholders, diluted\$ 0.10\$ (0.59)\$ 0.17\$ (0.78)Weighted average shares outstanding: weighted average number of shares used in computing net income (loss) per share, basic70,00150,60666,42950,374Weighted average number of shares used in computing weighted average number of shares used in computing70,00150,60666,42950,374	Net income (loss)	\$ 7,307	\$ (29,626)	\$	12,740	\$	(39,060)
Net income (loss) per share attributable to common stockholders, basic\$ 0.10\$ (0.59)\$ 0.19\$ (0.78)Net income (loss) per share attributable to common stockholders, diluted\$ 0.10\$ (0.59)\$ 0.17\$ (0.78)Weighted average shares outstanding: weighted average number of shares used in computing net income (loss) per share, basic70,00150,60666,42950,374Weighted average number of shares used in computing weighted average number of shares used in computing70,00150,60666,42950,374	Income (loss) per share:	 	 ;				
stockholders, basic\$0.10\$(0.59)\$0.19\$(0.78)Net income (loss) per share attributable to common stockholders, diluted\$0.10\$(0.59)\$0.17\$(0.78)Weighted average shares outstanding: Weighted average number of shares used in computing net income (loss) per share, basic70,00150,60666,42950,374Weighted average number of shares used in computing Net income (loss) per share, basic70,00150,60666,42950,374							
Net income (loss) per share attributable to common stockholders, diluted\$ 0.10 \$ (0.59) \$ 0.17 \$ (0.78)Weighted average shares outstanding: Weighted average number of shares used in computing net income (loss) per share, basic70,001 50,606 66,429 50,374Weighted average number of shares used in computing Net income (loss) per share, basic70,001 50,606 66,429 50,374		\$ 0.10	\$ (0.59)	\$	0.19	\$	(0.78)
stockholders, diluted\$0.10\$(0.59)\$0.17\$(0.78)Weighted average shares outstanding: Weighted average number of shares used in computing net income (loss) per share, basic70,00150,60666,42950,374Weighted average number of shares used in computing Weighted average number of shares used in computing70,00150,60666,42950,374							. ,
Weighted average number of shares used in computing net income (loss) per share, basic70,00150,60666,42950,374Weighted average number of shares used in computing		\$ 0.10	\$ (0.59)	\$	0.17	\$	(0.78)
net income (loss) per share, basic70,00150,60666,42950,374Weighted average number of shares used in computing	Weighted average shares outstanding:						
Weighted average number of shares used in computing	Weighted average number of shares used in computing						
	net income (loss) per share, basic	70,001	50,606		66,429		50,374
net income (loss) per share, diluted 76,709 50,606 74,182 50,374							
	net income (loss) per share, diluted	76,709	50,606		74,182		50,374

See accompanying notes to consolidated financial statements.

ALTAIR ENGINEERING INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS) (Unaudited)

	Three Mor Septem				Nine Mon Septem		
(in thousands)	 2018	_	2017		2018		2017
Net income (loss)	\$ 7,307	\$	(29,626)	\$	12,740	\$	(39,060)
Other comprehensive income (loss), net of tax:							
Foreign currency translation (net of tax effect of \$0,							
\$0, \$0 and \$0, respectively)	(431)		(11)		(2,273)		1,500
Retirement related benefit plans (net of tax effect of \$(9),							
\$41, \$(16) and \$41, respectively)	36		52		142		8
Total other comprehensive income (loss)	 (395)		41		(2,131)		1,508
Comprehensive income (loss)	\$ 6,912	\$	(29,585)	\$	10,609	\$	(37,552)

See accompanying notes to consolidated financial statements.

ALTAIR ENGINEERING INC. AND SUBSIDIARIES CONSOLIDATED STATEMENT OF CHANGES IN STOCKHOLDERS' EQUITY (Unaudited)

	Common stock						Accumulated other	Total
	Cla	ss A	Clas	is B	paid-in	Accumulated	comprehensive	stockholders'
(in thousands)	Shares	Amount	Shares	Amount	capital	deficit	loss	equity
Balance at January 1, 2018	26,725	\$2	36,508	\$ 4	\$ 232,156	\$ (166,499)	\$ (5,072)	\$ 60,591
Net income	—				—	12,740		12,740
Follow-on public offering, net of offering								
costs of \$370	5,731	1	(1,675)	(1)	135,201	—		135,201
Adjustment for acquisitions	—				(96)	—		(96)
Conversion from Class B to Class A	2,662		(2,662)				—	
Exercise of stock options	3,002	1			1,928		—	1,929
Stock-based compensation	—			—	1,213	_	_	1,213
Foreign currency translation, net of tax	—						(2,273)	(2,273)
Retirement related benefit plans, net of tax	—			—	_	_	142	142
Balance at September 30, 2018	38,120	\$ 4	32,171	\$3	\$ 370,402	\$ (153,759)	\$ (7,203)	\$ 209,447

See accompanying notes to consolidated financial statements.

ALTAIR ENGINEERING INC. AND SUBSIDIARIES CONSOLIDATED STATEMENTS OF CASH FLOWS (Unaudited)

	 Nine Months End	led Septen	nber 30,
(In thousands)	2018		2017
OPERATING ACTIVITIES:			
Net income (loss)	\$ 12,740	\$	(39,060)
Adjustments to reconcile net income (loss) to net cash provided by operating activities:			
Depreciation and amortization	10,895		7,895
Provision for bad debt	455		517
Stock-based compensation expense	1,213		39,302
Gain on sale of assets held for sale and other	(4,544)		(20)
Impairment of intangible assets	608		_
Deferred income taxes	(300)		(4,793)
Other, net	(116)		169
Changes in assets and liabilities:			
Accounts receivable	15,674		12,016
Prepaid expenses and other current assets	(6,334)		431
Other long-term assets	36		(11,024)
Accounts payable	796		(1,583)
Accrued compensation and benefits	2,650		(211)
Other accrued expenses and current liabilities	(4,626)		6,122
Deferred revenue	11,275		7,694
Net cash provided by operating activities	 40,422		17,455
INVESTING ACTIVITIES:			
Payments for acquisition of businesses, net of cash acquired	(15,950)		(15,582)
Proceeds from sale of assets held for sale and other	6,613		20
Capital expenditures	(5,333)		(4,367)
Payments for acquisition of developed technology	(2,738)		(2,120)
Other investing activities, net			(29)
Net cash used in investing activities	 (17,408)		(22,078)
FINANCING ACTIVITIES:	 (1),100)		(==,070)
Proceeds from issuance of Class A common stock in follow-on public offering,			
net of underwriters' discounts and commissions	135,572		
Proceeds from the exercise of stock options	1,929		476
Payments for follow-on public offering and initial public offering costs	(541)		(2,595)
Payments for redemption of common stock	(119)		(2,555)
Principal payments on long-term debt	(115)		(8,392)
Payments on revolving commitment	(101)		(71,676)
Borrowings under revolving commitment			86,270
Other financing activities	(226)		
-	 <u> </u>		(31)
Net cash provided by financing activities	 136,514		3,134
Effect of exchange rate changes on cash, cash equivalents and restricted cash	 (1,354)		1,301
Net increase (decrease) in cash, cash equivalents and restricted cash	158,174		(188)
Cash, cash equivalents and restricted cash at beginning of year	 39,578		17,139
Cash, cash equivalents and restricted cash at end of period	\$ 197,752	\$	16,951
Supplemental disclosure of cash flow:			
Interest paid	\$ 70	\$	1,722
Income taxes paid	\$ 5,900	\$	4,154
Supplemental disclosure of non-cash investing and financing activities:			
Capital leases	\$ 995	\$	_
Property and equipment in accounts payable	\$ 228	\$	144
Follow-on public offering costs in accounts payable	\$ 15	\$	_
Promissory notes issued and deferred payment obligations for acquisitions	\$ 278	\$	12,440
Issuance of common stock in connection with acquisitions	\$ 	\$	8,712
		-	-,· -
Issuance of common stock with put rights	\$ _	\$	2,352

See accompanying notes to consolidated financial statements.

ALTAIR ENGINEERING INC. AND SUBSIDIARIES NOTES TO CONSOLIDATED FINANCIAL STATEMENTS (Unaudited)

1. Organization and description of business

Altair Engineering Inc. ("Altair" or the "Company") is incorporated in the state of Delaware. The Company is a provider of enterprise-class engineering software enabling innovation across the entire product lifecycle from concept design to in-service operation. Altair transforms design and decision making by applying simulation, machine learning, and optimization throughout product lifecycles. The Company is headquartered in Troy, Michigan.

Follow-on public offering

In June 2018, the Company closed its follow-on public offering (the "Offering"), in which the Company issued and sold 4,056,004 shares of Class A common stock (inclusive of 763,424 shares sold upon the exercise by the underwriters of their option to purchase additional shares of our Class A common stock). The price per share to the public was \$35.00. The Company received aggregate proceeds of \$135.6 million from the Offering, net of underwriters' discounts and commissions, before deducting offering costs of approximately \$0.4 million.

The Offering also included the sale of 2,307,420 shares of Class A common stock by selling stockholders, giving effect to the conversion of 1,675,420 shares of the Company's Class B common stock into an equivalent number of shares of Class A common stock and the exercise of 257,000 options to purchase Class A common stock. The Company did not receive any proceeds from the sale of shares of Class A common stock by the selling stockholders other than the \$0.5 million in proceeds from exercises of stock options by certain selling stockholders.

2. Accounting policies

Basis of presentation

The accompanying unaudited consolidated financial statements have been prepared in accordance with United States generally accepted accounting principles ("GAAP") and applicable rules and regulations of the Securities and Exchange Commission ("SEC") regarding interim financial information. Accordingly, the accompanying statements do not include all the information and notes required by GAAP for complete financial statements. The accompanying unaudited consolidated financial statements should be read in conjunction with the Company's audited consolidated financial statements (and notes thereto) for the year ended December 31, 2017, included in the most recent Annual Report on Form 10-K filed with the SEC. In the opinion of management, all adjustments considered necessary for a fair presentation of the financial statements have been included, and all adjustments are of a normal and recurring nature. The preparation of the financial statements in conformity with GAAP 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 financial statements, and reported amounts of revenue and expenses during the reporting periods. Considerable judgment is often involved in making these determinations; use of different assumptions could result in significantly different results. Management believes its assumptions and estimates are reasonable and appropriate. However, actual results may differ from those estimates. In addition, the results of operations for the three and nine months ended September 30, 2018 are not necessarily indicative of the results that may be expected for any future period.

There have been no material changes to Altair's significant accounting policies as compared to the significant accounting policies described in the Company's Annual Report on Form 10-K for the year ended December 31, 2017.

The Company has concluded that all material transactions that have occurred that require disclosure or adjustments to the consolidated financial statements have been reported herein. See Note 17 – Subsequent events for additional information.



Cash, cash equivalents and restricted cash

The Company considers all highly liquid investments with original or remaining maturities of 90 days or less at the date of purchase to be cash equivalents. Cash and cash equivalents are recorded at cost, which approximates fair value.

Restricted cash is included in other long-term assets on the consolidated balance sheets. The following table provides a reconciliation of cash, cash equivalents and restricted cash reported in the consolidated balance sheet that sum to the total of the amounts reported in the consolidated statement of cash flows (in thousands):

	Septe	ember 30, 2018	December 31, 2017
Cash and cash equivalents	\$	197,413 \$	39,213
Restricted cash included in other long-term assets		339	365
Total cash, cash equivalents, and restricted cash shown in the statement of cash flows	\$	197,752 \$	39,578

Restricted cash represents amounts required for a contractual agreement with an insurer for the payment of potential health insurance claims, and term deposits for bank guarantees.

Receivable for French R&D credit

The French government provides a research and development ("R&D") tax credit known as Credit Impôt Recherche, or CIR, in order to encourage Companies to invest in R&D activities. The tax credit is deductible from French income tax and any excess is carried forward three years. After three years, any unused credit may be reimbursed to the Company by the French government. As of September 30, 2018, the Company had approximately \$11.1 million in receivables from the French government related to CIR, of which \$3.6 million is recorded in income tax receivable and the remaining \$7.5 million is recorded in other long-term assets. CIR is subject to customary audit by French tax authorities.

Mezzanine equity

In 2017, the Company issued 200,000 shares of Class A common stock to a third party as partial consideration for the purchase of developed technology. These shares have a put right that can be exercised by the holder five years from date of purchase at \$12.50 per share that requires the shares to be recorded at fair value at the issuance date and classified as mezzanine equity in the consolidated balance sheet. The put right option is terminated if the shareholders sell their shares. Classification of the of instrument shall remain as mezzanine equity until one of the following three events take place: (1) shares are sold on the open market; (2) a redemption feature lapses; or (3) there is a modification of the terms of the instrument.

Income (loss) per share

Basic income (loss) per share attributable to common stockholders is computed using the weighted average number of shares of common stock outstanding for the period, excluding stock options and restricted stock units ("RSUs"). Diluted income (loss) per share attributable to common stockholders is based upon the weighted average number of shares of common stock outstanding for the period and potentially dilutive common shares, including the effect of stock options and RSUs under the treasury stock method. The following table sets forth the computation of the numerators and denominators used in the basic and diluted income (loss) per share amounts (in thousands, except per share data):

	Three Months Ended September 30,					Nine Months Ended September 30,				
	2018 2017		2018			2017				
Numerator:										
Net income (loss)	\$	7,307	\$	(29,626)	\$	12,740	\$	(39,060)		
Denominator:										
Denominator for basic income (loss) per share—										
weighted average shares		70,001		50,606		66,429		50,374		
Effect of dilutive securities, stock options and RSUs		6,708		—		7,753		—		
Denominator for dilutive income (loss) per share		76,709		50,606		74,182		50,374		
Net income (loss) per share attributable to common										
stockholders, basic	\$	0.10	\$	(0.59)	\$	0.19	\$	(0.78)		
Net income (loss) per share attributable to common										
stockholders, diluted	\$	0.10	\$	(0.59)	\$	0.17	\$	(0.78)		



The computation of diluted income (loss) per share does not include shares that are anti-dilutive under the treasury stock method because their exercise prices are higher than the average fair value of the Company's stock during the period or due to a net loss in the period. For the three and nine months ended September 30, 2018, there were no anti-dilutive shares excluded from the computation of income (loss) per share. For the three and nine months ended September 30, 2017, respectively, there were 10.1 million and 9.8 million anti-dilutive shares excluded from the computation of income (loss) per share.

3. Recent accounting guidance

Accounting standards adopted

The Company adopted Accounting Standards Update, "ASU" 2017-09, *Compensation – Stock Compensation (Topic 718): Scope of Modification Accounting*, on January 1, 2018. ASU 2017-09 amends the guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting in Topic 718. The Company adopted ASU 2017-09 on a prospective basis, and the adoption did not have a material effect on the Company's consolidated financial statements.

Accounting standards not yet adopted

The Company will cease to qualify as an emerging growth company (as defined in the Jumpstart Our Business Startups Act of 2012) as of December 31, 2018, therefore the public company adoption dates mentioned below will be applicable at that time.

Revenue Recognition—In May 2014, the Financial Accounting Standards Board, or "FASB", issued ASU 2014-09, *Revenue from Contracts with Customers*. This standard outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes most existing revenue recognition guidance under GAAP. The core principle of the guidance is that an entity should recognize revenue when it transfers promised goods or services to customers in an amount that reflects the consideration to which the company expects to be entitled in exchange for those goods or services. ASU 2014-09 also requires enhanced disclosures about the nature, amount, timing, and uncertainty of revenues and cash flows arising from contracts with customers. Entities have the option of using either a full retrospective or a modified retrospective approach for the adoption of the new standard. In August 2015, the FASB issued ASU 2015-14, *Revenue from Contracts with Customers: Deferral of the Effective Date* that defers the effective date of ASU 2014-09 for all entities by one year for public business entities. This ASU is effective for fiscal years beginning after December 15, 2018, and interim periods within annual periods beginning after December 15, 2019. Early adoption is permitted.

Under existing GAAP, the Company does not have vendor-specific objective evidence ("VSOE") of fair value for post-contract customer support ("PCS") sold along with software products licenses; therefore, revenues for the software products licenses (including perpetual licenses), PCS and professional services, if applicable, are considered to be one accounting unit and, once all services have commenced, are recognized ratably over the remaining period of the arrangement (the longer of the contractual service term or PCS term). Under ASU 2014-09, the concept of assessing VSOE has been eliminated and the Company must determine standalone selling price and allocate transaction price associated with each performance obligation within an arrangement. As a result, the Company expects the timing of revenue recognition to be accelerated because it anticipates that license revenue will be recognized at a point in time, rather than over time, which is its current practice. Generally, the license revenue component of an arrangement represents a significant portion of the consolidated financial statements. The Company plans to adopt this standard effective January 1, 2018, using the modified retrospective approach, which will be reflected in the December 31, 2018 financial statements. The Company is currently evaluating the impact this standard will have on its consolidated financial statements and related disclosures.

Financial Instruments—In January 2016, the FASB issued ASU 2016-01, *Financial Instruments*—*Overall: Recognition and Measurement of Financial Assets and Financial Liabilities.* This standard affects the accounting for equity instruments, financial liabilities under the fair value option and the presentation and disclosure requirements of financial instruments. For public business entities, ASU 2016-01 is effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. For all other entities, including emerging growth companies, ASU 2016-01 is effective for fiscal years beginning after December 15, 2018, and interim periods within fiscal years beginning after December 15, 2019. The Company is currently evaluating the impact of the adoption of ASU 2016-01 on its consolidated financial statements and related disclosures. *Leases*—In February 2016, the FASB issued ASU 2016-02, *Leases (Topic 842)*. This standard amends various aspects of existing accounting guidance for leases, including the recognition of a right-of-use asset and a lease liability on the balance sheet for all leases with terms longer than 12 months. Leases will be classified as either finance or operating, with classification affecting the pattern of expense recognition in the income statement. This standard also introduces new disclosure requirements for leasing arrangements. ASU 2016-02 is effective for fiscal years beginning after December 15, 2018, including interim periods within those fiscal years for public business entities. For all other entities, including emerging growth companies, ASU 2016-02 is effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted. The new standard must be adopted using a modified retrospective approach, and provides for certain practical expedients. The Company plans to adopt this standard on January 1, 2019. The Company is currently evaluating the impact of the adoption of ASU 2016-02 on its consolidated financial statements and related disclosures.

Cash Classification—In August 2016, the FASB issued ASU 2016-15, *Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments*, to improve financial reporting in regard to how certain transactions are classified in the statement of cash flows. ASU 2016-15 provides guidance for targeted changes with respect to how cash receipts and cash payments are classified in the statements of cash flows, with the objective of reducing diversity in practice. ASU 2016-15 is effective for interim and annual periods beginning after December 15, 2017, for public business entities. For all other entities, including emerging growth companies, ASU 2016-15 is effective for fiscal years beginning after December 15, 2018, and interim periods within fiscal years beginning after December 15, 2019. Early adoption is permitted. The Company is currently evaluating the impact of the adoption of ASU 2016-15 on its consolidated financial statements and related disclosures.

Goodwill Impairment—In January 2017, the FASB issued ASU 2017-04, *Intangibles* – *Goodwill and Other (Topic 350): Simplifying the Test for Goodwill Impairment*, which simplifies accounting for goodwill impairments by eliminating step two from the goodwill impairment test. This guidance is effective for annual or interim goodwill impairment tests in fiscal years beginning after December 15, 2019, for public business entities that are Securities and Exchange Commission (SEC) filers, and December 15, 2020, for public business entities that are not SEC filers. For all other entities, including emerging growth companies, ASU 2017-04 is effective for annual or interim goodwill impairment tests in fiscal years beginning after December 15, 2021. Early adoption is permitted for interim and annual goodwill impairment tests performed on testing dates after January 1, 2017. The new standard must be applied on a prospective basis. The adoption of this guidance is not expected to have a material impact on the Company's consolidated financial statements and related disclosures.

Retirement Benefits – In March 2017, the FASB issued ASU 2017-07, *Compensation* – *Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost.* This ASU requires that an employer report the service cost component in the same line item or items as other compensation costs arising from services rendered by the pertinent employees during the period. The other components of net benefit cost are required to be presented in the income statement separately from the service cost component. The new guidance is effective for public business entities for annual reporting periods, and interim reporting periods within those annual periods, beginning after December 15, 2017. For all other entities, including emerging growth companies, ASU 2017-07 is effective for annual periods beginning after December 15, 2018, and interim periods within annual periods beginning after December 15, 2019. Early adoption is permitted as of the beginning of an annual period. The adoption of this guidance is not expected to have a material impact on the Company's consolidated financial statements and related disclosures.

Derivatives and Hedging – In August 2017, the FASB issued ASU 2017-12, *Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities.* This ASU amends the guidance with the objective of improving the financial reporting of hedging relationships to better portray the economic results of an entity's risk management activities in its financial statements. In addition, this ASU amends the current guidance to simplify the application of the hedge accounting guidance. For public business entities, the amendments are effective for annual reporting periods, and interim reporting periods within those annual periods, beginning after December 15, 2018. For all other entities, including emerging growth companies, the amendments are effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted. The adoption of ASU 2017-12 is not expected to have a material effect on the Company's consolidated financial statements and related disclosures.

Comprehensive Income – In February 2018, the FASB issued ASU 2018-02, *Income Statement* — *Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income (AOCI)*, which gives entities the option to reclassify to retained earnings the tax effects resulting from the Tax Cuts and Jobs Act, or the Tax Act, related to items in AOCI that the FASB refers to as having been stranded in AOCI. The new guidance may be applied retrospectively to each period in which the effect of the Tax Act is recognized in the period of adoption. The Company must adopt this guidance for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early adoption is permitted for periods for which financial statements have not yet been issued or made available for issuance, including the period the Tax Act was enacted. The guidance, when adopted, will require new disclosures regarding a company's accounting policy for releasing the tax effects in AOCI and permit the company the option to reclassify to retained earnings the tax effects resulting from the Tax Act that are stranded in AOCI. The Company is currently evaluating how to apply the new guidance and has not determined whether it will elect to reclassify stranded amounts. The adoption of ASU 2018-02 is not expected to have a material effect on the Company's consolidated financial statements and related disclosures.

Stock Compensation – In June 2018, the FASB issued ASU 2018-07, Compensation – Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting. This ASU simplifies the accounting for share-based payments to nonemployees by aligning it with the accounting for share-based payments to employees, with certain exceptions. Under the guidance, the measurement of equity-classified nonemployee awards will be fixed at the grant date, which may lower an entity's cost and reduce volatility in the income statement. For public business entities, the amendments are effective for fiscal years beginning after December 15, 2018, including interim periods within that fiscal year. For all other entities, including emerging growth companies, the amendments are effective for fiscal years beginning after December 15, 2019, and interim periods within fiscal years beginning after December 15, 2020. Early adoption is permitted, including in an interim period, but not before an entity adopts ASC 606, *Revenue from contracts with customers*. The adoption of this guidance is not expected to have a material effect on the Company's consolidated financial statements and related disclosures.

Fair Value – In August 2018, the FASB issued ASU 2018-13, *Fair Value Measurement (Topic 820): Disclosure Framework* – *Changes to the Disclosure Requirements for Fair Value Measurement.* This ASU modifies the disclosure requirements for fair value measurements, by removing, modifying, or adding certain disclosures. The amendments are effective for all entities for fiscal years, and interim reporting periods within those fiscal years, beginning after December 15, 2019. Early adoption is permitted for any removed or modified disclosures. The Company is currently evaluating the impact of the new guidance on its consolidated financial statements and related disclosures.

Retirement Benefits – In August 2018, the FASB issued ASU 2018-14, *Compensation* – *Retirement Benefits*- *Defined Benefit Plans* – *General (Subtopic 715-20): Disclosure Framework* – *Changes to the Disclosure Requirements for Defined Benefit Plans*. This ASU modifies the disclosure requirements for defined benefit pension or other postretirement plans. For public business entities, the amendments are effective for fiscal years ending after December 15, 2020. For all other entities, including emerging growth companies, the amendments are effective for fiscal years ending after December 15, 2021. Early adoption is permitted. The Company is currently evaluating the impact of the new guidance on its consolidated financial statements and related disclosures.

Intangibles – In August 2018, the FASB issued ASU 2018-15, *Intangibles* – *Goodwill and Other* – *Internal-Use Software (Subtopic 350-40): Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That is a Service Contract.* This ASU clarifies and aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. For public business entities, the amendments are effective for fiscal years beginning after December 15, 2019, and interim periods within those fiscal years. For all other entities, including emerging growth companies, the amendments are effective for annual reporting periods beginning after December 15, 2021. Early adoption is permitted. The Company is currently evaluating the impact of the new guidance on its consolidated financial statements and related disclosures.

4. Fair value measurements

The accounting guidance for fair value, among other things, defines fair value, establishes a consistent framework for measuring fair value and expands disclosure for each major asset and liability category measured at fair value on either a recurring or nonrecurring basis. Fair value is defined as the price that would be received to sell an asset or paid to transfer a liability (an exit price) in an orderly transaction between market participants at the reporting date. The framework for measuring fair value consists of a three-level valuation hierarchy that prioritizes the inputs to valuation techniques used to measure fair value based upon whether such inputs are observable or unobservable. Observable inputs reflect market data obtained from independent sources, while unobservable inputs reflect market assumptions made by the reporting entity. The three-level hierarchy for the inputs to valuation techniques is briefly summarized as follows:

Level 1 – Quoted prices in active markets for identical assets and liabilities at the measurement date;

Level 2 – Observable inputs, other than the quoted prices in active markets, that are observable either directly or indirectly; and

Level 3 – Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

An asset's or liability's fair value measurement level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement. Valuation techniques used need to maximize the use of observable inputs and minimize the use of unobservable inputs.

The carrying value of cash and cash equivalents, accounts receivable and accounts payable approximate fair value due to their short maturities. Interest on the Company's long-term debt is at a variable rate, and as such the debt obligation outstanding approximates fair value.

5. Acquisitions

FluiDyna GmbH

In May 2018, the Company purchased the remaining equity interests in FluiDyna GmbH ("FluiDyna") for aggregate consideration of EUR 2.2 million (\$2.7 million). Prior to the purchase of the remaining equity interests, the Company owned 24% of the outstanding equity interests in FluiDyna. The purchase price was allocated to assets and liabilities of FluiDyna based on the fair values of the assets acquired and liabilities assumed. The allocation included \$2.1 million to intangibles, consisting of developed technology and customer relationships and \$1.8 million to goodwill, which is not tax deductible. The financial results of FluiDyna have been included in the consolidated financial statements since the acquisition date.

The allocation of fair value of purchase consideration is incomplete pending the final determination of the fair value of assets acquired and liabilities assumed, and is subject to change within the measurement period (up to one year from the acquisition date). The primary areas that remain preliminary relate to the fair value of intangible assets acquired, certain tangible assets and liabilities acquired, income taxes and residual goodwill.

FluiDyna developed NVIDIA CUDA and GPU-based Computational Fluid Dynamics ("CFD") and numerical simulation technologies. The Company made an initial investment in FluiDyna in 2015. FluiDyna's simulation software products ultraFluidx and nanoFluidx have been available to the Company's customers through the Altair Partner Alliance and also offered as standalone licenses. ultraFluidX solves large scale internal and external aerodynamics problems for a broad class of problems including ultra-fast prediction and evaluation of vehicle, building, and environmental aerodynamics. nanoFluidX is a fluid dynamics simulation tool based on the smoothed particle hydrodynamics method to predict the flow in complex geometries with complex motion.

CANDI Controls, Inc.

In April 2018, the Company entered into an asset purchase agreement with California-based CANDI Controls, Inc. ("CANDI") and acquired all the intellectual property assets of CANDI for \$2.4 million. The sale was approved by the bankruptcy court on April 25, 2018, and the asset purchase was completed on April 26, 2018.

CANDI developed a modern platform which supports multiple data protocols for edge gateway computers to communicate with a constellation of Internet of Things ("IoT") devices. CANDI's software is designed to easily connect systems and equipment with cloud-based monitoring and control services to help organizations improve performance, conserve resources, and cut operational costs. Sensor data can be analyzed, visualized, and processed with machine learning and predictive analytics tools to forecast performance and prescribe actions consistent with business objectives.



6. Inventory

Inventory consists of finished goods and is stated at the lower of cost and net realizable value. Cost is determined using the first-in, first-out method. Net realizable value is the estimated selling prices in the ordinary course of business, less reasonable predictable costs of completion, disposal and transportation. The valuation of inventory requires management to estimate excess inventory as well as inventory that is not of saleable quality. The determination of obsolete or excess inventory requires management to estimate market conditions and future demand for the Company's products.

7. Property and equipment, net

Property and equipment consists of the following (in thousands):

	Se	ptember 30, 2018	D	ecember 31, 2017
Land	\$	7,994	\$	7,994
Building and improvements		13,041		15,185
Computer equipment and software		34,438		32,103
Office furniture and equipment		7,297		6,751
Leasehold improvements		6,757		6,467
Total property and equipment		69,527		68,500
Less: accumulated depreciation and amortization		39,848		37,054
Property and equipment, net	\$	29,679	\$	31,446

On August 7, 2018, the Company consummated the sale of the building that was used as the headquarters for its toggled subsidiary. The building was previously recorded as a held for sale asset and had a book value of \$2.1 million as of June 30, 2018. In connection with the sale of the building, the Company entered into a three-year lease back of part of the building, primarily for continued use as a distribution center for toggled's operational needs. The Company recognized a gain of \$4.4 million which is included in other operating income for the three and nine months ended September 30, 2018.

Depreciation expense was \$1.6 million and \$5.2 million for the three and nine months ended September 30, 2018, respectively, and \$1.6 million and \$4.6 million for the three and nine months ended September 30, 2017, respectively.

8. Goodwill and other intangible assets

Goodwill

The changes in the carrying amount of goodwill, which is attributable to the Software reporting segment, are as follows (in thousands):

Balance at December 31, 2017	\$	62,706
Acquisitions		1,768
Effects of foreign currency translation and other		(1,569)
Balance at September 30, 2018	\$	62,905
Balance at September 30, 2018	<u>\$</u>	62,90

Other intangible assets

A summary of other intangible assets is shown below (in thousands):

	September 30, 2018																		
	Weighted average amortization period		Gross carrying amount		5 0		, ,		, ,		5 0		5 0		5.0		cumulated ortization	N	let carrying amount
Definite-lived intangible assets:																			
Developed technology	4 years	\$	29,081	\$	13,942	\$	15,139												
Customer relationships	7 years		12,080		6,925		5,155												
Other intangibles	10 years		125		125		125		125		125 5		55	5					
Total definite-lived intangible assets			41,286		20,922		20,364												
Indefinite-lived intangible assets:																			
Trade names			1,965				1,965												
Total other intangible assets		\$	43,251	\$	20,922	\$	22,329												

	December 31, 2017									
	Weighted average amortization period		Gross carrying amount		cumulated ortization	N	let carrying amount			
Definite-lived intangible assets:										
Developed technology	4 years	\$	25,947	\$	9,909	\$	16,038			
Customer relationships	7 years		11,794		6,195		5,599			
Other intangibles	10 years	143			57		86			
Total definite-lived intangible assets			37,884		16,161		21,723			
Indefinite-lived intangible assets:										
Trade names			2,738				2,738			
Total other intangible assets		\$	40,622	\$	16,161	\$	24,461			

Amortization expense related to intangible assets was \$1.7 million and \$5.7 million for the three and nine months ended September 30, 2018, respectively, and \$1.2 million and \$3.3 million for the three and nine months ended September 30, 2017, respectively.

As of September 30, 2018, the Company completed an impairment test of indefinite-lived trade names. This test was triggered by the Company's decision during the September 30, 2018 quarter to rename and rebrand certain products. Upon completion of the impairment test, the Company recorded an impairment charge of \$0.6 million which is included in other operating income for the three and nine months ended September 30, 2018.

9. Other liabilities

The following table provides the details of other accrued expenses and current liabilities (in thousands):

	Sep	tember 30, 2018	D	ecember 31, 2017
Accrued professional fees		3,561		2,500
Accrued VAT		3,104		3,916
Income taxes payable		2,159		3,724
Accrued royalties		2,122		2,037
Defined contribution plan liabilities		1,285		1,274
Government grants		818		712
Self-insurance and other insurance reserves		798		601
Billings in excess of cost		379		832
Related party liabilities				119
Other current liabilities		5,996		6,029
	\$	20,222	\$	21,744



The following table provides details of other long-term liabilities (in thousands):

	1	ember 30, 2018	Dec	ember 31, 2017
Pension and other post retirement liabilities	\$	7,939	\$	7,670
Deferred tax liabilities		1,710		1,620
Other liabilities		3,387		8,357
	\$	13,036	\$	17,647

10. Stock-based compensation

2001 stock-based compensation plans

Nonqualified stock option plan

In 2001, the Company established the Nonqualified Stock Option Plan ("NSO Plan") under which 4,372,856 stock options with an exercise price of \$0.000025 remain outstanding at September 30, 2018. The NSO Plan was terminated in 2003. Stock options under the NSO plan were immediately vested and have a contractual term of 35 years from the date of grant. The outstanding awards granted under the NSO plan will continue to be governed by their existing terms under the NSO Plan. The NSO Plan is accounted for as an equity plan.

The following table summarizes the stock option activity under the NSO Plan:

	Number of options	Veighted average exercise price per share	Weighted average remaining contractual term (years)
Outstanding at January 1, 2018	6,441,972	\$ 0.000025	19.0
Exercised	(2,069,116)	\$ 0.000025	
Forfeited	_	_	
Outstanding and exercisable at September 30, 2018	4,372,856	\$ 0.000025	17.7

The total intrinsic value of the NSO Plan stock options exercised during the nine months ended September 30, 2018 was \$67.2 million.

Incentive and nonqualified stock-based plan

Also in 2001, the Company established the Incentive and Nonqualified Stock-based Plan ("ISO Plan") which was terminated in 2011 and was authorized to issue nonqualified stock options ("NQSO") and incentive stock options ("ISO") exercisable for an aggregate amount totaling 11,153,872 shares of Class A common stock. The NQSO grants could be issued at less than the fair market value at date of grant under the terms of the ISO Plan, while ISO grants were issued at a price equal to or greater than the fair market value at date of grant. Options generally vested over a two to three-year period. All options have a contractual term of ten years from the date of grant.

The following table summarizes the stock option activity under the 2001 stock-based compensation plans for the periods indicated as follows:

	Number of Options	v	Veighted average exercise price per share	Weighted average remaining contractual term (years)
Outstanding at January 1, 2018	888,864	\$	0.67	2.5
Exercised	(341,644)	\$	0.70	
Forfeited	—		—	
Outstanding and exercisable at September 30, 2018	547,220	\$	0.65	1.7

The total intrinsic value of the ISO Plan stock options exercised during the nine months ended September 30, 2018 was \$4.7 million.

2012 stock-based compensation plans

During 2012, the Company established the 2012 Incentive and Nonqualified Stock Option Plan ("2012 Plan") which permits the issuance of 5,200,000 shares of Class A common stock for the grant of nonqualified stock options ("NQSO") and incentive stock options ("ISO") for management, other employees, and board members of the Company. The options are issued at a price equal to or greater than fair market value at date of grant. All options have a contractual term of 10 years from date of grant.

The 2012 Plan is accounted for as an equity plan. For those options expected to vest, compensation expense is recognized on a straight-line basis over a fouryear period, the total requisite service period of the awards. Total compensation cost related to nonvested awards not yet recognized as of September 30, 2018, totaled \$1.0 million, and is expected to be recognized over a weighted average period of 2.7 years.

The following table summarizes the stock option activity under the 2012 Plan for the periods indicated as follows:

	Number of options	Veighted average exercise price per share	Weighted average remaining contractual term (years)
Outstanding at January 1, 2018	2,183,127	\$ 3.74	7.3
Granted	—	—	
Exercised	(590,067)	\$ 2.74	
Forfeited	(13,530)	\$ 4.79	
Outstanding at September 30, 2018	1,579,530	\$ 4.10	7.1
Exercisable at September 30, 2018	840,310	\$ 3.64	6.3

The total intrinsic value of the 2012 Plan stock options exercised during the nine months ended September 30, 2018 was \$17.1 million.

2017 stock-based compensation plan

In 2017, the Company's board of directors adopted the 2017 Equity Incentive Plan ("2017 Plan"), which was approved by the Company's stockholders. The 2017 Plan provides for the grant of incentive stock options to the Company's employees and any parent and subsidiary corporations' employees, and for the grant of nonstatutory stock options, stock appreciation rights, restricted stock, restricted stock units, performance units, performance shares, other cash-based awards and other stock-based awards to the Company's employees, directors and consultants and the Company's parent, subsidiary, and affiliate corporations' employees and consultants. The 2017 Plan has 8,104,971 authorized shares of the Company's Class A common stock reserved for issuance.

The following table summarizes the restricted stock units, or RSUs, awarded under the 2017 Plan for the period:

	Number of RSUs	Weighted average remaining contractual term (years)
Outstanding at January 1, 2018		
Granted	228,201	
Vested	(1,000)	
Forfeited	(16,070)	
Outstanding at September 30, 2018	211,131	3.5

The weighted average grant date fair value of the RSUs was \$30.99 and the RSUs generally vest in four equal annual installments. Total compensation cost related to nonvested awards not yet recognized as of September 30, 2018, totaled \$6.3 million, and is expected to be recognized over a weighted average period of four years.

Stock-based compensation expense

The stock-based compensation expense was recorded as follows (in thousands):

	Three Months Ended September 30,					led		
		2018		2017		2018		2017
Cost of revenue – software	\$	8	\$	326	\$	24	\$	342
Research and development		175		6,711		330		10,495
Sales and marketing		140		4,045		315		6,160
General and administrative		240		14,183		544		22,305
Total stock-based compensation expense	\$	563	\$	25,265	\$	1,213	\$	39,302

11. Other (income) expense, net

Other (income) expense, net consists of the following (in thousands):

	Three Months Ended September 30,				 Nine Mon Septem		
		2018		2017	2018		2017
Foreign exchange loss (gain)	\$	(152)	\$	105	\$ (732)	\$	1,022
Other		(818)		(53)	(1,314)		(184)
Other (income) expense, net	\$	(970)	\$	52	\$ (2,046)	\$	838

12. Income taxes

At the end of each interim period, the Company makes its best estimate of the annual expected effective income tax rate and applies that rate to its ordinary year-to-date income (loss) before income taxes. The income tax provision or benefit related to unusual or infrequent items, if applicable, that will be separately reported or reported net of their related tax effects are individually computed and recognized in the interim period in which those items occur. In addition, the effect of changes in enacted tax laws or rates, tax status, judgment on the realizability of a beginning-of-the-year deferred tax asset in future years or income tax contingencies is recognized in the interim period in which the change occurs.

The computation of the annual expected effective income tax rate at each interim period requires certain estimates and assumptions including, but not limited to, the expected income (loss) before income taxes for the year, projections of the proportion of income (and/or loss) earned and taxed in respective tax jurisdictions, including applicable foreign taxes withheld at the source, permanent and temporary differences, and the likelihood of the realizability of deferred tax assets generated in the current year. Jurisdictions with a projected loss for the year or a year-to-date loss for which no tax benefit can be recognized due to a valuation allowance are excluded from the estimated annual effective tax rate. The impact of such an exclusion could result in a higher or lower effective tax rate during a particular quarter, based upon the composition and timing of actual earnings compared to annual projections. The estimates used to compute the provision or benefit for income taxes may change as new events occur, additional information is obtained or the Company's tax environment changes. To the extent that the expected annual effective income tax rate changes, the effect of the change on prior interim periods is included in the income tax provision in the period in which the change in estimate occurs.

The Company's income tax expense and effective tax rate for the three and nine months ended September 30, 2018 and 2017 were as follows (in thousands, except percentages):

	 Three Months Ended September 30,				Nine Mon Septen		
	2018	2017		2018			2017
Income tax expense	\$ 2,600	\$	8,012	\$	4,629	\$	6,353
Effective tax rate	26% (37%		26% (37%) 27%)	(19%)

The tax rate is affected by the Company being a U.S. resident taxpayer, the tax rates in the U.S. and other jurisdictions in which the Company operates, the relative amount of income earned by jurisdiction and the relative amount of losses or income for which no benefit or expense is recognized. The effective tax rate was impacted by the geographic income mix in 2018 as compared to 2017, primarily related to United States pre-tax income of \$7.4 million and \$6.4 million and tax credits not benefited due to a valuation allowance of \$4.5 million and \$7.5 million for the three and nine months ended September 30, 2018, respectively, compared to a United States pre-tax loss of \$25.5 million and \$40.5 million and non-deductible stock-based compensation expense of \$15.6 million and \$24.9 million for the three and nine months ended September 30, 2017, respectively.

The Tax Cuts and Jobs Act, or the Tax Act, was enacted on December 22, 2017. The Tax Act reduces the U.S. federal corporate income tax rate from 35% to 21%, requires companies to pay a one-time transition tax on earnings of certain foreign subsidiaries that were previously tax deferred and creates new taxes on certain foreign sourced earnings. The Company is applying the guidance in *Staff Accounting Bulletin No. 118, Income Tax Accounting Implications of the Tax Cut and Jobs Act* when accounting for the enactment-date effects of the Tax Act. At September 30, 2018, the Company had not completed its accounting for the tax effects of the Tax Act; however, it has made reasonable estimates of the tax effects. During the three months ended September 30, 2018, the Company has not recorded any adjustments to the provisional amounts recorded at December 31, 2017 related to the remeasurement of its deferred balances. At December 31, 2017, the Company originally recorded a provisional amount for its one-time transition tax of \$4.2 million, which was expected to be substantially offset by available foreign tax credits. During the three months ended September 30, 2018, the Company revised its estimate of the provisional amount of the one-time transition tax. Upon further analyses of certain aspects of the Tax Act and refinement of its calculations during the three months ended September 30, 2018, the Company increased its provisional amount of transition tax by approximately \$0.6 million. This resulted in no change to income tax expense due to the impact of foreign tax credits. In all cases, the Company is continuing to make and refine its federal and state calculations as additional analysis is completed. In addition, the Company's estimates may also be affected as it gains a more thorough understanding of the Tax Act and certain aspects of the Tax Act are clarified by the taxing authorities.

The Tax Act subjects a U.S. shareholder to current tax on global intangible low-taxed income ("GILTI") earned by certain foreign subsidiaries. The Company has made sufficient progress in its calculation to reasonably estimate the tax expense related to GILTI for the year ended December 31, 2018, and included it in the Estimated Annual Effective Tax Rate. The impact of GILTI resulted in no incremental tax expense for the quarter ended September 30, 2018 due to net operating loss carryforwards, foreign tax credits and a full valuation allowance on U.S. net deferred tax assets. The Company will continue to refine its calculations, which may result in changes to the expected impact for 2018.

The Company maintains its assertion on a provisional basis that it intends to continue to indefinitely reinvest the gross book-tax differences in its foreign consolidated subsidiaries. However, the Company records deferred foreign taxes on gross book-tax basis differences to the extent of foreign distributable reserves for certain foreign subsidiaries. Determining the amount of unrecognized deferred tax liability related to any remaining undistributed foreign earnings not subject to the transition tax and additional outside basis differences in these entities (i.e., basis difference in excess of that subject to the one-time transition tax) is not practicable.

13. Accumulated other comprehensive loss

The components of accumulated other comprehensive loss were as follows (in thousands):

	n currency nslation	ment related efit plans	Total
Balance at December 31, 2017	\$ (3,374)	\$ (1,698)	\$ (5,072)
Other comprehensive income (loss) before reclassification	(2,273)	105	(2,168)
Amounts reclassified from accumulated other comprehensive loss	—	53	53
Tax effects	—	(16)	(16)
Other comprehensive income (loss)	(2,273)	142	(2,131)
Balance at September 30, 2018	\$ (5,647)	\$ (1,556)	\$ (7,203)

14. Related party transactions

At September 30, 2018, the Company had no obligations to related parties. At December 31, 2017, the Company had obligations to related parties for \$0.1 million recorded in other accrued expenses and current liabilities.

At December 31, 2017, the Company had receivables from an entity for which the Company had an equity investment, FluiDyna, for \$0.5 million recorded in other long-term assets. The Company acquired FluiDyna in May 2018; as a result, the receivable has been eliminated from the September 30, 2018 consolidated balance sheet. For additional information on the acquisition of FluiDyna, see Note 5 - Acquisitions.

15. Commitments and contingencies

MSC Litigation

In July 2007, MSC Software Corporation filed a lawsuit against the Company alleging misappropriation of trade secrets, breach of confidentiality and other claims. On April 10, 2014, a jury returned a verdict against the Company. The Company challenged the verdict and on November 13, 2014, a judge vacated all but \$0.4 million of the judgment and ordered a new trial on damages. On December 13, 2017, the court granted Altair's motion for summary judgment and dismissed MSC's claim of trade secret misappropriation. On January 5, 2018, MSC filed a notice of appeal of the final judgment entered on December 13, 2017 and prior orders in this action to the Sixth Circuit Court of Appeals. On January 19, 2018, Altair filed a cross-appeal. The Sixth Circuit referred the case to mediation. On August 28, 2018, the parties filed stipulations of dismissal with both the District Court and the Court of Appeals. The matter is settled.

Legal proceedings

From time to time, the Company may be subject to legal proceedings and claims in the ordinary course of business. The Company has received, and may in the future continue to receive, claims from third parties asserting, among other things, infringement of their intellectual property rights. Future litigation may be necessary to defend the Company, its partners and its customers by determining the scope, enforceability and validity of third party proprietary rights, or to establish and enforce the Company's proprietary rights. The results of any current or future litigation cannot be predicted with certainty and regardless of the outcome, litigation can have an adverse impact on the Company because of defense and settlement costs, diversion of management resources and other factors.

16. Segment information

The Company defines its operating segments as components of its business where separate financial information is available and used by the chief operating decision maker ("CODM") in deciding how to allocate resources to its segments and in assessing performance. The Company's CODM is its Chief Executive Officer.

The Company has identified two reportable segments for financial reporting purposes: Software and Client Engineering Services. The primary measure of segment operating performance is Adjusted EBITDA, which is defined as net income (loss) adjusted for income tax expense (benefit), interest expense, interest income and other, depreciation and amortization, stock-based compensation expense, restructuring charges, asset impairment charges and other special items as determined by management. Adjusted EBITDA includes an allocation of corporate headquarters costs.

The Software reportable segment derives revenue from the sale and subscription of licenses for software products focused on the development and application of simulation technology to synthesize and optimize designs, processes and decisions for improved business performance. The Software segment also derives revenue from software support, upgrades, training and consulting services focused on product design and development expertise and analysis support from the component level up to complete product engineering at any stage of the lifecycle. To a much lesser extent, the Software segment also includes revenue from the sale of hardware products, primarily as a result of recent business acquisitions.

The Client Engineering Services reportable segment provides support to its customers with long-term ongoing product design and development expertise in its market segments of Solvers & Optimization, Modeling & Visualization, Industrial and Concept Design, and high-performance computing. The Company hires simulation specialists, industrial designers, design engineers, materials experts, development and test specialists, manufacturing engineers and information technology specialists for placement at customer sites for specific customer-directed assignments.



The "All other" represents innovative services and products, including toggled[®], the Company's LED lighting business. toggled[®] is focused on developing and selling next-generation solid state lighting technology along with communication and control protocols based on intellectual property for the direct replacement of fluorescent light tubes with LED lamps. Other businesses combined within Other include our WEYV business, a consumer music and content service, and potential services and product concepts that are still in their development stages.

Inter-segment sales are not significant for any period presented. The CODM does not review asset information by segment when assessing performance, therefore no asset information is provided for reportable segments.

The following tables are in thousands:

Three Months Ended September 30, 2018	Software	 CES	All other	 Total
Revenue	\$ 79,994	\$ 12,155	\$ 1,722	\$ 93,871
Adjusted EBITDA	\$ 8,946	\$ 1,407	\$ (866)	\$ 9,487
Three Months Ended September 30, 2017	Software	CES	 All other	 Total
Revenue	\$ 71,782	\$ 11,477	\$ 1,679	\$ 84,938
Adjusted EBITDA	\$ 7,278	\$ 1,432	\$ (1,667)	\$ 7,043

Nine Months Ended September 30, 2018	Software		Software CES		All other	 Total
Revenue	\$	239,130	\$	36,652	\$ 5,386	\$ 281,168
Adjusted EBITDA	\$	22,818	\$	3,971	\$ (2,323)	\$ 24,466

Nine Months Ended September 30, 2017	Software			CES		CES		All other		Total
Revenue	\$	202,654	\$	36,071	\$	4,741	\$	243,466		
Adjusted EBITDA	\$	14,001	\$	4,174	\$	(4,076)	\$	14,099		

	 Three Mon Septem				Nine Mon Septem	
	2018	2017		2018		2017
Reconciliation of Adjusted EBITDA to U.S. GAAP Income (loss) before						
income taxes:						
Adjusted EBITDA	\$ 9,487	\$	7,043	\$	24,466	\$ 14,099
Stock-based compensation expense	(563)		(25,265)		(1,213)	(39,302)
Interest expense	(31)		(634)		(92)	(1,793)
Interest income and other (1)	4,384		53		5,103	2,184
Depreciation and amortization	(3,370)		(2,811)		(10,895)	(7,895)
Income (loss) before income taxes	\$ 9,907	\$	(21,614)	\$	17,369	\$ (32,707)

(1) Includes a) gain on the sale of a building for \$4.4 million for the three and nine months ended September 30, 2018, b) impairment charges for royalty contracts and trade names resulting in \$0.8 million and \$2.6 million of expense for the three and nine months ended September 30, 2018, and c) a non-recurring adjustment for a change in estimated legal expenses resulting in \$2.0 million of income for both the nine months ended September 30, 2018 and September 30, 2017.

17. Subsequent events

Acquisition of SIMSOLID

In October 2018, the Company acquired all of the outstanding capital stock of SIMSOLID Corporation, a Canadian corporation ("SIMSOLID"), for aggregate consideration of \$22.1 million. The consideration consisted of cash in the amount of \$12.0 million, 145,000 shares of the Company's Class A common stock and commitments (through convertible notes and contractual covenants) to issue an additional 145,000 shares of the Company's Class A common stock (collectively, the "Deferred Shares"), one half of which will be issued on the first business day following the one year anniversary of the closing date and one half of which will be issued on the first business day following the closing date, subject to acceleration in the event of a change of control of the Company and subject to reduction as a set-off to any indemnification obligations.

SIMSOLID works on full-fidelity computer-aided design, or CAD, assemblies to provide fast, accurate, and robust structural simulation without requiring geometry simplification, cleanup, or meshing. The SIMSOLID computational engine is a commercial implementation of novel and unpublished mathematics based on extensions to the theory of external approximations. SIMSOLID controls solution accuracy using multi-pass adaptive analysis, which the Company believes makes the SIMSOLID solution extremely fast, accurate and memory efficient.

Amendment to revolving credit agreement

Effective October 31, 2018, the Company increased its revolving commitment available under the 2017 Credit Agreement from \$100.0 million to \$150.0 million. The \$50.0 million accordion remains available under the terms of the 2017 Credit Agreement. There were no other material changes to the terms of the 2017 Credit Agreement.

Acquisition of Datawatch

On November 5, 2018, the Company and Datawatch Corporation ("Datawatch") announced the signing of a definitive merger agreement under which the Company has agreed to acquire Datawatch. Under the terms of the agreement, the Company will pay \$13.10 per share in cash, representing a fully diluted equity value of approximately \$176.0 million. The transaction was unanimously approved by the Boards of Directors of both companies.

Under the terms of the definitive merger agreement, the Company will commence a tender offer within ten business days of the execution of the merger agreement to acquire all of the outstanding shares of common stock of Datawatch for \$13.10 per share in cash. This represents a 35% percent premium to the closing price of Datawatch's common stock on November 2, 2018. The tender offer is subject to customary closing conditions, including the tender of at least a majority of the outstanding shares of Datawatch common stock and the expiration or early termination of the applicable waiting period under the Hart-Scott-Rodino Antitrust Improvements Act of 1976. Following the closing of the tender offer, a wholly-owned subsidiary of Altair will merge with and into Datawatch, with each share of Datawatch common stock that has not been tendered being converted into the right to receive the same \$13.10 per share in cash offered in the tender offer.

Funding for the transaction will come primarily from cash, coupled with utilization of borrowings under the Company's existing credit facility.



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

The following discussion and analysis of our financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes included elsewhere in this quarterly report and with our audited consolidated financial statements (and notes thereto) for the year ended December 31, 2017, included in our Annual Report on Form 10-K filed with the SEC. This discussion contains forward-looking statements that involve risks and uncertainties. Our actual results could differ materially from those discussed below.

CAUTIONARY NOTE REGARDING FORWARD-LOOKING STATEMENTS

This quarterly report on Form 10-Q contains forward-looking statements made pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 under Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. Forward-looking statements include statements with respect to our beliefs, plans, objectives, goals, expectations, anticipations, assumptions, estimates, intentions and future performance, and involve known and unknown risks, uncertainties and other factors, which may be beyond our control, and which may cause our actual results, performance or achievements to be materially different from future results, performance or achievements expressed or implied by such forward-looking statements. All statements other than statements of historical fact are statements that could be forward-looking statements. You can identify these forward-looking statements through our use of words such as "may," "can," "anticipate," "assume," "should," "indicate," "would," "believe," "contemplate," "expect," "seek," "estimate," "continue," "plan," "point to," "project," "predict," "could," "intend," "target," "potential" and other similar words and expressions of the future.

There are a number of important factors that could cause the actual results to differ materially from those expressed in any forward-looking statement made by us. These factors include, but are not limited to:

- our ability to acquire new customers because of the difficulty in predicting our software sales cycles;
- reduced spending on product design and development activities by our customers;
- our dependence on annual renewals of our software licenses;
- our ability to maintain or protect our intellectual property;
- our ability to retain key executive members;
- our ability to internally develop new inventions and intellectual property;
- our ability to successfully integrate and realize the benefits of our past or future strategic acquisitions or investments;
- demand for our software by customers other than simulation engineering specialists and in additional industry verticals;
- acceptance of our business model by investors;
- our susceptibility to factors affecting the automotive industry where we derive a substantial portion of our revenues;
- the accuracy of our estimates regarding expenses and capital requirements;
- our susceptibility to foreign currency risks that arise because of our substantial international operations; and
- the significant quarterly fluctuations of our results.

The foregoing does not represent an exhaustive list of matters that may be covered by the forward-looking statements contained herein or risk factors that we are faced with that may cause our actual results to differ from those anticipate in our forward-looking statements. For additional risks which could adversely impact our business and financial performance please see "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2017, which was filed with the SEC, on March 21, 2018, and the other information appearing elsewhere in such report, this report on Form 10-Q and our other filings with the SEC. All forward-looking statements are expressly qualified in their entirety by this cautionary notice. You are cautioned not to place undue reliance on any forward-looking statements, which speak only as of the date of this report or the date of the document incorporated by reference into this report. We have no obligation, and expressly disclaim any obligation, to update, revise or correct any of the forward-looking statements, whether as a result of new information, future events or otherwise. We have expressed our expectations, beliefs and projections in good faith and we believe they have a reasonable basis. However, we cannot assure you that our expectations, beliefs or projections will result or be achieved or accomplished.

Overview

Altair Engineering Inc., ("Altair", the "Company", "we", "us", or "our") is a leading provider of enterprise-class engineering software enabling innovation across the entire product lifecycle from concept design to in-service operation. Our simulation-driven approach to innovation is powered by our broad portfolio of high-fidelity and high performance physics solvers. Our integrated suite of software optimizes design performance across multiple disciplines encompassing structures, motion, fluids, thermal management, electromagnetics, system modeling and embedded systems, while also providing data analytics and true-to-life visualization and rendering.

Our engineering and design platform offers a wide range of multi-disciplinary computer aided engineering, or CAE, solutions which we believe is one of the most innovative and comprehensive offerings available in the market. To ensure customer success and deepen our relationships with them, we engage with our customers to provide consulting, implementation services, training, and support, especially when applying optimization. We participate in five software categories related to CAE and high performance computing, or HPC:

- Solvers & Optimization;
- Modeling & Visualization;
- Industrial & Concept Design;
- Internet of Things, or IoT; and
- HPC.

Altair also provides client engineering services, or CES, to support our customers with long-term ongoing product design and development expertise. This has the benefit of embedding us within customers, deepening our understanding of their processes, and allowing us to more quickly perceive trends in the overall market. Our presence at our customers' sites helps us to better tailor our software products' research and development, or R&D, and sales initiatives.

Follow-on public offering

On June 11, 2018, we completed a follow-on public offering (the "Offering") and sold 4,056,004 shares of Class A common stock at a public offering price of \$35.00 per share for an aggregate offering price of \$142.0 million. We received aggregate proceeds of \$135.6 million from the Offering, net of underwriters' discounts and commissions, before deducting offering costs of approximately \$0.4 million.

The Offering also included the sale of 2,307,420 shares of Class A common stock by selling stockholders, giving effect to the conversion of 1,675,420 shares of the Company's Class B common stock into an equivalent number of shares of Class A common stock and the exercise of 257,000 options to purchase Class A common stock. The Company did not receive any proceeds from the sale of shares of Class A common stock by the selling stockholders other than the \$0.5 million in proceeds from exercises of stock options by certain selling stockholders.

Factors Affecting our Performance

We believe that our future success will depend on many factors, including those described below. While these areas present significant opportunity, they also present risks that we must manage to achieve successful results. If we are unable to address these challenges, our business, operating results and prospects could be harmed. Please see Risk Factors in our Annual Report on Form 10-K for the year ended December 31, 2017, as filed with the SEC on March 21, 2018.

Seasonality and quarterly results

Our billings have historically been highest in the first and fourth quarters of any calendar year and may vary in future quarters. The timing of recording billings and the corresponding effect on our cash flows may vary due to the seasonality of the purchasing patterns of our customers. In addition, the timing of the recognition of revenue, the amount and timing of operating expenses, including employee compensation, sales and marketing activities, and capital expenditures, may vary from quarter-to-quarter which may cause our reported results to fluctuate significantly. In addition, we may choose to grow our business for the long-term rather than to optimize for profitability or cash flows for a particular shorter-term period. This seasonality or the occurrence of any of the factors above may cause our results of operations to vary and our financial statements may not fully reflect the underlying performance of our business.

Foreign currency fluctuations

Because of our substantial international operations, we are exposed to foreign currency risks that arise from our normal business operations, including in connection with our transactions that are denominated in foreign currencies, including the Euro, British Pound Sterling, Indian Rupee, Japanese Yen, and Chinese Yuan. To present the changes in our underlying business without regard to the impact of currency fluctuations, we evaluate certain of our operating results both on an as reported basis, as well as on a constant currency basis.

Constant currency amounts exclude the effect of foreign currency fluctuations on our reported results. Our comparative financial results were impacted by fluctuations in the value of the United States dollar relative to other currencies during the three and nine months ended September 30, 2018, as compared to the three and nine months ended September 30, 2017. To present this information, the results for 2018 for entities whose functional currency is a currency other than the United States dollar were converted to United States dollars at rates that were in effect for 2017. These adjusted amounts are then compared to our current period reported amounts to provide operationally driven variances in our results.

The effects of currency fluctuations on our Revenue, Adjusted EBITDA, and Billings are reflected in the table below. Positive amounts indicate a net positive impact from currency fluctuations.

	Three Months Ended	Nine Months Ended
(in thousands)	 September 30, 2018	 September 30, 2018
Revenue	\$ (923)	\$ 6,283
Adjusted EBITDA	\$ 69	\$ 1,870
Billings	\$ (4,040)	\$ (3,801)

Expanded use of our software applications

Our ability to grow our revenue is affected, in part, by the pace at which our customers continue to expand their use of our design, simulation, optimization and analysis applications and the degree to which prospective customers realize the benefit of using our software applications. To grow our presence within our customers and attract new customers, we devote substantial sales and marketing resources to drive increased adoption across our existing customers and encourage new customers to commence using our software. As a result of this "land and expand" business model, we expect to generate additional revenue from our current and future customer base. To the extent our sales and marketing efforts do not translate into customer retention or expansion, or if we do not allocate those expenses efficiently, our financial performance may be adversely affected. Therefore, our financial performance will depend in part on the degree to which our "land and expand" strategies are successful.

Investments for growth

We have made and plan to continue to make investments for long-term growth, including investments in our ongoing research and development activities seeking to create new software and to enhance our existing applications to address emerging technology trends and additional customer needs. Generally, the development of new or improved applications in our software can result in the expansion of our user base within an organization and a potential increase in revenue over time, although the expenditures associated with such developments may adversely affect our performance in the near term. We intend to continue to invest resources in sales and marketing, by further expanding our sales teams and increasing our marketing activities. Our ability to continue to grow revenue from our current and potential customer base is dependent, in part, upon the success of our current and future research and development and sales and marketing activities.

As part of our long-term growth strategy, we have made and plan to continue to explore and pursue selective acquisitions and strategic investments to complement and strengthen our product offerings, expand the functionality of our solutions, acquire technology or talent, or gain access to new customers and markets. We acquired 23 companies or strategic technologies since 1996, including 12 since January 1, 2015. We believe our ability to integrate expert teams and new IP into our organization, and quickly bring acquired products to market with our business model, is unique in the PLM market.



Business Segments

We have identified two reportable segments: Software and Client Engineering Services:

- *Software*—our Software segment includes software and software related services. The software component of this segment includes our portfolio of software products including our solvers and optimization technology products, modeling and visualization tools, industrial and concept design tools, IoT platform and analytics tools, and high performance computing, or HPC, software applications and hardware products, as well as support and the complementary software products we offer through our Altair Partner Alliance, or APA. The APA includes technologies ranging from computational fluid dynamics and fatigue to manufacturing process simulation and cost estimation. The software related services component of this segment includes consulting, implementation services, and training focused on product design and development expertise and analysis support from the component level up to complete product engineering at any stage of the lifecycle.
- Client Engineering Services—our client engineering services, or CES, segment provides client engineering services to support our customers with longterm, ongoing product design and development expertise. We operate our CES business by hiring engineers for placement at a customer site for specific customer-directed assignments. We employ and pay the engineers only for the duration of the placement.

Our other businesses that do not meet the criteria to be separate reportable segments are combined and reported as "Other" which represents innovative services and products, including toggled, our LED lighting business. toggled is focused on developing and selling next-generation solid state lighting technology along with communication and control protocols based on our intellectual property for the direct replacement of fluorescent light tubes with LED lamps. Other businesses combined within Other include our WEYV business, a consumer music and content service, and potential services and product concepts that are still in their development stages.

For additional information about our reportable segments and other businesses, see Note 16 in the Notes to consolidated financial statements in Item 1, Part I of this Quarterly Report on Form 10-Q.



Results of operations

Comparison of the three and nine months ended September 30, 2018 and 2017

The following table sets forth the results of operations and the period-over-period percentage change in certain financial data for the three and nine months ended September 30, 2018 and 2017:

		Three Mor Septen			Increase / (decrease)		Nine Mon Septem	Increase / (decrease)		
(in thousands)		2018		2017	%		2018		2017	%
Revenue:										
Software	\$	71,302	\$	63,208	13%	\$	212,258	\$	176,905	20%
Software related services		8,692		8,574	1%		26,872		25,749	4%
Total software		79,994		71,782	11%		239,130		202,654	18%
Client engineering services		12,155		11,477	6%		36,652		36,071	2%
Other		1,722		1,679	3%		5,386		4,741	14%
Total revenue		93,871		84,938	11%		281,168		243,466	15%
Cost of revenue:										
Software		9,831		9,166	7%		32,736		26,799	22%
Software related services		6,352		6,457	(2%)		19,573		20,230	(3%)
Total software		16,183		15,623	4%		52,309		47,029	11%
Client engineering services		9,817		9,231	6%		29,977		29,200	3%
Other		1,204		1,448	(17%)		3,416		3,745	(9%)
Total cost of revenue		27,204		26,302	3%	_	85,702	_	79,974	7%
Gross profit		66,667		58,636	14%		195,466		163,492	20%
Operating expenses:						-		_		
Research and development		24,301		27,590	(12%)		71,748		69,198	4%
Sales and marketing		19,275		22,345	(14%)		58,435		58,683	—%
General and administrative		17,234		29,175	(41%)		51,636		66,465	(22%)
Amortization of intangible assets		1,739		1,189	46%		5,665		3,287	72%
Other operating income		(4,850)		(735)	560%		(7,433)		(4,065)	83%
Total operating expenses		57,699		79,564	(27%)		180,051		193,568	(7%)
Operating income (loss)		8,968		(20,928)	NM		15,415		(30,076)	NM
Interest expense		31		634	(95%)		92		1,793	(95%)
Other (income) expense, net		(970)		52	NM		(2,046)		838	NM
Income (loss) before income taxes		9,907		(21,614)	NM	_	17,369	_	(32,707)	NM
Income tax expense		2,600		8,012	(68%)		4,629		6,353	(27%)
Net income (loss)	\$	7,307	\$	(29,626)	NM	\$	12,740	\$	(39,060)	NM
Other financial information:						_		_		
Billings ⁽¹⁾	\$	84,067	\$	76,423	10%	\$	288,119	\$	257,802	12%
Adjusted EBITDA(2)	\$	9,487	\$	7,043	35%	\$	24,466	\$	14,099	74%
Net cash provided by operating activities	\$	3,109	\$	(8,662)	NM	\$	40,422	\$	17,455	132%
Free cash flow(3)	\$	906	\$	(10,694)	NM	\$	35,089	\$	13,088	168%
	Ψ	000	÷	(10,001)		÷	00,000	Ψ	10,000	10070

NM Not meaningful.

GAAP financial measures to the most directly comparable financial measures calculated and presented in accordance with GAAP, see "Non-GAAP financial measures" contained herein. (1)

(2)

We define Adjusted EBITDA as net income (loss) adjusted for income tax expense (benefit), interest expense, interest income and other, depreciation and amortization, stock-based compensation expense, restructuring charges, asset impairment charges and other special items as determined by management. For more information about Adjusted EBITDA and our other non-GAAP financial measures and reconciliations of our non-GAAP financial measures to the most directly comparable financial measures calculated and presented in accordance with GAAP, see "Non-GAAP financial measures" contained herein. We define Free Cash Flow, see "Non-GAAP financial measures" contained herein.

(3)

The following table sets forth our revenue growth on a constant currency basis for the three and nine months ended September 30, 2018, compared to the three and nine months ended September 30, 2017:

	Three Mon Septem		Binaca	Change	Constant currency change(1)		Nine Mon Septem		Change	Constant currency change(1)
(dollars in thousands)	 2018	_	2017	%	%		2018	2017	%	%
Revenue:										
Software	\$ 71,302	\$	63,208	13%	14%	\$	212,258	\$ 176,905	20%	17%
Software related services	8,692		8,574	1%	3%		26,872	25,749	4%	1%
Total software	 79,994		71,782	11%	13%		239,130	202,654	18%	15%
Client engineering services	12,155		11,477	6%	6%		36,652	36,071	2%	2%
Other	1,722		1,679	3%	3%		5,386	4,741	14%	14%
Total revenue	\$ 93,871	\$	84,938	11%	12%	\$	281,168	\$ 243,466	15%	13%

(1) The results for entities whose functional currency is a currency other than the United States dollar were converted to United States dollars at rates that were in effect for the corresponding period of the prior year.

Three months ended September 30, 2018 and 2017

Revenue

Total revenue increased by \$8.9 million, or 11%, for the three months ended September 30, 2018, as compared to the three months ended September 30, 2017. The increase was primarily attributable to an increase in software revenue.

Software segment

<u>Software</u>

	Three Mor	nths End	ded			
	 Septem	ıber 30,			Period-to-peri	iod change
(in thousands)	 2018		2017		\$	%
Software revenue	\$ 71,302	\$	63,208	\$	8,094	13%
As a percent of software segment revenue	89%)	88%)		
As a percent of consolidated revenue	76%)	74%	,		

The 13% increase in our software revenue for the three months ended September 30, 2018, as compared to the three months ended September 30, 2017, was primarily the result of an expansion in the number of units licensed by our existing customers under renewed software license agreements, licensing of units to new customers pursuant to new software license agreements, and contributions from recent acquisitions.

Software related services

	Three Mor Septen	 	Period-to-period change			
(in thousands)	2018	2017		\$	%	
Software related services revenue	\$ 8,692	\$ 8,574	\$	118	1%	
As a percent of software segment revenue	11%	12%				
As a percent of consolidated revenue	9%	10%				

Software related services revenue was relatively consistent for the three months ended September 30, 2018, as compared to the three months ended September 30, 2017.

Client engineering services segment

	Three Mor Septen	nths Enc iber 30,		Period-to-per	iod change
(in thousands)	 2018		2017	 \$	%
Client engineering services revenue	\$ 12,155	\$	11,477	\$ 678	6%
As a percent of consolidated revenue	13%)	14%		

The 6% increase in CES revenue for the three months ended September 30, 2018, as compared to the three months ended September 30, 2017, was primarily due to an increase in demand for our consulting services. Headcount in the CES business increased 8% in the current quarter, as compared to the prior year. Our CES business is primarily affected by customer demand and our ability to fill customers' open positions.

Other

	Three Mor Septem	 		od change	
(in thousands)	2018	2017		\$	%
Other revenue	\$ 1,722	\$ 1,679	\$	43	3%
As a percent of consolidated revenue	2%	2%			

Other revenue was essentially unchanged for the three months ended September 30, 2018, as compared to the three months ended September 30, 2017.

Cost of revenue

Software segment

<u>Software</u>

	Three Mor Septem		Period-to-peri	iod change	
(in thousands)	2018	 2017	\$	%	
Cost of software revenue	\$ 9,831	\$ 9,166	\$ 665		7%
As a percent of software revenue	14%	15%			
As a percent of consolidated revenue	10%	11%			

Cost of software revenue increased by \$0.7 million, or 7%, for the three months ended September 30, 2018, as compared to the three months ended September 30, 2017. This increase in the current year period was due to \$0.7 million in costs associated with operations of recent acquisitions that we did not have in our prior year results.

Software related services

		Three Mor Septem	iths End iber 30,	ed	Period-to-period change			
(in thousands)		2018		2017		\$	%	
Cost of software related services revenue	\$	6,352	\$	6,457	\$	(105)	(2%)	
As a percent of software related services revenue		73%		75%				
As a percent of consolidated revenue		7%		8%	1			

Cost of software related services revenue decreased by 2% for the three months ended September 30, 2018, as compared to the three months ended September 30, 2017. The decrease in the current year period was due to a reduction in headcount driven by improved utilization of personnel.

Client engineering services segment

	Three Moi Septen	nths En 1ber 30,			Period-to-pe	riod change
(in thousands)	2018		2017		\$	%
Cost of client engineering services revenue	\$ 9,817	\$	9,231	\$	586	6%
As a percent of client engineering services segment revenue	81%)	80%)		
As a percent of consolidated revenue	10%)	11%	,		

Cost of CES revenue increased \$0.6 million, or 6%, for the three months ended September 30, 2018, as compared to the three months ended September 30, 2017. This increase was due to compensation expenses associated with a larger number of placements to meet customer demand.

	_	Three Mon Septem			Period-to-period change				
(in thousands)	2018			2017	\$		%		
Cost of other revenue	\$	1,204	\$	1,448	\$	(244)	(17%)		
As a percent of other revenue		70%		86%					
As a percent of consolidated revenue		1%		2%					

Cost of other revenue decreased by \$0.2 million, or 17%, for the three months ended September 30, 2018, as compared to the three months ended September 30, 2017. This was due to a decrease in third party royalty costs in the current quarter.

Gross profit

	Three Months Ended September 30,					Period-to-period change			
(in thousands)	2018			2017		\$	%		
Gross profit	\$	66,667	\$	58,636	\$	8,031	14%		
As a percent of consolidated revenue		71%		69%)				

Gross profit increased by \$8.0 million, or 14%, for the three months ended September 30, 2018, as compared to the three months ended September 30, 2017. This increase in gross profit was primarily attributable to the growth of our software revenue of \$8.1 million driven by the factors described above.

Operating expenses

Operating expenses, as discussed below, support all the products and services that we provide to our customers and, as a result, they are reported and discussed in aggregate.

Research and development

	Three Mor Septen			Period-to-period change		
(in thousands)	 2018 2017			\$		%
Research and development	\$ 24,301	\$	27,590	\$	(3,289)	(12%)
As a percent of consolidated revenue	26%	,	32%	,		

Research and development expenses decreased by \$3.3 million, or 12%, for the three months ended September 30, 2018, as compared to the three months ended September 30, 2017. While employee costs were higher by \$3.3 million resulting from annual compensation adjustments and an increase in our headcount, primarily due to acquisitions, this increase was offset by a decrease in stock-based compensation expense of \$6.5 million for the three months ended September 30, 2018, as compared to the three months ended September 30, 2017.

Sales and marketing

	Three Mor Septem			Period-to-period change		
(in thousands)	2018	2017		\$		%
Sales and marketing	\$ 19,275	\$	22,345	\$	(3,070)	(14%)
As a percent of consolidated revenue	21%		26%			

Sales and marketing expenses decreased by \$3.1 million, or 14%, for the three months ended September 30, 2018, as compared to the three months ended September 30, 2017. While employee costs increased by \$1.6 million resulting from annual compensation adjustments and an increase in our headcount, this increase was offset by a decrease in stock-based compensation expense of \$3.9 million and a \$0.4 million decrease in our sales and marketing campaigns for the three months ended September 30, 2017.

	 Three Mor Septem		Period-to-period change		
(in thousands)	2018	2017		\$	%
General and administrative	\$ 17,234	\$ 29,175	\$	(11,941)	(41%)
As a percent of consolidated revenue	18%	34%			

General and administrative expenses decreased by \$11.9 million, or 41%, for the three months ended September 30, 2018, as compared to the three months ended September 30, 2017. This decrease was primarily attributable to a \$13.9 million decrease in stock-based compensation expense offset by a \$1.5 million increase in professional services fees.

Amortization of intangible assets

		Three Mor Septem			Period-to-period change			
(in thousands)	2018			2017		\$	%	
Amortization of intangible assets	\$	1,739	\$	1,189	\$	550	46%	
As a percent of consolidated revenue		2%		1%				

Amortization of intangible assets increased by \$0.6 million for the three months ended September 30, 2018, as compared to the three months ended September 30, 2017. This was attributable to an increase in the amortization of developed technology in the current year period as a result of acquisitions.

Other operating income

	_	Three Mon Septem			Period-to-period change			
(in thousands)	2018			2017		\$	%	
Other operating income	\$	(4,850)	\$	(735)	\$	4,115	560%	
As a percent of consolidated revenue		(5%)		(1%)				

Other operating income increased \$4.1 million for the three months ended September 30, 2018 as compared to the three months ended September 30, 2017. This increase is primarily attributable to a gain on the sale of a building for \$4.4 million partially offset by an impairment of trade names for \$0.6 million as a result of rebranding certain products in the current year period.

Interest expense

	Three Mor	led	Period-to-period change				
(in thousands)	 <u>September 30,</u> 2018 2017				%		
Interest expense	\$ 31	\$	634	\$	(603)	(95%)	
As a percent of consolidated revenue		%	1%				

Interest expense decreased \$0.6 million for the three months ended September 30, 2018, as compared to the three months ended September 30, 2017. The decrease in interest expense was a result of the payoff of borrowings on our term loan and line of credit in the fourth quarter of 2017.

Other (income) expense, net

	Three Months Ended September 30,					Period-to-period change			
(in thousands)		2018	2	2017		\$	%		
Other (income) expense, net	\$	(970)	\$	52	\$	1,022	NM		
As a percent of consolidated revenue		(1)%		—%					

Other (income) expense, net increased by \$1.0 million for the three months ended September 30, 2018, as compared to the three months ended September 30, 2017. This increase was due to an increase of \$0.8 million in interest income and \$0.2 million fluctuations in the United States dollar relative to other functional currencies during the three months ended September 30, 2018, compared to the three months ended September 30, 2017.



Income tax expense

	Three Months Ended									
	September 30,					Period-to-peri	iod change			
(in thousands)	2018 2017					\$	%			
Income tax expense	\$ 2,600			8,012	\$	(5,412)		(68%)		

The effective tax rate was 26% and (37%) for the three months ended September 30, 2018 and 2017, respectively. The tax rate is affected by the Company being a U.S. resident taxpayer, the tax rates in the U.S. and other jurisdictions in which the Company operates, the relative amount of income earned or taxes incurred by jurisdiction and the relative amount of losses or income for which no benefit or expense is recognized. The effective tax rate was impacted by the geographic income mix in 2018 as compared to 2017, primarily related to United States pre-tax income of \$7.4 million and tax credits of \$4.5 million not benefited due to a valuation allowance for the three months ended September 30, 2018, compared to a United States pre-tax loss of \$25.5 million and non-deductible stock-based compensation expense of \$15.6 million for the three months ended September 30, 2017.

Nine months ended September 30, 2018 and 2017

Revenue

Total revenue increased by \$37.7 million, or 15%, for the nine months ended September 30, 2018, as compared to the nine months ended September 30, 2017. The increase was primarily attributable to an increase in software revenue.

Software segment

Software

						Period-to-period change			
(in thousands)	2018		2017		\$		%		
Software revenue	\$	212,258	\$	176,905	\$	35,353	20%		
As a percent of software segment revenue		89%	,	87%	,				
As a percent of consolidated revenue		75%	1	73%	•				

The 20% increase in our software revenue for the nine months ended September 30, 2018, as compared to the nine months ended September 30, 2017, was primarily the result of an expansion in the number of units licensed by our existing customers under renewed software license agreements, licensing of units to new customers pursuant to new software license agreements, contributions from recent acquisitions, and positive foreign currency effects.

Software related services

	Nine Months Ended September 30,					Period-to-period change				
(in thousands)	2018			2017		\$	%			
Software related services revenue	\$	26,872	\$	25,749	\$	1,123	4%			
As a percent of software segment revenue		11%)	13%)					
As a percent of consolidated revenue		10%)	11%	•					

The 4% increase in our software related services revenue for the nine months ended September 30, 2018, as compared to the nine months ended September 30, 2017, was primarily the result of fluctuations in foreign currencies.

Client engineering services segment

	Nine Months Ended September 30,					Period-to-period change		
(in thousands)		2018		2017		\$	%	
Client engineering services revenue	\$	36,652	\$	36,071	\$	581	2%	
As a percent of consolidated revenue		13%		15%				

CES revenue was relatively consistent for the nine months ended September 30, 2018, as compared to the nine months ended September 30, 2017.



Other

	Nine Mon Septem		Period-to-period change		
(in thousands)	2018	 2017	\$	%	
Other revenue	\$ 5,386	\$ 4,741	\$ 645	14%	
As a percent of consolidated revenue	2%	2%			

The 14% increase in other revenue for the nine months ended September 30, 2018, as compared to the nine months ended September 30, 2017, was primarily due to increased revenue from toggled, our LED lighting business.

Cost of revenue

Software segment

<u>Software</u>

		Nine Mon Septen	ths End ber 30,	Period-to-period change			
(in thousands)		2018		2017		\$	%
Cost of software revenue	\$	32,736	\$	26,799	\$	5,937	22%
As a percent of software revenue		15%)	15%)		
As a percent of consolidated revenue		12%)	11%)		

Cost of software revenue increased by \$5.9 million, or 22%, for the nine months ended September 30, 2018, as compared to the nine months ended September 30, 2017. This increase in the current year period was due to increased employee compensation and related costs of \$2.4 million, increased third party royalty costs of \$0.9 million for software programs and \$2.9 million in costs associated with operations of recent acquisitions that we did not have in our prior year results.

Software related services

	Nine Mon Septem	ed		Period-to-period change			
(in thousands)	 2018	2017		\$	%		
Cost of software related services revenue	\$ 19,573	\$ 20,230	\$	(657)	(3%)		
As a percent of software related services revenue	73%	79%					
As a percent of consolidated revenue	7%	8%	1				

Cost of software related services revenue decreased \$0.7 million, or 3%, for the nine months ended September 30, 2018, as compared to the nine months ended September 30, 2017. The decrease in the current year period was due to a reduction in headcount driven by improved utilization of personnel.

Client engineering services segment

	Nine Mon Septem	ths End ber 30,	ed		Period-to-period change			
(in thousands)	 2018	_	2017		\$	%		
Cost of client engineering services revenue	\$ 29,977	\$	29,200	\$	777	3%		
As a percent of client engineering services segment revenue	82%		81%)				
As a percent of consolidated revenue	11%		12%	1				

Cost of CES revenue increased \$0.8 million, or 3%, for the nine months ended September 30, 2018, as compared to the nine months ended September 30, 2017. This increase was due to compensation expenses associated with a larger number of placements to meet customer demand.



	Nine Months Ended September 30,					Period-to-period change			
(in thousands)	2	2018		2017		\$	%		
Cost of other revenue	\$	3,416	\$	3,745	\$	(329)	(9	9%)	
As a percent of other revenue		63%		79%					
As a percent of consolidated revenue		1%		2%					

Cost of other revenue decreased \$0.3 million, or 9%, for the nine months ended September 30, 2018, as compared to the nine months ended September 30, 2017. This decrease is due to a \$0.6 million decrease in third party royalties, partially offset by a \$0.4 million increase in manufacturing costs for our LED lighting business.

Gross profit

	Nine Mon Septem			Period-to-period change			
(in thousands)	2018	_	2017		\$	%	
Gross profit	\$ 195,466	\$	163,492	\$	31,974	20%	
As a percent of consolidated revenue	70%)	67%				

Gross profit increased by \$32.0 million, or 20%, for the nine months ended September 30, 2018, as compared to the nine months ended September 30, 2017. This increase in gross profit was primarily attributable to the growth of our software revenue of \$35.4 million driven by the factors described above. The increase in revenue was partially offset by the increase in cost of revenue as described above.

Operating expenses

Operating expenses, as discussed below, support all the products and services that we provide to our customers and, as a result, they are reported and discussed in aggregate.

Research and development

	Nine Mon Septem		Period-to-period change		
(in thousands)	2018	2017	 \$	%	
Research and development	\$ 71,748	\$ 69,198	\$ 2,550	4%	
As a percent of consolidated revenue	26%	28%			

Research and development expenses increased by \$2.6 million, or 4%, for the nine months ended September 30, 2018, as compared to the nine months ended September 30, 2017. This increase was primarily attributable to higher employee costs of \$12.1 million resulting from annual compensation adjustments and an increase in our headcount, primarily due to acquisitions. This increase was partially offset by a decrease in stock-based compensation expense of \$10.2 million for the nine months ended September 30, 2017.

Sales and marketing

	Nine Mon Septen			Period-to-period change			
(in thousands)	2018		2017		\$	%	
Sales and marketing	\$ 58,435	\$	58,683	\$	(248)	—%	
As a percent of consolidated revenue	21%)	24%	,			

Sales and marketing expenses decreased by \$0.2 million, or less than 1%, for the nine months ended September 30, 2018, as compared to the nine months ended September 30, 2017. This decrease was primarily attributable to a decrease in stock-based compensation expense of \$5.9 million for the nine months ended September 30, 2018, as compared to the nine months ended September 30, 2017, partially offset by higher employee costs of \$5.5 million resulting from annual compensation adjustments and an increase in our headcount.



General and administrative

	 Nine Mon Septem	Period-to-period change			
(in thousands)	2018	2017		\$	%
General and administrative	\$ 51,636	\$ 66,465	\$	(14,829)	(22%)
As a percent of consolidated revenue	18%	27%			

General and administrative expenses decreased by \$14.8 million, or 22%, for the nine months ended September 30, 2018, as compared to the nine months ended September 30, 2017. This decrease was primarily attributable to a \$21.8 million decrease in stock-based compensation expense, partially offset by a \$1.8 million increase in professional service fees, a \$1.8 million increase in employee compensation costs, a \$0.8 million increase in rent expense, a \$0.7 increase in software maintenance expense, a \$0.5 million increase in costs from being a public company, and a \$0.4 million increase in insurance

Amortization of intangible assets

	 Nine Mon Septen	Period-to-period change				
(in thousands)	2018		2017		\$	%
Amortization of intangible assets	\$ 5,665	\$	3,287	\$	2,378	72%
As a percent of consolidated revenue	2%)	1%	,		

Amortization of intangible assets increased by \$2.4 million for the nine months ended September 30, 2018, as compared to the nine months ended September 30, 2017. This was attributable to an increase in the amortization of developed technology in the current year period as a result of 2017 and 2018 acquisitions.

Other operating income

	Nine Months Ended September 30,					Period-to-period change			
(in thousands)		2018		2017		\$	%		
Other operating income	\$	(7,433)	\$	(4,065)	\$	(3,368)	83%		
As a percent of consolidated revenue		(3%)		(2%)					

Other operating income increased \$3.4 million for the nine months ended September 30, 2018, as compared to the nine months ended September 30, 2017. The increase is attributable to a gain on the sale of a building for \$4.4 million and an increase in grant income of \$1.1 million in the current year period. These increases were partially offset by impairment charges for guaranteed royalty expense of \$2.0 million related to our WEYV business, and impairment of trade names for \$0.6 million as a result of rebranding certain products.

Interest expense

		Nine Mon Septem			Period-to-period change				
(in thousands)	201	2018		2017		\$	%		
Interest expense	\$	92	\$	1,793	\$	(1,701)	(95%)		
As a percent of consolidated revenue		—%		1%					

Interest expense decreased \$1.7 million for the nine months ended September 30, 2018, as compared to the nine months ended September 30, 2017. The decrease in interest expense was a result of the payoff of borrowings on our term loan and line of credit in the fourth quarter of 2017.

Other (income) expense, net

		Nine Mo Septer	nths End mber 30,		_	Period-to-period change			
(in thousands)		2018		2017		\$	%		
Other (income) expense, net	\$	(2,046)	\$	838	\$	(2,884)	NM		
As a percent of consolidated revenue		(1%	6)	—%					
	35								

Other (income) expense, net increased by \$2.9 million for the nine months ended September 30, 2018, as compared to the nine months ended September 30, 2017. This increase was due to fluctuations in the United States dollar relative to other functional currencies during the nine months ended September 30, 2018, compared to the nine months ended September 30, 2017, and an increase in interest income of \$1.1 million in the current year period.

Income tax expense

	Nine Mon Septem			Period-to-period change				
(in thousands)	 2018		2017		\$	%		
Income tax expense	\$ 4,629	\$	6,353	\$	(1,724)	(27%)		

The effective tax rate was 27% and (19%) for the nine months ended September 30, 2018 and 2017, respectively. The tax rate is affected by the Company being a U.S. resident taxpayer, the tax rates in the U.S. and other jurisdictions in which the Company operates, the relative amount of income earned or taxes incurred by jurisdiction and the relative amount of losses or income for which no benefit or expense is recognized. The effective tax rate was impacted by the geographic income mix in 2018 as compared to 2017, primarily related to United States pre-tax income of \$6.4 million and tax credits of \$7.5 million not benefited due to a valuation allowance for the nine months ended September 30, 2018, compared to a United States pre-tax loss of \$40.5 million and non-deductible stock-based compensation expense of \$24.9 million for the nine months ended September 30, 2017.

Non-GAAP financial measures

In analyzing and planning for our business, we supplement our use of GAAP financial measures with non-GAAP financial measures, including Billings as a liquidity measure, Adjusted EBITDA as a performance measure and Free Cash Flow as a liquidity measure.

		Three Months Ended September 30,				Nine Months Ended September 30,		
(in thousands)	2018		2017		2018		2017	
Other financial data:								
Billings	\$	84,067	\$	76,423	\$	288,119	\$	257,802
Adjusted EBITDA	\$	9,487	\$	7,043	\$	24,466	\$	14,099
Free Cash Flow	\$	906	\$	(10,694)	\$	35,089	\$	13,088

Billings consists of our total revenue plus the change in our deferred revenue, excluding deferred revenue from acquisitions during the period. Given that we generally bill our customers at the time of sale, but typically recognize a majority of the related revenue ratably over time, management believes that Billings is a meaningful way to measure and monitor our ability to provide our business with the working capital generated by upfront payments from our customers.

We define Adjusted EBITDA as net income (loss) adjusted for income tax expense (benefit), interest expense, interest income and others, depreciation and amortization, stock-based compensation expense, restructuring charges, asset impairment charges and other special items as determined by management. Our management team believes that Adjusted EBITDA is a meaningful measure of performance as it is commonly utilized by management and the investment community to analyze operating performance in our industry.

We define Free Cash Flow as cash flow provided by operating activities less capital expenditures. Management believes that Free Cash Flow is useful in analyzing our ability to service and repay debt and return value directly to stockholders.

These non-GAAP financial measures reflect an additional way of viewing aspects of our business that, when viewed with our GAAP results and the accompanying reconciliations to the corresponding GAAP financial measures included in the tables below, may provide a more complete understanding of factors and trends affecting our business. These non-GAAP financial measures should not be relied upon to the exclusion of GAAP financial measures and are by definition an incomplete understanding of the Company and must be considered in conjunction with GAAP measures.



We believe that the non-GAAP measures disclosed herein are only useful as an additional tool to help management and investors make informed decisions about our financial and operating performance and liquidity. By definition, non-GAAP measures do not give a full understanding of the Company. To be truly valuable, they must be used in conjunction with the comparable GAAP measures. In addition, non-GAAP financial measures are not standardized. It may not be possible to compare these financial measures with other companies' non-GAAP financial measures having the same or similar names. We strongly encourage investors to review our consolidated financial statements and the notes thereto in their entirety and not rely on any single financial measure.

The following table provides a reconciliation of Billings to revenue, the most comparable GAAP financial measure, for each of the periods presented:

	 Three Months Ended September 30,					Nine Months Ended September 30,		
(in thousands)	2018		2017		2018		2017	
Revenue	\$ 93,871	\$	84,938	\$	281,168	\$	243,466	
Ending deferred revenue	146,713		130,464		146,713		130,464	
Beginning deferred revenue	(156,517)		(136,780)		(139,762)		(113,929)	
Acquisition related deferred revenue	_		(2,199)		_		(2,199)	
Billings	\$ 84,067	\$	76,423	\$	288,119	\$	257,802	

The following table provides a reconciliation of Adjusted EBITDA to net income (loss), the most comparable GAAP financial measure, for each of the periods presented:

	Three Months Ended September 30,				Nine Months Ended September 30,			
(in thousands)	2018		2017		2018		2017	
Net income (loss)	\$	7,307	\$	(29,626)	\$	12,740	\$	(39,060)
Income tax expense		2,600		8,012		4,629		6,353
Stock-based compensation expense		563		25,265		1,213		39,302
Interest expense		31		634		92		1,793
Interest income and other (1)		(4,384)		(53)		(5,103)		(2,184)
Depreciation and amortization		3,370		2,811		10,895		7,895
Adjusted EBITDA	\$	9,487	\$	7,043	\$	24,466	\$	14,099

(1) Includes a) gain on the sale of a building for \$4.4 million for the three and nine months ended September 30, 2018, b) an impairment charge for royalty contracts and trade names resulting in \$0.8 million and \$2.6 million of expense for the three and nine months ended September 30, 2018, and c) a non-recurring adjustment for a change in estimated legal expenses resulting in \$2.0 million of income for both the nine months ended September 30, 2018 and September 30, 2017.

The following table provides a reconciliation of Free Cash Flow to net cash provided by operating activities, the most comparable GAAP financial measure, for each of the periods presented:

	Nine Months Ended September 30,			
(in thousands)	2018 2017			
Net cash provided by operating activities	\$ 40,422	\$	17,455	
Capital expenditures	(5,333)		(4,367)	
Free cash flow	\$ 35,089	\$	13,088	

Recurring Software License Rate. A key factor to our success is our recurring software license rate which we measure through billings, primarily derived from annual renewals of our existing subscription customer agreements. We calculate our recurring software license rate for a particular period by dividing (i) the sum of software term-based license billings, software license maintenance billings, and 20% of software perpetual license billings which we believe approximates maintenance as an element of the arrangement by (ii) the total software license billings including all term-based, maintenance, and perpetual license billings from all customers for that period. For the nine months ended September 30, 2018, our recurring software license rate was 90%.

Liquidity and capital resources

Our principal sources of liquidity have been the net payments received from global customers using our software and services, proceeds from our initial public and follow-on offerings, and prior to the initial public offering, periodic draws on our credit facilities. At September 30, 2018, we had cash and cash equivalents totaling \$197.4 million and net accounts receivable of \$69.1 million. We believe that funds generated from operations, with cash and cash equivalents and the amounts available to us to borrow under our credit facility will be sufficient to meet our anticipated cash needs for at least the next 12 months.

We have commenced the initial planning to update zoning to allow for future expansion of our corporate headquarters facilities on the adjacent property we own to enable development consistent with our long-term needs. We have not yet determined the nature and scope of the overall timeline and investment beyond the immediate rezoning efforts necessary for our potential use in the future. Over the next 12 months, we expect to continue to advance this project.

Acquisition of Datawatch

On November 5, 2018, the Company and Datawatch Corporation ("Datawatch") announced the signing of a definitive merger agreement under which the Company has agreed to acquire Datawatch. Under the terms of the agreement, the Company will pay \$13.10 per share in cash, representing a fully diluted equity value of approximately \$176.0 million. Funding for the transaction will come primarily from cash, coupled with utilization of borrowings under the Company's existing credit facility. See Note 17 – Subsequent events for further discussion on the acquisition of Datawatch.

Revolving credit facility

Our credit agreement consists of an aggregate commitment amount of \$100.0 million, with a sublimit for the issuance of letters of credit of up to \$5.0 million and a sublimit for swingline loans of up to \$5.0 million (the "2017 Credit Agreement"). The 2017 Credit Agreement matures on October 18, 2022.

The 2017 Credit Agreement allows us to request that the aggregate commitments under the 2017 Credit Agreement be increased by up to \$50.0 million for a total of \$150.0 million, subject to certain conditions, by obtaining additional commitments from the existing lenders or by causing a person acceptable to the administrative agent to become a lender (in each case subject to the terms and conditions set forth in the 2017 Credit Agreement).

Effective October 31, 2018, we increased the revolving commitment available under the 2017 Credit Agreement from \$100.0 million to \$150.0 million. The \$50.0 million accordion remains available under the terms of the 2017 Credit Agreement. There were no other material changes to the terms of the 2017 Credit Agreement.

As of September 30, 2018, we had no outstanding borrowings under the 2017 Credit Agreement, and there was \$100.0 million available for future borrowing. The 2017 Credit Agreement is available for general corporate purposes, including working capital, capital expenditures and permitted acquisitions.

The 2017 Credit Agreement is secured by collateral including (i) substantially all of the Company's properties and assets, and the properties and assets of the Company's domestic subsidiaries but excluding any patents, copyrights, patent applications or copyright applications or any trade secrets or software products and (ii) pledges of the equity interests in all present and future domestic subsidiaries (subject to certain exceptions as provided for under the 2017 Credit Agreement). The Company's direct and indirect domestic subsidiaries are guarantors of all of the obligations under the 2017 Credit Agreement. In addition, the 2017 Credit Agreement contains financial covenants relating to maintaining a minimum interest coverage ratio of 3.0 to 1.0 and maximum leverage ratio of 3.0 to 1.0, as defined in the 2017 Credit Agreement. At September 30, 2018, we were in compliance with all financial covenants.

Cash flows

As of September 30, 2018, we had an aggregate of cash and cash equivalents of \$197.4 million that was held for working capital purposes, acquisitions, and capital expenditures; \$172.8 million of this aggregate amount was held in the United States and \$22.9 million was held in the APAC and EMEA regions.



Other than statutory limitations, there are no significant restrictions on the ability of our subsidiaries to pay dividends or make other distributions to Altair. Based on our current liquidity needs and repatriation strategies, we expect that we can manage our global liquidity needs without material adverse tax implications. The recent changes in U.S. tax law could materially affect our tax obligations. For further discussion, please see our 2017 Annual Report on Form 10-K, "Item 1A. Risk Factors – New legislations or tax-reform policies that would change U.S. or foreign taxation of international business activities, including uncertainties in the interpretation and application of the 2017 Tax Cuts and Jobs Act, could materially affect our tax obligations and effective tax rate."

The following table summarizes our cash flows for the periods indicated:

	 Nine Months Ended September 30,		
(in thousands)	2018		2017
Net cash provided by operating activities	\$ 40,422	\$	17,455
Net cash used in investing activities	(17,408)		(22,078)
Net cash provided by financing activities	136,514		3,134
Effect of exchange rate changes on cash, cash equivalents and restricted cash	(1,354)		1,301
Net increase (decrease) in cash, cash equivalents and restricted cash	\$ 158,174	\$	(188)

Net cash provided by operating activities

Net cash provided by operating activities for the nine months ended September 30, 2018 was \$40.4 million, which reflects an increase of \$23.0 million compared to the nine months ended September 30, 2017. This increase was primarily a result of our improved financial performance and changes to our working capital position for the nine months ended September 30, 2018, as compared to the nine months ended September 30, 2017.

Net cash used in investing activities

Net cash used in investing activities for the nine months ended September 30, 2018 was \$17.4 million, which reflects a decrease in cash used of \$4.7 million compared to the nine months ended September 30, 2017. This decrease was primarily the result of cash received from the sale of a building in the nine months ended September 30, 2018.

Net cash provided by financing activities

Net cash provided by financing activities for the nine months ended September 30, 2018 was \$136.5 million, which reflects an increase in cash provided of \$133.4 million compared the nine months ended September 30, 2017. We received aggregate proceeds of \$135.6 million from our follow-on public offering, net of underwriters' discount and commissions. We had a decrease in net borrowings of \$6.3 million for the nine months ended September 30, 2017. Additionally, we had a \$1.5 million increase in cash from the exercise of stock options and a decrease in the payment of offering costs of \$2.0 million in the current year.

Effect of exchange rate changes on cash, cash equivalents and restricted cash

There was an adverse effect of exchange rate changes on cash, cash equivalents and restricted cash of \$1.4 million for the nine months ended September 30, 2018, compared to a favorable effect of exchange rate changes on cash, cash equivalents and restricted cash of \$1.3 million for the nine months ended September 30, 2017.

2018 Employee Equity Program ("2018 EEP")

Under the terms of the 2017 Equity Incentive Plan ("2017 Plan"), the Company intends to issue Restricted Stock Units ("RSUs") to its senior executives, sales team, and other designated employees based upon a combination of factors including Company performance, tenure, position, geographic location, and individual performance related to the 2018 fiscal year. The determination of the actual number of the individual and aggregate number of RSUs to be awarded and subject to a four-year vesting period is expected to be finalized in early 2019 and remains subject to Compensation Committee approval at that time. Based upon expectations, potential dilution is expected to be below 1% for this future award of RSUs.



Contractual obligations and commitments

There were no material changes in our commitments under contractual obligations as disclosed in our Annual Report on Form 10-K for the year ended December 31, 2017.

Off-balance sheet arrangements

Through September 30, 2018, we did not have any relationships with unconsolidated organizations or financial partnerships, such as structured finance or special purpose entities that would have been established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes.

Recently issued accounting pronouncements

See Note 3 in the Notes to consolidated financial statements in Item 1, Part I of this Quarterly Report on Form 10-Q for a full description of the recent accounting pronouncements and our expectation of their impact, if any, on our results of operations and financial condition.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

We are exposed to certain global market risks, including foreign currency exchange risk and interest rate risk associated with our debt.

Foreign Currency Risk

As a result of our substantial international operations, we are exposed to foreign currency risks that arise from our normal business operations, including in connection with our transactions that are denominated in foreign currencies. In addition, we translate sales and financial results denominated in foreign currencies into United States dollars for purposes of our consolidated financial statements. As a result, appreciation of the United States dollar against these foreign currencies generally will have a negative impact on our reported revenue and operating income while depreciation of the United States dollar against these foreign currencies will generally have a positive effect on reported revenue and operating income.

To date, we have not entered into any foreign currency hedging contracts since exchange rate fluctuations have not had a material impact on our operating results and cash flows. Based on our current international structure, we do not plan on engaging in hedging activities in the near future.

Interest Rate Risk

Interest rate risk relates to the gain/increase or loss/decrease we could incur on our debt balances and interest expense associated with changes in interest rates. It is our policy not to enter into derivative instruments for speculative purposes, and therefore, we hold no derivative instruments for trading purposes.

Item 4. Controls and Procedures

Under the supervision and with the participation of our management, including the Chief Executive Officer and Chief Financial Officer, we have evaluated the effectiveness of our disclosure controls and procedures as defined in Rule 13(a)-15(e) under the Exchange Act as of the end of the period covered by this report. Based on that evaluation, the Chief Executive Officer and Chief Financial Officer have concluded that these disclosure controls and procedures were not effective as of September 30, 2018, due to the material weaknesses identified in connection with the audits of fiscal years 2017 and 2016 financial statements.

The first material weakness pertained to controls over accounting for income taxes. Specifically, that: (i) certain misstatements were either not identified by management or were not identified timely by management; and (ii) additional technical resources were necessary to enable timely and sufficient review controls over accounting for income taxes. We have taken steps to remediate this by hiring additional technical resources and increasing management review and oversight over the income tax process.

The second material weakness pertained to our internal controls over the financial statement close process not being designed to be precise enough to detect a material error in the financial statements in a timely manner. Specifically, certain misstatements were either not identified by management or were not identified timely by management. We have taken steps to remediate this material weakness, by hiring additional personnel and increasing management review and oversight over the financial statement close process.



If our steps are insufficient to successfully remediate the material weaknesses and otherwise establish and maintain an effective system of internal control over financial reporting, the reliability of our financial reporting, investor confidence in us and the value of our common stock could be materially and adversely affected. The process of designing and implementing internal control over financial reporting required to comply with applicable securities laws and regulations and will be time consuming, costly and complicated. Our independent registered public accounting firm was not engaged to audit the effectiveness of our internal control over financial reporting reported herein or any other prior period. We may discover other control deficiencies in the future, and we cannot assure you that we will not have a material weakness in future periods.

Effective internal control over financial reporting is necessary for us to provide reliable and timely financial reports and, together with adequate disclosure controls and procedures, are designed to reasonably detect and prevent fraud. Any failure to implement required new or improved controls, or difficulties encountered in their implementation could cause us to fail to meet our reporting obligations.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) that occurred during the quarter ended September 30, 2018, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II - OTHER INFORMATION

Item 1. Legal Proceedings

As previously described in our Annual Report on Form 10-K, Part 1, Item 3, we are subject to litigation for which there were no material changes during the nine months ended September 30, 2018, except as noted below.

MSC Litigation

On July 5, 2007, MSC Software Corporation, or MSC, filed a lawsuit against us and certain of our named employees in the United States District Court for the Eastern District of Michigan, asserting, among other things, that we and certain of our employees misappropriated alleged trade secrets that certain of our employees breached contractual non-solicitation and confidentiality obligations owed to MSC and that we tortiously interfered with MSC's contractual relations with these employees. In April 2014, a jury returned a \$26.1 million verdict against us on three trade secrets claims and a tortious interference claim as well as against certain of our employees for breach of contractual obligations to MSC. In November 2014, this verdict was partially vacated except for damages of \$425,000 related to the employment matters, and the Court ordered a new trial on damages for the trade secrets claims. On December 13, 2017, the court granted Altair's motion for summary judgment and dismissed MSC's claim of trade secret misappropriation. On January 5, 2018, MSC filed a notice of appeal of the final judgment entered on December 13, 2017 and prior orders in this action to the Sixth Circuit Court of Appeals. On January 19, 2018, Altair filed a cross-appeal. The Sixth Circuit referred the case to mediation. On August 28, 2018, the parties filed stipulations of dismissal with both the District Court and the Court of Appeals. The matter is settled.

Item 1A. Risk Factors

Except as set forth below, there have been no material changes to the risk factors disclosed in our Annual Report on Form 10-K for the year ended December 31, 2017.

The risk factor set forth below supplements the risk factors regarding our status as an emerging growth company previously disclosed in Part I, Item 1A. "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2017, and as updated by our Quarterly Report on Form 10-Q for the quarters ended March 31, 2018 and June 30, 2018.

We will cease to qualify as an "emerging growth company" (as defined in the Jumpstart Our Business Startups Act of 2012) as of December 31, 2018, in which case we will be subject to Section 404(b) of the Sarbanes-Oxley Act of 2002 and accelerated adoption of certain new accounting standards that may be difficult for us to satisfy in a timely fashion.

We will cease to qualify as an "emerging growth company", or EGC, as of December 31, 2018 because the market value of our common stock held by nonaffiliates exceeded \$700 million as of June 30, 2018. As a result, we will be required to comply with the additional requirements associated with no longer being an EGC, as described in our Annual Report on Form 10-K for the year ended December 31, 2017, including the requirements for accelerated adoption of certain new accounting standards and the requirement that our independent registered public accounting firm express an opinion as to the effectiveness of our internal controls over financial reporting. Section 404(a) of the Sarbanes-Oxley Act of 2002 requires that we evaluate and determine the effectiveness of our internal controls over financial reporting and provide a management report on the internal controls over financial reporting. Section 404(b) of that Act will require that we file our independent registered public accounting firm's attestation report on our internal controls over financial reporting. We are preparing for the accelerated adoption of new accounting standards as well as designing, documenting and implementing the incremental internal controls over financial reporting required to comply with these obligations, which has been and is expected to continue to be time consuming, costly and complicated. Our evaluation and testing to date has identified areas requiring further analysis, work and remediation. In light of the volume of work to be performed, we may not be able to complete our evaluation, testing, and any required remediation in a timely fashion.

If we are unable to complete the implementation of certain new accounting standards, if we identify previously undetected material weaknesses in our internal controls over financial reporting, if we are unable to comply with the requirements of Section 404 in a timely manner, if we are unable to assert that our internal controls over financial reporting are effective, or if our independent registered public accounting firm is unable to express an opinion as to the effectiveness of our internal controls over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports and the market price of our Class A common stock could be negatively affected.



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

Unregistered Sales of Equity Securities

None.

Use of Proceeds

Initial public offering

On October 31, 2017, the Registration Statement on Form S-1 (File No. 333-220710) for our initial public offering was declared effective by the SEC. On November 3, 2017, we closed the initial public offering and sold 9,865,004 shares of our Class A common stock at a public offering price of \$13.00 per share for an aggregate offering price of approximately \$128.2 million.

The remainder of the information required by this item regarding the use of our IPO proceeds has been omitted pursuant to SEC rules because such information has not changed since our last periodic report was filed.

Item 3. Defaults Upon Senior Securities

None.

Item 4. Mine Safety Disclosures

Not applicable.

Item 5. Other Information

None.

Item 6. Exhibits

No.	Description
31.1*	Certification of the Chief Executive Officer of Altair Engineering Inc. pursuant to Rule 13a-14(a)/Rule 15d-14(a) under the Securities Exchange Act of 1934, as amended
31.2*	Certification of the Chief Financial Officer of Altair Engineering Inc. pursuant to Rule 13a-14(a)/Rule 15d-14(a) under the Securities Exchange Act of 1934, as amended
32.1**	Certification of the Chief Executive Officer and Chief Financial Officer of Altair Engineering Inc. pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002
EX-101.INS	XBRL INSTANCE DOCUMENT
EX-101.SCH	XBRL TAXONOMY EXTENSION SCHEMA DOCUMENT
EX-101.CAL	XBRL TAXONOMY EXTENSION CALCULATION LINKBASE
EX-101.LAB	XBRL TAXONOMY EXTENSION LABELS LINKBASE
EX-101.PRE	XBRL TAXONOMY EXTENSION PRESENTATION LINKBASE

* Filed herewith.

** The certifications furnished in Exhibit 32.1 hereto are deemed to accompany this Quarterly Report on Form 10-Q and will not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934, as amended, except to the extent that the registrant specifically incorporates it by reference.

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.

Date: November 8, 2018

Date: November 8, 2018

ALTAIR ENGINEERING INC.

By:	/s/ James Scapa
	James R. Scapa
	Chief Executive Officer (Principal Executive Officer)

By: /s/ Howard N. Morof Howard N. Morof Chief Financial Officer (Principal Financial and Accounting Officer)

CERTIFICATION PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, James R. Scapa, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Altair Engineering 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)) for the registrant and have:

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

b) (paragraph omitted pursuant to the transition period exemption for newly public companies);

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 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.

/s/ James Scapa

James R. Scapa Chief Executive Officer (Principal Executive Officer)

November 8, 2018

CERTIFICATION PURSUANT TO RULES 13a-14(a) AND 15d-14(a) UNDER THE SECURITIES EXCHANGE ACT OF 1934, AS ADOPTED PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT OF 2002

I, Howard N. Morof, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Altair Engineering 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)) for the registrant and have:

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

b) (paragraph omitted pursuant to the transition period exemption for newly public companies);

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 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.

/s/ Howard N. Morof Howard N. Morof Chief Financial Officer (Principal Financial and Accounting Officer)

November 8, 2018

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

In connection with the Quarterly Report of Altair Engineering Inc. (the "Company"), on Form 10-Q for the period ended September 30, 2018, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), the undersigned officers of the Company certify to their knowledge and in their respective capacities, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Report fully complies with the requirements of section 13(a) or 15(d), as applicable, of the Securities Exchange Act of 1934, as amended; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ James Scapa James R. Scapa Chief Executive Officer (Principal Executive Officer)

/s/ Howard N. Morof Howard N. Morof Chief Financial Officer (Principal Financial and Accounting Officer)

November 8, 2018