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

FORM 10-Q

(Mark One)

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

For the quarterly period ended September 30, 2017

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

Commission File Number 001-34099

MASTECH DIGITAL, INC.
(Exact name of registrant as specified in its charter)

PENNSYLVANIA
(State or other jurisdiction of
incorporation or organization)

26-2753540
(I.R.S. Employer
Identification No.)

1305 Cherrington Parkway, Building 210, Suite 400
Moon Township, Pennsylvania
(Address of principal executive offices)

15108
(Zip Code)

Registrant's telephone number, including area code: (412) 787-2100

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

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or emerging growth company. See 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	<input type="checkbox"/>	Accelerated filer	<input type="checkbox"/>
Non-accelerated filer	<input type="checkbox"/> (Do not check if a smaller reporting company)	Smaller reporting company	<input checked="" type="checkbox"/>
		Emerging growth company	<input type="checkbox"/>

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

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

The number of shares of the registrant's Common Stock, par value \$.01 per share, outstanding as of October 31, 2017 was 5,454,952.

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FOR THE QUARTER ENDED SEPTEMBER 30, 2017

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PART I. FINANCIAL INFORMATION

ITEM 1. FINANCIAL STATEMENTS

MASTECH DIGITAL, INC.
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Amounts in thousands, except per share data)
(Unaudited)

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
Revenues	\$39,228	\$34,263	\$107,414	\$99,606
Cost of revenues	30,410	27,366	85,310	79,707
Gross profit	8,818	6,897	22,104	19,899
Selling, general and administrative expenses	8,603	5,303	20,504	16,506
Income from operations	215	1,594	1,600	3,393
Interest income (expense), net	(439)	(116)	(648)	(353)
Other income (expense), net	(11)	(4)	11	(24)
Income (loss) before income taxes	(235)	1,474	963	3,016
Income tax expense (benefit)	(99)	550	202	1,136
Net income (loss)	<u>\$ (136)</u>	<u>\$ 924</u>	<u>\$ 761</u>	<u>\$ 1,880</u>
Earnings per share:				
Basic	<u>\$ (.03)</u>	<u>\$.21</u>	<u>\$.16</u>	<u>\$.43</u>
Diluted	<u>\$ (.03)</u>	<u>\$.21</u>	<u>\$.16</u>	<u>\$.42</u>
Weighted average common shares outstanding:				
Basic	<u>5,342</u>	<u>4,405</u>	<u>4,795</u>	<u>4,371</u>
Diluted	<u>5,365</u>	<u>4,493</u>	<u>4,835</u>	<u>4,469</u>

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

MASTECH DIGITAL, INC.
CONDENSED CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(Amounts in thousands)
(Unaudited)

	<u>Three Months Ended</u> <u>September 30,</u>		<u>Nine Months Ended</u> <u>September 30,</u>	
	<u>2017</u>	<u>2016</u>	<u>2017</u>	<u>2016</u>
Net income (loss)	\$ (136)	\$ 924	\$ 761	\$ 1,880
Other comprehensive income (loss):				
Net unrealized gain/(loss) on interest rate swap contracts	(99)	18	(87)	(17)
Foreign currency translation adjustment	(19)	—	(19)	—
Total pretax net unrealized gain/(loss)	(118)	18	(106)	(17)
Income tax expense (benefit)	(38)	7	(33)	(7)
Total other comprehensive income (loss), net of taxes	(80)	11	(73)	(10)
Total comprehensive income (loss)	<u>\$ (216)</u>	<u>\$ 935</u>	<u>\$ 688</u>	<u>\$ 1,870</u>

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

MASTECH DIGITAL, INC.
CONDENSED CONSOLIDATED BALANCE SHEETS
(Amounts in thousands, except share and per share data)
(Unaudited)

	September 30, 2017	December 31, 2016
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 3,162	\$ 829
Accounts receivable, net of allowance for uncollectible accounts of \$388 in 2017 and 2016	23,691	17,916
Unbilled receivables	6,474	3,186
Prepaid and other current assets	1,169	701
Prepaid income taxes	731	52
Total current assets	<u>35,227</u>	<u>22,684</u>
Equipment, enterprise software, and leasehold improvements, at cost:		
Equipment	1,371	1,198
Enterprise software	1,461	645
Leasehold improvements	365	354
	<u>3,197</u>	<u>2,197</u>
Less – accumulated depreciation and amortization	<u>(1,769)</u>	<u>(1,639)</u>
Net equipment, enterprise software, and leasehold improvements	1,428	558
Deferred income taxes	132	254
Non-current deposits	258	170
Goodwill	35,772	8,427
Intangible assets, net	<u>26,157</u>	<u>7,313</u>
Total assets	<u>\$ 98,974</u>	<u>\$ 39,406</u>
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Current portion of long-term debt	\$ 3,813	\$ 1,800
Accounts payable	3,239	1,963
Accrued payroll and related costs	7,375	7,645
Other accrued liabilities	1,643	653
Deferred revenue	72	196
Total current liabilities	<u>16,142</u>	<u>12,257</u>
Long-term liabilities:		
Long-term debt, less current portion, net	39,600	8,077
Contingent consideration liability	17,125	—
Total liabilities	<u>72,867</u>	<u>20,334</u>
Commitments and contingent liabilities (Note 4)		
Shareholders' equity:		
Preferred Stock, no par value; 20,000,000 shares authorized; none outstanding	—	—
Common Stock, par value \$.01; 125,000,000 shares authorized and 6,274,680 shares issued as of September 30, 2017 and 5,317,148 as of December 31, 2016	63	53
Additional paid-in-capital	20,208	13,863
Retained earnings	10,058	9,297
Accumulated other comprehensive loss	(80)	(7)
Treasury stock, at cost; 819,728 shares as of September 30, 2017 and 818,569 December 31, 2016	<u>(4,142)</u>	<u>(4,134)</u>
Total shareholders' equity	<u>26,107</u>	<u>19,072</u>
Total liabilities and shareholders' equity	<u>\$ 98,974</u>	<u>\$ 39,406</u>

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

MASTECH DIGITAL, INC.
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Amounts in thousands)
(Unaudited)

	Nine Months Ended	
	September 30,	
	2017	2016
OPERATING ACTIVITIES:		
Net income	\$ 761	\$ 1,880
Adjustments to reconcile net income to cash provided by (used in) operating activities:		
Depreciation and amortization	1,180	763
Bad debt expense	—	25
Interest amortization of deferred financing costs	82	29
Stock-based compensation expense	285	298
Deferred income taxes, net	102	108
Loss of disposition of fixed assets	4	—
Foreign currency translation adjustment	(19)	—
Working capital items:		
Accounts receivable and unbilled receivables	(2,884)	(5,224)
Prepaid and other current assets	(1,080)	(235)
Accounts payable	208	(140)
Accrued payroll and related costs	(1,122)	(8)
Other accrued liabilities	991	(1,041)
Deferred revenue	(124)	(167)
Net cash flows (used in) operating activities	<u>(1,616)</u>	<u>(3,712)</u>
INVESTING ACTIVITIES:		
Acquisition of InfoTrellis, Inc. (net of cash acquired and issuance of contingent consideration)	(34,730)	—
Recovery of non-current deposits	59	6
Capital expenditures	(896)	(73)
Net cash flows (used in) investing activities	<u>(35,567)</u>	<u>(67)</u>
FINANCING ACTIVITIES:		
Borrowings on revolving credit facility, (net)	9,689	4,874
Borrowings on term loan facility	30,500	—
(Repayments) on term loan facility	(6,300)	(1,350)
Proceeds from the issuance of common shares	6,000	—
Payment of deferred financing costs	(435)	—
Purchase of treasury stock	(7)	(8)
Proceeds from the exercise of stock options	69	49
Increase in excess tax benefits related to stock options / restricted shares, net	—	104
Net cash flows provided by financing activities	<u>39,516</u>	<u>3,669</u>
Net change in cash and cash equivalents	2,333	(110)
Cash and cash equivalents, beginning of period	829	848
Cash and cash equivalents, end of period	<u>\$ 3,162</u>	<u>\$ 738</u>

The accompanying notes are an integral part of these Condensed Consolidated Financial Statements.

MASTECH DIGITAL, INC.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
SEPTEMBER 30, 2017 AND 2016
(Unaudited)

1. Description of Business and Basis of Presentation:

References in this Quarterly Report on Form 10-Q to “we”, “our”, “Mastech Digital”, “Mastech” or “the Company” refer collectively to Mastech Digital, Inc. and its wholly-owned operating subsidiaries, which are included in these Condensed Consolidated Financial Statements (the “Financial Statements”).

Description of Business

We are a provider of Digital Transformation IT Services.

Our portfolio of offerings include Data Management and Analytics services; other digital transformation services such as Salesforce.com, SAP HANA, and Digital Learning services; and IT staffing services that span across digital and mainstream technologies.

Following our recent acquisition of the services division of Canada-based InfoTrellis, Inc., we have added specialized capabilities in delivering data management and analytics services to our customers globally. This business offers project-based consulting services in the areas of Master Data Management, Data Integration, and Big Data, with such services delivered using on-site and offshore resources.

We also offer other digital transformation services focused on providing CRM on the cloud through Salesforce.com; driving IT efficiencies through SAP HANA; and using digital methods to enhance organizational learning.

Our IT staffing business combines technical expertise with business process experience to deliver a broad range of staffing services in digital and mainstream technologies. Our ‘digital’ technologies stack includes Data Management & Analytics, Cloud, Mobility, Social and Automation. We work with businesses and institutions with significant IT spending and recurring staffing service needs. We also support smaller organizations with their “project focused” temporary IT staffing requirements.

Recent Developments

On July 13, 2017, the Company completed its acquisition of the services division of Canada-based InfoTrellis, Inc., a project-based consulting services company with specialized capabilities in data management and analytics. The acquisition is expected to significantly strengthen Mastech Digital’s capabilities to offer consulting and project-based delivery of digital transformation services. InfoTrellis, Inc. is headquartered in Toronto, Canada, with offices in Austin, Texas and a global delivery center in Chennai, India.

The transaction is valued at \$55 million, with \$35.75 million paid in cash at closing (subject to working capital adjustments) and \$19.25 million deferred over the next two years. The deferred purchase price is contingent upon the acquired business generating specified EBIT (earnings before interest and taxes) targets during the two years following closing.

The funding for the transaction consisted of a combination of debt and equity. A new \$65 million credit facility the Company established on July 13, 2017 with PNC Bank, N.A. (“PNC”) provided debt financing for the transaction, refinancing of the Company’s existing debt with PNC and additional borrowing capacity for the future. The equity financing was completed through a \$6.0 million private placement of newly-issued shares of the Company’s common stock to Mastech’s founders and majority shareholders, Ashok Trivedi and Sunil Wadhwani. Pursuant to the terms of the share purchase agreements executed in connection with the private placement of these shares, the Company agreed to sell such shares at a price per share equal to the greater of \$7.00 or the closing price for the common stock on July 10, 2017 (two business days after the July 7, 2017 announcement of the transaction), which was \$6.35 per share. Accordingly, the common stock was sold on July 13, 2017 at a price per share equal to \$7.00. The terms of the private placement were negotiated and approved by a Special Committee of the Company’s independent directors, which retained counsel and an independent financial advisor.

On July 13, 2017 and July 19, 2017, the Company filed with the Securities and Exchange Commission Current Reports on Form 8-K providing additional details on this acquisition and the financing arrangements. On September 27, 2017, the Company filed an Amendment to its July 19, 2017 Current Report on Form 8-K solely to include the financial statements and financial information required under Item 9.01 of Form 8-K, which statements and information were excluded from the original Form 8-K in reliance on paragraphs (a)(4) and (b)(2) of Item 9.01 of Form 8-K.

Accounting Principles

The accompanying Financial Statements have been prepared by management in accordance with U.S. generally accepted accounting principles (“GAAP”) for interim financial information and applicable rules and regulations of the Securities and Exchange Commission (the “SEC”). Accordingly, they do not include all of the information and disclosures required by U.S. GAAP for complete consolidated financial statements. In the opinion of management, all adjustments, consisting principally of normal recurring adjustments, considered necessary for a fair presentation have been included. The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the amounts reported in the Financial Statements and the accompanying notes. Actual results could differ from these estimates. These Financial Statements should be read in conjunction with the Company’s audited consolidated financial statements and accompanying notes for the year ended December 31, 2016, included in our Annual Report on Form 10-K filed with the SEC on March 24, 2017 and the Current Reports on Form 8-K filed with the SEC on July 13, 2017, July 19, 2017 and September 27, 2017. Additionally, our operating results for the three and nine months ended September 30, 2017 are not necessarily indicative of the results that can be expected for the year ending December 31, 2017 or for any other period.

Principles of Consolidation

The Financial Statements include the accounts of the Company and its wholly-owned subsidiaries. All material intercompany transactions and balances have been eliminated in consolidation.

Reclassification

As Discussed in Note 16, Recently Issued Accounting Standards, the Company adopted ASU 2015-17 “Balance Sheet Classification of Deferred Taxes” on a retrospective basis during the first quarter of 2017. Accordingly, the impact of this retrospective adoption was a reclassification of \$26,000 of non-current deferred tax liabilities and \$280,000 of current deferred tax assets as a net non-current asset of \$254,000 as of December 31, 2016. This presentation conforms to the September 30, 2017 balance sheet.

Critical Accounting Policies

Please refer to Note 1 “Summary of Significant Accounting Policies” of the Consolidated Financial Statements and “Management’s Discussion and Analysis of Financial Condition and Results of Operations—Critical Accounting Policies and Estimates” in our Annual Report on Form 10-K for the year ended December 31, 2016 for a more detailed discussion of our significant accounting policies and critical accounting estimates. There were no material changes to these critical accounting policies during the nine months ended September 30, 2017 except for the policy related to contingent consideration associated with the InfoTrellis acquisition, as detailed below:

Contingent Consideration:

In connection with the InfoTrellis acquisition, the Company may be required to pay future consideration that is contingent upon the achievement of specified earnings before interest and taxes (“EBIT”) objectives. As of the acquisition date, the Company recorded a contingent consideration liability representing the estimated fair value of the contingent consideration that is expected to be paid. The fair value of the contingent consideration liability was estimated by utilizing a probability weighted simulation model to determine the fair value of contingent consideration. We re-measure this liability each reporting period and record changes in the fair value through a separate line item without our consolidated statements of operations. Increases or decreases in the fair value of the contingent consideration liability can result from changes in discount periods and rates, as well as changes in the timing and amount of revenue and earnings estimates or in the timing of likelihood of achieving contractual milestones.

Segment Reporting

Subsequent to the July 13, 2017 closing of the InfoTrellis acquisition, the Company has two reportable segments, in accordance with ASC Topic 280 “Disclosures About Segments of an Enterprise and Related Information”, Data and Analytics Services (which segment represents the acquired InfoTrellis business) and IT Staffing Services.

2. Business Combinations

On July 7, 2017, Mastech Digital, Inc., through its wholly-owned subsidiaries Mastech InfoTrellis, Inc., Mastech InfoTrellis Digital, Ltd., Mastech Digital Data, Inc. and Mastech Digital Private Limited (collectively, the “Company Entities”), entered into two Asset Purchase Agreements and a Share Purchase Agreement (collectively, the “Purchase Agreements”) to acquire substantially all of the assets comprising the consulting services business in the areas of master data management, data integration and big data (the “Acquired Business”) of InfoTrellis Inc., InfoTrellis, Inc. and 2291496 Ontario Inc., including all outstanding shares of InfoTrellis India Private Limited (collectively, “InfoTrellis”). The aforementioned transaction was closed on July 13, 2017.

Under the terms of the Purchase Agreements, the Company Entities paid at the closing of the acquisition \$35.75 million in cash, less certain working capital adjustments which totaled \$930,000. The Purchase Agreements also provided for contingent consideration of \$19.25 million in deferred cash payments, with up to \$8.25 million payable if the EBIT of the Acquired Business for the 12-month period beginning on August 1, 2017 (the “Actual Year 1 EBIT”) equals \$10.0 million and up to \$11.0 million payable if the EBIT of the Acquired Business for the 12-month period beginning on August 1, 2018 (the “Actual Year 2 EBIT”) equals \$10.7 million. The deferred amount payments are subject to adjustments under the terms of the Purchase Agreements based upon, among other items, the amount of the Actual Year 1 EBIT and the amount of the Actual Year 2 EBIT.

In support of the acquisition, the Company entered into a new credit agreement on July 13, 2017 with PNC Bank, National Association, as administrative agent, swing loan lender and issuing lender, PNC Capital Markets LLC, as sole lead arranger and sole book runner, and certain financial institutions party thereto as lenders. The Credit Agreement provides for a total aggregate commitment of \$65.0 million, consisting of (i) a revolving credit facility in an aggregate principal amount not to exceed \$27.5 million, subject to increases to an aggregate amount not to exceed \$37.5 million upon satisfaction of certain conditions; (ii) a \$30.5 million term loan facility; and (iii) a \$7.0 million delayed draw term loan facility to be used exclusively toward contingent consideration payments. In addition, the Company entered into Securities Purchase Agreements with Ashok Trivedi and Sunil Wadhvani (collectively, the “Investors”) on July 7, 2017 pursuant to which the Company issued and sold an aggregate 857,144 shares (the “Shares”) of its common stock, par value \$0.01 per share (the “Common Stock”), to the Investors on July 13, 2017 for \$6.0 million in aggregate gross proceeds (the “Private Placement Transactions”). The Company used the proceeds from the Private Placement Transactions to fund a portion of the cash paid at the closing of the acquisition.

The following table summarizes the fair value of consideration for the Acquired Business on the July 13, 2017 closing date:

(in thousands)	<u>Amounts</u>
Cash purchase price at closing	\$35,750
Working capital adjustments	(930)
Estimated payout of contingent consideration (1)	17,125
Total Fair Value of Consideration	<u>\$51,945</u>

- (1) Based on a valuation conducted by an independent third party, the fair value of contingent consideration at the closing date was determined to be \$17,125,000.

The cash purchase price at closing was paid with funds obtained from the following sources:

(in thousands)	<u>Amounts</u>
Cash balance on hand	\$ 341
Sale of common stock in a private placement transactions	6,000
Term loan debt facility	30,500
Revolving line of credit	9,000
Payoff of previous credit facility	(10,091)
Cash paid at Closing	<u>\$ 35,750</u>

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The preliminary allocation of the purchase price was based on estimates of the fair value of assets acquired and liabilities assumed as of July 13, 2017, as set forth below. The excess purchase price over the fair values of the net tangible assets and identifiable intangible assets was recorded as goodwill, which includes value associated with the assembled workforce. All goodwill is expected to be deductible for tax purposes. The valuation of net assets acquired is as follows:

(in thousands)	Amounts
Current Assets	\$ 6,841
Fixed Assets and Other	286
Identifiable intangible assets:	
Client relationships	16,671
Covenant not-to-compete	761
Trade name	1,221
Technology	1,209
Total identifiable intangible assets	19,862
Goodwill	27,345
Current liabilities	(2,389)
Net Assets Acquired	<u>\$51,945</u>

The fair value of identifiable intangible assets has been estimated using the income approach through a discounted cash flow analysis. Specifically, the Company used the income approach through an excess earnings analysis to determine the fair value of client relationships. The value applied to the covenant not-to-compete was based on an income approach using a “with or without” analysis of this covenant in place. The trade name and technology were valued using the income approach – relief from royalty method. All identifiable intangibles are considered level 3 inputs under the fair value measurement and disclosure guidance.

For the three and nine months ended September 30, 2017, the Company recorded transaction costs related to the acquisition of \$1.7 million and \$2.0 million, respectively. These costs are included in selling, general and administrative expenses in the accompanying Condensed Consolidated Statement of Operations.

Included in the Condensed Consolidated Statement of Operations for the three and nine month periods ended September 30, 2017 were revenues of \$4.1 million and net income of approximately \$0.5 million applicable to the InfoTrellis operations.

The following reflects the Company’s unaudited pro forma results as though the acquisition occurred as of the beginning of each period presented:

	Three Months Ended September 30, (Amounts in Thousands)		Nine Months Ended September 30, (Amounts in Thousands)	
	2017	2016	2017	2016
Revenue	\$ 39,815	\$ 41,149	\$118,317	\$ 117,916
Net income	\$ (78)	\$ 2,633	\$ 1,523	\$ 4,878
Earnings per share-diluted	\$ (0.01)	\$ 0.49	\$ 0.28	\$ 0.92

The information above does not reflect any operating efficiencies or inefficiencies that may have resulted from the InfoTrellis acquisition. Therefore, this information is not necessarily indicative of results that would have been achieved had the business been combined during the periods presented or the results that the Company will experience going forward.

3. Goodwill and Other Intangible Assets, net

Goodwill related to our June 15, 2015 acquisition of Hudson Global Resource Management’s U.S. IT staffing business (“Hudson IT”) totaled \$8.4 million. Goodwill related to or July 13, 2017 acquisition of the services division of InfoTrellis totaled \$27.4 million.

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The Company is amortizing the identifiable intangible assets on a straight-line basis over estimated average lives ranging from 3 to 12 years. Intangible assets were comprised of the following as of September 30, 2017:

(Amounts in Thousands)	Amortization Period (In Years)	September 30, 2017		
		Gross Carrying Value	Accumulative Amortization	Net Carrying Value
IT staffing services:				
Client relationships	12	\$ 7,999	\$ 1,528	\$ 6,471
Covenant-not-to-compete	5	319	146	173
Trade name	3	249	190	59
Data and analytics services:				
Client relationships	12	\$ 16,671	\$ 289	\$ 16,382
Covenant-not-to-compete	5	761	32	729
Trade name	5	1,221	51	1,170
Technology	7	1,209	36	1,173
Total Intangible Assets		\$ 28,429	\$ 2,272	\$ 26,157

(Amounts in Thousands)	Amortization Period (In Years)	December 31, 2016		
		Gross Carrying Value	Accumulative Amortization	Net Carrying Value
IT staffing services:				
Client relationships	12	\$ 7,999	\$ 1,027	\$ 6,972
Covenant-not-to-compete	5	319	99	220
Trade name	3	249	128	121
Total Intangible Assets		\$ 8,567	\$ 1,254	\$ 7,313

Amortization expense for the three and nine month periods ended September 30, 2017 was \$611,000 and \$1.0 million, respectively, and is included in selling, general and administrative expenses in the Condensed Consolidated Statement of Operations. For the three and nine month periods ended September 30, 2016 amortization expense was \$204,000 and \$610,000, respectively.

The estimated aggregate amortization expense for intangible assets for the years ending December 31, 2017 through 2021 is as follows:

	Years Ended December 31,				
	2017	2018	2019	2020	2021
	(Amounts in Thousands)				
Amortization expense	\$1,711	\$2,727	\$2,689	\$2,654	\$2,625

4. Commitments and Contingencies

Lease Commitments

The Company rents certain office space and equipment under non-cancelable leases which provide for future minimum rental payments. Total lease commitments have not materially changed from the amounts disclosed in the Company's Annual Report on Form 10-K for the year ended December 31, 2016.

Contingencies

In the ordinary course of our business, the Company is involved in a number of lawsuits and administrative proceedings. While uncertainties are inherent in the final outcome of these matters, the Company's management believes, after consultation with legal counsel, that the disposition of these proceedings should not have a material adverse effect on our financial position, results of operations or cash flows.

5. Employee Benefit Plan

The Company provides an Employee Retirement Savings Plan (the “Retirement Plan”) under Section 401(k) of the Internal Revenue Code of 1986, as amended (the “Code”), that covers substantially all U.S. based salaried employees. Concurrent with the acquisition of Hudson IT, the Company expanded employee eligibility under the Retirement Plan to include all U.S. based W-2 hourly employees. Employees may contribute a percentage of eligible compensation to the Retirement Plan, subject to certain limits under the Code. For Hudson IT employees enrolled in the Hudson Employee Retirement Savings Plan under the Code at the acquisition date, the Company provides a matching contribution of 50% of the first 6% of the participant’s contributed pay, subject to vesting based on the combined tenure with Hudson and Mastech Digital. For all other employees, the Company did not provide for any matching contributions for the nine months ended September 30, 2017 and 2016. Mastech Digital’s total contributions to the Retirement Plan for the three and nine months ended September 30, 2017 related to the former Hudson IT employees totaled approximately \$21,000 and \$75,000 respectively. Mastech Digital’s contributions to the retirement plan for the three and nine months ended September 30, 2016 related to the Hudson IT employees totaled \$27,000 and \$82,000, respectively.

6. Stock-Based Compensation

In 2008, the Company adopted a Stock Incentive Plan (the “Plan”) which, as amended, provides that up to 1,400,000 shares of the Company’s Common Stock shall be allocated for issuance to directors, officers and key personnel. Grants under the Plan can be made in the form of stock options, stock appreciation rights, performance shares or stock awards. During the three and nine months ended September 30, 2017, the Company granted no shares under the Plan. During the three and nine months ended September 30, 2017 there were 12,000 stock options forfeited due to the non-achievement of performance targets. These shares are available for future grants under the Plan. During the three and nine months ended September 30, 2016, there were 85,000 and 335,000 stock options grants made under the Plan. As of September 30, 2017 and December 31, 2016, there were 126,000 shares and 114,000 shares, respectively, available for future grant under the Plan.

Stock-based compensation expense for the three months ended September 30, 2017 and 2016 was \$70,000 and \$113,000, respectively, and for the nine months ended September 30, 2017 and 2016 was \$285,000 and \$298,000, respectively. Stock-based compensation expense is included in selling, general and administrative expenses in the Condensed Consolidated Statements of Operations.

During the three and nine months ended September 30, 2017, the Company issued 6,250 and 100,388 shares, respectively, related to the vesting of restricted stock and the exercising of stock options. During the three and nine months ended September 30, 2016, the Company issued 71,250 and 75,750 shares, respectively, related to the exercise of stock options and vesting of restricted stock and performance shares.

7. Credit Facility

On July 13, 2017, the Company entered into a Credit Agreement (the “Credit Agreement”) with PNC Bank, National Association, as administrative agent, swing loan lender and issuing lender (“PNC Bank”), PNC Capital Markets LLC, as sole lead arranger and sole book-runner, and certain financial institution parties thereto as lenders (the “Lenders”). The Credit Agreement provides for a total aggregate commitment of \$65 million, consisting of (i) a revolving credit facility (the “Revolver”) in an aggregate principal amount not to exceed \$27 million (subject to increase by up to an additional \$10 million upon satisfaction of certain conditions); (ii) a \$30.5 million term loan facility (the “Term Loan”); and a (iii) \$7.0 million delayed draw term loan facility (the “Delayed Draw Term Loan”), as more fully described in Exhibit 10.1 to the Company’s Form 8-K, filed with the SEC on July 19, 2017.

The Revolver expires in three years and includes swing loan and letter of credit sub-limits in the aggregate amount not to exceed \$3.0 million for swing loans and \$5.0 million for letters of credit. Borrowings under the Revolver may be denominated in U.S. dollars or Canadian dollars. The maximum borrowings in U.S. dollars may not exceed the sum of 85% of eligible U.S. accounts receivable and 60% of eligible U.S. unbilled receivables, less a reserve amount established by the administrative agent. The maximum borrowings in Canadian dollars may not exceed the lesser of (i) \$10.0 million; and (ii) the sum of 85% of eligible Canadian receivables, plus 60% of eligible Canadian unbilled receivables, less a reserve amount established by the administrative agent.

Amounts borrowed under the Term Loan are required to be repaid in consecutive quarterly installments commencing on October 1, 2017 through and including July 1, 2022 and on the maturity date of July 13, 2022. The principal amount of each quarterly installment payable on the Term Loan equals the product of \$30.5 million, multiplied by (i) 3.125% for quarterly installments due on October 1, 2017 through and including July 1, 2018; (ii) 3.75% for quarterly installments payable on October 1, 2018 through and including July 1, 2021; and (iii) 5.00% for quarterly installments payable on October 1, 2021 through and including the maturity date. The Delayed Draw Term Loan may be used through the date of the final contingent consideration payment (referred to as the final

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“Deferred Amount Payment” in the Credit Agreement) on no more than two separate occasions in borrowing multiples of \$1.0 million up to the lesser of contingent consideration earned or \$7.0 million. Amounts borrowed under the Delayed Draw Term Loan will be payable in consecutive quarterly installments commencing on the first payment date after disbursement of such borrowings. The principal amount of each quarterly installment payable of each Delayed Draw Term Loan equals the product of the original balance of such Loan, multiplied by (i) 3.75% for quarterly installments due on October 1, 2018 through and including July 1, 2021; and (ii) 5.00% for quarterly installments payable on October 1, 2021 through and including the maturity date, with the maturity date payment equal to the outstanding amount of the loan on that date.

Borrowings under the revolver and the term loans, at the Company’s election, bear interest at either (a) the higher of PNC’s prime rate or the federal funds rate plus 0.50%, plus an applicable margin determined based upon the Company’s senior leverage ratio or (b) an adjusted LIBOR rate, plus an applicable margin determined based upon the Company’s senior leverage ratio. The applicable margin on the base rate is between 0.50% and 1.25% on revolver borrowings and between 1.75% and 2.50% on term loans. The applicable margin on the adjusted LIBOR rate is between 1.50% and 2.25% on revolver borrowings and between 2.75% and 3.50% on term loans. A 20 to 30 basis point per annum commitment fee on the unused portion of the revolver facility and the delayed draw term loan is charged and due monthly in arrears. The applicable commitment fee is determined based upon the Company’s senior leverage ratio.

The Company pledged substantially all of its assets in support of the Credit Agreement. The credit agreement contains standard financial covenants, including, but not limited to, covenants related to the Company’s senior leverage ratio and fixed charge ratio (as defined under the credit agreement) and limitations on liens, indebtedness, guarantees, contingent liabilities, loans and investments, distributions, leases, asset sales, stock repurchases and mergers and acquisitions. As of September 30, 2017, the Company was in compliance with all provisions under the facility.

In connection with securing the commitments under the Credit Agreement, the Company paid a commitment fee and incurred deferred financing costs totaling \$435,000, which were capitalized and are being amortized as interest expense over the lives of the facilities. Debt financing costs of \$411,000 and \$59,000 (net of amortization) as of September 30, 2017 and December 31, 2016, respectively, are presented as reductions in long-term debt in the Company’s Condensed Consolidated Balance Sheets. The deferred financing costs outstanding at December 31, 2016 previously presented in other assets, have been reclassified to conform to the current period presentation.

At Closing the Company borrowed \$9.0 million under the Revolver and \$30.5 million under the Term Loan which were used to repay all borrowings under the previous credit facility with PNC and to pay a portion of the acquisition consideration and transaction expenses. The Company’s net outstanding borrowings as of September 30, 2017 under the Revolver totaled \$12.9 million and unused borrowing capacity available was approximately \$10 million. The Company’s outstanding borrowings under the term loan were \$30.5 million at September 30, 2017. As of September 30, 2017, the Company believed the eligible borrowing base on the revolver would not fall below current outstanding borrowings for a period of time exceeding one year and has classified the \$12.9 million net outstanding debt balance at September 30, 2017 as long-term.

8. Income Taxes

The components of income before income taxes, as shown in the accompanying Financial Statements, consisted of the following for the three and nine months ended September 30, 2017 and 2016:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
	(Amounts in Thousands)		(Amounts in Thousands)	
Income before income taxes:				
Domestic	\$ (507)	\$ 1,359	\$ 417	\$ 2,685
Foreign	272	115	546	331
Income before income taxes	<u>\$ (235)</u>	<u>\$ 1,474</u>	<u>\$ 963</u>	<u>\$ 3,016</u>

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The Company has foreign subsidiaries in Canada and India – both of which generate revenues from foreign clients. Additionally, the India subsidiaries provide services to both the Canadian and U.S. operating entities and the Company allocates a portion of its income to these subsidiaries based on a “transfer pricing” model. No provision for U.S. income taxes has been made for the undistributed earnings of its Indian and Canadian subsidiaries as of September 30, 2017, as those earnings are expected to be permanently reinvested outside the U.S. If these foreign earnings were to be repatriated in the future, the U.S. tax liability may be reduced by any foreign income taxes previously paid on such earnings, which would make this U.S. tax liability immaterial. The determination of the amount of unrecognized deferred tax liability related to these earnings is not practicable.

The provision for income taxes, as shown in the accompanying Financial Statements, consisted of the following for the three and nine months ended September 30, 2017 and 2016:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
	(Amounts in Thousands)		(Amounts in Thousands)	
Current provision:				
Federal	\$ (240)	\$ 310	\$ (78)	\$ 820
State	(36)	25	(13)	89
Foreign	64	39	157	112
Total current provision (benefit)	<u>(212)</u>	<u>374</u>	<u>66</u>	<u>1,021</u>
Deferred provision:				
Federal	80	155	100	102
State	11	21	14	13
Foreign	22	—	22	—
Total deferred provision	<u>113</u>	<u>176</u>	<u>136</u>	<u>115</u>
Total provision (benefit) for income taxes	<u>\$ (99)</u>	<u>\$ 550</u>	<u>\$ 202</u>	<u>\$ 1,136</u>

The reconciliation of income taxes computed using the statutory U.S. income tax rate and the provision for income taxes for the three and nine months ended September 30, 2017 and 2016 were as follows (amounts in thousands):

	Three Months Ended September 30, 2017		Three Months Ended September 30, 2016	
	\$	%	\$	%
Income taxes computed at the federal statutory rate	\$ (80)	(34.0)%	\$ 501	34.0%
State income taxes, net of federal tax benefit	(25)	(10.6)	46	3.1
Excess tax benefits from stock options/restricted shares	10	4.2	—	—
Other – net	(4)	(1.7)	3	0.2
	<u>\$ (99)</u>	<u>(42.1)%</u>	<u>\$ 550</u>	<u>37.3%</u>

	Nine Months Ended September 30, 2017		Nine Months Ended September 30, 2016	
	\$	%	\$	%
Income taxes computed at the federal statutory rate	\$ 327	34.0%	\$ 1,025	34.0%
State income taxes, net of federal tax benefit	17	1.8	102	3.4
Excess tax benefits from stock options/restricted shares	(145)	(15.1)	—	—
Other – net	3	0.3	9	0.3
	<u>\$ 202</u>	<u>21.0%</u>	<u>\$ 1,136</u>	<u>37.7%</u>

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A reconciliation of the beginning and ending amounts of unrecognized tax benefits related to uncertain tax positions, including interest and penalties, are as follows:

<u>(Amounts in thousands)</u>	<u>Nine Months Ended September 30, 2017</u>
Balance as of December 31, 2016	\$ 128
Additions related to current period	—
Additions related to prior periods	—
Reductions related to prior periods	(33)
Balance as of September 30, 2017	<u>\$ 95</u>

Although it is difficult to anticipate the final outcome of these uncertain tax positions, the Company believes that the total amount of unrecognized tax benefits could be reduced by approximately \$40,000 during the next twelve months due to the expiration of the statutes of limitation.

9. Derivative Instruments and Hedging Activities

Interest Rate Risk Management

Concurrent with the Company's July 13, 2017 borrowings under its new credit facility, the Company entered into a 44-month interest-rate swap to convert the debt's variable interest rate to a fixed rate of interest. Under the swap contracts, the Company pays interest at a fixed rate of 1.99% and receives interest at a variable rate equal to the daily U.S. LIBOR rate on a notional amount of \$15,000,000. These swap contracts have been designated as cash flow hedging instruments and qualified as effective hedges at inception under ASC Topic 815, "Derivatives and Hedging". These contracts are recognized on the balance sheet at fair value. The effective portion of the changes in fair value on these instruments is recorded in other comprehensive income (loss) and is reclassified into the Condensed Consolidated Statements of Operations as interest expense in the same period in which the underlying hedge transaction affects earnings. Changes in the fair value of interest-rate swap contracts deemed ineffective are recognized in the Condensed Consolidated Statements of Operations as interest expense. The fair value of the interest-rate swap contracts at September 30, 2017 was a liability of \$99,000 and is reflected in the Condensed Consolidated Balance Sheet as other current liabilities.

The effect of derivative instruments on the Condensed Consolidated Statements of Operations and Comprehensive Income are as follows (in thousands):

<u>Derivatives in ASC Topic 815 Cash Flow Hedging Relationships</u>	<u>Amount of Gain / (Loss) recognized in OCI on Derivatives</u>	<u>Location of Gain / (Loss) reclassified from Accumulated OCI to Income (Expense)</u>	<u>Amount of Gain / (Loss) reclassified from Accumulated OCI to Income (Expense)</u>	<u>Location of Gain / (Loss) reclassified in Income (Expense) on Derivatives</u>	<u>Amount of Gain / (Loss) recognized in Income (Expense) on Derivatives</u>
	(Effective Portion)	(Effective Portion)	(Effective Portion)	(Ineffective Portion/Amounts excluded from effectiveness testing)	
For the Three Months Ended September 30, 2017:					
Interest-Rate Swap Contract	\$ (99)	Interest Expense	\$ (20)	Interest Expense	\$ —
For the Nine Months Ended September 30, 2017:					
Interest-Rate Swap Contract	\$ (87)	Interest Expense	\$ (30)	Interest Expense	\$ —
For the Three Months Ended September 30, 2016:					
Interest-Rate Swap Contract	\$ 18	Interest Expense	\$ (10)	Interest Expense	\$ —
For the Nine Months Ended September 30, 2016:					
Interest-Rate Swap Contract	\$ (17)	Interest Expense	\$ (32)	Interest Expense	\$ —

Information on the location and amounts of derivative fair values in the Condensed Consolidated Balance Sheets (in thousands):

Derivative Instruments	September 30, 2017		December 31, 2016	
	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Interest-Rate Swap Contracts	Other Current Liabilities	\$ 99	Other Current Liabilities	\$ 12

The estimated amount of pretax losses as of September 30, 2017 that is expected to be reclassified from other comprehensive income (loss) into earnings within the next 12 months is approximately \$80,000.

10. Fair Value Measurements

The Company has adopted the provisions of ASC 820, “Fair Value Measurements and Disclosures” (“ASC 820”), related to certain financial and nonfinancial assets and liabilities. ASC 820 establishes the authoritative definition of fair value; sets out a framework for measuring fair value; and expands the required disclosures about fair value measurements. The valuation techniques required by ASC 820 are based on observable and unobservable inputs using the following three-tier hierarchy:

- Level 1 - Inputs are observable quoted prices (unadjusted) in active markets for identical assets and liabilities.
- Level 2 - Inputs are observable, other than quoted prices included in Level 1, such as quoted prices for similar assets and liabilities in active markets; quoted prices for identical or similar assets and liabilities in markets that are not active; or other inputs that are directly or indirectly observable in the marketplace.
- Level 3 - Inputs are unobservable that are supported by little or no market activity.

At September 30, 2017 and December 31, 2016, the Company carried the following financial (liabilities) at fair value measured on a recurring basis (in thousands):

(Amounts in thousands)	Fair Value as of September 30, 2017			
	Level 1	Level 2	Level 3	Total
Interest-Rate Swap Contracts	\$ —	\$ (99)	\$ —	\$ (99)
Contingent consideration liability	\$ —	\$ —	\$ (17,125)	\$ (17,125)

(Amounts in thousands)	Fair Value as of December 31, 2016			
	Level 1	Level 2	Level 3	Total
Interest-Rate Swap Contracts	\$ —	\$ (12)	\$ —	\$ (12)

The fair value of interest rate swap contracts are based on quoted prices for similar instruments from a commercial bank, and therefore, the fair value measurement is considered to be within level 2. The fair value of the contingent consideration liability was estimated by utilizing a probability weighted simulation model to determine the fair value of contingent consideration, and therefore, the fair value measurement is considered to be within level 3.

11. Shareholders’ Equity

On July 7, 2017 the Company entered into Securities Purchase Agreements with Ashok Trivedi and Sunil Wadhvani pursuant to which the Company agreed to sell to each the number of shares of Common Stock equal to \$3.0 million divided by the greater of (i) \$7.00 per share of Common Stock and (ii) the closing price of the Common Stock on the NYSE American on July 10, 2017, which was \$6.35 per share. On July 13, 2017, the Closing Date of the Company’s acquisition of InfoTrellis’ services division, the Company issued and sold an aggregate of 857,144 shares of Common Stock to Ashok Trivedi and Sunil Wadhvani for \$6.0 million in aggregate gross proceeds. The Company used the proceeds from the private placement to fund a portion of the closing date purchase price of the InfoTrellis acquisition.

The Company had a Share Repurchase Program in place that expired on December 22, 2016. During the nine months ended September 30, 2016 no shares were repurchased under a share repurchase program. During the three and nine months ended September 30, 2017, the Company purchased 0 and 1,159 shares, respectively, at a share price of \$6.42 to satisfy employee tax obligations related to the vesting of restricted stock. During the three and nine months ended September 30, 2016, the Company purchased 1,158 shares to satisfy employee tax obligations related to the vesting of restricted shares at an average price of \$6.80

12. Revenue Concentration

For the three months ended September 30, 2017, the Company had two clients that exceeded 10% of total revenues (CGI = 12.5% and Accenture = 11.7%). For the three months ended September 30, 2016, the Company had one client that exceeded 10% of total revenues (CGI = 11.0%). For the nine months ended September 30, 2017, the Company had two clients that exceeded 10% of total revenues (CGI = 13.1% and Accenture 10.5%). For the nine months ended September 30, 2016, the Company had no clients that exceeded 10% of total revenues.

The Company's top ten clients represented approximately 47% and 45% of total revenues for the three months ended September 30, 2017 and 2016, respectively. For the nine months ended September 30, 2017 and 2016, the Company's top ten clients represented approximately 48% and 44% of total revenues, respectively.

13. Earning Per Share

The computation of basic earnings per share is based on the Company's net income divided by the weighted average number of common shares outstanding. Diluted earnings per share reflect the potential dilution that could occur if outstanding stock options were exercised. The dilutive effect of stock options was calculated using the treasury stock method.

For the three and nine months ended September 30, 2017, there were no anti-dilutive stock options excluded from the computation of diluted earnings per share. For the three and nine months ended September 30, 2016, there were 4,759 and 200,014 anti-dilutive stock options excluded from the computation of diluted earnings per share.

14. Severance Charges

During the nine month period ending September 30, 2017, the Company incurred no severance costs. During the three and nine months ended September 30, 2016, the Company incurred severance costs of \$0 and \$780,000 (pre-tax), respectively, related to several changes in executive leadership.

15. Business Segment and Geographic Information

Our reporting segments are: 1) Data and Analytics Services; and 2) IT Staffing Services.

The data and analytics services segment was acquired through the July 13, 2017 acquisition of the services division of Canada-based InfoTrellis, Inc. This segment is a project-based consulting services business with specialized capabilities in data management and analytics. The business is marketed as Mastech InfoTrellis and utilizes a dedicated sales team with deep subject matter expertise. Mastech InfoTrellis has offices in Toronto, Canada and Austin, Texas and a global delivery center in Chennai, India. Project-based delivery reflects a combination of on-site resources and offshore resources out of the Company's delivery center in Chennai. Assignments are secured on both a time and material and fixed price basis.

The IT staffing services segment offers (a) staffing services in digital and mainstream technologies; and (b) digital transformation services focused on providing CRM on the cloud through Salesforce.com; driving IT efficiencies through SAP HANA; and using digital methods to enhance organizational learning. These services are marketed using a common sales force and delivered via our global recruitment center. While the vast majority of our assignments are based on time and materials, we do have the capabilities to deliver our digital transformation services on a fixed price basis.

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Below are the operating results of our reporting segments:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
	(Amounts in Thousands)		(Amounts in Thousands)	
Revenues:				
Data and analytics services	\$ 4,069	\$ —	\$ 4,069	\$ —
IT staffing services	35,159	34,263	103,345	99,606
Total revenues	<u>\$ 39,228</u>	<u>\$ 34,263</u>	<u>\$ 107,414</u>	<u>\$ 99,606</u>
Segment operating income:				
Data and analytics services	\$ 1,060	\$ —	\$ 1,060	\$ —
IT staffing services	1,520	1,798	3,577	4,003
Subtotal	2,580	1,798	4,637	4,003
Amortization of acquired intangible assets	(611)	(204)	(1,018)	(610)
Acquisition transaction expenses	(1,754)	—	(2,019)	—
Interest expenses and other, net	(450)	(120)	(637)	(377)
Income before income taxes	<u>\$ (235)</u>	<u>\$ 1,474</u>	<u>\$ 963</u>	<u>\$ 3,016</u>

Below is a reconciliation of segment total assets to consolidated total assets:

	At September 30,	
	2017	2016
	(Amounts in Thousands)	
Total assets:		
Data and analytics services	\$ 56,178	\$ —
IT staffing services	42,796	42,974
Total assets	<u>\$ 98,974</u>	<u>\$ 42,974</u>

Below is geographic information related to our revenues from external customers:

	Three Months Ended September 30,		Nine Months Ended September 30,	
	2017	2016	2017	2016
	(Amounts in Thousands)		(Amounts in Thousands)	
United States	\$ 38,142	\$ 34,263	\$ 106,328	\$ 99,606
Canada	716	—	716	—
Other	370	—	370	—
Total revenues	<u>\$ 39,228</u>	<u>\$ 34,263</u>	<u>\$ 107,414</u>	<u>\$ 99,606</u>

16. Recently Issued Accounting Standards

Recently Adopted Accounting Pronouncements

In November 2015, the FASB issued ASU 2015-17, “Balance Sheet Classification of Deferred Taxes.” The Company adopted ASU 2015-17 which amends existing guidance to require presentation of deferred tax asset and liabilities as non-current within a classified balance sheet. This guidance was adopted, on a retrospective basis, at March 31, 2017. Prior periods were adjusted to conform to the current period presentation.

In March, 2016, the FASB issued ASU 2016-09 “Compensation – Stock Compensation (Topic 718) - Improvements to Employee Share-Based Payment Accounting”. The FASB issued this ASU as part of its “Simplification Initiative,” which has the objective of identifying, evaluating, and improving areas of GAAP for which cost and complexity can be reduced while maintaining

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or improving the usefulness of the information provided to users of financial statements. The areas for simplification in this ASU involve several aspects of the accounting for share-based payment transactions, including the income tax consequences, classification of awards as either equity or liabilities, and classification on the statement of cash flows. The amendments in this ASU are effective for annual periods beginning after December 15, 2016 and, accordingly, we adopted this ASU on January 1, 2017. The adoption of this ASU resulted in the recognition of a \$10,000 expense and a \$145,000 benefit in our provision for income taxes for the three and nine months ended September 30, 2017.

Recent Accounting Pronouncements not yet adopted

In May 2014, the Financial Accounting Standards Board (“FASB”) issued Accounting Standards Update (“ASU”) 2014-09, “Revenue from Contracts with Customers,” which provides for a single five-step model to be applied to all revenue contracts with customers. The new guidance also requires additional financial statement disclosures that will enable users to understand the nature, amount, timing and uncertainty of revenue and cash flows relating to customer contracts. Entities can use either a retrospective approach or a cumulative effect adjustment approach to implement the guidance. In 2015, the FASB issued a deferral of the effective date of the guidance to 2018, with early adoption permitted in 2017. In 2016, the FASB issued ASU 2016-08, ASU 2016-10, ASU 2016-12 and ASU 2016-20 to amend ASU 2014-09 for technical corrections and improvements and to clarify the implementation guidance for 1) principal versus agent considerations, 2) identifying performance obligations, 3) the accounting for licenses of intellectual property and 4) narrow scope improvements on assessing collectability, presentation of sales taxes, non-cash consideration and completed contracts and contract modifications at transition and based on our preliminary assessment which is subject to change, the Company does not expect the adoption to have a material impact on its consolidated financial statements.

In January 2016, the FASB issued ASU 2016-01, “Financial Instruments – Overall (Subtopic 825-10) - Recognition and Measurement of Financial Assets and Financial Liabilities”, which amends certain aspects of recognition, measurement, presentation and disclosure of financial instruments. This amendment requires all equity investments to be measured at fair value with changes in the fair value recognized through net income (other than those accounted for under the equity method of accounting or those that result in consolidation of the investee). This standard will be effective for fiscal years beginning after December 15, 2017, including interim periods within those fiscal years. We are evaluating the impact the adoption of ASU 2016-01 will have on our consolidated financial statements.

In February 2016, the FASB issued ASU No. 2016-02, “Leases (Topic 842)”. The main difference between the current requirement under GAAP and ASU 2016-02 is the recognition of lease assets and lease liabilities by lessees for those leases classified as operating leases. ASU 2016-02 requires that a lessee recognize in the statement of financial position a liability to make lease payments (the lease liability) and a right-of-use asset representing its right to use the underlying asset for the lease term (other than leases that meet the definition of a short-term lease). The liability will be equal to the present value of the lease payment. The lease asset will be based on the liability, subject to adjustment, such as for initial direct costs. For income statement purposes, the FASB retained a dual model, requiring leases to be classified as either operating or finance. Operating leases will result in straight-line expense (similar to current operating leases), while finance leases will result in a front-loaded expense pattern (similar to current capital leases). The classification of these leases will be based on the criteria that are largely similar to those applied in current lease accounting. For lessors, the guidance modifies the classification criteria and the accounting for sales-type and direct financing leases. ASU 2016-02 is effective for annual and interim periods beginning after December 15, 2018 and early adoption is permitted. ASU 2016-02 must be adopted using a modified retrospective transition and provides for certain practical expedients. Transition will require application of the new guidance at the beginning of the earliest comparative period presented. We are currently assessing the potential impact of ASU 2016-02 and expect adoption will have a material impact on our consolidated financial condition and results of operations. Contractual obligations on lease arrangements as of September 30, 2017 approximated \$3.0 million.

In August 2016, the FASB issued ASU 2016-15 “Statement of Cash Flows (Topic 230) – Classification of Certain Cash Receipts and Cash Payments”. Current GAAP either is unclear or does not include specific guidance on eight specific cash flow classification issues included in the amendments in this ASU. The ASU addresses these cash flow issues with the objective of reducing the existing diversity in practice. The amendments in this ASU are effective for fiscal years beginning after December 15, 2017, and interim periods within those fiscal years. Early adoption is permitted, including adoption in an interim period. The Company does not expect the adoption of this ASU to have a material impact on its consolidated financial statements.

In January 2017, the FASB issued ASU 2017-04, “Intangibles – Goodwill and Other (Topic 350): Simplifying the Accounting for Goodwill Impairment”, which removes the requirement to perform a hypothetical purchase price allocation to measure goodwill impairment. Under this ASU, a goodwill impairment will now be the amount by which a reporting unit’s carrying value exceeds its fair value, not to exceed the carrying amount of goodwill. ASU 2017-04 is effective for annual and interim periods beginning January 1, 2020, with early adoption permitted, and applied prospectively. We do not expect ASU 2017-04 to have a material impact on our financial statements.

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In May 2017, the FASB issued ASU 2017-09, “Compensation – Stock Compensation (Topic 718): Scope of Modification Accounting”. Entities have defined the term “modification” in a broad manner resulting in diversity in modification accounting practice. The amendments in this Update provide guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting. The amendments in this Update are effective for all entities for annual periods, and interim periods within those annual periods, beginning after December 15, 2017. The Company does not expect the adoption of this ASU to have a material impact on its consolidated financial statements.

In July 2017, the FASB issued ASU 2017-11, “Earnings Per Share (Topic 260); Distinguishing Liabilities from Equity (Topic 480); Derivatives and Hedging (Topic 815)”. This update addresses I. Accounting for Certain Financial Instruments with Down Round Features and II. Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception. The amendments in Part I of this Update change the classification analysis of certain equity-linked financial instruments (or embedded features) with down round features. When determining whether certain financial instruments should be classified as liabilities or equity instruments, a down round feature no longer precludes equity classification when assessing whether the instrument is indexed to an entity’s own stock. The amendments also clarify existing disclosure requirements for equity-classified instruments. The amendments in Part II of this Update recharacterize the indefinite deferral of certain provisions of Topic 480 that now are presented as pending content in the Codification, to a scope exception. Those amendments do not have an accounting effect. The amendments in Part I of this Update are effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2018. Early adoption is permitted for all entities, including adoption in an interim period. If an entity early adopts the amendments in an interim period, any adjustments should be reflected as of the beginning of the fiscal year that includes that interim period. The Company does not expect this ASU to have a material impact on its financial statements.

In August 2017, the FASB issued ASU 2017-12, “Derivatives and Hedging (Topic 815); Targeted Improvements to Accounting for Hedging Activities”. The amendments in this Update better align an entity’s risk management activities and financial reporting for hedging relationships through changes to both the designation and measurement guidance for qualifying hedging relationships and the presentation of hedge results. To meet that objective, the amendments expand and refine hedge accounting for both nonfinancial and financial risk components and align the recognition and presentation of the effects of the hedging instrument and the hedged item in the financial statements. The amendments in this Update are effective for fiscal years beginning after December 15, 2018, and interim periods within those fiscal years. Early application is permitted in any interim period after issuance of the Update. The Company does not expect this ASU to have a material impact on its financial statements.

A variety of proposed or otherwise potential accounting standards are currently under consideration by standard-setting organizations and certain regulatory agencies. Because of the tentative and preliminary nature of such proposed standards, management has not yet determined the effect, if any, that the implementation of such proposed standards would have on the Company’s consolidated financial statements.

ITEM 2. MANAGEMENT’S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion in conjunction with our audited consolidated financial statements and accompanying notes for the year ended December 31, 2016, included in our Annual Report on Form 10-K, filed with the Securities and Exchange Commission (“SEC”) on March 24, 2017.

This quarterly report on Form 10-Q contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995, including statements about future events, future performance, plans, strategies, expectations, prospects, competitive environment and regulations. Forward-looking statements include all statements that are not historical facts and can be identified by the use of forward-looking terminology such as the words, “may”, “will”, “expect”, “anticipate”, “believe”, “estimate”, “plan”, “intend” or the negative of these terms or similar expressions in this quarterly report on Form 10-Q. We have based these forward-looking statements on our current views with respect to future events and financial performance. Our actual financial performance could differ materially from those projected in the forward-looking statements due to the inherent uncertainty of estimates, forecasts and projections and our financial performance may be better or worse than anticipated. Given these uncertainties, you should not put undue reliance on any forward-looking statements. All of the forward-looking statements are qualified in their entirety by reference to the factors discussed under “Risk Factors”, “Forward-Looking Statements” and elsewhere in our Annual Report on Form 10-K for the year ended December 31, 2016. Forward-looking statements represent our estimates and assumptions only as of the date that they were made. We do not undertake any duty to update forward-looking statements and the estimates and assumptions associated with them, after the date of this quarterly report on Form 10-Q, except to the extent required by applicable securities laws.

Website Access to SEC Reports:

The Company’s website is www.mastechdigital.com. The Company’s Annual Report on Form 10-K for the year ended December 31, 2016, current reports on Form 8-K and all other reports filed with the SEC, are available free of charge on the Investors page. The website is updated as soon as reasonably practical after such reports are filed electronically with the SEC.

Critical Accounting Policies

Please refer to Note 1 “Summary of Significant Accounting Policies” of the Consolidated Financial Statements and “Management’s Discussion and Analysis of Financial Condition and Results of Operations–Critical Accounting Policies and Estimates” in our Annual Report on Form 10-K for the year ended December 31, 2016 for a more detailed discussion of our significant accounting policies and critical accounting estimates. There were no material changes to these critical accounting policies during the nine months ended September 30, 2017 except for the policy related to contingent consideration associated with the InfoTrellis acquisition, as detailed below:

Contingent Consideration:

In connection with the InfoTrellis acquisition, the Company may be required to pay future consideration that is contingent upon the achievement of specified earnings before interest and taxes (“EBIT”) objectives. As of the acquisition date, the Company recorded a contingent consideration liability representing the estimated fair value of the contingent consideration that is expected to be paid. The fair value of the contingent consideration liability was estimated by utilizing a probability weighted simulation model to determine the fair value of contingent consideration. We re-measure this liability each reporting period and record changes in the fair value through a separate line item without our consolidated statements of operations. Increases or decreases in the fair value of the contingent consideration liability can result from changes in discount periods and rates, as well as changes in the timing and amount of revenue and earnings estimates or in the timing of likelihood of achieving contractual milestones.

Overview:

We are a provider of Digital Transformation IT Services to mostly large and medium sized organizations.

Our portfolio of offerings include Data Management and Analytics services; other digital transformation services such as Salesforce.com, SAP HANA, and Digital Learning services; and IT Staffing services.

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With the July 13, 2017 acquisition of InfoTrellis, we now operate in two reporting segments – Data and Analytics Services and IT Staffing Services. Our data and analytics services are marketed on a global basis under the brand Mastech InfoTrellis and delivered largely on a project basis with on-site and off-shore resources. These capabilities and expertise were acquired through our recent acquisition of InfoTrellis. Our IT staffing business combines technical expertise with business process experience to deliver a broad range of staffing services in digital and mainstream technologies, as well as our other digital transformation services.

Both business segments provide their services across various industry verticals including: consumer products; education; financial services; government; healthcare; manufacturing; retail; technology; telecommunications; transportation; and utilities. Within each reporting segment we evaluate our revenues and gross profits largely by sales channel responsibility. In the past, we have disclosed revenues and gross profits by client type (wholesale clients and retail clients). Management’s emphasis on the breakdown of wholesale and retail client types has diminished over the last year as gross margin opportunities within each client type has changed considerably as the Company has focused on digital technologies. Today our analysis within our two reporting segments are multi-purposed and include technologies employed, client relationship, and sales channel accountability.

Economic Trends and Outlook:

Generally, our business outlook is highly correlated to general U.S. economic conditions. During periods of increasing employment and economic expansion, demand for our services tends to increase. Conversely, during periods of contracting employment and / or a slowing domestic economy, demand for our services tends to decline. As the economy slowed during the second half of 2007 and recessionary conditions emerged in 2008 and during much of 2009, we experienced less demand for our staffing services. During the second half of 2009, we began to see signs of market stabilization and a modest pick-up in activity levels within certain sales channels and technologies. In 2010, market conditions continued to strengthen over the course of the year and activity levels within most of our sales channels progressively improved. In 2011 and 2012, activity levels continued to trend up in most technologies and sales channels. During 2013, 2014 and 2015, we continued to see a steady flow of solid activity in our contract staffing business; however, tightness in the supply side (skilled IT professionals) of our business in 2014 and 2015 negatively impacted our new assignment successes. Solid activity levels in our contract staffing business continued during 2016, however, recruitment challenges remained due to the tightness in the supply of skilled IT professionals. During the first nine months of 2017, activity levels continued to be solid and recruitment challenges remain.

In addition to tracking general U.S. economic conditions, a large portion of our revenues are generated from a limited number of clients. Accordingly, our trends and outlook are impacted by the prospects and well-being of these specific clients. This “account concentration” factor may cause our results of operations to deviate from the prevailing U.S. economic trends from time to time.

Within the IT staffing business many larger users of these services are employing MSPs to manage their contractor spending in an effort to drive down overall costs. This trend towards utilizing the MSP model may pressure gross margins in the future.

Results of Operations for the Three Months Ended September 30, 2017 as Compared to the Three Months Ended September 30, 2016:

Revenues:

Revenues for the three months ended September 30, 2017 totaled \$39.2 million compared to \$34.3 million for the corresponding three month period in 2016. This 14.5% year-over-year revenue increase largely reflected the July 13, 2017 acquisition of InfoTrellis’ data management and analytics services business. For the three months ended September 30, 2017, the Company had two clients that had revenues in excess of 10% of total revenues (CGI = 12.5% and Accenture = 11.7%). For the three months ended September 30, 2016, the Company had one client that had revenues in excess of 10% of total revenues (CGI = 11.0%). The Company’s top ten clients represented approximately 47% and 45% of total revenues for the three months ended September 30, 2017 and 2016, respectively.

Below is a tabular presentation of revenues by reportable segment for the three months ended September 30, 2017 and 2016, respectively:

Revenues (Amounts in millions)	Three Months Ended September 30, 2017	Three Months Ended September 30, 2016
Data and Analytics Services	\$ 4.1	\$ —
IT Staffing Services	35.1	34.3
Total revenues	<u>\$ 39.2</u>	<u>\$ 34.3</u>

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Revenues from digital transformation and IT staffing services totaled \$35.1 million compared to \$34.3 million during the corresponding 2016 period. This 2.6% increase reflected a higher level of billable consultants in the 2017 quarter, partially offset by a lower average bill rate and a lower utilization rate due to the business disruptions related to the hurricanes in Florida and Texas and a higher level of vacation time incurred. Billable consultant headcount at September 30, 2017 totaled 995-consultants compared to 884-consultants one-year earlier. Robust demand for our staffing services and improved efficiencies at our global recruitment center were responsible for this improvement. Our average bill rate decreased during the 2017 quarter to \$72.54 / per hour compared to \$75.29 / per hour in the 2016 quarter. The decrease in our average bill rate was due to lower rates on new assignments over the last several quarters and is reflective of the types of skill-sets that we have deployed. Permanent placement / fee revenues were approximately \$0.1 million during the quarter, essentially in-line with last year's performance.

Revenues from data management and analytics services from our July 13, 2017 acquisition date through September 30, 2017 totaled \$4.1 million.

Gross Margins:

Gross profits in the third quarter of 2017 totaled \$8.8 million, compared to \$6.9 million in the third quarter of 2016. Gross profit as a percentage of revenue was 22.5% for the three month period ending September 30, 2017 compared to 20.1% during the same period of 2016. This 240-basis point improvement reflected the consolidation of the financial results of our data management and analytics business segment, which has a gross margin profile that is materially higher than our IT staffing segment.

Below is a tabular presentation of gross margin by reporting segment for the three months ended September 30, 2017 and 2016, respectively:

Gross Margin	Three Months Ended September 30, 2017	Three Months Ended September 30, 2016
Data and Analytics Services	44.2%	— %
IT Staffing Services	20.0	20.1
Total gross margin	22.5%	20.1%

Gross margins from digital transformation and IT staffing services were 20.0% in the third quarter of 2017 compared to 20.1% million during the corresponding quarter of 2016. This slight decline was due to higher non-billable time paid due to disruptions reflected to the Florida and Texas hurricanes. This downtime was much more impactful on revenues than on gross margins due to the fact that we employ many of our consultants on a W-2 hourly basis and pay only on billable hours worked.

Gross margins from data management and analytics services were 44.2% of revenues during the third quarter of 2017.

Selling, General and Administrative (“SG&A”) Expenses:

SG&A expenses for the three months ended September 30, 2017 totaled \$8.6 million or 21.9% of total revenues, compared to \$5.3 million or 15.5% of revenues for the three months ended September 30, 2016. Excluding \$1.7 million of acquisition transaction expenses incurred in the 2017 period, SG&A expenses as a percentage of revenues in the third quarter of 2017 would have been 17.5%. Fluctuations within SG&A expense components during the third quarter of 2017, compared to the third quarter of 2016, included the following:

- Sales expense increased by \$0.5 million in the 2017 period compared to 2016. Approximately \$0.4 million was related to our new data and analytics segment; and \$0.1 million was attributable to higher compensation expense reflective of staff expansion in our IT staffing business.
- Recruiting expense increased by \$0.4 million in the 2017 period compared to 2016. Approximately \$0.1 million was related to our new data and analytics segment; \$0.2 million was attributable to higher compensation expense reflective of our offshore staff expansion; and \$0.1 million was due to higher H1B processing fees reflective of higher activity levels.
- General and administrative expense increased by \$2.4 million in the 2017 period compared to 2016. Approximately \$0.7 million was related to our new data and analytics segment, of which \$0.4 million which attributable to the amortization of acquired identifiable intangible assets; and \$1.7 million was due to acquisition transaction expenses associated with the InfoTrellis transaction.

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Other Income / (Expense) Components:

Other Income / (Expense) for the three months ended September 30, 2017 consisted of interest expense of (\$439,000) and foreign exchange losses of (\$11,000). For the three months ended September 30, 2016, Other Income / (Expense) consisted of interest expense of (\$116,000) and foreign exchange losses of (\$4,000). The higher level of interest expense was due to the InfoTrellis acquisition.

Income Tax Expense:

Income tax expense (benefit) for the three months ended September 30, 2017 totaled (\$99,000), representing an effective (benefit) tax rate on pre-tax income of 42.1%, compared to \$550,000 for the three months ended September 30, 2016, which represented a 37.3% effective tax rate on pre-tax income. The higher effective tax benefit rate largely reflected a lower global tax rate on income from our data and analytics segment.

Results of Operations for the Nine Months Ended September 30, 2017 as Compared to the Nine Months Ended September 30, 2016:

Revenues:

Revenues for the nine months ended September 30, 2017 totaled \$107.4 million compared to \$99.6 million for the corresponding nine month period in 2016. This 7.8% year-over-year revenue increase reflected a combination of organic growth of approximately 4 percent in our IT staffing services business and the impact of the July 13, 2017 acquisition of InfoTrellis' data and analytics services business. For the nine months ended September 30, 2017, the Company had two clients that had revenues in excess of 10% of total revenues (CGI = 13.1% and Accenture = 10.5%). For the nine months ended September 30, 2016, the Company had no clients that had revenues in excess of 10% of total revenues. The Company's top ten clients represented approximately 48% and 44% of total revenues for the nine months ended September 30, 2017 and 2016, respectively.

Below is a tabular presentation of revenues by reportable segment for the nine months ended September 30, 2017 and 2016, respectively:

Revenues (Amounts in millions)	Nine Months Ended September 30, 2017	Nine Months Ended September 30, 2016
Data and Analytics Services	\$ 4.1	\$ —
IT Staffing Services	103.3	99.6
Total revenues	<u>\$ 107.4</u>	<u>\$ 99.6</u>

Revenues from digital transformation and IT staffing services totaled \$103.3 million compared to \$99.6 million during the corresponding 2016 period. This 3.7% increase reflected a higher level of billable consultants in the 2017 quarter, partially offset by a lower average bill rate and a lower utilization rate. Billable consultant headcount at September 30, 2017 was 111-consultants higher than that at September 30, 2016. Our average bill rate for the nine month period ended September 30, 2017 was \$73.90 / per hour, compared to an average of \$75.10 / per hour in the corresponding 2016 period. The lower utilization rate was largely due to the major hurricanes experienced in Florida and Texas during the third quarter of 2017. Permanent placement / fee revenues were approximately \$0.1 million lower in the nine-month period ending September 30, 2017 compared to the corresponding nine-month period of 2016.

Revenues from data and analytics services from our July 13, 2017 acquisition date through September 30, 2017 totaled \$4.1 million.

Gross Margins:

Gross profits in the nine months ended September 30, 2017 totaled \$22.1 million, compared to \$19.9 million during the first nine months of 2016. Gross profit as a percentage of revenue was 20.6% for the nine month period ending September 30, 2017 compared to 20.0% during the same period of 2016. This 60-basis point improvement reflected the consolidation of the financial results our data and analytics business segment, which has a gross margin profile that is materially higher than our digital transformation and IT staffing segment.

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Below is a tabular presentation of gross margin by reportable segment for the nine months ended September 30, 2017 and 2016, respectively:

<u>Gross Margin</u>	<u>Nine Months Ended September 30, 2017</u>	<u>Nine Months Ended September 30, 2016</u>
Data and Analytics Services	44.2%	— %
IT Staffing Services	19.6	20.0
Total gross margin	20.6%	20.0%

Gross margins from digital transformation and IT staffing services were 19.6% in the nine month period ended September 2017 compared to 20.0% during the corresponding period of 2016. This decline was due to a combination of lower permanent placement fees; higher non-billable time paid due to disruptions from the Florida and Texas hurricanes; and tighter gross margins on several large volume accounts.

Gross margins from data and analytics services were 44.2% of revenues during the third quarter of 2017.

Selling, General and Administrative (“SG&A”) Expenses:

SG&A expenses for the nine months ended September 30, 2017 totaled \$20.5 million or 19.1% of total revenues, compared to \$16.5 million or 16.6% of revenues for the three months ended September 30, 2016. Excluding \$2.0 million of acquisition transaction expenses incurred in the 2017 period and \$0.8 million of severance costs incurred in the 2016 period, SG&A expenses as a percentage of revenues would have been 17.2% and 15.8% for the nine months ended September 30, 2017 and 2016, respectively. Fluctuations within SG&A expense components during the nine months of 2017, compared to the nine months of 2016, included the following:

- Sales expense increased by \$1.1 million in the 2017 period compared to 2016. Approximately \$0.4 million was related to our new data and analytics segment; \$0.6 million was attributable to higher IT staffing compensation expense reflective of staff expansion; and \$0.1 million reflected higher marketing costs.
- Recruiting expense increased by \$1.1 million in the 2017 period compared to 2016. Approximately \$0.1 million was related to our new data and analytics segment; \$0.8 million was attributable to higher IT staffing compensation expense reflective of our offshore and domestic recruitment staff expansion; and \$0.2 million was due to higher IT staffing H1B processing fees reflective of higher activity levels.
- General and administrative expense increased by \$1.8 million in the 2017 period compared to 2016. Approximately \$0.7 million was related to our new data and analytics segment, of which \$0.4 million which attributable to the amortization of acquired identifiable intangible assets; \$2.0 million was due to acquisition transaction expenses associated with the InfoTrellis transaction; and (\$0.1 million) was due to slightly lower facility costs. This total increase was partially offset by severance costs incurred in the 2016 period of \$0.8 million.

Other Income / (Expense) Components:

Other Income / (Expense) for the nine months ended September 30, 2017 consisted of interest expense of (\$648,000); foreign exchange gains of \$15,000; and a (\$4,000) loss on the disposition of fixed assets. For the nine months ended September 30, 2016, Other Income / (Expense) consisted of interest expense of (\$353,000) and foreign exchange losses of (\$24,000). The higher level of interest expense was due to the InfoTrellis acquisition.

Income Tax Expense:

Income tax expense for the nine months ended September 30, 2017 totaled \$202,000, representing an effective tax rate on pre-tax income of 21.0%, compared to \$1.1 million for the nine months ended September 30, 2016, which represented a 37.7% effective tax rate on pre-tax income. The lower effective tax rate largely reflected excess tax benefits related to stock options and restricted shares which favorably impacted our aggregate income tax rate in the 2017 period and a lower global tax rate at our newly acquired data and analytics segment.

Liquidity and Capital Resources:

Financial Conditions and Liquidity:

At September 30, 2017, we had bank debt, net of cash balances on hand, of \$40.3 million and approximately \$10.0 million of borrowing capacity under our existing credit facility.

Historically, we have funded our business needs with cash generated from operating activities. Controlling our operating working capital levels by closely managing our accounts receivable balance is an important element of cash generation. At September 30, 2016, our accounts receivable “days sales outstanding” (“DSOs”) measurement increased to 56-days from 55-days a quarter earlier.

We believe that cash provided by operating activities, cash balances on hand and current availability under our credit facility should be adequate to fund our business needs and debt service obligations over the next twelve months.

Cash flows provided by (used in) operating activities:

Cash (used in) operating activities for the nine months ended September 30, 2017 totaled (\$1.6 million) compared to cash (used in) operating activities of (\$3.7 million) during the nine months ended September 30, 2016. Elements of cash flows in the 2017 period were net income of \$0.8 million, non-cash charges of \$1.6 million, and an increase in operating working capital levels of (\$4.0 million). During the nine months ended September 30, 2016, elements of cash flows were net income of \$1.9 million, non-cash charges of \$1.2 million and an increase in operating working capital levels of (\$6.8 million). The operating working capital increases in 2017 were in support of revenue growth. The operating working capital increases in 2016 reflected amended payment terms on several major clients and higher operating working capital levels in support of 2016 revenue growth.

Cash flows used in investing activities:

Cash used in investing activities for the nine months ended September 30, 2017 was \$35.6 million compared to \$0.1 million for the nine months ended September 30, 2016. In 2017, the acquisition of InfoTrellis, Inc. and capital expenditures accounted for \$34.7 million and \$0.9 million, respectively. In 2016, cash used in investing activities consisted entirely of capital expenditures. Capital expenditure for the 2017 period largely related to the implementation of a new cloud-based financial and HR software package.

Cash flows provided by (used in) financing activities:

Cash provided by (used in) financing activities for the nine months ended September 30, 2017 totaled \$39.5 million and consisted of net borrowings under our revolving credit facility of \$9.7 million; \$30.5 million of borrowings under our term loan facility; proceeds of \$6.0 million from the issuance of common stock; offset by debt payments on our previous term loan facility of (\$6.3 million) and payments of deferred financing costs of (\$0.4 million). Cash provided by financing activities for the nine months ended September 30, 2016 totaled \$3.7 million and consisted of borrowings under our revolving credit facility of \$4.9 million and cash generated from stock option activities of \$0.2 million, partially offset by debt payments on our term loan of (\$1.4 million).

Off-Balance Sheet Arrangements:

We do not have any off-balance sheet arrangements.

Inflation:

We do not believe that inflation had a significant impact on our results of operations for the periods presented. On an ongoing basis, we attempt to minimize any effects of inflation on our operating results by controlling operating costs and, whenever possible, seeking to ensure that billing rates are adjusted periodically to reflect increases in costs due to inflation.

Seasonality:

Our operations are generally not affected by seasonal fluctuations. However, our consultants’ billable hours are affected by national holidays and vacation policies. Accordingly, we generally have lower utilization rates and higher benefit costs during the fourth quarter. Additionally, assignment completions tend to be higher near the end of the calendar year, which largely impacts our revenue and gross profit performance during the subsequent quarter.

Recently Issued Accounting Standards:

Recent accounting pronouncements are described in Note 16 to the accompanying financial statements.

ITEM 3: QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK

Cash and cash equivalents are defined as cash and highly liquid investments with maturities of three months or less when purchased. Cash equivalents are stated at cost, which approximates market value.

Our cash flow and earnings are subject to fluctuations due to exchange rate variations. Foreign currency risk exists by nature of our global recruitment centers. During 2012 through 2015, we attempted to limit our exposure to currency exchange fluctuations in the Indian rupee via the purchase of foreign currency forward contracts. The Company elected not to engage in currency hedging activities for 2016 and 2017 given the likelihood of an environment of interest rate expansion in the United States, which should have the impact of mitigating any material appreciation in the Indian rupee against the U.S. dollar. As a result, we currently do not have a currency hedging program in place.

Concurrent with the Company's July 13, 2017 borrowings of \$39.5 million in support of the InfoTrellis acquisition, we entered into a 44-month interest-rate swap to convert the debt's variable interest rate to a fixed rate of interest. Under the swap contracts, the Company pays interest at a fixed rate of 1.99% and receives interest at a variable rate equal to the daily U.S. LIBOR rate on a notional amount of \$15 million. The swap contracts mature in monthly installments commencing on September 1, 2017. These swap contracts have been designed as cash flow hedging instruments.

ITEM 4: CONTROLS AND PROCEDURES

Disclosure Controls and Procedures

The Company maintains disclosure controls and procedures that are designed to ensure that information required to be disclosed in the reports that the Company files or submits under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), is recorded, processed, summarized, and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to the Company's management, including its Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure.

As of the end of the period covered by this report, the Company carried out an evaluation, under the supervision and with the participation of Company management, including the Chief Executive Officer and the Chief Financial Officer, of the effectiveness of the design and operation of the Company's disclosure controls and procedures pursuant to Exchange Act rules 13a-15(b) and 15d-15(b), except in connection with the InfoTrellis acquisition completed on July 13, 2017. Based upon that evaluation, the Chief Executive Officer and the Chief Financial Officer concluded that the Company's disclosure controls and procedures were effective.

The certifications required by Section 302 of the Sarbanes-Oxley Act of 2002 are filed as exhibits 31.1 and 31.2, respectively, to this quarterly report on Form 10-Q.

Changes in Internal Control over Financial Reporting

Except in connection with the InfoTrellis acquisition completed on July 13, 2017, there has been no change in Mastech's internal control over financial reporting that occurred during the quarter ended September 30, 2017 that has materially affected, or is reasonably likely to materially affect, such internal control over financial reporting as of December 31, 2016.

PART II. OTHER INFORMATION

ITEM 1. LEGAL PROCEEDINGS

In the ordinary course of our business, we are involved in a number of lawsuits and administrative proceedings. While uncertainties are inherent in the final outcome of these matters, management believes, after consultation with legal counsel, that the disposition of these proceedings should not have a material adverse effect on our financial position, results of operations or cash flows.

ITEM 1A. RISK FACTORS

There have been no material changes from the risk factors as previously disclosed in our Annual Report on Form 10-K for the year ended December 31, 2016, filed with the SEC on March 24, 2017.

ITEM 2. UNREGISTERED SALES OF EQUITY SECURITIES AND USE OF PROCEEDS

On July 7, 2017, the Company entered into Securities Purchase Agreements with Ashok Trivedi and Sunil Wadhvani pursuant to which the Company agreed to sell to each the number of shares of Common Stock equal to \$3.0 million divided by the greater of (i) \$7.00 per share of Common Stock and (ii) the closing price of the Common Stock on the NYSE American on July 10, 2017, which was \$6.35 per share. On July 13, 2017, the Closing Date of the Company's acquisition of InfoTrellis' services division, the Company issued and sold an aggregate of 857,144 shares of Common Stock to Ashok Trivedi and Sunil Wadhvani for \$6.0 million in aggregate gross proceeds. The Company used the proceeds from the private placement to fund a portion of the closing date purchase price of the InfoTrellis acquisition.

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ITEM 6. EXHIBITS

(a) Exhibits

- 2.1 [Asset Purchase Agreement, dated July 7, 2017, by and among Mahmood Abbas, Zahid Naeem, Sachin Wadhwa, Infotrellis Inc. and Mastech InfoTrellis Digital, Ltd., \(incorporated by reference to Exhibit 2.1 to Mastech Digital, Inc.'s Current Report on Form 8-K, filed with the Securities and Exchange Commission on July 13, 2017\)*](#)
- 2.2 [Asset Purchase Agreement, dated July 7, 2017, by and among Mahmood Abbas, Zahid Naeem, Sachin Wadhwa, Infotrellis Inc. and Mastech InfoTrellis, Inc. \(incorporated by reference to Exhibit 2.2 to Mastech Digital, Inc.'s Current Report on Form 8-K, filed with the Securities and Exchange Commission on July 13, 2017\)*](#)
- 2.3 [Share Purchase Agreement, dated July 7, 2017, by and amongst Mastech Digital Data, Inc., 2291496 Ontario Inc., InfoTrellis India Private Limited, Mastech Digital Private Limited and Kumaran Sasikanthan \(incorporated by reference to Exhibit 2.3 to Mastech Digital, Inc.'s Current Report on Form 8-K, filed with the Securities and Exchange Commission on July 13, 2017\)*](#)
- 4.1 [Registration Rights Agreement, dated July 13, 2017, by and between Mastech Digital, Inc., Ashok Trivedi, as trustee of the Ashok K. Trivedi Revocable Trust, and Sunil Wadhvani, as trustee of The Revocable Declaration of Trust of Sunil Wadhvani](#)
- 10.1 [Credit Agreement, dated July 13, 2017, by and among Mastech Digital, Inc., certain subsidiaries of Mastech Digital, Inc., PNC Bank, National Association, as administrative agent, swing loan lender and issuing lender, PNC Capital Markets LLC, as sole lead arranger and sole bookrunner, and certain financial institutions party thereto as lenders \(incorporated by reference to Exhibit 10.1 to Mastech Digital, Inc.'s Current Report on Form 8-K, filed with the Securities and Exchange Commission on July 19, 2017\)](#)
- 10.2 [Pledge Agreement, dated July 13, 2017, made by Mastech Digital, Inc. and certain subsidiaries of Mastech Digital, Inc. \(incorporated by reference to Exhibit 10.2 to Mastech Digital, Inc.'s Current Report on Form 8-K, filed with the Securities and Exchange Commission on July 19, 2017\)](#)
- 10.3 [Securities Purchase Agreement, dated July 7, 2017, by and between Mastech Digital, Inc. and Ashok Trivedi, as trustee of the Ashok K. Trivedi Revocable Trust \(incorporated by reference to Exhibit 10.1 to Mastech Digital, Inc.'s Current Report on Form 8-K, filed with the Securities and Exchange Commission on July 13, 2017\)](#)
- 10.4 [Securities Purchase Agreement, dated July 7, 2017, by and between Mastech Digital, Inc. and Sunil Wadhvani, as trustee of The Revocable Declaration of Trust of Sunil Wadhvani \(incorporated by reference to Exhibit 10.2 to Mastech Digital, Inc.'s Current Report on Form 8-K, filed with the Securities and Exchange Commission on July 13, 2017\)](#)
- 31.1 [Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 by the Chief Executive Officer is filed herewith.](#)
- 31.2 [Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 by the Chief Financial Officer is filed herewith.](#)
- 32.1 [Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, by the Chief Executive Officer is furnished herewith.](#)
- 32.2 [Certification pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, by the Chief Financial Officer is furnished herewith.](#)
- 101.INS XBRL Instance Document.
- 101.SCH XBRL Taxonomy Extension Schema Document.
- 101.CAL XBRL Taxonomy Extension Calculation Linkbase Document.
- 101.DEF XBRL Taxonomy Extension Definition Linkbase Document.
- 101.LAB XBRL Taxonomy Extension Label Linkbase Document.
- 101.PRE XBRL Taxonomy Extension Presentation Linkbase Document.

* Pursuant to Item 601(b)(2) of Regulation S-K, certain schedules and exhibits to these agreements have not been filed. Mastech Digital, Inc. hereby agrees to furnish supplementally a copy of any omitted schedule or exhibit to the SEC upon request.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) 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, on this 14th day of November 2017.

November 14, 2017

MASTECH DIGITAL, INC.

/s/ VIVEK GUPTA

Vivek Gupta
Chief Executive Officer

/s/ JOHN J. CRONIN, JR.

John J. Cronin, Jr.
Chief Financial Officer
(Principal Financial Officer)

REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement (the “Agreement”) dated as of July 13, 2017, is entered into and made by and between Mastech Digital, Inc. a Pennsylvania corporation (the “Company”), and the persons set forth on the signature pages hereto (the “Holders”).

WHEREAS, the Company and each Holder have entered into a Securities Purchase Agreement dated as of July 7, 2017 (together, the “Purchase Agreements”), pursuant to which the Company shall issue to the Holders, and the Holders shall purchase from the Company, a total of 857,144 shares of the Company’s common stock, par value \$0.01 per share (the “Common Stock”) on the terms and subject to the conditions set forth therein; and

WHEREAS, pursuant to the terms of, and in partial consideration for, the Holders’ agreements to enter into the Purchase Agreements, the Company has agreed to provide the Holders with certain registration rights with respect to the Registrable Securities (as defined below) as set forth herein;

NOW, THEREFORE, in consideration of the premises, the representations, warranties, covenants and agreements contained herein and in the Purchase Agreements, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, intending to be legally bound hereby, the parties hereto agree as follows.

ARTICLE I CERTAIN DEFINED TERMS

1.1 Definitions. For purposes of this Agreement:

“Affiliate” means, with respect to any Person, (i) any other Person of which securities or other ownership interests representing more than fifty percent (50%) of the voting interests are, at the time such determination is being made, owned, Controlled or held, directly or indirectly, by such Person or (ii) any other Person which, at the time such determination is being made, is Controlling, Controlled by or under common Control with, such Person. As used herein, “Control”, whether used as a noun or verb, refers to the possession, directly or indirectly, of the power to direct, or cause the direction of, the management or policies of a Person, whether through the ownership of voting securities or otherwise.

“Exchange Act” means the Securities Exchange Act of 1934, as amended, and the rules and regulations of the SEC promulgated thereunder.

“FINRA” means the Financial Industry Regulatory Authority, Inc.

“Holder” means a Person that (i) is a party to this Agreement (or a permitted transferee thereof under Section 2.13 hereof) and (ii) owns Registrable Securities.

“Participating Holders” means Holders participating, or electing to participate, in an offering of Registrable Securities.

“Person” means any individual, firm, corporation, company, partnership, trust, incorporated or unincorporated association, limited liability company, joint venture, joint

stock company, government (or an agency or political subdivision thereof) or other entity of any kind, and shall include any successor (by merger or otherwise) of any such entity.

“Registrable Securities” means the Common Stock acquired by the Holders pursuant to the Purchase Agreement; *provided, however*, that shares of such Common Stock shall cease to be Registrable Securities (A) upon the sale thereof pursuant to an effective registration statement, (B) upon the sale thereof pursuant to Rule 144 (or any successor rule under the Securities Act), (C) when such securities cease to be outstanding, (D) when all such securities become eligible for immediate sale under Rule 144 (or any successor rule under the Securities Act), without any time or volume limitations under such Rule or (E) when such securities have been sold in a private transaction in which the transferor’s rights under this Agreement are not assigned to the transferee of such securities pursuant to the terms of this Agreement.

“Registration Expenses” mean all expenses (other than underwriting discounts, fees and commissions) arising from or incident to the performance of, or compliance with, this Agreement, including, without limitation, (i) SEC, stock exchange, FINRA and other registration and filing fees, (ii) all fees and expenses incurred by the Company in connection with complying with any securities or blue sky laws (including fees, charges and disbursements of counsel in connection with blue sky qualifications of the Registrable Securities), (iii) all printing, messenger and delivery expenses, (iv) the fees, charges and disbursements of counsel to the Company and of its independent public accountants and any other accounting and legal fees, charges and expenses incurred by the Company (including any expenses arising from any special audits or “comfort letters” required in connection with or incident to any registration), (v) the fees, charges and disbursements of any special experts retained by the Company in connection with any registration pursuant to the terms of this Agreement, (vi) all internal expenses of the Company (including all salaries and expenses of its officers and employees performing legal or accounting duties), (vii) the fees and expenses incurred by the Company in connection with the listing of the Registrable Securities on any securities exchange and (viii) Securities Act liability insurance (if the Company elects to obtain such insurance), regardless of whether any Registration Statement filed in connection with such registration is declared effective. “Registration Expenses” shall not include any Selling Expenses.

“Registration Statement” means any Registration Statement of the Company filed with the SEC on the appropriate form pursuant to the Securities Act which covers any of the Registrable Securities pursuant to the provisions of this Agreement and all amendments and supplements to any such Registration Statement, including post-effective amendments, in each case including the prospectus contained therein, all exhibits thereto and all materials incorporated by reference therein.

“Rule 144” means Rule 144 promulgated by the SEC pursuant to the Securities Act, as such rule may be amended from time to time, or any similar rule or regulation hereafter adopted by the SEC having substantially the same effect as Rule 144.

“SEC” means the United States Securities and Exchange Commission.

“Securities Act” means the Securities Act of 1933, as amended, and the rules and regulations of the SEC promulgated thereunder.

“Selling Expenses” means all underwriting fees, discounts, selling commissions and stock transfer taxes applicable to all Registrable Securities registered by the Participating Holders, all travel and other expenses associated with any “road show” or other selling efforts incurred by the Holder(s) in connection with any Demand Request, fees and disbursements of counsel to any Holder(s) and the expenses of any liability insurance obtained by any Holder(s).

“WKSI” means a well-known seasoned issuer as defined in Rule 405 under the Securities Act.

ARTICLE II REGISTRATION RIGHTS

2.1 Demand Registration

(a) Request by Holders. One or both of Holders may request that the Company register the Registrable Securities. Upon receipt of a written request from a Holder (the “Requesting Holder”) that the Company register the Registrable Securities held by the Requesting Holder (a “Demand Request”), then the Company shall, within fifteen (15) days after receipt of such Demand Request, give written notice of such request (a “Request Notice”) to the other Holder, provided, however, that if both Holders jointly request that the Company register their Registrable Securities, then the Company shall have no obligation to deliver any such Request Notice. Each Demand Request shall (x) specify the number of Registrable Securities that the Requesting Holders intend to sell or dispose of, (y) state the intended method of methods of sale or disposition of the Registrable Securities and (z) specify the expected price range (net of underwriting discounts and commissions) acceptable to the Requesting Holders to be received for such Registrable Securities. Following receipt of a Demand Request, the Company shall, subject to the limitations and conditions of Section 2.1(c) and Section 2.5:

(i) use commercially reasonable efforts to cause to be filed, as soon as practicable, but within forty-five (45) days of the date of delivery to the Company of the Demand Request, a Registration Statement covering such Registrable Securities which the Company has been so requested to register by the Requesting Holder(s) and, if applicable, the other Holder who requests to the Company that his or its Registrable Securities be registered within ten (10) days of their receipt of the Request Notice, providing for the registration under the Securities Act of such Registrable Securities to the extent necessary to permit the disposition of such Registrable Securities in accordance with the intended method of distribution specified in such Demand Request; and

(ii) use commercially reasonable efforts to have such Registration Statement declared effective by the SEC as soon as practicable thereafter and no later than ninety (90) days after the filing of such Registration Statement.

(b) Effective Registration Statement. A registration requested pursuant to this Section 2.1 shall not be deemed to have been effected unless a Registration Statement with respect thereto has become effective and remained effective in compliance with the provisions of the Securities Act with respect to the disposition of all Registrable Securities covered by such Registration

Statement until (i) such time as all of such Registrable Securities have been disposed of in accordance with the intended methods of disposition by the Holders thereof set forth in such Registration Statement or (ii) such Registration Statement has been effective for ninety (90) days; *provided* that if, after it has become effective, such registration is interfered with by any stop order, injunction or other order or requirement of the SEC or other governmental agency or court, such period shall be extended for any period during which the Registration Statement was not in effect.

(c) Limitation on Demand Registrations. The Company shall only be obligated to effect three (3) Demand Requests pursuant to this Section 2; *provided* that the Company shall only be obligated to effect one (1) Demand Request pursuant to this Section 2 in the first twelve-month period beginning on the date of this Agreement. The Company shall not be obligated to file a Registration Statement pursuant to a Demand Request in the ninety (90) days immediately following the date of this Agreement.

(d) Cancellation of Registration. The Requesting Holders shall have the right to cancel a proposed registration of Registrable Securities pursuant to a Demand Request under this Section 2.1 at any time and for any reason prior to the effective date of the Registration Statement filed or to be filed in response to such Demand Request. Such cancellation of a registration shall not be counted as one of three (3) Demand Requests and, notwithstanding anything to the contrary in this Agreement, the Requesting Holder(s) exercising such right to cancel shall be responsible for all Registration Expenses incurred in connection with such proposed registration prior to the time of cancellation unless such request is either (i) the result of any act or omission by the Company that occurred after the date on which such Demand Request was made, and such act or omission would have a material adverse effect on the offering of the Registrable Securities, or (ii) the result of the Company declaring a Blackout Period (as defined in Section 2.5(a)). Upon receipt of notice of any such cancellation, the Company shall revise, abandon or withdraw such Registration Statement, as applicable.

2.2 Piggyback Registrations.

(a) Right to Include Registrable Securities. Each time that the Company proposes for any reason to register any of its equity interests under the Securities Act, either for its own account or otherwise, other than a rights offering or pursuant to a Registration Statement on Form S-4 or S-8 (or similar or successor forms) (a "Proposed Registration"), the Company shall promptly give written notice of such Proposed Registration to all of the Holders (which notice shall be given not less than fifteen (15) days prior to the expected filing date of the Company's Registration Statement) and shall offer such Holders the right to request inclusion of any of such Holder's Registrable Securities in the Proposed Registration (the "Piggyback Notice"). Subject to Section 2.6, no registration pursuant to this Section 2.2 shall relieve the Company of its obligation to register Registrable Securities pursuant to a Demand Request, as contemplated by Section 2.1 hereof. The rights to piggyback registration may be exercised on an unlimited number of occasions.

(b) Piggyback Procedure. Each Holder shall have ten (10) days from the date of receipt of the Piggyback Notice to deliver to the Company a written request specifying the number of Registrable Securities such Holder intends to sell and such Holder's intended method

of disposition. Any Holder shall have the right to withdraw such Holder's request for inclusion of such Holder's Registrable Securities in any Registration Statement pursuant to this Section 2.2 by giving written notice to the Company of such withdrawal; *provided, however*, that the Company may ignore a notice of withdrawal made within two (2) business days prior to the date the Registration Statement is to become effective. Subject to Section 2.5(c) below, the Company shall use commercially reasonable efforts to include in such Registration Statement all such Registrable Securities so requested to be included therein; *provided, however*, that the Company may at any time withdraw or cease proceeding with any such Proposed Registration if it shall at the same time withdraw or cease proceeding with the registration of all other securities originally proposed to be registered.

(c) Underwritten Offering. In the event that the Proposed Registration by the Company is, in whole or in part, an underwritten public offering of securities of the Company, any request under this Section 2.2 shall specify that the Registrable Securities be included in the underwriting on the same terms and conditions as the securities, if any, otherwise being sold through underwriters under such registration. The Holders whose Registrable Securities are to be included in such Proposed Registration shall (together with the Company and any other Company stockholders distributing their securities through such underwriting) enter into an underwriting agreement in customary form for secondary public offerings with the managing underwriter or underwriters selected for underwriting by the Company.

2.3 Shelf Registration.

(a) Inclusion in Shelf Registration Statement. At any time that the Company is eligible to file a Registration Statement in accordance with Rule 415(a)(1)(i) under the Securities Act or any similar rule that may be adopted by the SEC on Form S-1, Form S-3 or any other available form (a "Shelf Registration Statement"), any one or more of the Holders shall have the right to request in writing (which request shall specify the Registrable Securities intended to be registered, the transaction to be registered and, to the extent applicable, the intended methods of disposition thereof) that the Company register any or all of such Holders' Registrable Securities by filing with the SEC a Shelf Registration Statement, including if the Company is at any time a WKSI, an automatic shelf registration statement, covering such Registrable Securities (a "Shelf Request"). Within ten (10) days of the Company's receipt of a Shelf Request, the Company shall give written notice to each Holder informing such Holder of the Company's intent to file such Shelf Registration Statement and of such Holder's right to request the registration of the Registrable Securities held by such Holder. The Company shall, subject to the provisions of this Section 2.3(a), include in such registration all Registrable Securities of each Holder with respect to which the Company receives a written request for inclusion therein together with all other documents reasonably requested by the Company and necessary to enable it to include such Holder as a selling security holder within ten (10) business days after the notice contemplated by the immediately preceding sentence is given to the Holders. A Shelf Request shall count as a Demand Request in all respects (including, without limitation, with respect to the requirements of Section 2.1(a)(i) and (ii) and the limitations set forth in Section 2.1(c)).

(b) Takedown. The Holders may at any time and from time to time request in writing (a "Shelf Takedown Notice") (which request shall specify the Registrable Securities intended to be disposed of by Holders and the intended method of distribution thereof) to sell pursuant to a

prospectus supplement (a “Shelf Takedown Prospectus Supplement”) Registrable Securities of such Holders available for sale pursuant to an effective Shelf Registration Statement. The Company shall use commercially reasonable efforts to, not later than the tenth (10th) business day after its receipt of the Shelf Takedown Notice, cause to be filed with the SEC the Shelf Takedown Prospectus Supplement, unless such sale involves an underwritten offering, which is the subject of Section 2.3(c) below. A request for a Shelf Takedown Prospectus Supplement may be withdrawn by the initiating Holder prior to the filing thereof pursuant to Section 2.1(d) hereof. A Shelf Takedown Notice shall not count as a Demand Request.

(c) **Underwritten Shelf Offering.** If a sale of Registrable Securities pursuant to this Section 2.3 involves an underwritten offering and the applicable securities are to be distributed on a firm commitment basis by or through one or more underwriters of recognized standing under underwriting terms appropriate for such transaction, then, within five (5) business days of the Company’s receipt of a Shelf Takedown Notice pursuant to Section 2.3(b), the Company shall give written notice to each Holder who has elected to be included in the Shelf Registration Statement informing such Holder of the Company’s intent to file such Shelf Takedown Prospectus Supplement with the SEC and of such Holder’s right to request the addition of such Holder’s Registrable Securities to such Shelf Takedown Prospectus Supplement. The Company shall, subject to the provisions of Section 2.7(b) and this Section 2.3(c), include in such Shelf Takedown Prospectus Supplement all Registrable Securities of each such Holder with respect to which the Company receives a written request for inclusion therein within five (5) business days after the notice contemplated by the immediately preceding sentence is given to the Holders.

2.4 Selection of Underwriters. In the event that the Company is required to file a Registration Statement covering any Registrable Securities and the proposed public offering is to be an underwritten public offering, the managing underwriter shall be one or more reputable nationally recognized investment banks selected by the Participating Holders holding a majority of the Registrable Securities to be sold in such offering and reasonably acceptable to the Company, which consent shall not be unreasonably withheld, delayed or conditioned; *provided* that the managing underwriter for any registration initiated by the Company for its own account shall be a reputable national recognized investment bank selected by the Company in its sole discretion.

2.5 Suspension of Effectiveness; Company-Initiated Registrations.

(a) Notwithstanding the foregoing obligations in this Section 2, with respect to any Registration Statement or Shelf Registration Statement, whether filed or to be filed pursuant to this Agreement, if the Company shall reasonably determine that maintaining the effectiveness of such Registration Statement or Shelf Registration Statement, or filing an amendment or supplement thereto (or, if no Registration Statement or Shelf Registration Statement has yet been filed, filing such a Registration Statement or Shelf Registration Statement) would (i) materially interfere with a significant acquisition, corporate reorganization, financing, securities offering or other similar transaction involving the Company; (ii) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (iii) render the Company unable to comply with requirements under the Securities Act or Exchange Act (a “Disadvantageous Condition”), the Company may notify the Holders whose offers and sales of Registrable Securities are covered (or to be covered) by such Registration

Statement or Shelf Registration Statement (a “Blackout Notice”) that such Registration Statement or Shelf Registration Statement is unavailable for use (or will not be filed as requested). The period during which any such Registration Statement or Shelf Registration Statement may be made unavailable for use by the Holders shall be for the shortest period reasonably practicable, and in any event for not more than sixty (60) consecutive calendar days (a “Blackout Period”). Upon the receipt of any such Blackout Notice, the Holders shall forthwith discontinue use of the prospectus contained in any effective Registration Statement or Shelf Registration Statement during the Blackout Period; provided, that, if at the time of receipt of such Blackout Notice any Holder shall have sold its Registrable Securities (or have signed a firm commitment underwriting agreement with respect to the purchase of such shares) and the Disadvantageous Condition is not of a nature that would require a post-effective amendment to the Registration Statement or Shelf Registration Statement, then the Company shall use commercially reasonable efforts to take such action as to eliminate any restriction imposed by federal securities laws on the timely delivery of such Registrable Securities. When any Disadvantageous Condition as to which a Blackout Notice has been previously delivered shall cease to exist, the Company shall as promptly as reasonably practicable notify the Holders and take such actions in respect of such Registration Statement or Shelf Registration Statement as are otherwise required by this Agreement. The effectiveness period for any registration requested pursuant to this Section 2 for which the Company has given notice of a Blackout Period shall be increased by the length of time of such Blackout Period. If the Company declares a Blackout Period with respect to a Demand Request for a Registration Statement that has not yet been declared effective, the Holders may by notice to the Company withdraw the related Demand Registration request without such Demand Request counting against the number of Demand Requests permitted to be made under Section 2.1(c).

(b) The Company shall not be obligated to effect, or to take any action to effect, any registration of Registrable Securities pursuant to Section 2.1 or Section 2.3 during the period that is sixty (60) days before the Company’s good faith estimate of the date of filing of, and ending on a date that is ninety (90) days after the effective date of, a Company-initiated registration statement to register any of its equity interests under the Securities Act, provided that the Company is (A) actively employing in good faith commercially reasonable efforts to cause such registration statement to become effective and (B) in compliance with the requirements of Section 2.2, including providing the Holders with a Piggyback Notice.

2.6 Duplicate Registrations. The Company shall not be required to effect a registration under this Agreement if the Registrable Securities that are the subject of such request are at the time of such request included in an effective registration statement of the Company permitting the resale of such Registrable Securities in the manner contemplated by the Requesting Holder.

2.7 Priority for Registration.

(a) General. Notwithstanding any other provision of this Agreement and subject to Section 2.7(b), Section 2.7(c) and Section 2.7(d) below, if the managing underwriter of an underwritten public offering determines in good faith and advises the Participating Holders and the Company in writing that the inclusion of all Registrable Securities proposed to be included

by the Company and any other Holders in the underwritten public offering would materially and adversely interfere with the successful marketing of the securities to be included in such offering at the desired offering price, timing or distribution method, then the Company will be obligated to include in such Registration Statement, as to each Holder, only a portion of the Registrable Securities such Holder has requested be registered equal to the ratio which such Holder's requested Registrable Securities bears to the total number of Registrable Securities requested to be included in such Registration Statement by all Holders who have requested that their Registrable Securities be included in such Registration Statement.

(b) Demand or Shelf Takedown. It is acknowledged by the parties hereto that pursuant to Section 2.7(a) above, the securities to be included in a registration requested by the Requesting Holders pursuant to Section 2.1 or in a Shelf Takedown Prospectus Supplement pursuant to Section 2.3 shall be allocated: (i) first, to the Requesting Holders or Holders who have provided a Shelf Takedown Notice; (ii) second, to any other Holders (other than those in clause (i)); (iii) third, to the Company; and (iv) fourth, to any other holders of equity interests of the Company requesting registration of securities of the Company; *provided* that in the case of a demand by any Holder(s) with respect to which one or more other Holders has exercised its piggyback rights pursuant to Section 2.2 hereof, any such Holder may convert its piggyback election to a Demand Request, such that such Holder will be included in subclause (i) above in the event of any cutback pursuant to this Section 2.7.

(c) Piggyback. It is acknowledged by the parties hereto that pursuant to Section 2.7(a) above, the securities to be included in a registration initiated by the Company, including with respect to a Shelf Takedown Prospectus Supplement, shall be allocated: (i) first, to the Company; (ii) second, to the Holders; and (iii) third, to any others requesting registration of securities of the Company.

(d) Other registrations. It is acknowledged by the parties hereto that pursuant to Section 2.7(a) above, the securities to be included in a registration initiated by holders of equity securities other than the Company or the Holders shall be allocated: (i) first, to such initiating holders; (ii) second, to the Holders; and (iii) third, to the Company.

2.8 Registration Procedures.

(a) Obligations of the Company. Whenever registration of Registrable Securities is required pursuant to this Agreement, the Company shall use commercially reasonable efforts to effect the registration and sale of such Registrable Securities in accordance with the intended method of distribution thereof as promptly as possible, and in connection with any such request, the Company shall, as expeditiously as possible:

(i) Preparation of Registration Statement; Effectiveness. Prepare and file with the SEC (in any event not later than forty-five (45) days after receipt of a Demand Request or a Shelf Request, as applicable, to file a Registration Statement with respect to Registrable Securities), a Registration Statement on any form on which the Company then qualifies, which counsel for the Company shall deem appropriate and pursuant to which such offering may be made in accordance with the intended method of distribution thereof for a Demand Request and on Form S-1, Form S-3 or any other available form for a Shelf Request (except that the Registration

Statement shall contain such information as may reasonably be requested for marketing or other purposes by the managing underwriter), and use commercially reasonable efforts to cause any registration required hereunder to become effective as soon as practicable after the initial filing thereof (and within ninety (90) days of such filing) and remain effective for a period of not less than ninety (90) days (or such shorter period in which all Registrable Securities have been sold in accordance with the methods of distribution set forth in the Registration Statement); provided, however, that, in the case of any Shelf Registration Statement, such ninety (90) day period shall be extended, if necessary, to keep the Registration Statement effective until all such Registrable Securities are sold, provided that Rule 415, or any successor rule under the Securities Act, permits an offering on a continuous or delayed basis;

(ii) Participation in Preparation. Provide any Participating Holder, any underwriter participating in any disposition pursuant to a Registration Statement, and any attorney, accountant or other agent retained by any Participating Holder or underwriter (each, an “Inspector” and, collectively, the “Inspectors”), the opportunity to participate in the preparation of (including, but not limited to, reviewing and commenting on) such Registration Statement, each prospectus included therein or filed with the SEC and each amendment or supplement thereto;

(iii) Due Diligence. For a reasonable period prior to the filing of any Registration Statement pursuant to this Agreement, make available for inspection by the Inspectors upon reasonable notice at reasonable times and for reasonable periods such financial and other information and books and records, pertinent corporate documents and properties of the Company and its subsidiaries and cause the officers, directors, employees, counsel and independent certified public accountants of the Company and its subsidiaries to respond to such inquiries and to supply all information reasonably requested by any such Inspector in connection with such Registration Statement, as shall be reasonably necessary, in the judgment of the Company’s counsel, to conduct a reasonable investigation within the meaning of the Securities Act; provided, that, if any such information is identified by the Company as being confidential or proprietary, each Inspector receiving such information shall take such actions as are reasonably necessary to protect the confidentiality of such information and shall sign customary confidentiality agreements reasonably requested by the Company prior to the receipt of such information and, provided further, that, in no event shall the Company be required to make available any information that the Company determines in good faith to be competitively sensitive, confidential or privileged;

(iv) General Notifications. Promptly notify in writing the Participating Holders, the sales or placement agent, if any, therefor and the managing underwriter of the securities being sold, (A) when such Registration Statement or the prospectus included therein or any prospectus amendment or supplement or post-effective amendment has been filed, and, with respect to any such Registration Statement or any post-effective amendment, when the same has become effective, (B) when the SEC notifies the Company whether there will be a “review” of such Registration Statement, (C) of any comments (oral or written) by the SEC and by the blue sky or securities commissioner or regulator of any state with respect thereto and (D) of any request by the SEC for any amendments or supplements to such Registration Statement or the prospectus or for additional information;

(v) 10b-5 Notification. Promptly notify in writing the Participating Holders, the sales or placement agent, if any, therefor and the managing underwriter of the securities being sold pursuant to any Registration Statement at any time when a prospectus relating thereto is required to be delivered under the Securities Act upon discovery that, or upon the happening of any event as a result of which, any prospectus included in such Registration Statement (or amendment or supplement thereto) contains an untrue statement of a material fact or omits to state any material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances under which they were made, and the Company shall as promptly as reasonably practicable prepare a supplement or amendment to such prospectus and file it with the SEC so that after delivery of such prospectus, as so amended or supplemented, to the purchasers of such Registrable Securities, such prospectus, as so amended or supplemented, shall not contain an untrue statement of a material fact or omit to state any material fact required to be stated therein or necessary to make the statements therein not misleading in light of the circumstances under which they were made;

(vi) Notification of Stop Orders; Suspensions of Qualifications and Exemptions. Promptly notify in writing the Participating Holders, the sales or placement agent, if any, therefor and the managing underwriter of the securities being sold of the issuance by the SEC of (A) any stop order issued or threatened to be issued by the SEC or (B) any notification with respect to the suspension of the qualification or exemption from qualification of any of the Registrable Securities for sale in any jurisdiction or the initiation or threatening of any proceeding for such purpose, and the Company agrees to use commercially reasonable efforts to (x) prevent the issuance of any such stop order, and in the event of such issuance, to obtain the withdrawal of any such stop order and (y) obtain the withdrawal of any order suspending or preventing the use of any related prospectus or suspending the qualification of any Registrable Securities included in such Registration Statement for sale in any jurisdiction as early as reasonably practicable;

(vii) Amendments and Supplements; Acceleration. Prepare and file with the SEC such amendments, including post-effective amendments to each Registration Statement as may be necessary to keep such Registration Statement continuously effective for the applicable time period required hereunder and, if applicable, file any Registration Statements pursuant to Rule 462(b) under the Securities Act; cause the related prospectus to be supplemented by any required prospectus supplement, and as so supplemented to be filed pursuant to Rule 424 (or any similar provisions then in force) promulgated under the Securities Act; and comply with the provisions of the Securities Act and the Exchange Act with respect to the disposition of all securities covered by such Registration Statement during such period in accordance with the intended methods of disposition by the sellers thereof set forth in such Registration Statement as so amended or in such prospectus as so supplemented;

(viii) Copies. Furnish as promptly as practicable (and as far in advance as reasonably practicable prior to filing) to each Participating Holder and Inspector prior to filing a Registration Statement or any supplement or amendment thereto, copies of such Registration Statement, supplement or amendment as it is proposed to be filed, and after such filing such number of copies of such Registration Statement, each amendment and supplement thereto (in each case including all exhibits thereto), the prospectus included in such Registration Statement (including each preliminary prospectus) and such other documents as each such Participating Holder or

underwriter may reasonably request in order to facilitate the disposition of the Registrable Securities owned by such Participating Holder;

(ix) Blue Sky. Use commercially reasonable efforts to, prior to any public offering of the Registrable Securities, register or qualify (or seek an exemption from registration or qualifications) such Registrable Securities under such other securities or blue sky laws of such jurisdictions as any Participating Holder or underwriter may reasonably request, and to continue such qualification in effect in each such jurisdiction for as long as is permissible pursuant to the laws of such jurisdiction, or for as long as a Participating Holder or underwriter requests or until all of such Registrable Securities are sold, whichever is shortest, and do any and all other acts and things which may be reasonably necessary or advisable to enable any Participating Holder to consummate the disposition in such jurisdictions of the Registrable Securities; provided that the Company shall not be required to qualify generally to do business in any jurisdiction where it is not then so qualified, to take any action which would subject it to taxation or general service of process in any such jurisdiction where it is not then so subject or conform its capitalization or the composition of its assets at the time to the securities or blue sky laws of any such jurisdiction;

(x) Other Approvals. Use commercially reasonable efforts to obtain all other approvals, consents, exemptions or authorizations from such governmental agencies or authorities as may be necessary to enable the Participating Holders and underwriters to consummate the disposition of Registrable Securities;

(xi) Agreements. Enter into customary agreements (including any underwriting agreements in customary form, including any lock-up provisions therein), and take such other actions as may be reasonably required in order to expedite or facilitate the disposition of Registrable Securities;

(xii) “Cold Comfort” Letter. Obtain a “cold comfort” letter from the Company’s independent public accountants in customary form and covering such matters of the type customarily covered by “cold comfort” letters as the managing underwriter may reasonably request, and reasonably satisfactory to the Participating Holders;

(xiii) Legal Opinion. Furnish, at the request of any underwriter of Registrable Securities on the date such securities are delivered to the underwriters for sale pursuant to such registration, an opinion, dated such date, of counsel representing the Company for the purposes of such registration, addressed to the Holders, and the placement agent or sales agent, if any, thereof and the underwriters, if any, thereof, covering such legal matters with respect to the registration in respect of which such opinion is being given as such underwriter may reasonably request and as are customarily included in such opinions, and reasonably satisfactory to the Participating Holders;

(xiv) SEC Compliance; Earnings Statement. Use commercially reasonable efforts to comply with all applicable rules and regulations of the SEC and make available to its shareholders, as soon as reasonably practicable, but no later than fifteen (15) months after the effective date of any Registration Statement, an earnings statement covering a period of twelve (12) months beginning after the effective date of such Registration Statement, in a manner which satisfies the provisions of Section 11(a) of the Securities Act and Rule 158 thereunder;

(xv) Certificates; Closing. Provide officers' certificates and other customary closing documents;

(xvi) FINRA. Cooperate with each Participating Holder and each underwriter participating in the disposition of such Registrable Securities and underwriters' counsel in connection with any filings required to be made with FINRA, including the retention of a "Qualified Independent Underwriter" (as defined in FINRA Rule 5121(f)(12)) and the use of commercially reasonable efforts to obtain FINRA's pre-clearing or pre-approval of the applicable registration statement and applicable prospectus upon filing with the SEC;

(xvii) Road Show. Cause appropriate officers as are reasonably requested by a managing underwriter to participate in a "road show" or similar marketing effort being conducted by such underwriter with respect to an underwritten public offering;

(xviii) Listing. Use commercially reasonable efforts to cause all such Registrable Securities to be listed on each securities exchange, including the NYSE MKT, on which similar securities issued by the Company are then listed;

(xix) Transfer Agent, Registrar and CUSIP. Provide a transfer agent and registrar for all Registrable Securities registered pursuant hereto and a CUSIP number for all such Registrable Securities, in each case, no later than the effective date of such registration;

(xx) Commercially Reasonable Efforts. Use commercially reasonable efforts to take all other actions necessary to effect the registration of the Registrable Securities contemplated hereby.

(b) Holder Information. The Company may require each Participating Holder as to which any registration of such Holder's Registrable Securities is being effected to furnish to the Company such information regarding such Participating Holder and such Participating Holder's method of distribution of such Registrable Securities as the Company may from time to time reasonably request in writing. If a Participating Holder refuses to provide the Company with any of such information on the grounds that it is not necessary to include such information in the Registration Statement, the Company may exclude such Participating Holder's Registrable Securities from the Registration Statement if the Company determines, upon the advice of its counsel, that such information must be included in the Registration Statement and such Participating Holder continues thereafter to withhold such information. The exclusion of a Participating Holder's Registrable Securities shall not affect the registration of the other Registrable Securities to be included in the Registration Statement.

(c) Notice to Discontinue. Each Participating Holder whose Registrable Securities are covered by a Registration Statement filed pursuant to this Agreement agrees that, upon receipt of written notice from the Company of the happening of any event of the kind described in Section 2.8(a)(v), such Participating Holder shall forthwith discontinue the disposition of Registrable Securities until such Participating Holder's receipt of the copies of the supplemented or amended prospectus contemplated by Section 2.8(a)(v) or until it is advised in writing by the Company that the use of the prospectus may be resumed and has received copies of any additional or supplemental filings which are incorporated by reference into the prospectus, and, if so directed

by the Company in the case of an event described in Section 2.8(a)(v), such Participating Holder shall deliver to the Company (at the Company's expense) all copies, other than permanent file copies then in such Participating Holder's possession, of the prospectus covering such Registrable Securities which is current at the time of receipt of such notice. If the Company shall give any such notice, the Company shall extend the period during which such Registration Statement is to be maintained effective by the number of days during the period from and including the date of the giving of such notice pursuant to Section 2.8(a)(v) to and including the date when the Participating Holder shall have received the copies of the supplemented or amended prospectus contemplated by, and meeting the requirements of, Section 2.8(a)(v).

2.9 Registration Expenses. Except as otherwise provided herein, all Registration Expenses shall be borne by the Company. All Selling Expenses relating to Registrable Securities registered shall be borne by the Participating Holders of such Registrable Securities *pro rata* on the basis of the number of Registrable Securities so registered.

2.10 Indemnification.

(a) Indemnification by the Company. The Company agrees to indemnify and hold harmless to the fullest extent permitted by law, each Holder, each of their directors, officers, employees, advisors, agents and general or limited partners (and the directors, officers, employees, advisors and agents thereof), their respective Affiliates and each Person who controls (within the meaning of the Securities Act or the Exchange Act) any of such Persons, and each underwriter and each Person who controls (within the meaning of the Securities Act or the Exchange Act) any underwriter (collectively, "Holder Indemnified Parties") from and against any and all losses, claims, damages, expenses (including, without limitation, reasonable costs of investigation and fees, disbursements and other charges of counsel, any amounts paid in settlement effected with the Company's consent, which consent shall not be unreasonably withheld or delayed, and any costs incurred in enforcing the Company's indemnification obligations hereunder) or other liabilities (collectively, "Losses") to which any such Holder Indemnified Party may become subject under the Securities Act, Exchange Act, any other federal law, any state or common law or any rule or regulation promulgated thereunder or otherwise, insofar as such Losses are resulting from or arising out of or based upon (i) any untrue, or alleged untrue, statement of a material fact contained in any Registration Statement or Shelf Registration Statement, prospectus or preliminary prospectus (as amended or supplemented) or any document incorporated by reference in any of the foregoing or resulting from or arising out of or based upon any omission or alleged omission to state therein a material fact required to be stated therein or necessary to make the statements therein (in the case of a prospectus, in light of the circumstances under which they were made), not misleading or (ii) any violation by the Company of the Securities Act, Exchange Act, any other federal law, any state or common law or any rule or regulation promulgated thereunder or otherwise incident to any registration, qualification or compliance and in any such case, the Company will promptly reimburse each such Holder Indemnified Party for any legal expenses and any other Losses reasonably incurred in connection with investigating, preparing or defending any such claim, loss, damage, liability, action or investigation or proceeding (collectively, a "Claim"); *provided, however*, that the Company will not be liable in any such case if and to the extent that any such Loss arises out of or is based upon an untrue statement or alleged untrue statement or omission or alleged omission so made in conformity with information furnished by such Holder Indemnified Party in writing

specifically for use in any Registration Statement, preliminary prospectus, prospectus, free writing prospectus or prospectus supplement, as applicable. Such indemnity obligation shall remain in full force and effect regardless of any investigation made by or on behalf of the Holder Indemnified Parties and shall survive the transfer of Registrable Securities by such Holder Indemnified Parties.

(b) Indemnification by Holders. In connection with any proposed registration in which a Holder is participating pursuant to this Agreement, each such Holder shall furnish to the Company in writing such information with respect to such Holder as the Company may reasonably request or as may be required by law for use in connection with any Registration Statement or prospectus or preliminary prospectus to be used in connection with such registration and each Holder agrees, severally and not jointly, to indemnify and hold harmless the Company, any underwriter retained by the Company and their respective directors, officers, partners, employees, advisors, agents and general or limited partners (and the directors, officers, employees, advisors and agents thereof), their respective Affiliates and each Person who controls (within the meaning of the Securities Act or the Exchange Act) any of such Persons to the same extent as the foregoing indemnity from the Company to the Holder Indemnified Parties as set forth in Section 2.10(a) (subject to the exceptions set forth in the foregoing indemnity, the proviso to this sentence and applicable law), but only with respect to any such information furnished in writing by such Holder expressly for use therein; *provided, however*, that the liability of any Holder under this Section 2.10(b) shall be limited to the amount of the net proceeds received by such Holder in the offering giving rise to such liability. Such indemnity obligation shall remain in full force and effect regardless of any investigation made by or on behalf of the Holder Indemnified Parties (except as provided above) and shall survive the transfer of Registrable Securities by such Holder.

(c) Conduct of Indemnification Proceedings. Any Person entitled to indemnification hereunder (the “Indemnified Party”) agrees to give prompt written notice to the indemnifying party (the “Indemnifying Party”) after the receipt by the Indemnified Party of any written notice of the commencement of any action, suit, proceeding or investigation or threat thereof made in writing for which the Indemnified Party intends to claim indemnification or contribution pursuant to this Agreement; *provided, however*, that, the failure to so notify the Indemnifying Party shall not relieve the Indemnifying Party of any liability that it may have to the Indemnified Party hereunder unless and to the extent such Indemnifying Party is materially prejudiced by such failure. If notice of commencement of any such action is given to the Indemnifying Party as above provided, the Indemnifying Party shall be entitled to participate in and, to the extent it may wish, jointly with any other Indemnifying Party similarly notified, to assume the defense of such action at its own expense, with counsel chosen by it and reasonably satisfactory to such Indemnified Party. The Indemnified Party shall have the right to employ separate counsel in any such action and participate in the defense thereof, but the fees and expenses of such counsel shall be paid by the Indemnified Party unless (i) the Indemnifying Party agrees to pay the same, (ii) the Indemnifying Party fails to assume the defense of such action with counsel satisfactory to the Indemnified Party in its reasonable judgment or (iii) the named parties to any such action (including, but not limited to, any impleaded parties) reasonably believe that the representation of such Indemnified Party and the Indemnifying Party by the same counsel would be inappropriate under applicable standards of professional conduct. In the case of clauses (ii) and (iii) above, the Indemnifying Party shall not have the right to assume the defense of such action

on behalf of such Indemnified Party. No Indemnifying Party shall be liable for any settlement entered into without its written consent, which consent shall not be unreasonably withheld. No Indemnifying Party shall, without the written consent of the Indemnified Party, effect the settlement or compromise of, or consent to the entry of any judgment with respect to, any pending or threatened action or claim in respect of which indemnification or contribution may be sought hereunder (whether or not the Indemnified Party is an actual or potential party to such action or claim) unless such settlement, compromise or judgment (A) includes an unconditional release of the Indemnified Party from all liability arising out of such action or claim and (B) does not include a statement as to, or an admission of, fault, culpability or a failure to act by or on behalf of any Indemnified Party. The rights afforded to any Indemnified Party hereunder shall be in addition to any rights that such Indemnified Party may have at common law, by separate agreement or otherwise.

(d) Contribution. If the indemnification provided for in this Section 2.10 from the Indemnifying Party is unavailable or insufficient to hold harmless an Indemnified Party in respect of any Losses referred to herein, then the Indemnifying Party, in lieu of indemnifying the Indemnified Party, shall contribute to the amount paid or payable by the Indemnified Party as a result of such Losses in such proportion as is appropriate to reflect the relative fault of the Indemnifying Party and the Indemnified Party, as well as any other relevant equitable considerations. The relative faults of the Indemnifying Party and Indemnified Party shall be determined by reference to, among other things, whether any action in question, including any untrue or alleged untrue statement of a material fact or omission or alleged omission to state a material fact, was made by, or relates to information supplied by, such Indemnifying Party or Indemnified Party, and the Indemnifying Party's and Indemnified Party's relative intent, knowledge, access to information and opportunity to correct or prevent such action; provided, however, that the liability of any Holder under this Section 2.10(d) shall be limited to the amount of the net proceeds received by such Holder in the offering giving rise to such liability. The amount paid or payable by a party as a result of the Losses or other liabilities referred to above shall be deemed to include, subject to the limitations set forth in clauses (a), (b) and (c) of this Section 2.10, any legal or other fees, charges or expenses reasonably incurred by such party in connection with any investigation or proceeding.

2.11 Rule 144; Other Exemptions. With a view to making available to the Holders the benefits of Rule 144 and other rules and regulations of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration, the Company covenants that it shall use commercially reasonable efforts to (i) file in a timely manner all reports and other documents required to be filed by it under the Securities Act and the Exchange Act and the rules and regulations adopted by the SEC thereunder and (ii) take such further action as each Holder may reasonably request (including, but not limited to, providing any information necessary to comply with Rule 144, if available with respect to resales of the Registrable Securities under the Securities Act), at all times from and after the date hereof, all to the extent required from time to time to enable such Holder to sell Registrable Securities without registration under the Securities Act within the limitation of the exemptions provided by Rule 144 (if available with respect to resales of the Registrable Securities). Upon the written request of a Holder, the Company shall deliver to the Holder a written statement as to whether it has complied with such requirements.

2.12 Limitations on Subsequent Registration Rights. The Company represents and warrants that it has not granted registration rights on or prior to the date hereof (other than pursuant to this Agreement) and agrees that from and after the date hereof, it shall not, without the prior written consent of the Holders, which consent shall not be unreasonably withheld, enter into any agreement (or amendment or waiver of the provisions of any agreement) with any holder or prospective holder of any securities of the Company that would grant such holder registration rights that are more favorable or senior to those granted to the Holders hereunder, as reasonably determined by the Company. The Company agrees that any holder or prospective holder granted registration rights in any such agreement shall be required to be subject to reasonable lock-up provisions if requested by the Company or underwriters.

2.13 Transfer of Registration Rights. The rights of a Holder hereunder may be transferred or assigned in connection with a transfer of Registrable Securities to (i) any Affiliate of a Holder, (ii) any subsidiary, parent, partner, retired partner, limited partner, shareholder or member of a Holder, or (iii) any family member or trust for the benefit of any Holder. Notwithstanding the foregoing, such rights may only be transferred or assigned provided that all of the following additional conditions are satisfied: (a) such transfer or assignment is effected in accordance with applicable securities laws; (b) such transferee or assignee agrees in writing to become subject to the terms of this Agreement; and (c) the Company is given written notice by such Holder of such transfer or assignment, stating the name and address of the transferee or assignee and identifying the Registrable Securities with respect to which such rights are being transferred or assigned.

2.14 Lock-Up Agreement. Each Holder agrees that in connection with any registered offering of the Common Stock or other equity securities of the Company, and upon the request of the managing underwriter in such offering, such Holder shall not, without the prior written consent of such managing underwriter, during the ten (10) days prior to the effective date of such registration and ending on the date specified by such managing underwriter (such period not to exceed ninety (90) days), (a) offer, pledge, sell, contract to sell, grant any option or contract to purchase, purchase any option or contract to sell, hedge the beneficial ownership of or otherwise dispose of, directly or indirectly, any shares of Common Stock or any securities convertible into, exercisable for or exchangeable for shares of Common Stock (whether such shares or any such securities are then owned by the Holder or are thereafter acquired), or (b) enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities, whether any such transaction described in clause (a) or (b) above is to be settled by delivery of Common Stock or such other securities, in cash or otherwise. The foregoing provisions of this Section 2.14 shall not apply to sales of Registrable Securities to be included in an offering made pursuant to Section 2. Each Holder of Registrable Securities agrees to execute and deliver such other agreements as may be reasonably requested by the Company or the managing underwriter which are consistent with the foregoing or which are necessary to give further effect thereto.

ARTICLE III GENERAL PROVISIONS

3.1 Entire Agreement. This Agreement and any certificates, documents, instruments and writings that are delivered pursuant hereto, constitutes the entire agreement and

understanding of the parties in respect of the subject matter hereof and supersedes all prior understandings, agreements or representations by or among the parties, written or oral, to the extent they relate in any way to the subject matter hereof.

3.2 Assignment; Binding Effect. Except as otherwise provided in Section 2.13, no party may assign either this Agreement or any of its rights, interests or obligations hereunder without the prior written approval of the other parties. All of the terms, agreements, covenants, representations, warranties and conditions of this Agreement are binding upon, and inure to the benefit of and are enforceable by, the parties and their respective successors and permitted assigns.

3.3 Notices. All notices, requests and other communications provided for or permitted to be given under this Agreement must be in writing and shall be given by personal delivery, by certified or registered United States mail (postage prepaid, return receipt requested), by a nationally recognized overnight delivery service for next day delivery, or by facsimile transmission, to the address listed for each party on the signature pages to the Purchase Agreement (or to such other address as any party may give in a notice given in accordance with the provisions hereof). All notices, requests or other communications will be effective and deemed given only as follows: (i) if given by personal delivery, upon such personal delivery, (ii) if sent by certified or registered mail, on the fifth business day after being deposited in the United States mail, (iii) if sent for next day delivery by overnight delivery service, on the date of delivery as confirmed by written confirmation of delivery, (iv) if sent by facsimile, upon the transmitter's confirmation of receipt of such facsimile transmission, except that if such confirmation is received after 5:00 p.m. (in the recipient's time zone) on a business day, or is received on a day that is not a business day, then such notice, request or communication will not be deemed effective or given until the next succeeding business day. Notices, requests and other communications sent in any other manner, including by electronic mail, will not be effective.

3.4 Specific Performance; Remedies. Each party acknowledges and agrees that the other parties would be damaged irreparably if any provision of this Agreement were not performed in accordance with its specific terms or were otherwise breached. Accordingly, the parties will be entitled to an injunction, injunctions or other equitable relief to prevent breaches of the provisions of this Agreement and to enforce specifically this Agreement and its provisions in any action or proceeding instituted in any state or federal court sitting in Pittsburgh, Pennsylvania having jurisdiction over the parties and the matter, in addition to any other remedy to which they may be entitled, at law or in equity. Except as expressly provided herein, the rights, obligations and remedies created by this Agreement are cumulative and in addition to any other rights, obligations or remedies otherwise available at law or in equity. Except as expressly provided herein, nothing herein will be considered an election of remedies.

3.5 Submission to Jurisdiction; Waiver of Jury Trial.

(a) Submission to Jurisdiction. Any action, suit or proceeding seeking to enforce any provision of, or based on any matter arising out of or in connection with, this Agreement or the transactions contemplated hereby shall only be brought in any state or federal court sitting in Pittsburgh, Pennsylvania, and each party consents to the exclusive jurisdiction and venue of such courts (and of the appropriate appellate courts therefrom) in any such action, suit or proceeding

and irrevocably waives, to the fullest extent permitted by law, any objection that it may now or hereafter have to the laying of the venue of any such, action, suit or proceeding in any such court or that any such action, suit or proceeding brought in any such court has been brought in an inconvenient forum. Process in any such action, suit or proceeding may be served on any party anywhere in the world, whether within or without the jurisdiction of any such court. Without limiting the foregoing, service of process on such party as provided in Section 3.5 shall be deemed effective service of process on such party.

(b) Waiver of Jury Trial. EACH PARTY ACKNOWLEDGES THAT ANY DISPUTE THAT MAY ARISE OUT OF OR RELATING TO THIS AGREEMENT IS LIKELY TO INVOLVE COMPLICATED AND DIFFICULT ISSUES, AND THEREFORE SUCH PARTY HEREBY EXPRESSLY WAIVES ITS RIGHT TO JURY TRIAL OF ANY DISPUTE BASED UPON OR ARISING OUT OF THIS AGREEMENT OR ANY OTHER AGREEMENTS RELATING HERETO OR ANY DEALINGS AMONG THEM RELATING TO THE TRANSACTIONS CONTEMPLATED HEREBY. THE SCOPE OF THIS WAIVER IS INTENDED TO ENCOMPASS ANY AND ALL ACTIONS, SUITS AND PROCEEDINGS THAT RELATE TO THE SUBJECT MATTER OF THE TRANSACTIONS CONTEMPLATED HEREBY, INCLUDING CONTRACT CLAIMS, TORT CLAIMS, BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. EACH PARTY REPRESENTS THAT (i) NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT IN THE EVENT OF ANY ACTION, SUIT OR PROCEEDING, SEEK TO ENFORCE THE FOREGOING WAIVER, (ii) SUCH PARTY UNDERSTANDS AND WITH THE ADVICE OF COUNSEL HAS CONSIDERED THE IMPLICATIONS OF THIS WAIVER, (iii) SUCH PARTY MAKES THIS WAIVER VOLUNTARILY, AND (iv) SUCH PARTY HAS BEEN INDUCED TO ENTER INTO THIS AGREEMENT BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND REPRESENTATIONS IN THIS SECTION 3.5(b).

3.6 Governing Law. This Agreement will be governed by and construed in accordance with the laws of the Commonwealth of Pennsylvania, without giving effect to any choice of law principles.

3.7 Headings. The article and section headings contained in this Agreement are inserted for convenience only and will not affect in any way the meaning or interpretation of this Agreement.

3.8 Amendments. This Agreement may not be amended or modified without the written consent of the Holders and the Company.

3.9 Extensions; Waivers. Any party may, for itself only, (a) extend the time for the performance of any of the obligations of any other party under this Agreement, (b) waive any inaccuracies in the representations and warranties of any other party contained herein or in any document delivered pursuant hereto and (c) waive compliance with any of the agreements or conditions for the benefit of such party contained herein. Any such extension or waiver will be valid only if set forth in a writing signed by the party to be bound thereby. No waiver by any party of any default, misrepresentation or breach of warranty or covenant hereunder, whether

intentional or not, may be deemed to extend to any prior or subsequent default, misrepresentation or breach of warranty or covenant hereunder or affect in any way any rights arising because of any prior or subsequent such occurrence. Neither the failure nor any delay on the part of any party to exercise any right or remedy under this Agreement shall operate as a waiver thereof, nor shall any single or partial exercise of any right or remedy preclude any other or further exercise of the same or of any other right or remedy.

3.10 Severability. The provisions of this Agreement will be deemed severable and the invalidity or unenforceability of any provision will not affect the validity or enforceability of the other provisions hereof; *provided* that if any provision of this Agreement, as applied to any party or to any circumstance, is judicially determined not to be enforceable in accordance with its terms, the parties agree that the court judicially making such determination may modify the provision in a manner consistent with its objectives such that it is enforceable, and/or to delete specific words or phrases, and in its modified form, such provision will then be enforceable and will be enforced.

3.11 Counterparts; Effectiveness. This Agreement may be executed in two or more counterparts, each of which will be deemed an original but all of which together will constitute one and the same instrument. This Agreement will become effective when one or more counterparts have been signed by each of the parties and delivered to the other parties. For purposes of determining whether a party has signed this Agreement or any document contemplated hereby or any amendment or waiver hereof, only a handwritten original signature on a paper document or a "pdf" or facsimile copy of such a handwritten original signature shall constitute a signature, notwithstanding any law relating to or enabling the creation, execution or delivery of any contract or signature by electronic means.

3.12 Construction. This Agreement has been freely and fairly negotiated among the parties. If an ambiguity or question of intent or interpretation arises, this Agreement will be construed as if drafted jointly by the parties and no presumption or burden of proof will arise favoring or disfavoring any party because of the authorship of any provision of this Agreement. Any reference to any law will be deemed to refer to such law as in effect on the date hereof and all rules and regulations promulgated thereunder, unless the context requires otherwise. The words "include," "includes," and "including" will be deemed to be followed by "without limitation." Pronouns in masculine, feminine, and neuter genders will be construed to include any other gender, and words in the singular form will be construed to include the plural and vice versa, unless the context otherwise requires. The words "this Agreement," "herein," "hereof," "hereby," "hereunder," and words of similar import refer to this Agreement as a whole and not to any particular subdivision unless expressly so limited. The parties intend that each representation, warranty, and covenant contained herein will have independent significance. If any party has breached any covenant contained herein in any respect, the fact that there exists another covenant relating to the same subject matter (regardless of the relative levels of specificity) which the party has not breached will not detract from or mitigate the fact that the party is in breach of the first covenant. Time is of the essence in the performance of this Agreement.

3.13 Attorneys' Fees. If any dispute among any parties arises in connection with this Agreement, the prevailing party in the resolution of such dispute in any action or proceeding will

be entitled to an order awarding full recovery of reasonable attorneys' fees and expenses, costs and expenses (including experts' fees and expenses and the costs of enforcing this Section 3.13) incurred in connection therewith, including court costs, from the non-prevailing party.

3.14 Adjustments for Stock or Unit Splits, Etc. Wherever in this Agreement there is a reference to a specific number of units of the Company's capital stock of any class or series, then, upon the occurrence of any subdivision, combination or stock or unit dividend of such class or series of stock or unit, the specific number of units so referenced in this Agreement will automatically be proportionally adjusted to reflect the effect of such subdivision, combination or stock or unit dividend on the outstanding units of such class or series of stock or units.

[SIGNATURE PAGES FOLLOW]

IN WITNESS HEREOF, the parties hereto have caused this Registration Rights Agreement to be executed by the undersigned, thereunto duly authorized, as of the date first set forth above.

MASTECH DIGITAL, INC.

By: /s/ John J. Cronin
Name: John J. Cronin
Title: Chief Financial Officer

[Signature Page to Registration Rights Agreement – Mastech Digital, Inc.]

ASHOK K. TRIVEDI REVOCABLE TRUST

By: /s/ Ashok K. Trivedi

Name: Ashok K. Trivedi

Title: Trustee

[Signature Page to Registration Rights Agreement – Ashok K. Trivedi Revocable Trust]

**THE REVOCABLE DECLARATION OF TRUST OF SUNIL
WADHWANI**

By: /s/ Sunil Wadhani

Name: Sunil Wadhani

Title: Trustee

[Signature Page to Registration Rights Agreement — The Revocable Declaration of Trust of Sunil Wadhani]

Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 by Chief Executive Officer

I, Vivek Gupta, certify that:

1. I have reviewed this report on Form 10-Q of Mastech Digital, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15(d)-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in case of the annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

MASTECH DIGITAL, INC.

/S/ VIVEK GUPTA

Vivek Gupta
Chief Executive Officer

Date: November 14, 2017

Certification Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002 by Chief Financial Officer

I, John J. Cronin, Jr., certify that:

1. I have reviewed this report on Form 10-Q of Mastech Digital, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15(d)-15(f)) for the registrant and have:
 - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in case of the annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

MASTECH DIGITAL, INC.

/S/ JOHN J. CRONIN, JR.

John J. Cronin, Jr.
Chief Financial Officer

Date: November 14, 2017

**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 Mastech Digital, Inc. (the "Company") on Form 10-Q for the quarter ended September 30, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Vivek Gupta, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) 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/ VIVEK GUPTA

Vivek Gupta
Chief Executive Officer

Date: November 14, 2017

**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 Mastech Digital, Inc. (the "Company") on Form 10-Q for the quarter ended September 30, 2017, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, John J. Cronin, Jr. Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. § 1350, as adopted pursuant to § 906 of the Sarbanes-Oxley Act of 2002, that, to my knowledge:

- (1) The Report fully complies with the requirements of Section 13(a) or 15(d) 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/ JOHN J. CRONIN, JR.

John J. Cronin, Jr.

Chief Financial Officer

Date: November 14, 2017