Digimarc CORP Form 10-Q August 02, 2018

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#### 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 June 30, 2018

OR

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 For the transition period from to

Commission File Number: 001-34108

DIGIMARC CORPORATION

(Exact name of registrant as specified in its charter)

Oregon 26-2828185 (State or other jurisdiction of (I.R.S. Employer

incorporation or organization) Identification No.) 9405 SW Gemini Drive, Beaverton, Oregon 97008

(Address of principal executive offices) (Zip Code)

(503) 469-4800

(Registrant's telephone number, including area code)

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes 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, smaller reporting company, or an 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. (Check one):

Large accelerated filer	Accelerated filer
Non-accelerated filer	(Do not check if a smaller reporting company) Smaller reporting company

Emerging growth company

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

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

As of July 27, 2018, there were 11,880,405 shares of the registrant's common stock, par value \$0.001 per share, outstanding.

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## PART I. FINANCIAL INFORMATION

#### Item 1. Financial Statements. DIGIMARC CORPORATION

#### CONSOLIDATED BALANCE SHEETS

(In thousands, except per share data)

## (UNAUDITED)

	June 30, 2018	December 31, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	\$35,071	\$ 40,823
Marketable securities	21,713	26,915
Trade accounts receivable, net	3,843	6,404
Other current assets	1,982	2,171
Total current assets	62,609	76,313
Property and equipment, net	4,068	4,236
Intangibles, net	6,558	6,381
Goodwill	1,114	1,114
Other assets	403	326
Total assets	\$74,752	\$ 88,370
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and other accrued liabilities	\$1,695	\$ 1,914
Deferred revenue	2,410	3,124
Total current liabilities	4,105	5,038
Deferred rent and other long-term liabilities	944	985
Total liabilities	5,049	6,023
Commitments and contingencies (Note 12)		
Shareholders' equity:		
Preferred stock (par value \$0.001 per share, 2,500 authorized, 10 shares		
issued and outstanding at June 30, 2018 and December 31, 2017)	50	50
Common stock (par value \$0.001 per share, 50,000 authorized, 11,876 and		
11,651 shares issued and outstanding at June 30, 2018 and December 31, 2017,		
respectively)	12	12
Additional paid-in capital	159,160	155,793

Accumulated deficit	(89,519)	(73,508	)
Total shareholders' equity	69,703	82,347	
Total liabilities and shareholders' equity	\$74,752	\$ 88,370	

## CONSOLIDATED STATEMENTS OF OPERATIONS

(In thousands, except per share data)

## (UNAUDITED)

	Three Months Ended June 30, 2018	Three Months Ended June 30, 2017	Six Months Ended June 30, 2018	Six Months Ended June 30, 2017
Revenue:				
Service	\$3,336	\$3,253	\$6,843	\$6,949
Subscription	1,444	1,420	3,022	2,865
License	658	914	1,186	1,864
Total revenue	5,438	5,587	11,051	11,678
Cost of revenue:				
Service	1,548	1,464	3,111	3,099
Subscription	508	534	990	1,090
License	149	122	289	240
Total cost of revenue	2,205	2,120	4,390	4,429
Gross profit	3,233	3,467	6,661	7,249
Operating expenses:				
Sales and marketing	4,757	3,997	9,644	7,989
Research, development and engineering	4,058	3,936	8,005	7,395
General and administrative	2,416	2,239	5,048	4,624
Intellectual property	305	345	620	737
Total operating expenses	11,536	10,517	23,317	20,745
Operating loss	(8,303)	(7,050)	(16,656)	(13,496)
Other income, net	274	116	526	234
Loss before income taxes	(8,029)	(6,934)	(16,130)	(13,262)
Benefit (provision) for income taxes	(9)	(9)	(20)	101
Net loss	\$(8,038)	\$(6,943)	\$(16,150)	\$(13,161)
Earnings (loss) per common share:				
Loss per common share — basic	\$(0.71)	\$(0.68)	\$(1.43)	\$(1.29)
Loss per common share — diluted	\$(0.71)	\$(0.68)	\$(1.43)	\$(1.29)
Weighted average common shares outstanding — basic	11,337	10,266	11,302	10,214
Weighted average common shares outstanding — dilute	d 11,337	10,266	11,302	10,214

## CONSOLIDATED STATEMENTS OF SHAREHOLDERS' EQUITY

(In thousands)

## (UNAUDITED)

			Additional	Total
	Preferred			
	Stock	Common Stock	Paid-in Accumula	ated Shareholders'
	ShareAmount	Shares Amoun	t Capital Deficit	Equity
BALANCE AT DECEMBER 31, 2016	10 \$ 50	10,523 \$ 11	\$120,985 \$ (47,712	) \$ 73,334
Issuance of common stock, net of issuance				
costs		500 —	17,702 —	17,702
Exercise of stock options		59 —	568 —	568
Issuance of restricted common stock		236 —		
Forfeiture of restricted common stock		(7) —		
Purchase and retirement of common stock		(48) —	(1,348) —	(1,348)
Stock-based compensation			3,216 (25	) 3,191
Net loss			— (13,161	) (13,161 )
BALANCE AT JUNE 30, 2017	10 \$ 50	11,263 \$ 11	\$141,123 \$ (60,898	) \$ 80,286
BALANCE AT DECEMBER 31, 2017	10 \$ 50	11,651 \$ 12	\$155,793 \$ (73,508	) \$ 82,347
Exercise of stock options		72 —	914 —	914
Issuance of restricted common stock		210 —		_
Forfeiture of restricted common stock		(19) —		
Purchase and retirement of common stock		(38) —	(1,120) —	(1,120)
Stock-based compensation			3,573 —	3,573
Cumulative effect of the adoption of the				
new revenue standard, net of tax			— 139	139
Net loss			— (16,150	) (16,150 )
BALANCE AT JUNE 30, 2018	10 \$ 50	11,876 \$ 12	\$159,160 \$ (89,519	) \$ 69,703

## CONSOLIDATED STATEMENTS OF CASH FLOWS

(In thousands)

## (UNAUDITED)

	Six Months Ended June 30, 2018	Six Months Ended June 30, 2017	
Cash flows from operating activities:			
Net loss	\$(16,150)	\$(13,161	)
Adjustments to reconcile net loss to net cash used in			
operating activities:	- 64		
Depreciation, amortization and write-off of property and equipment	764	664	
Amortization and write-off of intangibles	287	486	
Stock-based compensation	3,480	3,093	
Changes in operating assets and liabilities:			
Trade accounts receivable	2,561	1,181	
Other current assets	210	(163	)
Other assets	(35)	50	
Accounts payable and other accrued liabilities	(248)	336	
Deferred revenue	(658)	(835	)
Net cash used in operating activities	(9,789)	(8,349	)
Cash flows from investing activities:			
Purchase of property and equipment	(557)	(938	)
Capitalized patent costs	(402)	(406	)
Maturity of marketable securities	20,839	28,636	
Purchase of marketable securities	(15,637)	(13,261	)
Net cash provided by investing activities	4,243	14,031	
Cash flows from financing activities:			
Issuance of common stock, net of issuance costs		17,702	
Exercise of stock options	914	568	
Purchase of common stock	(1,120)	(1,348	)
Net cash provided by (used in) financing activities	(206)	16,922	
Net increase (decrease) in cash and cash equivalents	(5,752)	22,604	
Cash and cash equivalents at beginning of period	40,823	11,638	
Cash and cash equivalents at end of period	\$35,071	\$34,242	
Supplemental disclosure of cash flow information:			
Cash received (paid) for income taxes, net	\$98	\$(25	)
Supplemental schedule of non-cash investing activities:			-
Property and equipment and patent costs in accounts payable	\$8	\$(22	)
Stock-based compensation capitalized to software and patent costs	\$93	\$98	/

## NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(In thousands, except per share data)

(UNAUDITED)

#### 1. Description of Business and Significant Accounting Policies

#### **Description of Business**

Digimarc Corporation ("Digimarc" or the "Company"), an Oregon corporation, enables governments, banks and businesses around the world to automatically and reliably identify and interact with virtually any media. The Company has pioneered the Digimarc® Intuitive Computing Platform (ICP<sup>TM</sup>), a comprehensive set of technologies for identifying, discovering and interacting with digitally-enhanced media. The platform includes Digimarc Barcode, a proprietary method for imperceptibly enhancing packaging, print, images, thermal labels, audio and other objects with data that is detected by enabled devices, such as smart phones, computers, barcode scanners and machine-vision equipment. Digimarc Discover software enables an ecosystem of connected devices to easily identify content or materials and deliver information.

Interim Consolidated Financial Statements

Our significant accounting policies are detailed in "Note 1: Description of Business and Summary of Significant Accounting Policies" of our Annual Report on Form 10-K for the year ended December 31, 2017. Significant changes to our accounting policies as a result of adopting Accounting Standards Codification ("ASC") 606, "Revenue from Contracts with Customers," effective January 1, 2018, are discussed in Note 3 below.

The accompanying interim consolidated financial statements have been prepared from the Company's records without audit and, in management's opinion, include all adjustments (consisting of only normal recurring adjustments) necessary to fairly reflect the financial condition and the results of operations for the periods presented. Certain information and note disclosures normally included in financial statements prepared in accordance with accounting principles generally accepted in the United States ("U.S. GAAP") have been condensed or omitted in accordance with the rules and regulations of the U.S. Securities and Exchange Commission ("SEC").

These interim consolidated financial statements should be read in conjunction with the audited consolidated financial statements included in the Company's Annual Report on Form 10-K for the year ended December 31, 2017, which was filed with the SEC on February 22, 2018. The results of operations for the interim periods presented in these consolidated financial statements are not necessarily indicative of the results for the full year.

#### Reclassifications

Certain prior period amounts in the accompanying consolidated financial statements and notes thereto have been reclassified to conform to current period presentation. These reclassifications had no material effect on the results of operations or financial position for any period presented.

## Contingencies

The Company evaluates all pending or threatened contingencies or commitments, if any, that are reasonably likely to have a material adverse effect on the Company's operations or financial position. The Company assesses the probability of an adverse outcome and determines if it is remote, reasonably possible or probable as defined in accordance with the provisions of ASC 450, "Contingencies." If information available prior to the issuance of the financial statements indicates that it is probable that an asset has been impaired or a liability has been incurred at the date of the financial statements, and the amount of the loss, or the range of probable loss can be reasonably estimated, then the loss is accrued and charged to operations. If no accrual is made for a loss contingency because one or both of the conditions pursuant to ASC 450 are not met, but the probability of an adverse outcome is at least reasonably possible, the Company will disclose the nature of the contingency and provide an estimate of the possible loss or range of loss, or state that such an estimate cannot be made.

#### Goodwill

The Company tests goodwill for impairment annually in June and whenever events or changes in circumstances indicate that the carrying value may exceed the fair value. The Company operates as a single reporting unit. The Company estimated the fair value of its single reporting unit using a market approach, which takes into account the Company's market capitalization plus an estimated control premium.

In connection with the Company's annual impairment test of goodwill as of June 30, 2018 and 2017, it was concluded that there was no impairment to goodwill as the estimated fair value of the Company's reporting unit substantially exceeded the carrying value.

## Accounting Pronouncements Adopted

In May 2014, the Financial Accounting Standards Board ("FASB") issued Accounting Standards Update ("ASU") No. 2014-09, "Revenue from Contracts with Customers (Topic 606)." ASU No. 2014-09 provides specific guidance to recognize revenue to depict the transfer of promised goods or services to customers in an amount that reflects the consideration to which the entity expects to be entitled in exchange for those goods or services. The ASU replaces most existing revenue recognition guidance in U.S. GAAP. In August 2015, the FASB issued ASU No. 2015-14 to defer the effective date of the new revenue standard for public entities by one-year to annual reporting periods beginning after December 31, 2017, and interim periods beginning in the first interim period within the year of adoption. The guidance permits the use of either the retrospective or cumulative effect transition method. The Company adopted the new standard on January 1, 2018 and elected to use the cumulative effect transition method. Upon adoption, the Company recorded a \$139 increase to opening retained earnings to reflect the impact of adopting the new standard using the cumulative effect transition method. The adoption of the standard did not have a material impact on the Company's financial condition, results of operations and cash flows.

## Accounting Pronouncements Issued But Not Yet Adopted

In February 2016, the FASB issued ASU No. 2016-02, "Leases (Topic 842)," which supersedes Topic 840, Leases. ASU No. 2016-02 increases the transparency and comparability of organizations by recognizing lease assets and lease liabilities on the balance sheet and disclosing key information about leasing arrangements. This guidance requires that operating leases recognize a right-of-use asset and a lease liability measured at the present value of the lease payments in the statement of financial position, recognize a single lease cost allocated over the lease term on a straight-line basis, and classify all cash payments within operating activities in the statement of cash flows. The amendments in this update are effective for fiscal years beginning after December 31, 2018, and interim periods beginning in the first interim period within the year of adoption. Early adoption is permitted. In transition, lessees and lessors are required to recognize and measure leases at the beginning of the earliest period presented using a modified retrospective approach, which includes a number of optional practical expedients that entities may elect to apply. Although the Company is currently assessing the potential future impact of adopting this standard, the Company expects the primary impact will be the recognition, on a discounted basis, of its minimum commitments under non-cancelable operating leases on its consolidated balance sheets, resulting in the recording of right of use assets and lease obligations. The Company's Annual Report on Form 10-K for the year ended December 31, 2017.

#### 2. Fair Value of Financial Instruments

The estimated fair values of the Company's financial instruments, which include cash equivalents, accounts receivable, accounts payable and other accrued liabilities approximate their carrying values due to the short-term nature of these instruments. The Company records marketable securities at amortized cost, which approximates fair value.

The Company's fair value hierarchy for its cash equivalents and marketable securities as of June 30, 2018 and December 31, 2017, respectively, was as follows:

	Level		Lev	el
June 30, 2018	1	Level 2	3	Total
Money market securities	\$1,232	\$—	\$	-\$1,232
Commercial paper		41,037		— 41,037
Corporate notes		7,938		— 7,938
Federal agency notes		3,008		— 3,008
U.S. treasuries		2,002		— 2,002
Total	\$1,232	\$53,985	\$	-\$55,217

	Level		Lev	vel
December 31, 2017	1	Level 2	3	Total
Money market securities	\$2,197	\$—	\$	-\$2,197
Commercial paper		49,834		— 49,834
Federal agency notes		10,715		— 10,715
U.S. treasuries		1,996		— 1,996
Corporate notes		1,934		— 1,934
Total	\$2,197	\$64,479	\$	-\$66,676

The fair value maturities of the Company's cash equivalents and marketable securities as of June 30, 2018 are as follows:

	Maturitie	s by Period				
		Less than	1-5	5 - 10	More than	
	Total	1 year	years	years	10 years	
Cash equivalents and marketable securities	\$55,217	\$55,217	\$ -	-\$ -	-\$	-

The Company considers all highly liquid marketable securities with original maturities of 90 days or less at the date of acquisition to be cash equivalents. Cash equivalents include money market funds and commercial paper totaling \$33,504 and \$39,761 at June 30, 2018 and December 31, 2017, respectively. Cash equivalents are carried at cost or amortized cost, which approximates fair value.

#### 3. Revenue Recognition

The Company adopted ASC 606 "Revenue from Contracts with Customers" using the cumulative effect method with a date of initial application of January 1, 2018. Therefore, the comparative period information has not been adjusted and continues to be reported under ASC 605 "Revenue Recognition" and ASC 985 "Software."

#### ASC 606

Effective January 1, 2018, revenue is recognized in accordance with ASC 606 by applying the following steps:

- Step 1: Identify the contract(s) with a customer.
- Step 2: Identify the performance obligations in the contract.
- Step 3: Determine the transaction price.
- Step 4: Allocate the transaction price to the performance obligations in the contract.

Step 5: Recognize when (or as) the entity satisfies a performance obligation.

The Company derives its revenue primarily from professional services, subscriptions and licensing of its intellectual property. Applicable revenue recognition criteria are considered separately for each performance obligation as follows:

Service revenue consists primarily of software development and consulting services. The majority of service revenue arrangements are structured as time and materials consulting agreements. Revenue for development and consulting services is recognized as the services are performed. Billing for services rendered generally occurs within one month after the services are provided.

Subscription revenue includes revenue derived from the sale of Digimarc Discover, Digimarc Barcode and Guardian products and services, is generally recurring, paid in advance and recognized over the term of the subscription, which

is generally one to three years.

License revenue originates primarily from licensing the Company's intellectual property where the Company receives license fees and/or royalties as its income stream. License fees are recognized when the customer has the right to the intellectual property and the license period has begun and royalties are recognized in the quarter in which the royalty was earned.

Some customer arrangements contain multiple performance obligations such as professional services, software licenses, and maintenance and support fees. The Company accounts for individual products and services separately if they are distinct. The consideration is allocated between distinct products and services based on their stand-alone selling prices. For items that are not sold separately, the Company estimates the standalone selling price based on reasonably available information, including market conditions, specific factors affecting the Company, and information about the customer.

ASC 605 and ASC 985

For the comparative periods, revenue was recognized under ASC 605 and ASC 985 when the following four criteria were met:

(i) persuasive evidence of an arrangement exists, (ii) delivery has occurred,

(iii) the fee is fixed or determinable, and

(iv) collection is reasonably assured or probable.

All revenue recognized in the Consolidated Statements of Operations is considered to be revenue from contracts with customers.

The following table provides information about disaggregated revenue by major product line in the Company's single reporting segment:

	Three	Six
	Months	Months
	Ended	Ended
	June 30,	June 30,
	2018	2018
Service	\$3,336	\$6,843
Subscription		
Guardian	888	1,877
Digimarc Discover and Digimarc Barcode	556	1,145
License	658	1,186
Total	\$ 5,438	\$11,051

The Company has contract assets from contracts with customers that are classified as "trade accounts receivable." Financial information about trade accounts receivable is included in Note 8.

The Company has contract liabilities from contracts with customers which are classified as "deferred revenue." Deferred revenue consists of billings in advance for professional services, subscriptions and licenses for which the performance obligation has not been satisfied.

The following table provides information about contract liabilities from contracts with customers:

	June 30,	December 31,
	2018	2017
Deferred revenue, current	\$2,410	\$ 3,124
Deferred revenue, long term	22	42
Total	\$ 2,432	\$ 3,166

In addition to deferred revenue, the Company has backlog of \$32,907 representing the transaction price from contractual obligations that are unsatisfied or partially unsatisfied as of June 30, 2018.

4. Segment Information

Geographic Information

The Company derives its revenue from a single reporting segment: media management solutions. Revenue is generated in this segment through development services, subscriptions and licensing of intellectual property. The Company markets its products in the United States ("U.S.") and in non-U.S. countries through its sales and licensing personnel and channel partners.

Revenue by geographic area, based upon the "bill-to" location, was as follows:

	Three	Three	Six	Six
	Months	Months	Months	Months
	Ended	Ended	Ended	Ended
	June 30,	June 30,	June 30,	June 30,
	2018	2017	2018	2017
Domestic	\$1,289	\$1,253	\$2,740	\$2,754
International (1)	4,149	4,334	8,311	8,924
Total	\$5,438	\$ 5,587	\$11,051	\$11,678

(1)Revenue from the Central Banks, consisting of a consortium of central banks around the world, is classified as international revenue. Reporting revenue by country for this customer is not practicable.

## Major Customers

Customers per Regulation S-K, Item 101(c)(1)(vii) are as follows:

	Three		Three		Six		Six	
	Months		Months		Months	5	Month	IS
	Ended		Ended		Ended		Ended	
	June 30	,	June 30	),	June 30	),	June 3	0,
	2018		2017		2018		2017	
Central Banks	67	%	63	%	67	%	63	%

Long-lived assets by geographical area

The Company's long-lived assets are all domestic, domiciled in the U.S.

#### 5. Stock-Based Compensation

Stock-based compensation includes expense charges for all stock-based awards to employees and directors. These awards include stock option grants and restricted stock awards.

Stock-based compensation expense related to internal labor is capitalized to software and patents based on direct labor hours charged to capitalized software and patent costs.

Determining Fair Value

#### Stock Options

Valuation and Amortization Method. The Company estimates the fair value of stock options on the date of grant (measurement date) using the Black-Scholes option valuation model. The Company amortizes the fair value of all awards on a straight-line basis over the requisite service periods, which are generally the vesting periods.

Expected Life. The expected life of awards granted represents the period of time that they are expected to be outstanding. The Company determines the expected life based on historical experience with similar awards, giving consideration to the contractual terms and vesting schedules of the awards. Stock options granted generally vest over three years and have contractual terms of ten years.

Expected Volatility. The Company estimates the volatility of its common stock at the date of grant based on the historical volatility of its common stock based on historical prices over the most recent period commensurate with the expected life of the award.

Risk-Free Interest Rate. The Company determines the risk-free interest rate using current U.S. treasury yields for bonds with a maturity commensurate with the expected life of the award.

Expected Dividend Yield. The expected dividend yield is derived by the Company's expected annual dividend rate over the expected term divided by the fair value of the Company's common stock at the grant date.

There were no stock options granted during the three and six months ended June 30, 2018 and 2017.

Restricted Stock

The fair value of restricted stock awarded is based on the fair market value of the Company's common stock on the date of the grant (measurement date), and is recognized over the vesting period of the award using the straight-line method. Restricted stock awards granted generally vest over three to four years for employee grants and one to three years for director grants.

#### Stock-based Compensation

	Three Months Ended June 30,	Three Months Ended June 30,	Six Months Ended June 30,	Six Months Ended June 30,
	2018	2017	2018	2017
Stock-based compensation:				
Cost of revenue	\$167	\$175	\$ 322	\$351
Sales and marketing	411	342	756	710
Research, development and engineering	350	354	648	662
General and administrative	814	637	1,615	1,210
Intellectual property	67	82	139	160
Stock-based compensation expense	1,809	1,590	3,480	3,093
Capitalized to software and patent costs	49	53	93	98
Total stock-based compensation	\$ 1,858	\$ 1,643	\$3,573	\$ 3,191

The following table sets forth total unrecognized compensation cost related to non-vested stock-based awards granted under all equity compensation plans:

	As of	As of
	June 30,	December 31,
	2018	2017
Total unrecognized compensation costs	\$15,876	\$ 13,669

Total unrecognized compensation costs will be adjusted for any future forfeitures if and when they occur.

The Company expects to recognize the total unrecognized compensation costs as of June 30, 2018 for stock options and restricted stock over weighted average periods through June 2022 as follows:

StockRestrictedOptionsStockWeighted average period1.25 years1.53 years

As of June 30, 2018, under all of the Company's stock-based compensation plans, equity awards to purchase an additional 1,780 shares were authorized for future grants under the plans. The Company issues new shares upon option exercises.

Stock Option Activity

The following table reconciles the outstanding balance of stock options:

		Weighted Average	Weighted Average	Aggregate
Three months ended June 30, 2018:	Options	Exercise Price	Grant Date Fair Value	Intrinsic Value
Outstanding at March 31, 2018 Granted	469	\$ 26.38	\$ 12.10	
Exercised	(26)	) 13.62	7.65	
Forfeited or expired	(20)			
Outstanding at June 30, 2018	443	\$ 27.13	\$ 12.37	\$ 915

		Weighted Average	Weighted Average Grant	Aggregate
		Exercise	Date	Intrinsic
Six months ended June 30, 2018:	Options	Price	Fair Value	Value
Outstanding at December 31, 2017	515	\$ 25.13	\$ 11.64	
Granted				
Exercised	(72)	12.78	7.14	
Forfeited or expired		_		
Outstanding at June 30, 2018	443	\$ 27.13	\$ 12.37	\$ 915
Exercisable at June 30, 2018	293	\$ 25.41		\$ 915
Unvested at June 30, 2018	150	\$ 30.50		\$ —

The aggregate intrinsic value is based on the closing price of \$26.80 per share of Digimarc common stock on June 30, 2018, which would have been received by the optionees had all of the options with exercise prices less than \$26.80 per share been exercised on that date.

Restricted Stock Activity

The following table reconciles the unvested balance of restricted stock:

	Number of	Weighted Average Grant Date
Three months ended June 30, 2018:	Shares	Fair Value
Unvested balance, March 31, 2018	552	\$ 29.01
Granted	32	\$ 28.94
Vested	(70)	\$ 28.87
Forfeited	(9)	\$ 29.35
Unvested balance, June 30, 2018	505	\$ 29.02

	Number of	Weighted Average Grant Date
Six months ended June 30, 2018:	Shares	Fair Value
Unvested balance, December 31, 2017	426	\$ 28.44
Granted	210	\$ 30.09
Vested	(112	\$ 28.85
Forfeited	(19	) \$ 28.84
Unvested balance, June 30, 2018	505	\$ 29.02

The following table indicates the fair value of all restricted stock awards that vested during the three and six months ended June 30, 2018 and 2017:

	Three	Three	Six	Six
	Months	Months	Months	Months
	Ended	Ended	Ended	Ended
	June 30,	June 30,	June 30,	June 30,
	2018	2017	2018	2017
Fair value of restricted stock awards vested	\$2,016	\$2,214	\$3,272	\$ 3,491

6. Shareholders' Equity

In June 2017, the Company sold 500 shares of its common stock in a registered direct offering to a certain investor at a price of \$35.55 per share. The offering was made without an underwriter or placement agent. The Company received \$17,775 of cash proceeds from the offering, and paid \$72 in stock issuance costs.

#### 7. Earnings Per Common Share

The Company calculates basic and diluted earnings per common share in accordance with ASC 260 "Earnings Per Share," using the two-class method because the Company's unvested restricted stock is a participating security since these awards contain non-forfeitable rights to receive dividends. Under the two-class method, earnings are allocated to each class of common stock and participating security as if all of the earnings for the period had been distributed.

Basic earnings per common share excludes dilution and is calculated by dividing earnings to common shares by the weighted-average number of common shares outstanding for the period. Diluted earnings per common share is calculated by dividing earnings to common shares by the weighted-average number of common shares, as adjusted for the potentially dilutive effect of stock options.

The following table reconciles earnings (loss) per common share for the three and six months ended June 30, 2018 and 2017:

	Three Months Ended June 30, 2018	Three Months Ended June 30, 2017	Six Months Ended June 30, 2018	Six Months Ended June 30, 2017
Basic Earnings (Loss) per Common Share:				
Numerator:				
Net loss	\$(8,038)	\$(6,943)	\$(16,150)	\$(13,161)
Distributed earnings to common shares				_
Distributed earnings to participating securities				
Total distributed earnings				
Undistributed loss allocable to common shares	(8,038)	(6,943)	(16,150)	(13,161)
Undistributed earnings allocable to participating securities			_	
Total undistributed loss	(8,038)	(6,943)	(16,150)	(13,161)
Loss to common shares — basic	\$(8,038)	\$(6,943)	\$(16,150)	\$(13,161)
Denominator				
Weighted average common shares outstanding — basic	11,337	10,266	11,302	10,214
Basic earnings (loss) per common share	\$(0.71)	\$(0.68)	\$(1.43)	\$(1.29)

Three	Three	Six	Six
Months	Months	Months	Months
Ended	Ended	Ended	Ended
June 30,	June 30,	June 30,	June 30,

	2018	2017	2018	2017
Diluted Earnings (Loss) per Common Share:				
Numerator:				
Loss to common shares — basic	\$(8,038)	\$(6,943)	\$(16,150)	\$(13,161)
Undistributed earnings allocated to participating securities				
Undistributed earnings reallocated to participating securities				
Loss to common shares — diluted	\$(8,038)	\$(6,943)	\$(16,150)	\$(13,161)
Denominator				
Weighted average common shares outstanding — basic	11,337	10,266	11,302	10,214
Dilutive effect of stock options				
Weighted average common shares outstanding — diluted	11,337	10,266	11,302	10,214
Diluted earnings (loss) per common share	\$(0.71)	\$(0.68)	\$(1.43)	\$(1.29)

There were 275 common stock equivalents related to stock options that were anti-dilutive and excluded from diluted earnings per common share calculations for each of the three and six months ended June 30, 2018, because their exercise prices were higher than the average market price of the underlying common stock for the periods.

There were 0 and 75 common stock equivalents related to stock options that were anti-dilutive and excluded from diluted earnings per common share for the three and six months ended June 30, 2017, respectively, because their exercise prices were higher than the average market price of the underlying common stock for the periods.

There were 0 common stock equivalents related to stock options that were anti-dilutive and excluded from diluted earnings per common share calculations for each of the three and six months ended June 30, 2018, because the Company incurred a net loss for the periods.

There were 131 and 125 common stock equivalents related to stock options that were anti-dilutive and excluded from diluted earnings per common share calculations for the three and six months ended June 30, 2017, respectively, because the Company incurred a net loss for the periods.

8. Trade Accounts Receivable

Trade Accounts Receivable

Trade accounts receivable are recorded at the invoiced amount.

	June 30, 2018	December 31, 2017
Trade accounts receivable	\$ 3,858	\$ 6,419
Allowance for doubtful accounts	(15)	(15)
Trade accounts receivable, net	\$3,843	\$ 6,404
Unpaid deferred revenue included in trade		
accounts receivable	\$ 995	\$ 2,217

#### Allowance for doubtful accounts

The allowance for doubtful accounts is the Company's best estimate of the amount of probable credit losses in the Company's existing trade accounts receivable. The Company determines the allowance based on historical write-off experience and current information. The Company reviews its allowance for doubtful accounts each reporting period. Account balances are charged against the allowance after all means of collection have been exhausted and the potential for recovery is considered remote.

#### Unpaid deferred revenue

The unpaid deferred revenue that is included in trade accounts receivable is billed in accordance with the provisions of the contracts with the Company's customers. Unpaid deferred revenue from the Company's cash-basis customers is not included in trade accounts receivable nor deferred revenue.

#### Major customers

The following customers accounted for 10% or more of trade accounts receivable, net:

	June 30	),	December 31,					
	2018		2017					
Central Banks	56	%	47	%				

9. Property and Equipment

Property and equipment are stated at cost. Repairs and maintenance are charged to expense when incurred.

Depreciation on property and equipment is calculated using the straight-line method over the estimated useful lives of the assets, generally two to ten years. Leasehold improvements are amortized using the straight-line method over the shorter of the estimated useful life or the lease term.

	June 30,	December 31,
	2018	2017
Office furniture and fixtures	\$1,575	\$ 1,551
Software	3,478	3,068
Equipment	4,480	4,390
Leasehold improvements	1,721	1,720
Gross property and equipment	11,254	10,729
Less accumulated depreciation and amortization	(7,186)	(6,493)
Property and equipment, net	\$4,068	\$ 4,236

#### 10. Intangibles

Intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. No impairment charges were recorded for the six months ended June 30, 2018 and 2017.

Amortization of capitalized patent costs associated with the application and award of patents in the U.S. and various other countries are capitalized and amortized on a straight-line basis over the term of the patents as determined at the award date, which varies depending on the pendency period of the application, generally approximating seventeen years.

Amortization of intangible assets acquired is calculated using the straight-line method over the estimated useful lives of the assets.

	Estimated Life (years)	June 30, 2018	December 31, 2017
Capitalized patent costs	17-20	\$8,402	\$ 7,978
Intangible assets acquired:			
Purchased patents and intellectual property	3-10	250	250
Existing technology	5	1,560	1,560
Customer relationships	7	290	290
Backlog	2	760	760
Tradenames	3	290	290
Non-solicitation agreements	1	120	120
Gross intangible assets		11,672	11,248
Accumulated amortization		(5,114)	(4,867)
Intangibles, net		\$6,558	\$ 6,381

## 11. Income Taxes

The benefit (provision) for income taxes for the six months ended June 30, 2018 and 2017 reflects current taxes, deferred taxes, and withholding taxes. The effective tax rates for the six months ended June 30, 2018 and 2017 were 0% and 1%, respectively. The valuation allowance against net deferred tax assets as of June 30, 2018 was \$37,880, an increase of \$5,555 from \$32,325 as of December 31, 2017.

The Company adopted the provisions of ASU No. 2016-09, "Compensation – Stock Compensation (Topic 718)," effective January 1, 2017. Deferred tax assets of \$6,219 were recorded for previously unrecognized excess tax benefits as of December 31, 2016, which were offset by \$6,219 of valuation allowance. Excess tax benefits of \$186 and \$711 were recognized in the provision for income taxes for the three and six months ended June 30, 2018, respectively, which were offset by \$186 and \$711 of valuation allowance, respectively. Excess tax benefits of \$923 and \$1,101 were recognized in the provision for income taxes for the three and six months ended June 30, 2017, respectively, which were offset by \$923 and \$1,101 of valuation allowance, respectively.

The U.S. enacted tax reform legislation on December 22, 2017 commonly known as the Tax Cuts and Jobs Act, ("the Act"), resulting in significant modifications to existing U.S. tax law. The provisions of the Act effective in 2018 have been recorded as applicable as of June 30, 2018.

## 12. Commitments and Contingencies

Certain of the Company's product license and services agreements include an indemnification provision for claims from third parties relating to the Company's intellectual property. Such indemnification provisions are accounted for in accordance with ASC 450 "Contingencies." To date, there have been no claims made under such indemnification provisions.

The Company is subject from time to time to other legal proceedings and claims arising in the ordinary course of business. At this time, the Company does not believe that the resolution of any such matters will have a material adverse effect on its financial position, results of operations or cash flows.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations The following Management's Discussion and Analysis of Financial Condition and Results of Operations contains forward-looking statements relating to future events or the future financial performance of Digimarc that involve risks and uncertainties. Our actual results could differ materially from those anticipated in these forward-looking statements. Please see the discussion regarding forward-looking statements included in this Quarterly Report on Form 10-Q under the caption "Safe Harbor Statement under the Private Securities Litigation Reform Act of 1995."

The following discussion should be read in conjunction with our consolidated financial statements and the related notes and other financial information appearing elsewhere in this Quarterly Report on Form 10-Q. Readers are also urged to carefully review and consider the disclosures made in Part II, Item 1A (Risk Factors) of this Quarterly Report on Form 10-Q and in the audited consolidated financial statements and related notes included in our Annual Report on Form 10-K for the year ended December 31, 2017 filed on February 22, 2018 (our "2017 Annual Report"), and other reports and filings we have made with the U.S. Securities and Exchange Commission ("SEC").

Unless the context otherwise requires, references in this Quarterly Report on Form 10-Q to "Company," "Digimarc," "we," "our" and "us" refer to Digimarc Corporation.

All dollar amounts are in thousands except per share amounts or unless otherwise noted. Percentages within the following tables included in this section may not sum to 100% due to rounding.

Digimarc, Digimarc Barcode, Digimarc Discover and Guardian are registered trademarks of Digimarc Corporation. This Quarterly Report on Form 10-Q also includes trademarks and trade names owned by other parties, and all other such trademarks and trade names mentioned in this Quarterly Report on Form 10-Q are the property of their respective owners.

## Overview

Digimarc Corporation, an Oregon corporation incorporated in 2008, enables governments, banks and businesses around the world to automatically and reliably identify and interact with virtually any media. We have pioneered the Digimarc® Intuitive Computing Platform (ICP<sup>TM</sup>), a comprehensive set of technologies for identifying, discovering and interacting with digitally-enhanced media. The platform includes Digimarc Barcode, a proprietary method for imperceptibly enhancing packaging, print, images, thermal labels, audio and other objects with data that is detected by enabled devices, such as smart phones, computers, barcode scanners and machine-vision equipment. Digimarc Discover software enables an ecosystem of connected devices to easily identify content or materials and deliver information.

Our media identification and discovery innovations enable our business partners to create numerous applications across a wide range of media content, including solutions that:

Improve the speed of retail checkout;

Provide simple and intuitive mobile customer engagement experiences in stores and at home;

Provide efficient and reliable identification of consumer packaged goods by retail associates in stores for inventory management and restocking;

Quickly and reliably identify and effectively manage music, movies, television programming, digital images,

e-publications, documents and other printed materials, especially in light of non-linear distribution over the Internet; Deter counterfeiting of money, media and goods, and piracy of e-publications, movies and music;

Support new digital media distribution models and methods to monetize media content;

Leverage the power of ubiquitous computing to instantly link consumers to a wealth of information and/or interactive experiences related to the media and objects they encounter each day;

Provide consumers with more choice and access to media content when, where and how they want it;

Enhance imagery and video by associating metadata or authenticating media content for government and commercial uses; and

Better secure identity documents to enhance national security and combat identity theft and fraud. 18

Our Intuitive Computing Platform has a proprietary foundation in signal processing innovation known as "digital watermarking," which allows imperceptible digital information to be embedded in all forms of digitally designed, produced or distributed media content and many physical objects, including photographs, movies, music, television, personal identification documents, financial instruments, industrial parts and product packages. We refer to this embedded information as the Digimarc Barcode. This digital information can be detected and read by a wide range of computers, smartphones, tablets and other digital devices enabled with our proprietary reading software, which we refer to as Digimarc Discover.

Our inventions allow our business partners and customers to provide persistent digital identities for virtually any media content that is digitally processed at some point during its lifecycle. Our technology can be applied to images, video, and audio to supply a wide range of consumer engagement, media management and security solutions across multiple consumer and government industry sectors. Over the years our enabling software and business processes, and associated intellectual property portfolio have grown to encompass many related technologies.

We provide our solutions directly and through our business partners. Our inventions provide a powerful element of document security, giving rise to a long-term relationship with a consortium of central banks (the "Central Banks"), and many leading companies in the information technology industry. We and our business partners have successfully propagated the use of our technology in music, movies, television broadcasts, digital images, e-publications and printed materials. Digimarc Barcodes have been used in these applications to improve media rights and asset management, reduce piracy and counterfeiting losses, improve marketing programs, permit more efficient and effective distribution of valuable media content and enhance consumer entertainment and commercial experiences.

Digimarc Barcodes can be used to enhance all forms of media and are generally imperceptible to human senses, but quickly detected by computers, networks or other digital devices like smartphones and tablets. Unlike traditional barcodes and tags, our solution does not require content owners to give up valuable visual space on their media content; nor does it affect the overall layout or aesthetics of their media content. Digimarc Barcodes are generally imperceptible in normal use and do all that visible barcodes do, but perform better. Our Digimarc Discover platform delivers a range of rich media experiences to its readers on their smartphones or tablets across multiple media formats, including print, audio, video and packaging. Unique to the Digimarc Discover platform is its seamless multi-modal use of various content identification technologies as needed, including Digimarc Barcode when present.

Banknote counterfeit deterrence was the first commercially successful large scale use of our technologies. Innovations based on our existing digital watermarking technology and experience have been leveraged to create new products to deter counterfeiting and tampering of driver licenses and other government-issued secure credentials. In parallel, our business partners, under patent or technology licenses from us, are delivering digital watermarking solutions to track and monitor the distribution of music, images, television and movies to consumers.

In January 2014, we introduced Digimarc Barcodes for use in consumer product packaging. These Digimarc Barcodes can contain the same information found in traditional universal product codes ("UPC"). The UPC information is invisibly repeated multiple times over the entire package surface making checkout faster and easier for both customers and cashiers. We partnered with Datalogic, a global leader in automatic data capture and industrial automation markets and producer of barcode readers, in introducing the Digimarc Barcode to the consumer product packaging market. Since then, additional scanner vendors and other channel partners have announced support for the Digimarc Barcode platform. Digimarc Barcodes can also connect mobile-enabled consumers directly from packaging to engaging mobile experiences such as additional product information, special offers, recommendations, reviews, social networks and more.

In January 2016, Digimarc and GS1 US, the United States ("U.S.") operation of the organization that maintains the global standards for barcodes, announced a broad collaboration to help the industries served by GS1 to make effective

use of Digimarc Barcode. GS1 US educates, trains and provides access to services to their 300,000 member businesses. Among other things, Digimarc and GS1 US are working to improve product identification for retailers and consumers with brand-certified, accurate product information via Digimarc Barcodes. In September 2016, Digimarc announced a similar collaboration with GS1 Germany.

In January 2018, we introduced Digimarc Barcode for use in thermal labels for fresh food products. These Digimarc Barcodes contain GS1 Application Identifiers for fresh foods, allowing retailers to dynamically adjust pricing on soon-to-be-expired fresh foods or sell items at a discount, instead of discarding them. Retail thermal labels with Digimarc Barcode scan even when ripped, creased, smudged or damaged, making checkout faster and easier for both customers and cashiers. We have partnered with multiple industry leading retail scale label manufacturers to introduce thermal labels enabled with Digimarc Barcode to the retail industry. Thermal labels enabled with Digimarc Barcode can also provide consumers an engaging mobile experience similar to Digimarc Barcode for consumer product packaging.

Our intellectual property contains many innovations in digital watermarking, content recognition (sometimes referred to as "fingerprinting"), digital rights management and related fields. To protect our inventions, we have implemented an extensive intellectual property protection program that relies on a combination of patent, copyright, trademark and trade secret laws, and nondisclosure agreements and other contracts. As a result, we believe we have one of the world's most extensive patent portfolios in digital watermarking and related fields, with over 1,100 U.S. and foreign patents granted and applications pending as of June 30, 2018. We continue to develop and broaden our portfolio in the fields of media identification and management technology and related applications and systems. We devote significant resources to developing and protecting our inventions and continuously seek to identify and evaluate potential licensees for our patents. The patents in our portfolio each have a life of approximately 20 years from the effective filing date of the patent, and up to 17 years after the patent has been granted.

The market for patent licensing has become more challenging in recent years. As a result, we have shifted our focus from direct monetization through enforcement and licensing to facilitating progress toward the realization of our vision to enrich everyday living via pervasive, intuitive computing by:

encouraging large scale adoption of our technologies by industry leaders;

increasing the scale and rate of growth of our products and services business; and

laying a foundation for continuing innovation.

For a discussion of activities and costs related to our research and development, see "Results of Operations –Summary – Research, development and engineering."

Critical Accounting Policies and Estimates

Detailed information about our critical accounting policies and estimates is set forth in Part III, Item 15 of our 2017 Annual Report ("Exhibits and Financial Statement Schedules"), in "Note 1: Description of Business and Summary of Significant Accounting Policies," which is incorporated by reference into this Quarterly Report on Form 10-Q.

Effective January 1, 2018, we adopted Accounting Standards Codification 606, Revenue from Contracts with Customers (Topic 606). Additional information is included in "Note 3: Revenue Recognition" of our Notes to Consolidated Financial Statements in this Quarterly Report on Form 10-Q.

## **Results of Operations**

The following table presents statements of operations data for the periods indicated as a percentage of total revenue. Unless otherwise indicated, all references in this Management's Discussion and Analysis of Financial Condition and Results of Operations to the three and six month periods relate to the three and six months ended June 30, 2018 and all changes discussed with respect to such periods reflect changes compared to the three and six months ended June 30, 2017.

Revenue:	Three Months Ended June 30, 2018 Percentage	es are perc	Three Months Ended June 30, 2017 ent of total rev	enue	Six Months Ended June 30, 2018 Percentage	es are perc	Six Months Ended June 30, 2017 ent of total rev	venue
Service	61	%	58	%	62	%	60	%
	27	70	25	%	27	70	25	%
Subscription License	12		16		11		16	
	12						10	
Total revenue	100		100		100		100	
Cost of revenue:	20		26		20		07	
Service	28		26		28		27	
Subscription	9		10		9		9	
License	3		2		3		2	
Total cost of revenue	41		38		40		38	
Gross profit	59		62		60		62	
Operating expenses:								
Sales and marketing	87		72		87		68	
Research, development and								
engineering	75		70		72		63	
General and administrative	44		40		46		40	
Intellectual property	6		6		6		6	
Total operating expenses	212		188		211		178	
Operating loss	(153	)	(126	)	(151	)	(116	)
Other income, net	5		2		5		2	
Loss before income taxes	(148	)	(124	)	(146	)	(114	)
Benefit (provision) for income	``	,		,	``			,
taxes	(0	)	(0	)	(0	)	1	
Net loss	(148	%)	(124	%)		%)	(113	%)

#### Summary

Total revenue for the three and six month periods ended June 30, 2018 decreased 3% to \$5.4 million and 5% to \$11.1 million, respectively, compared to the corresponding three and six month periods ended June 30, 2017, primarily as a result of lower license revenue.

Total operating expenses for the three and six month periods ended June 30, 2018 increased 10% to \$11.5 million and 12% to \$23.3 million, respectively, compared to the corresponding three and six month periods ended June 30, 2017, primarily reflecting higher investment in sales, marketing, and engineering as we continue to address important opportunities in market development and delivery of Digimarc Discover and Digimarc Barcode.

#### Revenue

	Three Months Ended June 30 2018	N F , J	Three Months Ended June 30 2017		Dollar Increase (Decrea	e	Percen Increa (Decre	se	Six Months Ended June 30 2018		Six Months Ended June 30 2017		Dollar Increase (Decrea	•	Percer Increa (Decre	se
Revenue:															Ì	
Service	\$3,336	\$	53,253		\$83		3	%	\$6,843		\$6,949		\$ (106	)	(2	)%
Subscription	1,444		1,420		24		2	%	3,022		2,865		157		5	%
License	658		914		(256	)	(28	)%	1,186		1,864		(678	)	(36	)%
Total	\$5,438	\$	5,587		\$ (149	)	(3	)%	\$11,05	1	\$11,678	3	\$ (627	)	(5	)%
Revenue (as % of total revenue):																
Service	61	%	58	%					62	%	60	%				
Subscription	27	%	25	%					27	%	25	%				
License	12	%	16	%					11	%	16	%				
Total	100	%	100	%					100	%	100	%				

Service. Service revenue consists primarily of revenue derived from the sale of software development and consulting services. The majority of service revenue arrangements are structured as time and materials consulting agreements. Most of our service revenue is derived from contracts with the Central Banks and government agency contractors. The agreements range from several months to several years in length, and our longer term contracts are subject to work plans that are reviewed and agreed upon at least annually. These contracts generally provide for billing hours worked at predetermined rates and, to a lesser extent, reimbursement for third party costs and services. Increases or decreases in the services provided under these contracts are generally subject to both volume and price changes. The volume of work is generally negotiated at least annually and can be modified as the customer's needs change. We also have provisions in our longer term contracts that allow for specific hourly rate price increases on an annual basis to account for cost of living variables. Contracts with government agency contractors are generally shorter term in nature, less linear in billings and less predictable than our longer term contracts because the contracts with government agency contractors are subject to government budgets and funding.

The changes in service revenue for the three and six month periods ended June 30, 2018, compared to the corresponding three and six month periods ended June 30, 2017, were insignificant.

Subscription. Subscription revenue includes revenue derived from the sale of Digimarc Discover, Digimarc Barcode and Guardian products and services, and is generally recurring in nature, paid in advance and recognized over the term of the subscription.

The increases in subscription revenue for the three and six month periods ended June 30, 2018, compared to the corresponding three and six month periods ended June 30, 2017, were due to higher Digimarc Discover and Barcode revenue, partially offset by lower Digimarc Guardian revenue.

License. License revenue originates primarily from licensing our intellectual property where we receive license fees and/or royalties as our income stream.

The decreases in license revenue for the three and six month periods ended June 30, 2018, compared to the corresponding three and six month periods ended June 30, 2017, were primarily due to lower royalties from an existing licensee. In the third quarter of 2017, we amended an existing license agreement whereby we waived all future royalty obligations in one of the licensed fields of use in exchange for an upfront \$3.5 million license fee.

## Revenue by Geography

	Three Months Ended June 30, 2018	Thre Mon Ende June 2017	ths ed 30,	Dollar Increase (Decrea	e .	Percen Increas (Decre	se	Six Months Ended June 30 2018		Six Months Ended June 30 2017		Dollar Increase (Decrea	•	Percei Increa	ise
Revenue by geography:				,	,		Í					,	,		Í
Domestic	\$1,289	\$1,2	53	\$ 36		3	%	\$2,740		\$2,754		\$ (14	)	(1	)%
International	4,149	4,3	34	(185	)	(4	)%	8,311		8,924		(613	)	(7	)%
Total	\$5,438	\$5,5	87	\$ (149	)	(3	)%	\$11,051	l	\$11,678	3	\$ (627	)	(5	)%
Revenue (as % of total revenue):															
Domestic	24	% 22	%					25	%	24	%				
International	76	% 78	%					75	%	76	%				
Total	100	% 100	) %					100	%	100	%				

The changes in domestic revenue for the three and six month periods ended June 30, 2018, compared to the corresponding three and six month periods ended June 30, 2017, were insignificant.

The decreases in international revenue for the three and six month periods ended June 30, 2018, compared to the corresponding three and six month periods ended June 30, 2017, were primarily due to lower royalties from an existing international licensee. In the third quarter of 2017, we amended an existing license agreement whereby we waived all future royalty obligations in one of the licensed fields of use in exchange for an upfront \$3.5 million license fee.

## Cost of Revenue

Service. Cost of service revenue primarily includes costs that are allocated from research, development and engineering, sales and marketing and intellectual property that relate directly to performing services under our customer contracts and direct costs of program delivery. Costs include:

compensation, benefits, incentive compensation in the form of stock-based compensation and related costs of our software developers, quality assurance personnel, product managers, business development managers and other personnel where we bill our customers for time and materials costs;

payments to outside contractors that are billed to customers;

charges for equipment directly used by customers;

depreciation for machinery, equipment and software directly used by customers;

travel costs directly attributable to service and development contracts; and

• charges for infrastructure and centralized costs of facilities and information technology.

Subscription. Cost of subscription revenue primarily includes:

compensation, benefits, incentive compensation in the form of stock-based compensation and related costs of operations personnel;

cost of outside contractors that provide operational support;

amortization of existing technology acquired in the acquisition of Attributor Corporation; and 23

Internet service provider connectivity charges and image search data fees to support the services offered to our subscription customers.

License. Cost of license revenue primarily includes:

• amortization of capitalized patent costs; and

amortization of patent maintenance fees.

Gross Profit

	Three Months Ended June 30 2018		Three Months Ended June 30 2017		Dollar Increase (Decrea		Percen Increas (Decre	se	Six Months Ended June 30 2018		Six Months Ended June 30 2017		Dollar Increase (Decreas	:	Percen Increas (Decre	se
Gross Profit:																
Service	\$1,788		\$1,789		\$ (1	)	(0	)%	\$3,732		\$3,850		\$ (118	)	(3	)%
Subscription	936		886		50		6	%	2,032		1,775		257		14	%
License	509		792		(283	)	(36	)%	897		1,624		(727	)	(45	)%
Total	\$3,233		\$3,467		\$ (234	)	(7	)%	\$6,661		\$7,249		\$ (588	)	(8	)%
Gross Profit (as % of related																
revenue components):																
Service	54	%	55	%					55	%	55	%				
Subscription	65	%	62	%					67	%	62	%				
License	77	%	87	%					76	%	87	%				
Total	59	%	62	%					60	%	62	%				

The decreases in total gross profit for the three and six month periods ended June 30, 2018, compared to the corresponding three and six month periods ended June 30, 2017, were primarily due to lower license revenue.

The changes in service gross profit as a percentage of service revenue for the three and six month periods ended June 30, 2018, compared to the corresponding three and six month periods ended June 30, 2017, were insignificant.

The increases in subscription gross profit as a percentage of subscription revenue for the three and six month periods ended June 30, 2018, compared to the corresponding three and six month periods ended June 30, 2017, were primarily due to higher subscription revenue and lower operational costs.

The decreases in license gross profit as a percentage of license revenue for the three and six month periods ended June 30, 2018, compared to the corresponding three and six month periods ended June 30, 2017, were primarily due to lower license revenue.

#### **Operating Expenses**

We allocate certain costs of research, development and engineering, sales and marketing, and intellectual property to cost of revenue when they relate directly to our customer contracts. We record all remaining, or "residual," costs as sales

and marketing, research, development and engineering, general and administrative, and intellectual property expenses.

Sales and marketing

	Three Months Ended June 30, 2018	Three Months Ended June 30, 2017	Dollar Increase (Decrease)	Percent Increase (Decrease)	Six Months Ended June 30, 2018	Six Months Ended June 30, 2017	Dollar Increase (Decrease)	Percent Increase (Decrease)
Sales and marketing	\$4,757	\$ 3,997	\$ 760	19 %	\$9,644	\$7,989	\$ 1,655	21 %
Sales and marketing								
(as % of total revenue)	87 %	5 72 %			87 %	68 %	)	

Sales and marketing expenses consist primarily of:

compensation, benefits, incentive compensation in the form of stock-based compensation and related costs of sales and marketing employees and product managers;

travel and market research costs, and costs associated with marketing programs, such as trade shows, public relations and new product launches;

professional services and outside contractor costs for product and marketing initiatives; and

• charges for infrastructure and centralized costs of facilities and information

technology.

The increase in sales and marketing expenses for the three month period ended June 30, 2018, compared to the corresponding three month period ended June 30, 2017, was primarily due to:

increased headcount and compensation-related expenses of \$0.7 million; and

increased charges for infrastructure and centralized costs of \$0.2 million due to increased costs and headcount; partially offset by

decreased recruiting costs of \$0.2 million.

The increase in sales and marketing expenses for the six month period ended June 30, 2018, compared to the corresponding six month period ended June 30, 2017, was primarily due to:

increased headcount and compensation-related expenses of \$1.4 million; and

increased charges for infrastructure and centralized costs of \$0.4 million due to increased costs and headcount; partially offset by

decreased recruiting costs of \$0.2 million.

Research, development and engineering

Three Six Three Six Months Months Months Months Ended Ended Ended Ended Percent Dollar Percent Dollar June 30, June 30, Increase Increase June 30, June 30, Increase Increase 2018 2017