SECURITIES & EXCHANGE COMMISSION EDGAR FILING

BIO KEY INTERNATIONAL INC

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U.S. SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

FORM 10-Q

☒ **QUARTERLY REPORT UNDER SECTION 13 OR 15(D) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 201 9

☐ **TRANSITION REPORT UNDER SECTION 13 OR 15(D) OF THE EXCHANGE ACT**

For the Transition Period from to

Commission file number 1-13463

BIO-KEY INTERNATIONAL, INC.

(Exact Name of registrant as specified in its charter)

DELAWARE	**41-1741861**
(State or Other Jurisdiction of Incorporation of Organization)	(IRS Employer Identification Number)

3349 HIGHWAY 138, BUILDING A, SUITE E, WALL, NJ 07719
(Address of Principal Executive Offices)

(732) 359-1100
(Registrant's telephone number, including area code)

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

Title of each class	Trading Symbol	Name of each exchange on which registered
Common Stock, par value $0.0001 per share	BKYI	Nasdaq Stock market

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

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

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

Large accelerated filer ☐	Accelerated filer ☐
Non-accelerated filer ☐	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 by rule 12b-2 of the Exchange Act) Yes ☐ No ☒

Number of shares of Common Stock, $.0001 par value per share, outstanding as of May 13, 2019 was 14,081,688.

BIO-KEY INTERNATIONAL, INC.

INDEX

PART I — FINANCIAL INFORMATION

BIO-KEY International, Inc. and Subsidiary
CONDENSED CONSOLIDATED BALANCE SHEETS

	March 31, 2019 (Unaudited)	December 31, 2018
ASSETS		
Cash and cash equivalents	$ 459,311	$ 323,943
Accounts receivable, net	740,419	1,574,032
Due from factor	75,824	56,682
Inventory	980,908	998,829
Resalable software license rights	1,125,000	1,125,000
Prepaid expenses and other	175,144	150,811
Total current assets	3,556,606	4,229,297
Resalable software license rights, net of current portion	6,483,406	6,790,610
Equipment and leasehold improvements, net	152,707	148,608
Capitalized contract costs, net	299,398	319,199
Deposits and other assets	8,712	8,712
Operating lease right-of-use assets	568,073	-
Intangible assets, net	194,330	195,906
Total non-current assets	7,706,626	7,463,035
TOTAL ASSETS	$ 11,263,232	$ 11,692,332
LIABILITIES		
Accounts payable	$ 472,629	$ 481,269
Accounts payable – related party	133,174	-
Accrued liabilities	577,996	548,232
Deferred revenue	333,240	196,609
Operating lease liabilities, current portion	138,274	-
Total current liabilities	1,655,313	1,226,110
Operating lease liabilities, net of current portion	419,171	-
Total non-current liabilities	419,171	-
TOTAL LIABILITIES	2,074,484	1,226,110
Commitments		
STOCKHOLDERS' EQUITY		
Common stock — authorized, 170,000,000 shares; issued and outstanding; 13,991,688 and 13,977,868 of $.0001 par value at March 31, 2019 and December 31, 2018, respectively	1,399	1,398
Additional paid-in capital	86,125,173	85,599,140
Accumulated deficit	(76,937,824)	(75,134,316)
TOTAL STOCKHOLDERS' EQUITY	9,188,748	10,466,222
TOTAL LIABILITIES AND STOCKHOLDERS' EQUITY	$ 11,263,232	$ 11,692,332

The accompanying notes to the condensed consolidated financial statements are an integral part of these statements.

BIO-KEY International, Inc. and Subsidiary
CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(Unaudited)

	Three months ended March 31, 2019	Three months ended March 31, 2018
Revenues		
Services	$ 241,610	$ 302,449
License fees	83,208	102,719
Hardware	226,805	436,287
	551,623	841,455
Costs and other expenses		
Cost of services	90,829	154,733
Cost of license fees	377,216	773,464
Cost of hardware	136,005	251,248
	604,050	1,179,445
Gross Profit (Loss)	(52,427)	(337,990)
Operating Expenses		
Selling, general and administrative	1,377,033	1,461,854
Research, development and engineering	374,118	392,154
Total Operating Expenses	1,751,151	1,854,008
Operating loss	(1,803,578)	(2,191,998)
Other income (expenses)		
Interest income	70	6
Total Other Income (Expenses)	70	6
Net loss	(1,803,508)	(2,191,992)
Convertible preferred stock dividends	-	(156,162)
Net loss available to common stockholders	$ (1,803,508)	$ (2,348,154)
Basic & Diluted Loss per Common Share	$ (0.13)	$ (0.30)
Weighted Average Shares Outstanding:		
Basic & Diluted	13,979,318	7,851,514

The accompanying notes to the condensed consolidated financial statements are an integral part of these statements.

BIO-key International, Inc. and Subsidiaries
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)

	Series A-1 Preferred Stock		Series B-1 Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total
	Shares	Amount	Shares	Amount	Shares	Amount			
Balance as of December 31, 2018	**-**	**$ -**	**-**	**$ -**	**13,977,868**	**$ 1,398**	**$ 85,599,140**	**$ (75,134,316)**	**$ 10,466,222**
Issuance of common stock for directors' fees	-	-	-	-	13,820	1	16,505	-	16,506
Share-based compensation	-	-	-	-	-	-	509,528	-	509,528
Net loss								(1,803,508)	(1,803,508)
Balance as of March 31, 2019	**-**	**$ -**	**-**	**$ -**	**13,991,688**	**$ 1,399**	**$ 86,125,173**	**$ (76,937,824)**	**$ 9,188,748**

The accompanying notes are an integral part of these statements.

BIO-key International, Inc. and Subsidiaries
CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY
(Unaudited)

	Series A-1 Preferred Stock		Series B-1 Preferred Stock		Common Stock		Additional Paid-in Capital	Accumulated Deficit	Total
	Shares	**Amount**	**Shares**	**Amount**	**Shares**	**Amount**			
Balance as of December 31, 2017	**62,596**	**$ 6**	**105,000**	**$ 11**	**7,691,324**	**$ 769**	**$ 80,829,001**	**$ (67,076,492)**	**$ 13,753,295**
Adoption of ASC 606	-	-	-	-	-	-	-	240,017	240,017
Issuance of common stock for directors' fees	-	-	-	-	8,421	1	16,512	-	16,513
Dividends declared on preferred stock	-	-	-	-	-	-	(156,162)	-	(156,162)
Conversion of B-1 preferred stock to common stock	-	-	(60,420)	(6)	1,678,334	168	(162)	-	-
Conversion of dividends payable on B-1 preferred stock	-	-	-	-	115,857	11	417,072	-	417,083
Share-based compensation	-	-	-	-	-	-	533,421		533,421
Net loss								(2,191,992)	(2,191,992)
Balance as of March 31, 2018	**62,596**	**$ 6**	**44,580**	**$ 5**	**9,493,936**	**$ 949**	**$ 81,639,682**	**$ (69,028,467)**	**$ 12,612,175**

The accompanying notes are an integral part of these statements.

BIO-KEY International, Inc. and Subsidiary
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

	Three Months Ended March 31, 2019	Three Months Ended March 31, 2018
CASH FLOW FROM OPERATING ACTIVITIES:		
Net loss	$ (1,803,508)	$ (2,191,992)
Adjustments to reconcile net loss to cash provided by operating activities:		
Depreciation	19,292	21,020
Amortization of intangible assets	3,314	5,655
Amortization of software license rights	281,074	659,414
Amortization of capitalized contract costs	33,510	18,668
Operating leases right-of-use assets	34,864	-
Stock based directors' fees	16,505	16,512
Share and warrant-based compensation for employees and consultants	509,528	533,421
Change in assets and liabilities:		
Accounts receivable	833,613	2,590,770
Due from factor	(19,142)	55,820
Capitalized contract costs	(13,709)	(144,018)
Inventory	17,921	47,687
Resalable software license rights	26,130	(11,954)
Prepaid expenses and other	(36,928)	(14,221)
Accounts payable	124,534	(246,245)
Accrued liabilities	29,764	(163,343)
Deferred revenue	136,631	(133,427)
Operating lease liabilities	(32,897)	-
Net cash provided by operating activities	160,496	1,043,767
CASH FLOW FROM INVESTING ACTIVITIES:		
Purchase of intangible assets	(1,737)	-
Capital expenditures	(23,391)	(32,857)
Net cash used for investing activities	(25,128)	(32,857)
NET INCREASE IN CASH AND CASH EQUIVALENTS	135,368	1,010,910
CASH AND CASH EQUIVALENTS, BEGINNING OF PERIOD	323,943	288,721
CASH AND CASH EQUIVALENTS, END OF PERIOD	$ 459,311	$ 1,299,631

The accompanying notes to the condensed consolidated financial statements are an integral part of these statements.

BIO-KEY International, Inc. and Subsidiary
CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(Unaudited)

SUPPLEMENTARY DISCLOSURES OF CASH FLOW INFORMATION

	Three Months Ended March 31,	
	2019	2018
Cash paid for:		
Interest	$ —	$ —
Noncash Investing and financing activities		
Accrual of unpaid preferred stock dividends	$ —	$ 156,162
Conversion of B-1 preferred dividends payable to common stock	$ —	$ 417,084
Conversion of B-1 preferred stock to common stock	$ —	$ 6,042,000
Right-of-use asset addition under ASC 842	$ 602,937	$ —
Operating lease liabilities under ASC 842	$ 590,342	$ —

The accompanying notes to the condensed consolidated financial statements are an integral part of these statements.

1. NATURE OF BUSINESS AND BASIS OF PRESENTATION

Nature of Business

The Company, founded in 1993, develops and markets proprietary fingerprint identification biometric technology and software solutions. The Company was a pioneer in developing automated, finger identification technology that supplements or compliments other methods of identification and verification, such as personal inspection identification, passwords, tokens, smart cards, ID cards, PKI, credit card, passports, driver's licenses, OTP or other form of possession or knowledge-based credentialing. Additionally, advanced BIO-key® technology has been, and is, used to improve both the accuracy and speed of competing finger-based biometrics.

Basis of Presentation

The accompanying unaudited interim condensed consolidated financial statements include the accounts of BIO-key International, Inc. and its wholly-owned subsidiary (collectively, the "Company" or "BIO-key") and are stated in conformity with accounting principles generally accepted in the United States of America, pursuant to the rules and regulations of the Securities and Exchange Commission (the "SEC"). The operating results for interim periods are not necessarily indicative of results that may be expected for any other interim period or for the full year. Pursuant to such rules and regulations, certain financial information and footnote disclosures normally included in the financial statements have been condensed or omitted. Significant intercompany accounts and transactions have been eliminated in consolidation.

In the opinion of management, the accompanying unaudited interim consolidated financial statements contain all necessary adjustments, consisting only of those of a recurring nature, and disclosures to present fairly the Company's financial position and the results of its operations and cash flows for the periods presented. The balance sheet at March 31, 2019 was derived from the audited financial statements, but does not include all of the disclosures required by accounting principles generally accepted in the United States of America. These unaudited interim condensed consolidated financial statements should be read in conjunction with the financial statements and the related notes thereto included in the Company's Annual Report on Form 10-K for the fiscal year ended December 31, 2018, filed with the SEC on April 1, 2019.

Updated Significant Accounting Policies

Leases

In February 2016, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2016-02, "Leases" (Topic 842), as amended (ASC 842). The new standard establishes a right-of-use (ROU) model that requires a lessee to record a ROU asset and a lease liability on the balance sheet for all leases with terms longer than 12 months and classify as either operating or finance leases. We adopted this standard effective January 1, 2019 using the modified retrospective approach for all leases entered into before the effective date. Adoption of the ASC 842 had a significant effect on our balance sheet resulting in increased non-current assets and increased current and non-current liabilities. There was no impact to retained earnings upon adoption of the new standard. We did not have any finance leases (formerly referred to as capital leases prior to the adoption of ASC 842), therefore there was no change in accounting treatment required. For comparability purposes, we will continue to comply with the previous disclosure requirements in accordance with the existing lease guidance and prior periods are not restated.

We elected the package of practical expedients as permitted under the transition guidance, which allowed us: (1) to carry forward the historical lease classification; (2) not to reassess whether expired or existing contracts are or contain leases; and, (3) not to reassess the treatment of initial direct costs for existing leases.

In accordance with ASC 842, at the inception of an arrangement, we determine whether the arrangement is or contains a lease based on the unique facts and circumstances present and the classification of the lease including whether the contract involves the use of a distinct identified asset, whether we obtain the right to substantially all the economic benefit from the use of the asset, and whether we have the right to direct the use of the asset. Leases with a term greater than one year are recognized on the balance sheet as right-of-use (ROU) assets, lease liabilities and, if applicable, long-term lease liabilities. We have elected not to recognize on the balance sheet leases with terms of one year or less under practical expedient in paragraph ASC 842-20-25-2. For contracts with lease and non-lease components, we have elected not to allocate the contract consideration and to account for the lease and non-lease components as a single lease component.

Lease liabilities and their corresponding ROU assets are recorded based on the present value of lease payments over the expected lease term. The implicit rate within our operating leases are generally not determinable and therefore we use the incremental borrowing rate at the lease commencement date to determine the present value of lease payments. The determination of our incremental borrowing rate requires judgment. We determine our incremental borrowing rate for each lease using our estimated borrowing rate, adjusted for various factors including level of collateralization, term and currency to align with the terms of the lease. The operating lease ROU asset also includes any lease prepayments, offset by lease incentives.

An option to extend the lease is considered in connection with determining the ROU asset and lease liability when it is reasonably certain we will exercise that option. An option to terminate is considered unless it is reasonably certain we will not exercise the option.

For periods prior to the adoption of ASC 842, we recorded rent expense based on the term of the related lease. The expense recognition for operating leases under ASC 842 is substantially consistent with prior guidance. As a result, there are no significant differences in our results of operations presented.

The impact of the adoption of ASC 842 on the balance sheet was:

	As reported December 31, 2018	Adoption of ASC 842 - increase (decrease)	Balance January 1, 2019
Operating lease right-of-assets	$ -	$ 602,937	$ 602,937
Prepaid expenses and other	$ 150,811	$ (12,595)	$ 138,216
Total assets	$ 11,692,332	$ 590,342	$ 12,282,674
Operating lease liabilities, current portion	$ -	$ 135,519	$ 135,519
Operating lease liabilities, net of current portion	$ -	$ 454,823	$ 454,823
Total liabilities	$ 1,226,110	$ 590,342	$ 1,816,452
Total liabilities and stockholders' equity	$ 11,692,332	$ 590,342	$ 12,282,674

Recently Issued Accounting Pronouncements

In August 2018, the FASB issued ASU No. 2018-15, Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract ("ASU 2018-15"). ASU 2018-15 aligns the requirements for capitalizing implementation costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing implementation costs incurred to develop or obtain internal-use software. The update to the standard is effective for interim and annual periods beginning after December 15, 2019, with early adoption permitted. Entities can choose to adopt the ASU 2018-15 prospectively or retrospectively. The Company is currently assessing the impact ASU 2018-15 will have on its consolidated financial statements.

Management does not believe that any other recently issued, but not yet effective, accounting standard if currently adopted would have a material effect on the accompanying consolidated financial statements.

Reclassification

Reclassification occurred to certain prior year amounts in order to conform to the current year classifications. The reclassifications have no effect on the reported net loss.

2. GOING CONCERN

The Company has incurred significant losses to date, and at March 31, 2019 had an accumulated deficit of approximately $77 million. In addition, broad commercial acceptance of the Company's technology is critical to the Company's success and ability to generate future revenues. At March 31, 2019, the Company's total cash and cash equivalents were approximately $459,000, as compared to approximately $324,000 at December 31, 2018.

The Company has financed operations in the past through access to the capital markets by issuing secured and convertible debt securities, convertible preferred stock, common stock, and through factoring receivables. The Company estimates that it currently requires approximately $537,000 per month to conduct operations, a monthly amount that it has been unable to achieve consistently through revenue generation.

If the Company is unable to generate sufficient revenue to meet its goals, it will need to obtain additional third-party financing to (i) conduct the sales, marketing and technical support necessary to execute its plan to substantially grow operations, increase revenue, and serve a significant customer base; and (ii) provide working capital. No assurance can be given that any form of additional financing will be available on terms acceptable to the Company, that adequate financing will be obtained by the Company, in order to meet its needs, or that such financing would not be dilutive to existing shareholders.

The accompanying condensed consolidated financial statements have been prepared in conformity with accounting principles generally accepted in the United States of America ("GAAP"), which contemplate continuation of the Company as a going concern, and assumes continuity of operations, realization of assets and the satisfaction of liabilities and commitments in the normal course of business. The matters described in the preceding paragraphs raise substantial doubt about the Company's ability to continue as a going concern. Recoverability of a major portion of the recorded asset amounts shown in the accompanying balance sheet is dependent upon the Company's ability to meet its financing requirements on a continuing basis, and become profitable in its future operations. The accompanying condensed consolidated financial statements do not include any adjustments relating to the recoverability and classification of recorded assets or the amounts and classification of liabilities that might be necessary should the Company be unable to continue in existence.

3. REVENUE FROM CONTRACTS WITH CUSTOMERS

The Company adopted ASC 606 on January 1, 2018 using the modified retrospective method for all contracts not completed as of the date of adoption. In accordance with ASC 606, revenue is recognized when a customer obtains control of promised services. The amount of revenue recognized reflects the consideration to which the Company expects to be entitled to receive in exchange for these services. To achieve this core principle, the Company applies the following five steps:

- Identify the contract with a customer
- Identify the performance obligations in the contract
- Determine the transaction price
- Allocate the transaction price to performance obligations in the contract
- Recognize revenue when or as the Company satisfies a performance obligation

Disaggregation of Revenue

The following table summarizes revenue from contracts with customers for the three month period ended:

	North America	South America	EMEA*	Asia	March 31, 2019
License fees	$ 14,208	$ -	$ -	$ 69,000	$ 83,208
Hardware	45,981	400	32,918	147,506	226,805
Support and Maintenance	195,326	2,116	36,418	5,000	238,860
Professional services	750	-	-	2,000	2,750
Total Revenues	$ 256,265	$ 2,516	$ 69,336	$ 223,506	$ 551,623

	North America	South America	EMEA*	Asia	March 31, 2018
License fees	$ 60,969	$ -	$ 41,750	$ -	$ 102,719
Hardware	99,590	-	214,776	121,921	436,287
Support and Maintenance	177,916	-	8,713	13,970	200,599
Professional services	101,850	-	-	-	101,850
Total Revenues	$ 440,325	$ -	$ 265,239	$ 135,891	$ 841,455

*EMEA – Europe, Middle East, Africa

All of the Company's performance obligations, and associated revenue, are generally transferred to customers at a point in time, with the exception of support and maintenance, and professional services, which are generally transferred to the customer over time.

Software licenses
Software license revenue consist of fees for perpetual software licenses for one or more of the Company's biometric fingerprint solutions. Revenue is recognized at a point in time once the software is available to the customer for download. Software license contracts are generally invoiced in full on execution of the arrangement.

Hardware
Hardware revenue consists of fees for associated equipment sold with or without a software license arrangement, such as servers, locks and fingerprint readers. Customers are not obligated to buy third party hardware from the Company, and may procure these items from a number of suppliers. Revenue is recognized at a point in time once the hardware is shipped to the customer. Hardware items are generally invoiced in full on execution of the arrangement.

Support and Maintenance
Support and Maintenance revenue consists of fees for unspecified upgrades, telephone assistance and bug fixes. The Company satisfies its Support and Maintenance performance obligation by providing "stand-ready" assistance as required over the contract period. The Company records deferred revenue (contract liability) at time of prepayment until the contracts term occurs. Revenue is recognized over time on a ratable basis over the contract term. Support and Maintenance contracts are up to one year in length and are generally invoiced either annually or quarterly in advance.

Professional Services
Professional services revenues consist primarily of fees for deployment and optimization services, as well as training. The majority of the Company's consulting contracts are billed on a time and materials basis, and revenue is recognized based on the amount billable to the customer in accordance with practical expedient ASC 606-10-55-18. For other professional services contracts, the Company utilizes an input method and recognizes revenue based on labor hours expended to date relative to the total labor hours expected to be required to satisfy its performance obligation.

Contracts with Multiple Performance Obligations
Some contracts with customers contain multiple performance obligations. For these contracts, the Company accounts for individual performance obligations separately if they are distinct. The transaction price is allocated to the separate performance obligations on a relative standalone selling price basis. The standalone selling prices are determined based on overall pricing objectives, taking into consideration market conditions and other factors, including the value of the contracts, the cloud applications sold, customer demographics, geographic locations, and the number and types of users within the contracts.

The Company considered several factors in determining that control transfers to the customer upon shipment of hardware and availability of download of software. These factors include that legal title transfers to the customer, the Company has a present right to payment, and the customer has assumed the risks and rewards of ownership.

Accounts receivable from customers are typically due within 30 days of invoicing. The Company does not record a reserve for product returns or warranties as amounts are deemed immaterial based on historical experience.

Costs to Obtain and Fulfill a Contract
Costs to obtain and fulfill a contract are predominantly sales commissions earned by the sales force and are considered incremental and recoverable costs of obtaining a contract with a customer. These costs are deferred and then amortized over a period of benefit determined to be four years. These costs are included as capitalized contract costs on the balance sheet. The period of benefit was determined by taking into consideration customer contracts, technology, and other factors based on historical evidence. Amortization expense is included in selling, general and administrative expenses in the accompanying condensed consolidated statements of operations.

Revenue recognized during the three months ended March 31, 2019 from amounts included in deferred revenue at the beginning of the period was approximately $76,000. The Company did not recognize any revenue from performance obligations satisfied in prior periods. Total deferred revenue (contract liability) was $333,240 and $196,609 at March 31, 2019 and December 31, 2018, respectively.

Transaction Price Allocated to the Remaining Performance Obligations

ASC 606 requires that the Company disclose the aggregate amount of transaction price that is allocated to performance obligations that have not yet been satisfied as at March 31, 2019. The guidance provides certain practical expedients that limit this requirement, which the Company's contracts meet as follows:

- The performance obligation is part of a contract that has an original expected duration of one year or less, in accordance with ASC 606-10-50-14.

At March 31, 2019 deferred revenue represents the Company's remaining performance obligations related to prepaid support and maintenance, all of which is expected to be recognized within one year.

4. ACCOUNTS RECEIVABLE

Accounts receivable are carried at original amount less an estimate made for doubtful receivables based on a review of all outstanding amounts on a monthly basis. Management determines the allowance for doubtful receivables by regularly evaluating individual customer receivables and considering a customer's financial condition, credit history, and current economic conditions. Accounts receivable are written off when deemed uncollectible. As a result of the payment delays for a large customer, the Company has reserved $1,720,000 at March 31, 2019 and December 31, 2018, which represents 100% of the remaining balance owed under the contract, respectively. Recoveries of accounts receivable previously written off are recorded when received. Accounts receivable at March 31, 2019 and December 31, 2018 consisted of the following:

	March 31, 2019	December 31, 2018
Accounts receivable - current	$ 754,204	$ 1,587,817
Accounts receivable - non current	1,720,000	1,720,000
	2,474,204	3,307,817
Allowance for doubtful accounts - current	(13,785)	(13,785)
Allowance for doubtful accounts - non current	(1,720,000)	(1,720,000)
	(1,733,785)	(1,733,785)
Accounts receivable, net of allowances for doubtful accounts	$ 740,419	$ 1,574,032

5. SHARE BASED COMPENSATION

The following table presents share-based compensation expenses for continuing operations included in the Company's unaudited condensed consolidated statements of operations:

	Three Months Ended March 31, 2019	
Selling, general and administrative	$ 453,086	$
Research, development and engineering	72,947	
	$ 526,033	$

6. FACTORING

Due from factor consisted of the following as of:

	March 31, 2019	December 31, 2018
Original invoice value	$ 302,777	$ 221,120
Factored amount	(226,953)	(164,438)
Balance due from factor	$ 75,824	$ 56,682

The Company entered into an accounts receivable factoring arrangement with a financial institution (the "Factor") which has been extended to October 31, 2019. Pursuant to the terms of the arrangement, the Company, from time to time, sells to the Factor a minimum of $150,000 per quarter of certain of its accounts receivable balances on a non-recourse basis for credit approved accounts. The Factor remits 35% of the foreign and 75% of the domestic accounts receivable balance to the Company (the "Advance Amount"), with the remaining balance, less fees to be forwarded to the Company once the Factor collects the full accounts receivable balance from the customer. In addition, the Company, from time to time, receives over advances from the factor. Factoring fees range from 2.75% to 15% of the face value of the invoice factored, and are determined by the number of days required for collection of the invoice. The cost of factoring is included in selling, general and administrative expenses. The cost of factoring was as follows:

	Three Months ended March 31, 2019	Three Months ended March 31, 2018
Factoring fees	$ 52,797	$ 91,523

7. INVENTORY

Inventory is stated at the lower of cost, determined on a first in, first out basis, or net realizable value, and consists primarily of fabricated assemblies and finished goods. Inventory is comprised of the following as of:

	March 31, 2019	December 31, 2018
Finished goods	$ 476,418	$ 496,358
Fabricated assemblies	504,490	502,471
Total inventory	$ 980,908	$ 998,829

8. RESALABLE SOFTWARE LICENSE RIGHTS

On November 11, 2015, the Company entered into a license agreement for the rights to all software and documentation regarding the technology currently known as or offered under the FingerQ name. The license agreement grants the Company the exclusive right to reproduce, create derivative works and distribute copies of the FingerQ software and documentation, create new FingerQ related products, and grant sub-licenses of the licensed technology to end users. The license rights have been granted to the Company in perpetuity, with a stated number of end-user resale sub-licenses allowed under the contract for a total of $12,000,000. The cost of sub-license rights expected to be amortized in the following 12 months is $1,125,000 and is classified as current, with remainder as non-current.

The Company originally determined the software license rights to be a finite lived intangible asset, and estimated that the software license rights shall be economically used over a 10 year period, with a weighting towards the beginning years of that time-frame. The license rights were acquired during the fourth quarter of 2015, but the usage of such rights in the Company's products was not generally available until January 2017. Accordingly, amortization began in the first quarter of 2017.

Through 2018, the remaining license rights were to be amortized over the greater of the following amounts: 1) an estimate of the economic use of such license rights, 2) the amount calculated by the straight line method over ten years or 3) the actual cost basis of sales usage of such rights. The Company believes that the economic use model was front-end focused as a majority of the expected up-take of the FingerQ technology was predicted to occur during the first 4-5 years of the 10-year life cycle of the product. Based on current sales trends, the Company now believes future transactions will be more evenly dispersed over the remaining life cycle of the product, indicating that the greater of the straight-line methodology or or actual unit cost per license sold will more closely align the expense with the remaining useful life of the product. The change in amortization was effective beginning on January 1, 2019 based on the net remaining software license rights balance. The Company believes categorizing the amortization expense under Cost of Sales more closely reflects the nature of the license right arrangement and the use of the technology. A total of $281,250 and $660,000 was charged to cost of sales during the three month periods ended March 31, 2019 and 2018, respectively and of this amount $176 and $586, represent the cost basis of the actual sales, respectively. Since the license purchase, a cumulative amount of $4,479,846 has been charged to cost of sales, with a carrying balance of $7,520,154 as of March 31, 2019. The Company's change in methodology was determined to be a change in accounting estimate that is effected by a change in accounting principle. Pursuant to ASC 250-10-45-17 guidance, this accounting change will not be accounted for as a cumulative effect adjustment on the statement of operations in the period of change and there will be no retroactive application or restatement of prior periods. Instead, the Company allocates the remaining unamortized balance over the remaining life of the assets using the newly adopted method.

The following compares line items on the statement of operations had the change in amortization methodology not been made:

	As reported 3 months ended March 31, 2019	Prior methodology 3 months ended March 31, 2019
Amortization of software license rights	$ 281,074	$ 749,824
Total operating expenses	$ 1,751,151	$ 2,219,901
Operating loss	$ (1,803,578)	$ (2,272,328)
Net loss	$ (1,803,508)	$ (2,272,258)
Basic & diluted loss per share	$ (0.13)	$ (0.16)

On December 31, 2015, the Company purchased third-party software licenses in the amount of $180,000 in anticipation of a large pending deployment that has yet to materialize. The Company is amortizing the total cost over the same methodology described above with the greatest of the two approaches being the actual unit cost per license sold. A total of $25,954 was charged to cost of sales during the three month period ended March 31, 2019, and a net credit of $12,540 was recorded during the 2018 period, respectively. Since the license purchase, the actual per unit cost (actual usage) of such license rights in the cumulative amount of $91,748 has been charged to cost of sales, with a carrying balance of $88,252 as of March 31, 2019. The Company has classified the balance as non-current until a larger deployment occurs. Software license rights is comprised of the following as of:

	March 31, 2019	**December 31, 2018**
Current software license rights	$ 1,125,000	$ 1,125,000
Non-current software license rights	6,483,406	6,790,610
Total software license rights	$ 7,608,406	$ 7,915,610

9. RELATED PARTY

During the quarter ended March 31, 2019, the Company received a non-interest bearing advance from an executive officer/director, the Company's principal stockholder, in amount of $133,174 to pay current liabilities. The advance is payable upon demand.

10. LEASES

The Company's leases office space in New Jersey, Hong Kong and Minnesota with lease termination dates of 2023, 2019, and 2020, respectively. The Minnesota lease is under 12 months, thus classified as short-term and not reported on the balance sheet under ASC 842. The Hong Kong and the New Jersey leases include non-lease components with variable payments. The following tables present the components of lease expense and supplemental balance sheet information related to the operating leases, for the three months ended and as of:

	March 31, 2019
Lease cost	
Operating lease cost	$ 42,981
Short-term lease cost	16,295
Sublease income	-
Total lease cost	$ 59,276
Balance sheet information	
Operating ROU assets	$ 568,073
Operating lease liabilities, current portion	$ 138,274
Operating lease liabilities, non-current portion	419,171
Total operating lease liabilities	$ 557,445
Weighted average remaining lease term (in years) – operating leases	4.11
Weighted average discount rate – operating leases	5.50%

Supplemental cash flow information related to leases were as follows, for the three months ended March 31, 2019:

Cash paid for amounts included in the measurement of operating lease liabilities	$ 42,030

Maturities of operating lease liabilities were as follows:

2019 (remaining nine months)	$	124,231
2020		155,682
2021		127,425
2022		131,249
2023		89,226
2024 and thereafter		-
Total future lease payments	$	627,813
Less: imputed interest		(70,368)
Total	$	557,445

11. EARNINGS PER SHARE ("EPS")

The Company's basic EPS is calculated using net income (loss) available to common shareholders and the weighted-average number of shares outstanding during the reporting period. Diluted EPS includes the effect from potential issuance of common stock, such as stock issuable pursuant to the exercise of stock options and warrants and the assumed conversion of convertible preferred stock.

The reconciliation of the numerator of the basic and diluted EPS calculations was as follows for the three month periods ended March 31, 2019 and 2018:

	Three Months ended March 31,	
	2019	2018
Basic Numerator:		
Net loss	$ (1,803,508)	$ (2,191,992)
Convertible preferred stock dividends	-	(156,162)
Net loss available to common stockholders (basic and diluted)	$ (1,803,508)	$ (2,348,154)

The following table summarizes the weighted average securities that were excluded from the diluted per share calculation because the effect of including these potential shares was antidilutive due to the net losses for the three months ended March 31, 2019 and 2018:

	Three Months ended March 31,	
	2019	2018
Preferred stock	-	4,506,259
Stock options	-	4,542
Warrants	-	-
Total	-	4,510,801

The following table sets forth options and warrants which were excluded from the diluted per share calculation because the exercise price was greater than the average market price of the common shares:

	Three Months Ended March 31,	
	2019	2018
Stock options	1,794,737	1,468,325
Warrants	3,780,976	1,398,969
Total	5,575,713	2,867,294

12. STOCKHOLDERS' EQUITY

Preferred Stock

Within the limits and restrictions provided in the Company's Certificate of Incorporation, the Board of Directors has the authority, without further action by the shareholders, to issue up to 5,000,000 shares of preferred stock, $.0001 par value per share, in one or more series, and to fix, as to any such series, any dividend rate, redemption price, preference on liquidation or dissolution, sinking fund terms, conversion rights, voting rights, and any other preference or special rights and qualifications. As of March 31, 2019, 100,000 shares of preferred stock have been designated as Series A-1 Convertible Preferred Stock, of which 90,000 were issued in 2015 and 0 remain outstanding, and 105,000 shares of preferred stock have been designated as Series B-1 Convertible Preferred Stock, of which 105,000 were issued in 2015 and 0 remain outstanding.

Series A-1 Convertible Preferred Stock

On October 22 and 29, 2015, the Company issued 84,500 shares of Series A-1 Convertible Preferred Stock at a purchase price of $100.00 per share, for aggregate gross proceeds of $8,450,000. On November 11, 2015, 5,500 additional shares of Series A-1 Convertible Preferred Stock were issued at a purchase price of $100.00 per share, for gross cash proceeds of $550,000.

Between September 22, 2017 and May 31, 2018, the holder of the Series A-1 Stock converted all shares of Series A-1 Stock into an aggregate of 2,500,000 shares of common stock and purchased an aggregate of 248,893 shares of common stock in consideration of the conversion of $896,015 of accrued dividends payable on the Series A-1 Stock

As a result of the forgoing conversions, there are no longer any issued and outstanding shares of Series A-1 Stock as of March 31, 2019.

Overall balances and conversion of Series A-1 shares and accrued dividends into common stock has been as follows:

	Series A-1	Accrued Dividends
Balance – January 1, 2017	90,000	$ 270,000
Accrual of dividends – Q1 2017	-	135,000
Accrual of dividends – Q2 2017	-	135,000
Accrual of dividends – Q3 2017	-	135,000
Conversion into common stock – September 2017	-	(540,000)
Conversion into common stock – October 2017	(27,404)	-
Accrual of dividends – Q4 2017		101,658
Balance – December 31, 2017	62,596	$ 236,658
Accrual of dividends – Q1 2018	-	93,894
Conversion into common stock – April 2018	(39,088)	(330,552)
Accrual of dividends – Q2 2018 (until final conversion)	-	25,463
Conversion into common stock – May 2018	(23,508)	(25,463)
Balance – December 31, 2018	-	$ -

Series B-1 Convertible Preferred Stock

On November 11, 2015, the Company issued 105,000 shares of Series B-1 Convertible Preferred Stock at a purchase price of $100.00 per share, for gross proceeds of $10,500,000.

Between March 23, 2018 and May 23, 2018, holders of shares of Series B-1 Stock converted all shares of Series B-1 Stock into an aggregate of 2,916,668 shares of common stock and purchased an aggregate of 131,229 shares of common stock in consideration of the conversion of $472,426 of accrued dividends payable on the Series B-1 Stock.

As a result of the forgoing conversions, there are no longer any issued and outstanding shares of Series B-1 Stock as of March 31, 2019.

Overall balances and conversion of Series B-1 shares and accrued dividends into common stock has been as follows:

	Series B-1	Accrued Dividends
Balance – January 1, 2017	105,000	$ 131,250
Accrual of dividends – Q1 2017	-	65,625
Accrual of dividends – Q2 2017	-	65,625
Accrual of dividends – Q3 2017	-	65,625
Accrual of dividends – Q4 2017	-	65,625
Balance – December 31, 2017	105,000	393,750
Conversion into common stock – March 2018	(60,420)	(417,084)
Accrual of dividends – Q1 2018	-	62,268
Accrual of dividends – Q2 2018 (until final conversion)	-	16,408
Conversion into common stock – May 2018	(44,580)	(55,342)
Balance – December 31, 2018	-	$ -

Common Stock

On March 21 and 28, 2019, the Company issued 13,820 shares of common stock to its directors in payment of board and board committee fees valued at $16,506.

Securities Purchase Agreement dated November 13, 2014

Pursuant to a Securities Purchase Agreement, dated November 13, 2014, by and between the Company and a number of private and institutional investors, the Company issued to certain private investors 664,584 shares of common stock and warrants to purchase an additional 996,877 shares of common stock for aggregate gross proceeds of $1,595,000.

The warrants have a term of five years and an initial exercise price of $3.60 per share, and have been fully exercisable since February 2015. The warrants have customary anti-dilution protections including a “full ratchet” anti-dilution adjustment provision which are triggered in the event the Company sells or grants any additional shares of common stock, options, warrants or other securities that are convertible into common stock at a price lower than $3.60 per share, The anti-dilution adjustment provision is not triggered by certain “exempt issuances” which among other issuances, includes the issuance of shares of common stock, options or other securities to officers, employees, directors, consultants or service providers.

Pursuant to the Underwriting Agreement with Maxim Group, on August 24, 2018 the Company issued Common Stock and Warrants to investors at a purchase price of $1.50 per unit which triggered the anti-dilution protection provision under this Securities Purchase Agreement. Due to this provision, the total number of outstanding and fully vested warrants was increased from 996,877 to 2,392,502, and the exercise price was reduced from $3.60 to $1.50 per share. The Company recognized a non-cash deemed dividend of $1,288,139 in connection with these adjustments.

Securities Purchase Agreement dated September 23, 2015

On September 23, 2015, the Company issued a warrant to purchase 69,445 shares of common stock in connection with the issuance of a promissory note. The warrants are immediately exercisable at an initial exercise price of $3.60 per share and have a term of five years.

The warrants have customary anti-dilution protections including a "full ratchet" anti-dilution adjustment provision which are triggered in the event the Company sells or grants any additional shares of common stock, options, warrants or other securities that are convertible into common stock at a price lower than $3.60 per share. The anti-dilution adjustment provision is not triggered by certain "exempt issuances" which among other issuances, includes the issuance of shares of common stock, options or other securities to officers, employees, directors, consultants or service providers.

Pursuant to the Underwriting Agreement with Maxim Group, on August 24, 2018 the Company issued Common Stock and Warrants to the investors at a purchase price of $1.50 per unit which triggered the anti-dilution protection provision under this Securities Purchase Agreement. Due to this provision, the total number of outstanding and fully vested warrants for the investor was increased from 69,445 to 166,668, and the exercise price was reduced from $3.60 to $1.50 per share. The Company recognized a non-cash deemed dividend of $140,827 in connection with these adjustments.

Issuances of Stock Options

On March 21, 2019, the Company issued options to purchase 235,334 shares of common stock to certain officers, employees, and contractors. The options have a three year vesting period, seven year term, and exercise price of $1.18.

The fair value of the options issued during the three months ended March 31, 2019 was estimated on the date of grant at $243,643 using the Black-Scholes option-pricing model with the following assumptions: risk free interest rate: 2.35%, expected life of options in years: 4.5, expected dividends: 0, volatility of stock price: 143%.

13. SEGMENT INFORMATION

The Company has determined that it operates in one discrete segment consisting of biometric products. Geographically, North American sales accounted for approximately 46% and 52% of the Company’s total sales for the three-month periods ended March 31, 2019 and 2018, respectively.

14. FAIR VALUES OF FINANCIAL INSTRUMENTS

Cash and cash equivalents, accounts receivable, inventory, due from factor, accounts payable and accrued liabilities are carried at, or approximate, fair value because of their short-term nature.

15. MAJOR CUSTOMERS AND ACCOUNTS RECEIVABLES

For the three months ended March 31, 2019 and 2018, two customers accounted for 56% of revenues and two customers accounted for 48% of revenues, respectively. One customer accounted for 74% of current accounts receivable as of March 31, 2019. At December 31, 2018, one customer accounted for 70% of current accounts receivable.

One customer accounted for 100% of non-current accounts receivable as of March 31, 2019 and December 31, 2018 which has been 100% reserved for.

16. SUBSEQUENT EVENTS

On April 4, 2019, the Company issued a $550,000 secured convertible debenture which matures November 15, 2019 and is convertible into common stock at a conversion price of $1.50 per share. The debenture may be redeemed at any time by payment of a premium to the principal balance starting at 5% and increasing to 20%. The debenture was issued at a 7% original issue discount. Subject to the mutual agreement of the Company and the investor, the Company may purchase two additional $550,000 principal amount debentures on the same terms after 45 day intervals from the prior issuance, totaling a potential $1,650,000. At the closing, the Company issued 80,000 shares of common stock in payment of a $120,000 commitment fee and is obligated to issue 10,000 shares of common stock monthly in payment of a monthly commitment fee of $15,000 until the earlier of November 1, 2019 or the repayment or conversion of the debenture.

On May 14, 2019, the Company issued 4,235 shares of common stock to its directors in payment of committee and board fees.

The Company has reviewed all other subsequent events through the date of filing.

CAUTIONARY STATEMENT REGARDING FORWARD-LOOKING STATEMENTS

All statements other than statements of historical facts contained in this Report on Form 10-Q, including statements regarding our future financial position, business strategy and plans and objectives of management for future operations, are forward-looking statements. The words “anticipate,” “believe,” “estimate,” “will,” “may,” “future,” “plan,” “intend” and “expect” and similar expressions generally identify forward-looking statements. These forward-looking statements are not guarantees and are subject to known and unknown risks, uncertainties and assumptions that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by such forward-looking statements. Although we believe that our plans, intentions and expectations reflected in the forward-looking statements are reasonable, we cannot be sure that they will be achieved. Particular uncertainties that could cause our actual results to be materially different than those expressed in our forward-looking statements include: our history of losses and limited revenue; our ability to raise additional capital; our ability to protect our intellectual property; changes in business conditions; changes in our sales strategy and product development plans; changes in the marketplace; continued services of our executive management team; security breaches; competition between us and other companies in the biometric technology industry; market acceptance of biometric products generally and our products under development; our ability to expand into the Asian market; delays in the development of products and statements of assumption underlying any of the foregoing, as well as other factors set forth under the caption “Risk Factors” in our Annual Report on Form 10-K for the year ended December 31, 2018 filed with the Securities and Exchange Commission. All subsequent written and oral forward-looking statements attributable to us, or persons acting on our behalf, are expressly qualified in their entirety by the foregoing. Except as required by law, we undertake no obligation to update or revise any forward-looking statement, whether as a result of new information, future events or otherwise.

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

This Management’s Discussion and Analysis of Financial Condition and Results of Operations summarizes the significant factors affecting the operating results, financial condition, liquidity and cash flows of the Company as of and for the periods presented below. The following discussion and analysis should be read in conjunction with our unaudited condensed consolidated financial statements and related information contained herein and our audited financial statements as of December 31, 2018.

OVERVIEW

BIO-key International, Inc. (the “Company”, “we” or “us”) develops and markets advanced fingerprint biometric identification and identity verification technologies, as well as related identity management and credentialing fingerprint biometric hardware and software solutions. We were pioneers in developing automated, finger identification technology that supplements or compliments other methods of identification and verification, such as personal inspection identification, passwords, tokens, smart cards, ID cards, PKI, credit card, passports, driver’s licenses, OTP or other form of possession or knowledge-based credentialing. Advanced BIO-key technology has been and is used to improve both the accuracy and speed of competing finger-based biometrics. Our solutions are used by many customers in every sector of our economy including government, retail, healthcare and financial services.

In partnerships with OEMs, integrators, and solution providers, we provide biometric software solutions to private and public sector customers. We provide the ability to positively identify and authenticate individuals before granting access to valuable corporate resources, web portals or applications in seconds. Powered by our patented Vector Segment Technology (VST™), or VST, WEB-key and BSP development kits are fingerprint biometric solutions that provide interoperability with all major reader manufacturers, enabling application developers and integrators to integrate fingerprint biometrics into their applications.

We also develop and distribute hardware components that are used in conjunction with our software, and sell third-party hardware components with our software in various configurations required by our customers. Our products are interoperable with all major fingerprint reader and hardware manufacturers and across Windows, Linux, and the Android mobile operating systems enabling application developers, value added resellers, and channel partners to integrate our fingerprint biometrics into their applications, while dramatically reducing maintenance, upgrade and life-cycle costs.

We support industry standards, such as FIDO, BioAPI, and have received National Institute of Standards and Technology independent laboratory certification of our ability to support Homeland Security Presidential Directive #12 (HSPD-12) and ANSI/INCITS-378 templates, as well as validation of our fingerprint match speed and accuracy in large database environments.

We have developed what we believe is the most discriminating and effective commercially available finger-based biometric technology. Our primary focus is in marketing and selling this technology into commercial logical and physical privilege entitlement & access control markets. Our primary market focus includes, among others, enterprise access, mobile payments & credentialing, online payments, and healthcare record and payment data security. Our secondary focus includes government and educational markets.

Products

In 2016, we began to sell through distribution and directly to consumers and commercial users our SideSwipe, SideTouch and EcoID products. SideSwipe, SideTouch and EcoID are stand-alone fingerprint readers that can be used on any laptop, tablet or other device with a USB port. In 2017, we expanded our consumer product line to include biometric and blue tooth enabled pad locks, TSA approved luggage locks, and bicycle locks. In 2018, we introduced OmniPass Consumer, a secure biometric-enabled application to manage multiple passwords for online apps, services or accounts.

In 2015, Microsoft announced native support for biometrics in the Windows 8.1 and Windows 10 Operating platforms as well as Office 2016. With Microsoft Hello, any user can replace their PIN or password to access their device without any special software downloads by using our finger scanners, SideSwipe, SideTouch and EcoID, which are plug and play compatible with the Microsoft platforms. We have been the preferred partner, in particular at the Microsoft “Ignite your Business” Windows 10 and Office 2016 launch events, which has generated a number opportunities for both our hardware and software offerings. In 2016, our finger scanners were tested and qualified by Microsoft, then introduced and are sold in the Microsoft stores nationwide, as well as through their on-line channel.

In 2018, we continued to invest and grow our relationship with Microsoft. The 2018 Ignite your Business event included Microsoft hosting an exclusive BIO-key demonstration kiosk within their event showcase.

STRATEGIC OUTLOOK AND RECENT DEVELOPMENTS

Historically, our largest market has been access control within highly regulated industries such as healthcare. However, we believe the mass adoption of advanced smart-phone and hand-held wireless devices have caused commercial demand for advanced user authentication to emerge as viable. The introduction of smart-phone capabilities, like mobile payments and credentialing, could effectively require biometric user authentication on mobile devices to reduce risks of identity theft, payment fraud and other forms of fraud in the mobile or cellular based world wide web. As more services and payment functionalities, such as mobile wallets and near field communication (NFC), migrate to smart-phones, the value and potential risk associated with such systems should grow and drive demand and adoption of advanced user authentication technologies, including fingerprint biometrics and BIO-key solutions.

As devices with onboard fingerprint sensors continue to deploy to consumers, we expect that third party application developers will demand the ability to authenticate users of their respective applications (app's) with the onboard fingerprint biometric. We further believe that authentication will occur on the device itself for potentially low-value, and therefore low-risk, use-transactions and that user authentication for high-value transactions will migrate to the application provider's authentication server, typically located within their supporting technology infrastructure, or Cloud. We have developed our technology to enable, on-device authentication as well as network or cloud-based authentication and believe we may be the only technology vendor capable of providing this flexibility and capability.

Our core technology works on over 40 commercially available fingerprint readers, across both Windows and Linux platforms, and Apple iOS and Android mobile operating systems. This interoperability, coupled with the ability to authentic users via the device or cloud, is unique in the industry, provides a key differentiator for us, and in our opinion, makes our technology more viable than competing technologies and expands the size of the overall market for our products.

We believe there is potential for significant market growth in the following key areas:

- Corporate network access control, corporate campuses, computer networks, and applications.
- Government funded initiatives, including with the state board of elections.
- International government use case applications as prospects see us as a global leader in the biometric technology space as witnessed by our agreement with the Israeli Defense Force, and the Singapore and Dubai Police departments.

- Consumer mobile credentialing, including mobile payments, credit and payment card programs, data and application access, and commercial loyalty programs.

- Demand for BIO-key hardware products from Windows 10 users and Fortune 500 companies.

- Government services and highly regulated industries including, Medicare, Medicaid, Social Security, Drivers Licenses, Campus and School ID, Passports/Visas.

- Growth in the Asia Pacific region.

- Biometric based consumer products.

In the near-term, we expect to grow our business within government services and highly-regulated industries in which we have historically had a strong presence, such as the healthcare industry. We believe that continued heightened security and privacy requirements in these industries will generate increased demand for security solutions, including biometrics. In addition, we expect that the integration of our technology into Windows 10, will accelerate the demand for our computer network log-on solutions and fingerprint readers. Finally, our entry into the Asian market and licensing arrangement with CGG has further expanded our business by opening new markets along with the new and innovative hardware offerings. We expect our SideSwipe, EcoID and SideTouch finger readers, and our biometric and Bluetooth enabled bicycle locks to continue to drive incremental revenue and growth.

We intend to expand our business into the cloud and mobile computing industries. The emergence of cloud computing and mobile computing are primary drivers of commercial and consumer adoption of advanced authentication applications, including biometric and BIO-key authentication capabilities. As the value of assets, services and transactions increases on such networks, we expect that security and user authentication demand should rise proportionately. Our integration partners include major web and network technology providers, who we believe will deliver our cloud-applicable solutions to interested service-providers. These service-providers could include, but are not limited to, financial institutions, web-service providers, consumer payment service providers, credit reporting services, consumer data service providers, healthcare providers and others. Additionally, our integration partners include major technology component providers and OEM manufacturers, who we believe will deliver our device-applicable solutions to interested hardware manufacturers. Such manufacturers could include cellular handset and smartphone manufacturers, tablet manufacturers, laptop and PC manufacturers, among other hardware manufacturers. Our recently introduced SAML and Open ID solutions will create new opportunities for us in 2019.

CRITICAL ACCOUNTING POLICIES

For detailed information regarding our critical accounting policies and estimates, see our financial statements and notes thereto included in this Report and in our Annual Report on Form 10-K for the year ended December 31, 2018. There have been no material changes to our critical accounting policies and estimates from those disclosed in our most recent Annual Report on Form 10-K, except for adoption of Leases (ASC 842) – refer Note 1.

RECENT ACCOUNTING PRONOUNCEMENTS

For detailed information regarding recent account pronouncements, see Notes to Condensed Consolidated Financial Statements included in Part I, Item 1 of this report.

RESULTS OF OPERATIONS

THREE MONTHS ENDED MARCH 31, 2019 AS COMPARED TO MARCH 31, 2018

Consolidated Results of Operations - Percent Trend

	Three Months Ended March 31, 2019	2018
Revenues		
Services	44%	36%
License fees	15%	12%
Hardware	41%	52%
Total Revenues	100%	100%
Costs and other expenses		
Cost of services	16%	18%
Cost of license fees and hardware	94%	122%
Total Cost of Goods Sold	110%	140%
Gross profit	-10%	-40%
Operating expenses		
Selling, general and administrative	249%	174%
Research, development and engineering	68%	46%
Total Operating Expenses	317%	220%
Operating loss	-327%	-261%
Other income (expenses)	-%	-%
Net loss	-327%	-261%

Revenues and cost of goods sold

	Three months ended March 31, 2019	2018	$ Change	% Change
Revenues				
Service	$ 241,610	$ 302,449	$ (60,839)	-20%
License	83,208	102,719	(19,511)	-19%
Hardware	226,805	436,287	(209,482)	-48%
Total Revenue	$ 551,623	$ 841,455	$ (289,832)	-34%
Cost of goods sold				
Service	$ 90,829	$ 154,733	$ (63,904)	-41%
License & Hardware	513,221	1,024,712	(511,491)	-50%
Total COGS	$ 604,050	$ 1,179,445	$ (575,395)	-49%

Revenues

For the three months ended March 31, 2019, service revenues were $241,610 as compared to $302,449 during the three months ended March 31, 2018, a decrease of $60,839, or 20%. The decrease was due to non-recurring custom service revenue decreasing to $2,750 as compared to $101,850 during the three months ended March 31, 2018, resulting primarily from the end of a project for custom services to one customer. The decrease was offset by recurring maintenance and support revenue increasing to approximately $238,900 as compared to $200,600 during the three months ended March 31, 2018, attributable largely to maintenance and support of a large license order shipped in December of 2017.

For the three months ended March 31, 2019, license revenue decreased to $83,208 or 19% from $102,719 during the three months ended March 31, 2018. The decrease was due to an increase in new customers with smaller initial orders. During the three months ended March 31, 2019, we continued to ship products to Omnicell (formerly Aesynt) for the continued deployment of our identification technology in its AccuDose® product line, and for continued expansion of biometric ID deployments with several commercial partners, including several healthcare facilities and banks.

Hardware sales decreased during the three months ended March 31, 2019 by approximately $209,500, or 48%, to $226,805 from $436,287 during the three months ended March 31, 2018. The decrease resulted from an approximate $116,000 reduction in the shipment of locks and an approximate $94,000 reduction in shipments of fingerprint readers due to smaller orders in 2019 as compared to 2018.

Costs of goods sold

For the three months ended March 31, 2019, cost of service decreased approximately $64,000 or 41% to $90,829, as a result of no large custom services orders, compared to the three months ended March 31, 2018 where costs of outside contractors and reclassed research and development resources to cost of goods sold were included. For the three months ended March 31, 2019, license and hardware decreased to $513,221 from $1,024,712 during the three months ended March 31, 2018, related to lower costs associated with less hardware revenue, and a decrease of approximately $379,000 in amortization of the software rights which is included in cost of license fees on the statement of operations.

Selling, general and administrative

	Three months ended March 31, 2019	Three months ended March 31, 2018	$ Change	% Change
Selling, general and administrative	$ 1,377,033	$ 1,461,854	$ (84,821)	-6%

Selling, general and administrative expenses for the three months ended March 31, 2019 decreased 6% to $1,377,033 as compared to $1,461,854 for the corresponding period in 2018. The decrease was due to lower personnel expenses, factoring fees, and non-cash, share-based compensation costs. These amounts were offset by an increases in commission expense, franchise tax expense, accounting and legal fees, show attendance and booth costs.

Research, development and engineering

	Three months ended March 31, 2019	Three months ended March 31, 2018	$ Change	% Change
Research, development and engineering	$ 374,118	$ 392,154	$ (18,036)	-5%

For the three months ended March 31, 2019, research, development and engineering expenses decreased 5% to $374,118 as compared to $392,154 for the corresponding period in 2018. Included in the decrease were reductions in personnel expense, non-cash, share-based compensation costs, and reductions in contractor labor. These amounts were offset by increased research and development expenses by our Hong Kong subsidiary.

LIQUIDITY AND CAPITAL RESOURCES

Cash Flows

Net cash provided by operations during the three months ended March 31, 2019 was approximately $160,000. The cash provided in operating activities was primarily attributable to the following items:

- Net positive cash flows related to adjustments for non-cash expenses for depreciation, amortization, share-based compensation, issuance of common stock to our non-employee directors, and right-of-use assets of approximately $900,000, and a decrease in accounts receivable, combined with increases in accounts payable, accruals and deferred revenue of approximately $1,125,000.

- Net negative cash flows related to reductions of prepayments, due from factor, and operating lease liabilities of approximately $90,000.

Approximately $25,000 was used for investing activities during the three months ended March 31, 2019 related to capital expenditures.

We had net working capital at March 31, 2019 of approximately $1,900,000 as compared to net working capital of approximately $3,000,000 at December 31, 2018.

Liquidity and Capital Resources

Since our inception, our capital needs have been principally met through proceeds from the sale of equity and debt securities. We expect capital expenditures to be less than $100,000 during the next twelve months.

The following sets forth our primary sources of capital during the previous two years:

We entered into an accounts receivable factoring arrangement with a financial institution (the "Factor") which has since been extended through October 31, 2019. Pursuant to the terms of the arrangement, from time to time, we sell to the Factor a minimum of $150,000 of certain of our accounts receivable balances per quarter on a non-recourse basis for credit approved accounts. The Factor remits 35% of the foreign and 75% of the domestic accounts receivable balance to us (the "Advance Amount"), with the remaining balance, less fees, to be forwarded to us once the Factor collects the full accounts receivable balance from the customer. In addition, from time to time, we receive over advances from the Factor. Factoring fees range from 2.75% to 15% of the face value of the invoice factored, and are determined by the number of days required for collection of the invoice. We expect to continue to use this factoring arrangement periodically to assist with our general working capital requirements due to contractual requirements.

On April 28, 2017, we issued to Wong Kwok Fong (Kelvin), a director, executive officer and principal stockholder of the Company, 277,778 shares of common stock at a purchase price of $3.60 per share for gross cash proceeds of $1,000,000.

On May 2, 2017, we entered into a committed equity facility pursuant to which we may issue and sell up to $5.0 million worth of shares of common stock, subject to certain limitations and satisfaction of certain conditions, over a 36-month term following the effectiveness of a registration statement covering the public resale of the shares of common stock issued under the facility. As of the date of this report, the registration statement has not been filed. From time to time over the term of the facility, we may issue requests to the investor to purchase a specified dollar amount of shares up to a maximum of $100,000 over a five trading day period based on the daily volume weighted average price of our common stock (VWAP) to the extent the VWAP equals or exceeds the greater of a formula amount or $3.83 per share. The per share purchase price for the shares issued under the facility will be equal to 94% of the lowest VWAP that equals or exceeds $3.83 per share. Aggregate sales under the facility are limited to 19.99% of the total outstanding shares of the Company's common stock as of May 2, 2017, unless stockholder approval is obtained, and sales under the facility are prohibited if such a sale would result in beneficial ownership by the investor of more than 9.99% of the Company's common stock.

On September 22, 2017, we issued to Wong Kwok Fong (Kelvin), a director, executive officer and principal stockholder of the Company, 427,778 shares of common stock and warrants to purchase 138,889 shares of common stock for an aggregate purchase price of $1,540,000, or $3.60 per share. The purchase consisted of a cash payment of $1,000,000 and the conversion of accrued dividends payable on the Company's Series A-1 Convertible Preferred Stock of $540,000.

On August 24, 2018, we completed a public offering of units consisting of 1,380,000 shares of common stock and warrants to purchase 1,035,000 shares of common stock for an aggregate gross proceeds of $2,070,000, or $1.50 per unit.

On April 4, 2019, we issued a $550,000 secured convertible debenture to an institutional investor which matures November 15, 2019 and is convertible into common stock at a conversion price of $1.50 per share. The debenture may be redeemed at any time by payment of a premium to the principal balance starting at 5% and increasing to 20%. The debenture was issued at a 7% original issue discount. Subject to the mutual agreement of us and the investor, we may purchase up to two additional $550,000 principal amount debentures on the same terms after 45 day intervals from the prior issuance. At the closing, we issued 80,000 shares of common stock in payment of a $120,000 commitment fee and we are obligated to issue 10,000 shares of common stock in payment of a monthly commitment fee of $15,000 until the earlier of November 1, 2019 or the repayment or conversion of the debenture issued on April 4, 2019.

Liquidity outlook

At March 31, 2019, our total cash and cash equivalents were approximately $459,000, as compared to approximately $324,000 at December 31, 2018.

As discussed above, we have historically financed our operations through access to the capital markets by issuing secured and convertible debt securities, convertible preferred stock, common stock, and through factoring receivables. We estimate that we currently require approximately $537,000 per month to conduct our operations, a monthly amount that we have been unable to consistently achieve through revenue generation. During the first quarter of 2019, we generated approximately $552,000 of revenue, which is below our average monthly requirements.

If we are unable to generate sufficient revenue to meet our goals, we will need to obtain additional third-party financing to (i) conduct the sales, marketing and technical support necessary to execute our plan to substantially grow operations, increase revenue and serve a significant customer base; and (ii) provide working capital. We may, therefore, need to obtain additional financing through the issuance of debt or equity securities.

Due to several factors, including our history of losses and limited revenue, our independent auditors have included an explanatory paragraph in their opinion related to our annual financial statements as to the substantial doubt about our ability to continue as a going concern. Our long-term viability and growth will depend upon the successful commercialization of our technologies and our ability to obtain adequate financing. To the extent that we require such additional financing, no assurance can be given that any form of additional financing will be available on terms acceptable to us, that adequate financing will be obtained to meet our needs, or that such financing would not be dilutive to existing stockholders. If available financing is insufficient or unavailable or we fail to continue to generate sufficient revenue, we may be required to reduce operating expenses, delay the expansion of operations, be unable to pursue merger or acquisition candidates, or in the extreme case, not continue as a going concern.

ITEM 4. CONTROLS AND PROCEDURES.

Disclosure Controls and Procedures

Our management, with the participation of our Chief Executive Officer ("CEO") and Chief Financial Officer ("CFO"), evaluated the effectiveness of our disclosure controls and procedures as of March 31, 2019. The term "disclosure controls and procedures," as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the "Exchange Act"), means controls and other procedures of a company that are designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is recorded, processed, summarized and reported, within the time periods specified in the SEC's rules and forms. Disclosure controls and procedures include, without limitation, controls and procedures designed to ensure that information required to be disclosed by a company in the reports that it files or submits under the Exchange Act is accumulated and communicated to the company's management, including its principal executive and principal financial officers, as appropriate, to allow timely decisions regarding required disclosure. Based on the evaluation of our disclosure controls and procedures as of March 31, 2019, our CEO and CFO concluded that, as of such date, our disclosure controls and procedures were effective at the reasonable assurance level.

Changes in Internal Control Over Financial Reporting

There have been no changes in our internal control over financial reporting during the fiscal quarter ended March 31, 2019, that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

PART II — OTHER INFORMATION

ITEM 6. EXHIBITS

The following exhibits are being filed or furnished with this quarterly report on Form 10-Q.

Exhibit No.	Description
31.1	Certificate of CEO of Registrant required under Rule 13a-15(f) under the Securities Exchange Act of 1934, as amended
31.2	Certificate of CFO of Registrant required under Rule 13a-15(f) under the Securities Exchange Act of 1934, as amended
32.1	Certificate of CEO of Registrant required under 18 U.S.C. Section 1350
32.2	Certificate of CFO of Registrant required under 18 U.S.C. Section 1350
101.INS	XBRL Instance
101.SCH	XBRL Taxonomy Extension Schema
101.CAL	XBRL Taxonomy Extension Calculation
101.DEF	XBRL Taxonomy Extension Definition
101.LAB	XBRL Taxonomy Extension Labels
101.PRE	XBRL Taxonomy Extension Presentation

SIGNATURES

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

BIO-Key International, Inc.

Dated: May 15, 2019	/s/ MICHAEL W. DEPASQUALE Michael W. DePasquale Chief Executive Officer
Dated: May 15, 2019	/s/ CECILIA C. WELCH Cecilia C. Welch Chief Financial Officer

CERTIFICATION

I, Michael W. DePasquale, certify that:

1. I have reviewed this quarterly report on Form 10-Q of BIO-key International, Inc. (the "Company");

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 Company as of, and for, the periods presented in this report;

4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company 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 Company, 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 Company'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 Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter (the Company's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting;

5. The Company's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company'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 Company'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 Company's internal control over financial reporting.

Dated: May 15, 2019

/s/ Michael W. DePasquale
Michael W. DePasquale
Chief Executive Officer

Exhibit 31.2

CERTIFICATION

I, Cecilia C. Welch, certify that:

1. I have reviewed this quarterly report on Form 10-Q of BIO-key International, Inc. (the "Company");

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 Company as of, and for, the periods presented in this report;

4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Company 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 Company, 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 Company'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 Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter (the Company's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the company's internal control over financial reporting;

5. The Company's other certifying officers and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company'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 Company'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 Company's internal control over financial reporting.

Dated: May 15, 2019

/s/ Cecilia C. Welch
Cecilia C. Welch
Chief Financial Officer

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 BIO-key International, Inc. (the "Company") on Form 10-Q for the period ended March 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the "Report"), I, Michael W. DePasquale, Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 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; and

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

BIO-KEY INTERNATIONAL, INC.

By: /s/ Michael W. DePasquale
Michael W. DePasquale
Chief Executive Officer

Dated: May 15, 2019

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 BIO-key International, Inc. (the “Company”) on Form 10-Q for the period ended March 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the “Report”), I, Cecilia Welch, Chief Financial Officer of the Company, certify, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 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; and

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

BIO-KEY INTERNATIONAL, INC.

By: /s/ Cecilia C. Welch
Cecilia C. Welch
Chief Financial Officer

Dated: May 15, 2019