BIO-key®

Nasdaq: BKYI

Next Generation Biometric Centric Identity and Access Management Solutions

December 2020

www.bio-key.com

Safe Harbor

All statements contained herein other than statements of historical facts are "forward-looking statements" as defined in the Private Securities Litigation Reform Act of 1995 (the "Act"). The words "estimate," "project," "intends," "expects," "anticipates," "believes" and similar expressions are intended to identify forward-looking statements. Such forward-looking statements are made based on management's beliefs, as well as assumptions made by, and information currently available to, management pursuant to the "safe-harbor" provisions of the Act. These statements are not guarantees of future performance or events and are subject to risks and uncertainties that may cause actual results to differ materially from those included within or implied by such forward-looking statements. These risks and uncertainties include, without limitation, 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 in the biometric technology industry; market acceptance of biometric products generally and our products under development; our ability to execute and deliver on contracts in Africa; our ability to expand into Asia, Africa and other foreign markets; our ability to integrate the operations and personnel of Pistol Star into our business, the duration and severity of the current coronavirus COVID-19 pandemic and its effect on our business operations, sales cycles, personnel, and the geographic markets in which we operate; 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 see "Risk Factors" in our Annual Report on Form 10-K for the year ended December 31, 2019 and other filings with the Securities and Exchange Commission. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date made. Except as required by law, the Company undertakes no obligation to disclose any revision to these forward-looking statements whether as a result of new information, future events, or otherwise.

Multi-factor Access Management + Biometrics

BIO-key provides proven, easy-to-use multifactor identity and access management software and hardware solutions for:

- Large-scale identity, Identity-as-a-Service (IDaaS) and identity and access management (IAM)

- Strong, convenient biometric user authentication

- Enterprise multi-factor authentication (MFA) and single sign-on (SSO) for users and devices ...."SUPER MFA" the next generation of security solutions

- Protecting enterprise infrastructure, data and cloud applications

BIO-key's powerful security layer protects against unauthorized access, identity theft, fraud and other threats. Unlike passwords, security cards or tokens, BIO-key strongly binds an individual to their identity through a superior, frictionless user experience

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Financial and reputation costs of major security breaches (CapitalOne, Equifax, Yahoo, SEC, Deloitte, Marriott) show value/ROI of security & data protection to enterprises.

BKYI at-a-Glance

- NASDAQ   BKYI
- Recent Price $3.40
- 52-Week Range $2.75 - $20.64
- Shares Out.   7.8M
- Market Cap $26.5M
- Net Cash (1) $18.4M
- Enterprise Value $8.1M
- TTM Revenue $2.3M

(1) In July of 2020, BIO-key raised approximately $22.8 million, after underwriting discounts, commissions & offering expenses. The Company used $4.2 million of proceeds to satisfy all outstanding convertible promissory notes due to Lind Global Macro Fund, L.P.

(2) In November 2020, BIO-key executed a 1-for-8 reverse stock split.

(3) Insiders have purchased shares starting 11-23-20 in price range of $3.21- $3.40

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Working Capital

	July 2020-Proforma
Current Assets (1)	$20.4M
Less: Current Liabilities (ex. Def. Revenue)	$0.9M
Less: Note Payable - PistolStar	$0.2M
Proforma Working Capital $19.3M	

(1) Includes $18.4M of cash and cash equivalents.

(2) In July of 2020, BIO-key raised approximately $22.8 million, after underwriting discounts, commissions & offering expenses. The co. used $4.2 million of proceeds to satisfy all outstanding convertible promissory notes due to Lind Global Macro Fund, L.P.

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Software Products & Services

(~60% of 2019 Revenue, ex. PG)

- **Vector Segment Technology™ VST Algorithm** converts fingerprint data into digital templates

- **WEB-key®** - Secure transport of biometric data from device -> cloud -> device

- **PortalGuard®** is today's all-inclusive identity management solution for SSO and self-service password reset to 2FA.

- **ID Director & ID Director for SAML:** One-touch biometric authentication within Microsoft Active Directory environment (a leading network protocol) without costly integration

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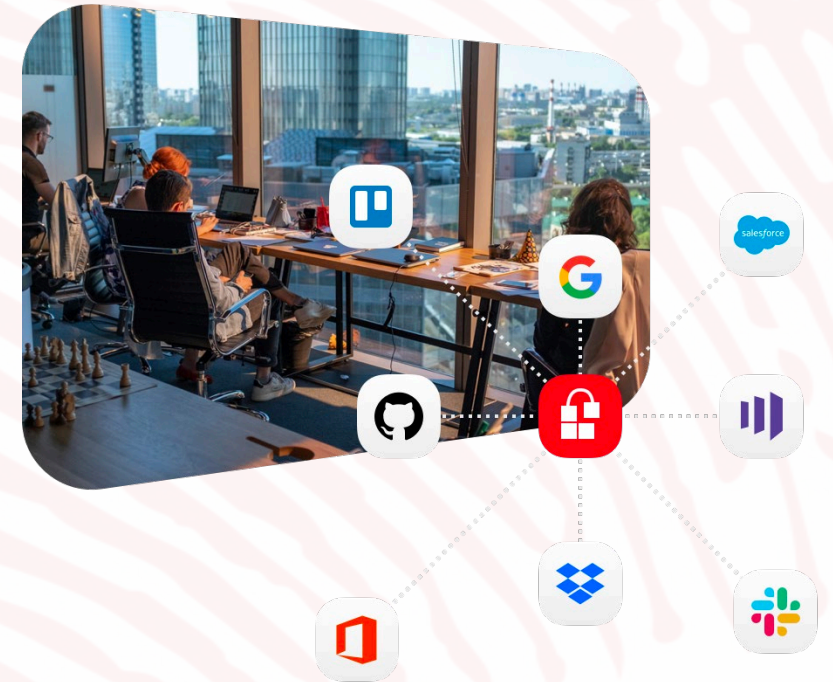
PistolStar® Acquisition

- **PistolStar's Flagship PortalGuard®** product is an effective, integrative and easy-to-use authentication & identity as a service (IDaaS) solution. PortalGuard provides comprehensive single sign-on (SSO), self-service password reset, two-factor authentication (2FA) & reactive cybersecurity cybersecurity methods.

- On July 1, 2020 BIO-key purchased PistolStar for $2.5 million. PistolStar's highly complementary team and products are now part of BIO-key's comprehensive offerings.

- PistolStar's 2019 revenues were $1.58 million. The acquisition is expected to be accretive to both revenue and operating income.

- PistolStar's experienced team & product line significantly expands BIO-key's market reach & revenue potential, combining a proven suite of IAM and IDaaS solutions with BIO-key's superior biometric user experience & value proposition.

- PistolStar's customer base includes over 200 institutions & enterprises with a strong presence in higher education & little overlap with BIO-key's base, creating cross-selling opportunities.

Hardware Products

(~40% of 2019 Revenue, ex. PG)

- Full line of secure, easy-to-use, value priced fingerprint readers for enterprises and consumers

- Windows 7, 8.1 and 10 and Android solutions

- MSRPs from $39.95 to $90; ~60% normal gross margin

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New PortalGuard IDaaS Platform

Award-winning PortalGuard IAM platform now launched as an in-cloud, fully-hosted, scalable and secure Identity-as-a-Service (IDaaS) offering.

- Includes BIO-key's NIST-certified device-or-server biometric authentication factors with 14 other flexible authentication options.

- Meets increasing demand for more secure, always-on-cloud computing – due to global shift to work-from-anywhere.

- IDaaS lets customers accelerate deployments, cut costs and simplify operations for mission-critical IAM solutions.

- High margin, recurring SaaS revenue stream.

Use Cases for BIO-key

- Compelling Event – Either Responding or Planning for an event/security breach.
- Compliance for Highly Regulated Industries (NIST tested and FIPS 201 compliant readers)
- Securing Shared Workstations / Call Centers
- Providing Multi-factor Authentication within an Organization's existing structure.

DATA BREACH

200+	80%	$500B	$3.5M
Average number of days attachers reside within a victim's network before detection	of all network intrusions are due to compromised user credentials	The total potential cost of cybercrime to the global economy	The average cost of a data breach to a company

Source: IBM Data Breach Calculator
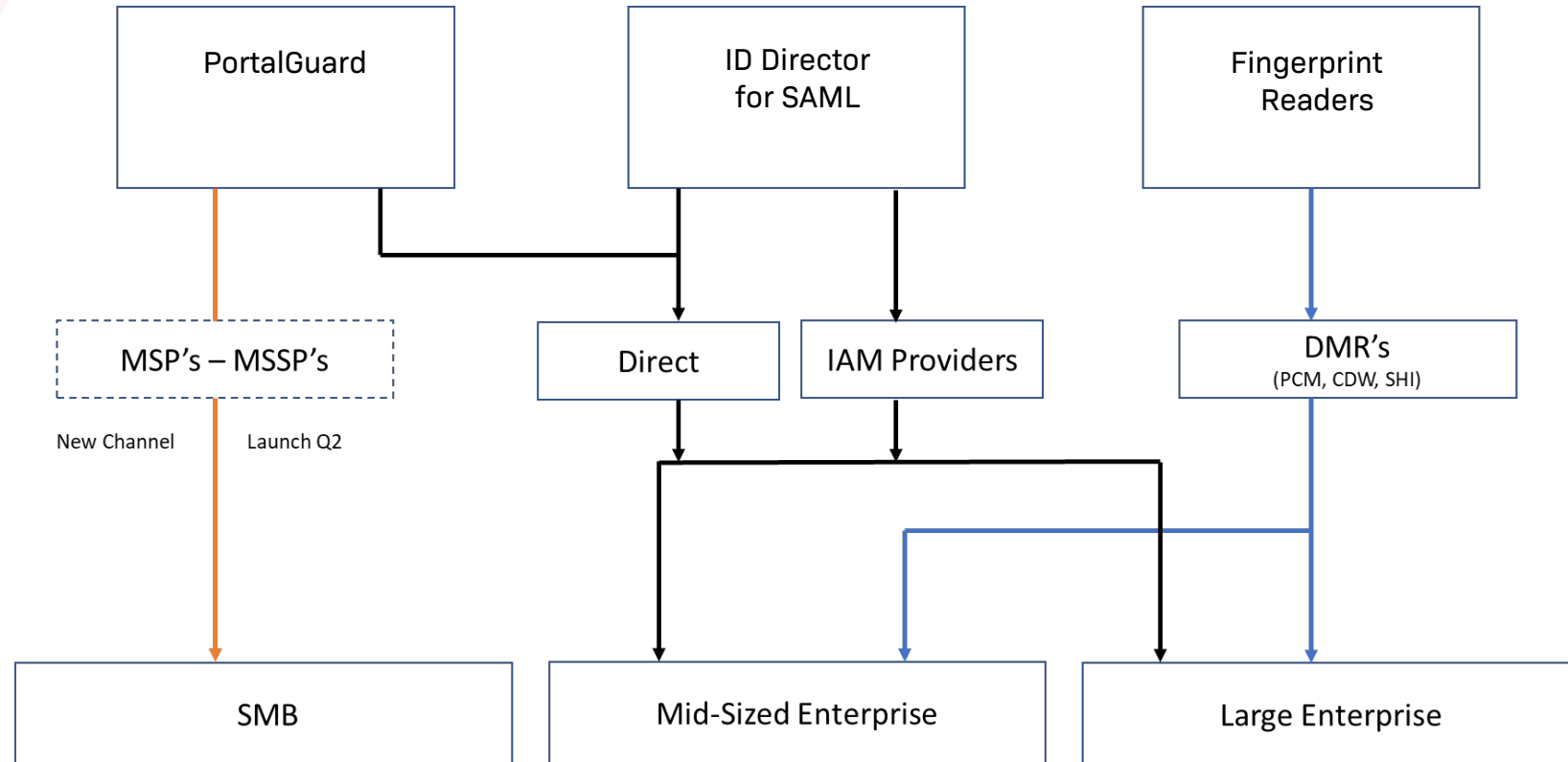
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BIO-Key Customers

PortalGuard Customers

Sales Strategy – Go-To-Market

- Expand **Channel Alliance Program** to include PortalGuard solution set through managed-service-providers and managed-security-service-providers.

- **Partnerships with Identity Access Mgt. Providers** to sell BIO-key SAML solution into Enterprise to supplement direct sales efforts

- Leverage existing direct market **reseller relationships** & expand into new agreements to sell more Readers to larger Enterprises.

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Strong IP Protection

14 U.S. Patents; two recently issued, two acquired with PistolStar :

UTILIZATION of BIOMETRIC DATA (Patent 10,002,244)

- *Enables BIO-key to capitalize on the transition of mobile devices to in-screen, "under glass" biometric sensors* – though patent is broad enough to apply to sensors anywhere on a device.

- Patent leverages continuous stream of partial fingerprint, facial or other biometric captures that occur as user interacts with a device. Technique enables a continuous, passive authentication for greater security with little impact to workflow.

ADAPTIVE SHORT LISTS & ACCELERATION of BIOMETRIC DATABASE SEARCH (Patent 10,025,831)

- *An indexing method for quickly & iteratively searching a large scale database of biometric records.*

- Large-scale Automated Fingerprint Identification Systems like that used by the FBI were once the exclusive province of big-budget agencies and enterprises.

- BIO-key's method uses 1 or more scans of a database with varying parameters, narrowing the field of candidates each pass. The approach powers a unique advantage in delivering cost-effective, 1-to-many ID solutions that avoid costly and computer-intensive brute force scans.

In June 2020, through our acquisition of PistolStar, we acquired U.S. Patent No. 8,397,077 for "Client side authentication redirection" and U.S. Patent No. 8,196,193 for a "Method for retrofitting password enabled computer software with a redirection user authentication method."

African Growth Opportunity

Formed New 'BIO-key Africa' Subsidiary, based in Nigeria, to Pursue Large Biometric Security Opportunity Across the Continent

- The **World Bank** recently approved $433M for Nigerian biometric national ID registration program.
- Nigeria joined the **African Continental Free Trade Area (CFTA),** the largest free trade area in the world, comprised of 54 nations.
- CFTA is expected to boost intra-African trade up to 60% by 2022.
- Africa has a **population of 1.3 billion** with strong need and support for biometric security.
- Well-respected Veteran exec., **Akintunde "Tunde" Carlton JeJe,** is leading BIO-key's Africa business.

Sources: CNBC, Leadership Nigerian News – September 2019

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Recent African Contracts

- Since March 2020, BIO-key and its African partners have been engaged to provide **biometric technology valued at $30 million** as part of a joint identity management solution. The solutions will facilitate the enrollment of users and the identification of individuals for a telecom company in Nigeria, working in conjunction with its Nigerian identity supply partner, Chams PLC. Chams Pl, (NSE: CHAMS)

- BIO-key and its partners are also part of a **$45 million contract** to provide biometric software & hardware solutions in support of a Nigerian Ministry of Labour program to educate, empower & create employment for a million college graduates in Nigeria. The program also seeks to foster secure & scalable ecommerce infrastructure to support Nigerian industry. Expected $650k of revenue in Q4'20.

NOTE: COVID has delayed most of our activity in Africa. Due to pandemic market conditions, our team and partners are re-confirming the projects including requirements and timelines to begin deployment.

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Growth Strategies

Increase Sales to Existing Customers

- Significant opportunity for cross-selling existing PortalGuard customers a biometric solution
- Similarly, there is an opportunity to upsell BIO-key customers the PortalGuard Access Management Platform

Launch New Products and Enhance Existing Solutions

- Introduce new biometric modalities to platform
- Introduced SaaS PortalGuard platform (IDaaS)
- Add functionality upgrades to WEB-key platform
- Rollout 'Scooch' product
- Add Provisioning and Governance modules to PortalGuard platform

Expand Customer Base by Investing in Sales and Partner Network

- Grow the Channel Alliance Program (CAP) significantly with IAM partners (Resellers, MSP's, Integrators)
- Explore Master Agent program for SaaS sales
- Invest in Marketing Programs to drive broader awareness of Integrated Platform

Expand Global Presence

- Introduce Integrated Platform to International Partners
- Introduce Integrated Platform to International End User Customers as appropriate
- Grow International Partner base strategically in select regions

Grow Business Development Function

- Find technology partners that complement integrated platform and expand opportunity base
- Offer biometric solutions to existing IAM vendors to broaden opportunities and enhance biometric brand in market
- Pursue partnerships with other biometric modality companies for potential integration into Platform

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Management

- **Michael W. DePasquale – Chairman & CEO** 25+ years in executive management, sales and marketing.

- **Cecilia Welch – CFO** 20+ years of tech operational and financial management experience.

- **Jim Sullivan – CLO, SVP Strategy** 25+ years enterprise sales in identity and access management, including with key customers AT&T World Bank IDF, Capitec Bank, NCR & Omnicell

- **Kelvin Wong – MD HK Subsidiary,** co-founder of World-Wide Touch Technology; 15+ years in manufacturing and marketing management, including biometrics & payments.

- **Fred Corsentino – CRO** 30+ years of developing and building inside / outside enterprise sales teams with a focus on advanced technology and security.

- **Mira LaCous – CTO** 30+ years solution development and product management.

- **Scott Mahnken – VP Channel Sales** 20+ years product and services marketing

- **Kimberly Johnson – VP Product Marketing** Extensive experience in IAM, started her career at PortalGuard

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Investment Considerations

- **Solid revenue growth potential from with PistolStar/PortalGuard acquisition and a strong backlog of contracts**

- **Expanded Global footprint:** Strategic partnerships with leading tech providers across Asia and now Africa

- **Expanded opportunity with PortalGuard for growing demand for biometrics as a multifactor option with IDaaS**, hybrid, or on-prem solutions that offer advantages & options not found in competing offerings, while allowing enterprises to leverage existing investments in factors their users already have

- **Broader Base of Software Applications / End-Markets –** BIO-key's focus on highly regulated industries: financial services, healthcare, government & protecting high value data in shared access environments: e.g. data centers, workstations – now significantly bolstered with PortalGuard's strength in higher education.

- **Microsoft Partnership –** Leveraging intensive Microsoft marketing highlighting elimination of passwords; drives software and reader sales

- **IoT or Biometrics of Things (BoT) –** Embedded biometric IoT modules and connected lock technology for industrial uses

- **Continued Innovation –** combined with new PistolStar team, strategic partners and OEMs.

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Thank You!

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