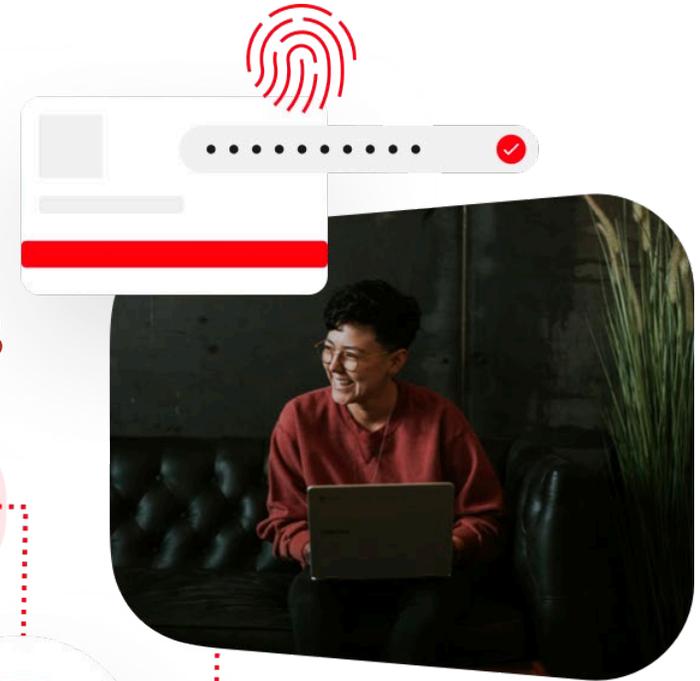


Next Generation Biometric-Centric Identity and Access Management Solutions

Growth from Cloud & Work-from-Anywhere Demand

September 2021

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 COVID19 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, 2020 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.

BKYI at-a-Glance



NASDAQ	BKYI
Recent Price	\$3.50 (1)
52-Week Range	\$2.75 - \$5.76
Shares Out	7.8m
Market Cap	\$27m
Net Cash	\$11.5m (2)
Enterprise Value	\$16m
LTM Revenue	\$4.9m
EV-to-Revenue	3.25x (3)
202E Rev. Growth	250%. (4)
Contract Backlog	>\$75m

- (1) Insiders purchased shares at prices between \$2.92 and \$4.00 in June & August of 2021.
- (2) In July of 2020, BIO-key raised approximately \$22.8 million, after underwriting discounts, commissions & offering expenses. BIO-key used \$4.2 million of proceeds to satisfy all outstanding convertible promissory notes due to Lind Global Macro Fund, L.P.
- (3) Larger public comps in the identity space (OKTA, FORG, SAIL, CYBR & PING) trade between 8x and 35x EV-to-Revenue with a median multiple of 12x.
- (4) Growth Estimate is based on mid-point of 2021 revenue guidance of \$8 -12 million. BIO-key also estimates that cash break-even is within this range.

Working Capital

	June 2021
Current Assets (1)	\$17.3m
Less: Current Liabilities (ex. Def. Revenue)	\$2.0m
Proforma Working Capital \$15.3m	
<p>1. Includes \$11.5m of cash and cash equivalents.</p> <p>2. 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.</p>	

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 via a superior, frictionless user experience. Its solutions support passwords, security cards, tokens & other factors, along with BIO-key’s industry-leading biometric hardware & software solutions, which provide the strongest possible link between an individual’s identity and authorized access or *“Identity -Bound Biometrics”*.



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

Use Cases for BIO-key

- Compliance for Highly Regulated Industries meeting NIST 2FA security requirements.
- Securing Shared Workstations / Call Centers.
- Providing Multi -factor Authentication within an organization's existing structure.
- Compelling Event – Either Responding to or Planning for an event/security breach.

DATA BREACH



[Source: IBM Data Breach Calculator](#)

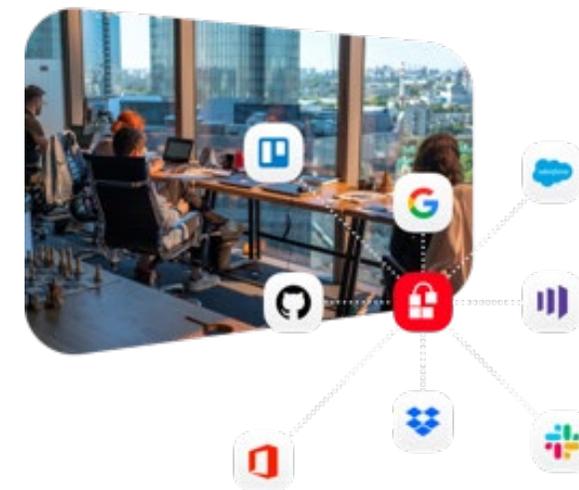
Software Products & Services

63% of 2021 Revenue

- **PortalGuard®** an all-inclusive identity management solution for single sign-on (SSO), 2 factor authentication (2FA) and efficient features like self-service password reset. Meets increased work-from-home demand & provides high-margin, recurring revenue. Customer base includes over 200 institutions & enterprises with a strong presence in higher education and regulated industries.

Identity-Bound Biometric Solutions

- **Vector Segment Technology (VST) Algorithm** converts fingerprint data into digital templates.
- **WEBkey®** - Secure transport of biometric data from device -> cloud -> device.
- **ID Director & ID Director for SAM** One-touch biometric authentication within Microsoft Active Directory environment (a leading network protocol) without costly integration.



Hardware Products

37% of 2021 Revenue

- Full line of secure, easy-to-use, value priced fingerprint readers for enterprises and consumers
- Windows 7, 8.1 and 10 & Android solutions
- MSRPs from \$39.95 to \$90; ~60% normal gross margin



New Hardware Products

- **Pocket10** is an FBI FAP50, NIMG and STQG certified fingerprint scanner, which captures ten print enrollments in a pocket-sized form factor, allowing highly mobile capability suitable for national IDs, background check submissions, and law enforcement.
- **USB-C versions of its popular SidePass® and SideSwipe®** fingerprint scanners. With this next generation of affordable hardware options for its customers, BIO-key continues its leadership in developing hardware to support the most secure and convenient authentication method – biometrics – and meeting the growing demand from enterprises and government for new form factors and USB connection options.



New Hardware Products (cont.)

- **BIO-key FIDO-keys®**, an affordably priced FIDO2 security key lineup, offer USB-A, USB-C, NFC, and iOS compatibility along with FIPS 140-2 certified options with on-device biometric verification.
- **MobilePOS Pro®**, a handheld, biometrically enabled, Android Point of Sale terminal, with an FBI-certified capacitive fingerprint, a thermal printer, high-resolution 5 megapixel camera, WiFi support, a barcode scanner, NFC scanner, triple-track magnetic stripe reader, long life 5800 mAh battery and large 5.5" touchscreen display.
- **BIO-key EcoID II®**, is the next generation of BIO-key's highly regarded EcoID USB fingerprint scanner. EcoID II incorporates new scanner technology with BIO-key's NIST-tested algorithms for improved scanning, image capture, and overall user experience. It's small size makes it ideal for space-constrained workspaces in the workplace or at home.



Improved PortalGuard IDaaS Platform

Award-winning PortalGuard IAM platform now offered as an on-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.



MobileAuth® A Different Way to Authenticate

- Multi-factor authentication (MFA) is an essential part of any IAM strategy and organizations such as NIST and the FBI have warned that traditional MFA methods such as passwords and phone-based methods, including one-time password (OTP) generators and SMS codes, remain vulnerable to social engineering and cyberattacks.
- BIO-key's new mobile app, *MobileAuth* with *PalmPositive* is the latest among over sixteen strong authentication factors available for BIO-key's PortalGuard® Identity-as-a-Service (IDaaS) platform.
- MobileAuth's fast, touchless biometric user authentication – using a palm scan – works with any Android or iOS device to provide an unprecedented simple, privacy protected, and convenient user experience with the identity integrity and availability that enterprises require.



New Software Solutions & Options

- **PortalGuard Contextual Authentication v2.0** – Continuous authentication, allows improved customer user experience through more fine-tuned risk-balancing controls, analyzes contextual or adaptive characteristics to strike a balance between security and convenience.
- **Microsoft Azure Active Directory (AD) Integration** to support working from anywhere with remote work continuing to be a mainstay amongst employees, users can often no longer connect to a Domain Controller to enforce security.
- **SSO Jump Page for Easy Application Organization.** Some enterprises don't have a full Cloud Management System portal, creating a need to show an accurate listing of all applications in which each user has SSO access.
- **Dashboard & Analytics for Full Visibility into User Interactions.** This innovation builds on PortalGuard's user activity data collection capabilities for reports on user interactions at a chosen interval, automatically scheduled reports via email or manually produced to gain actionable insights for troubleshooting and diagnostics.
- **New WEB-Key 4.0.931 Release** for Improved Product Experience. Faster installation and quicker device lookup for fingerprint scanners of choice, delivering an even more streamlined experience for users leveraging BIO-key's server-based biometric identity and authentication.

BIO-key Customers



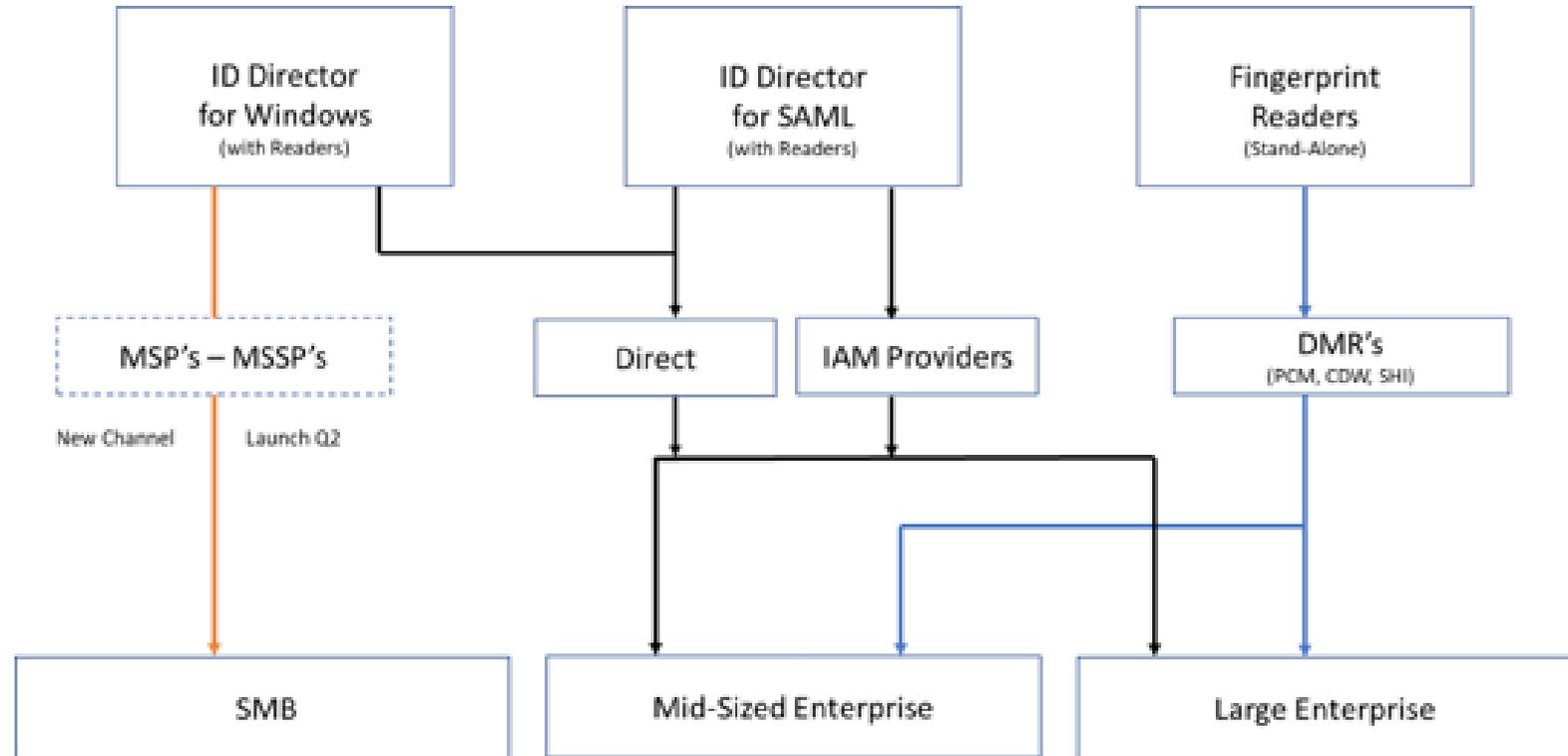
PortalGuard Customers



	BIO-key International (BKYI)		Okta, Inc. (OKTA)
COMPANY & EXPERTISE	<ul style="list-style-type: none"> • Founded 1993 • Global market penetration • Solutions for organizations of all sizes 		<ul style="list-style-type: none"> • Founded in 2009 • Primary market is North America • Larger enterprise focus – too expensive and complex for smaller organizations.
BIOMETRIC IDENTITY & AUTHENTICATION	Industry-leading biometric capabilities that go beyond phone-based biometrics to require the specific, authorized user’s presence – nothing to carry to prove who they are, and as important, nothing to make an unauthorized delegation.		Biometrics are limited to FaceID, TouchID, and Android which leaves it up to the owner of the device to decide who gains access vs. the organization/relying party.
SUPPORTED IDENTITY TYPES	<ul style="list-style-type: none"> • Support for workforce identities • Strong customer identity management, offering capabilities such as account self-registration and multi-factor authentication. 		<ul style="list-style-type: none"> • Support for workforce identities • Gartner highlights that managing customer identities is more simplistic than the competition.
CLOUD, HYBRID, ON-PREMISES DEPLOYMENTS	Flexibility to support all customer environments.		Struggle to support hybrid & on-premises environments with additional “hooks” required.
SUPPORT FOR UNIQUE CUSTOMER REQUIREMENTS	100s of successful tailored authentication projects delivered as productized solutions.		Unable to support unique requirements including multiple user directories and legacy applications
TOTAL COST OF OWNERSHIP	Affordable, straight forward pricing that can accommodate any budget. Special pricing available for education customers.		Pricing continues to be well above average, which is becoming a bigger concern for companies working through cost optimization exercises.

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 AccessMgt. 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.



Strong IP Protection

18 U.S. Patents; three recently issues, two acquired via PistolStar

ENABLING NEXT-GENERATION CONTINUOUS BIOMETRIC USER AUTHENTICATION (Patent 10,984,085)

- *Patent will protect BIO-key's method of enabling next-generation continuous and passive biometric user experiences* with its process for enrollment and continuous authentication.
- BIO-key's intelligent data pre-processing and transformation algorithms sort through varying samples of biometric data, making reliable and accurate connections between samples of different sizes, resolution qualities and points of view – supporting continuous authentication of a user's identity during ongoing activity. Methods particularly valuable for mobile devices with in-screen fingerprint sensors, cameras and microphones generating a continuous stream of partial biometric samples of fingerprints, faces or voices over time.

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 ID 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 acquisition of PistolStar, BIO-key acquired U.S. Patent No. 8,397,077 for “**Client side authentication redirection**” and U.S. Patent No. 8,196,193 – a “**Method for retrofitting password enabled computer software with a redirection user authentication method**”.

Large Scale Identity Opportunities in Africa



- Working with local partners, BIO-key's Africa subsidiary has secured \$70M in contracts to provide software, hardware and services for two identity/authentication projects in Nigeria. BIO-key is also pursuing other large-scale opportunities across the continent. Projects have been delayed to COVID19 pandemic and civic unrest; however, the situation has stabilized, and initial deployments have begun.
 - \$30M biometric user enrollment and identity management contract for major Nigerian telecom. BIO-key is partnered with the customers' Nigerian identity technology partner Chams PLC.
 - \$45M biometric software & hardware solutions contract to support Nigerian Ministry of Labour program to educate, empower & create employment for 1M college graduates, particularly by fostering secure & scalable ecommerce infrastructure to support Nigerian industry.

Growth Strategies

Increase Sales to Existing Customers

- Significant opportunity for cross-selling existing PortalGuard customers to biometric solutions
- Similarly, there remains opportunity to upsell legacy BIO-key customers the PortalGuard Access Management Platform (IDaaS)

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
- 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)
- Expand 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

Recent Awards & Recognition

- PortalGuard IDaaS Selected as *SC Media Trust Award Finalist for Best Authentication Technology* (others DUO; OKTA; Rubric; Beyond Identity) – March 2021.
- BIO-key VP of Product, *Kimberly Johnson Named to CRN's 2021 Women of the Channel: Power 100 List* – May 2021.
- BIO-key PortalGuard IDaaS Wins *"Identity Management Solution of the Year" by RemoteTech Breakthrough* for Innovation in the Global Remote Technology Industry – June 2021.
- Identity & Access Management Provider BIO-key's MobileAuth with PalmPositive Wins *Lucintel 2021 Technology Innovation Award* in the Biometric Market – July 2021.
- BIO-key PortalGuard IDaaS Wins *"Access Management Solution of the Year" by Cybersecurity Breakthrough* – September 2021.



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.
- **Mark Cochran – President PortalGuard** 20+ years of experience in Security and IAM markets.
- **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.
- **Akintunde Carlton JeJe – MD Africa** well-respected, experienced executive with extensive knowledge & contacts Nigerian & African markets.
- **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.

Investment Considerations

- ~ **\$27M Market Cap** (7.8M shares out. at recent price of \$3.50).
- ~ **\$16M Enterprise Value** net of ~\$11.5m of cash, represents 3.25x Revenue. Public comps in the Identity space (OKTA, FORG, SAIL, CYBR & PING) trade at a median of 12x revenue.
- **Solid Growth Potential** with \$75M Africa contract backlog + pipeline of PortalGuard and biometric opportunities.
 - **Broad Base of Solutions / End-Markets** – Focused on higher Education and highly regulated industries: financial services, healthcare, government, and protecting high value data in shared access environments: e.g. data centers, workstations.
 - **Global Footprint** – Strategic partnerships with leading tech providers in N. American, Africa and Asia.
 - **Increasing Work and Study from Anywhere Trends** – means more IT demands outside the corporate firewall.
 - **Growing Demand for Biometrics as a Multi -factor option** with cloud, on -premises or hybrid solutions that offer advantages & options not found in competing offerings, while also allowing enterprises to leverage investments in existing authentication factors.
 - **Growing Channel Alliance Partnerships** – Leveraging intensive marketing campaigns highlighting elimination of passwords; driving both software and FB reader sales.
- **Continued Innovation** by BIO-key's engineering teams across its hardware and software solutions.

Thank You

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