Socure

Socure is a digital identity verification and management platform providing predictive analytics to understand user behavior and potential threats. The platform works across a variety of industries, such as financial services, ecommerce, and online gaming. Consumers who frequently use onli
like Socure when creating a new on
early users of machine learning to r
database contains 8 billion records
2023, the company considered itse
verification fraud market globally."

Tags

AI / ML Cybersecurity IAM

Founding Date

Sep 2012

Total Funding

$744M

Stage

Series E

REPORT

Identity Moves to the Center of Security

By Kyle Harrison

REPORT

Identity Crisis: The Biggest Prize in Security

By Rak Garg, Kyle Harrison & Justin Li

MEMO

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Reading
28 min

Thesis

Since 2003, identity theft has incre payments fraud will reach $400 billion by 2032. The issue of fraud has become especially relevant in the early 2020s as the COVID-19 pandemic led to accelerated adoption in fintech, online gaming, and ecommerce. In 2021, the Federal Trade Commission (FTC) reported that consumers filed 2.8 million fraud reports – a 70%

March 2023, the Biden Administration announced a $1.6 billion "pandemic anti-fraud proposal".

Combatting fraud effectively can be difficult, especially for businesses operating in highly regulated industries like fintech or government services. On the one hand, customers want to be able to access their accounts and information quickly and easily; over 65% of customers in 2023 expect an exceptional digital experience. On the other hand, organizations need to protect customer data from unauthorized access. To strike a balance between convenience and security, firms must invest in robust security measures that protect customer data without adding friction to the customer journey.

The average user has ~130 differen
more complex, it also provides a cle
Unlike legacy solutions, newer platf
machine learning to learn from feed
time, reducing cases such as a goo
process due to suspected fraud. W
the global market for identity verific
$8.5 billion in 2021 to $34 billion by

Socure is a digital identity verificati
analytics to understand user behav
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verification fraud market globally."

Source: Business Wire

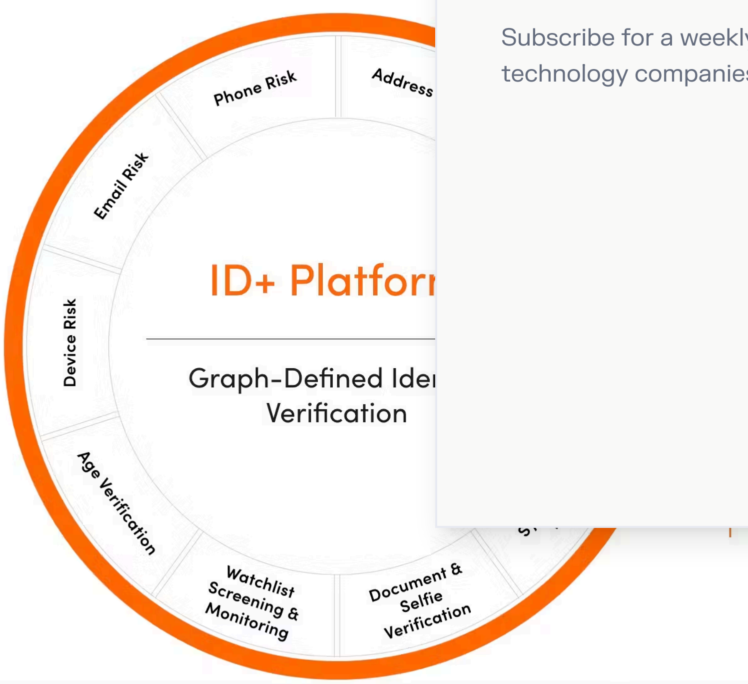
Socure was founded in 2012 in New
CEO). Prior to Socure, Ayers was a
Madhu was the founder of a bootst
experience as an IT Architect.

The pair started Socure with the id
fraud prediction [with the wealth of
approach differs significantly from
solutions are primarily focused on s
as well as still relying on manual pro

While Socure struggled to gain traction in the early years, the company eventually grew to double-digit millions in revenue by 2019, at which point Madhu left the company to tenure. As the company grew, so did its offerings, which expanded from multi-channel identity verification to KYC, fraud detection, and more. In 2021, Ayers became CEO.

Over time, Socure's mission has evolved from providing fraud detection and identity verification solutions to focused a broader fraud prevention platform. The company also has a number of executives that have contributed to the company's growth, including Pablo Abreu (Chief Product Officer), who past employees describe as "one of the sharpest minds in the industry as far as modeling and AI." Other executives who joined the company later include Chad Kalmes (CISO), who Socure hired in April 2022, having previously held director roles at Twilio and Optimizely. As of June 2023, the company has remote teams in both the United States and Chennai, India.

Product



Socure's core product offering is the ID+ Platform, which is comprised of several core features that together provide predictive solutions for identity verification and fraud prediction. Socure does this through Graph-Defined Identity Verification, an approach to identity verification that gets a comprehensive picture of every user in real-time using multiple trusted data sources.

Compared to its competitors and legacy solutions, Socure is considered to be better at detecting fraud with its graph analytics combined with machine learning models, enabling the platform to recognize attacks that would be difficult for humans to detect. The platform's individual features utilize AI/ML in an attempt to continuously learn on a proprietary network of online/offline data populated with billions of predictions and outcomes.

All of Socure's products can be acc
from onboarding to transactions. A
ID+ Platform provides a single solu
need for "patchworking and franke

Fraud Risk Detection & Predic

Socure's fraud & risk suite is compr
streamline their risk program and re

- **Sigma Identity Fraud:** This fea
identity—name, email, phone, a
address, device, velocity, netwo
fraud across a consumer's digital footprint. Companies' main identity verification-related concerns are customer-approval friction due to false positives (e.g. when a legitimate user does not pass an identity check). Sigma Identity Fraud is able to capture identity fraud in the riskiest 3% of applicants 85-90% of the time, while still

- **Sigma Synthetic Fraud:** Synthetic identity fraud occurs when someone uses a combination of real and fake personal information, such as a stolen SSN and a fake name, to commit identity fraud. As early as 2016, synthetic fraud accounted for 20% of total credit losses for US lenders. Socure's synthetic fraud solution uses advanced models built on fraud investigation best practices to draw upon public records and device intelligence to create a comprehensive profile and predictive fraud score associated with each user. Sigma Synthetic Fraud is "trained to think like a fraudster" and is learning from feedback data so that it can detect synthetic identity fraud as it happens.

- **Sigma Device:** Customers using mobile devices to transact and communicate are typically unaware of the potential malicious actors potentially using VPNs, virtual infrastructure, and mobile emu
Device binds a device to an ide
of fraud at account opening, a
AI/ML, Sigma Device can dete
avoiding additional friction for

- **Phone RiskScore:** Phone RiskS
of fraud associated with a pho
has been ported, length of sub
Socure continuously runs thes
account registration, one-time
phone number, Phone RiskSco
indicating a higher risk of frau

- **Address RiskScore:** Similar to
account 40+ factors related to
and proximity to high-crime ar
riskiness of an address.

- **Email RiskScore:** Socure provides a risk-scoring system for email addresses. Malicious actors often use fake, stolen, or invalid emails to conduct fraud, and Socure's platform factors in 60+ email-specific features like domain mismatches

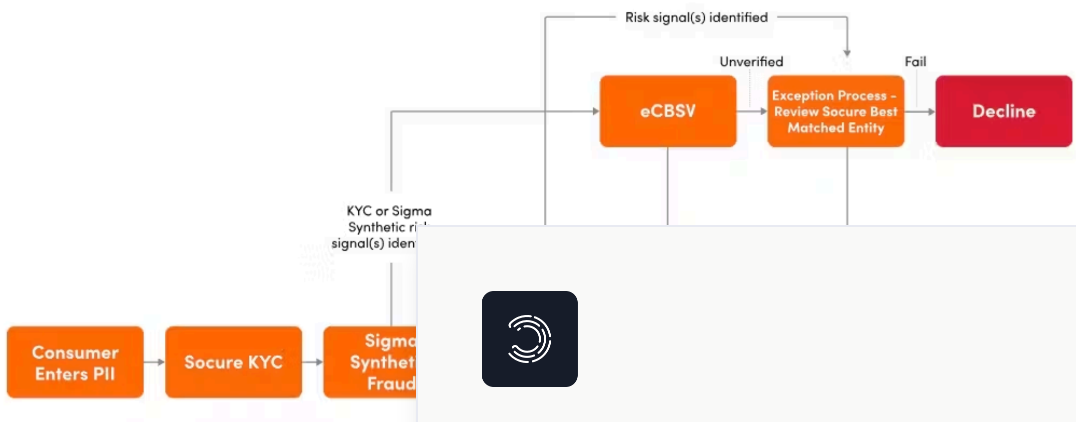
- **Portfolio Scrub:** In 2022, 62% of US financial institutions experienced an increase in financial crime. With large portfolios of data to manage, high-risk profiles and crimes, like money laundering, can easily fall through the cracks of any financial organization. Socure's Portfolio Scrub feature uses AI/ML and third-party fraud expertise to identify risks in computer accounts and support clients in developing better mitigation strategies. Companies can use Portfolio Scrub for a variety of applications, such as uncovering identities used by money mules, bolstering KYC processes, and identifying risks in newly acquired portfolios.

Compliance

In identifying and mitigating risk, co
with regulatory mandates, especiall
services and gaming. Socure provic
maintain approval processes while

- **KYC:** Socure KYC is a cloud-ba
of data sources, including publ
provide complete digital identi
rate through complete birth ma
name matching capabilities (ca
'Beth'). Additionally, Socure use
population segments (i.e. Gen
matching data records over tin
synergies with its identity verif
good or fraudulent. Companies
insights and analytics dashboa
possesses the most accurate a
coverage—more than the USPS, or Google.

- **eCBSV:** Socure's Electronic Consent Based Social Security Number Verification service (eCBSV) verifies user information against the Social Security confident decisions when interacting with higher-risk consumers, such as Gen Z, millennial, credit invisible, thin-file, and other hard-to-verify customers. On average, eCBSV allows companies to verify 6-8% more populations. Socure eCBSV is fully integrated within the company's general KYC solution.



Source: Socure

- **Global Watchlist Screening &** watchlist screening, or the pro international watchlists to prev data sources, Socure helps co global watchlists and providing Politically Exposed Persons (Ti owned entities data.

Identity Document Verification (DocV)

Socure's predictive document verification (DocV) solution digitally verifies thousands of document verification tools, Socure only needs a single selfie image to complete the verification process. Additionally, by using premium NIST PAD Level-2 liveness detection and enhanced biometrics, Socure detects and prevents spoofing attacks with 99.5% accuracy. Companies can implement DocV for a variety of use cases, such as decreasing spoofing attacks, reducing friction for customers during security checks, and getting a more holistic customer view.

In June 2023, Socure announced the acquisition of Berbix, an identity and document verification company, for $70 million. Socure indicated that its platform had already previously integrated with Berbix as part of its predictive document verification product. However, Socure CEO Johnny Ayers indicated that the market was increasingly looking for well-integrated best-in-class solutions:

> "We are finding repeatedly
> and passive — documentary
> and fraud controls to solve
> challenges."

Account Intelligence

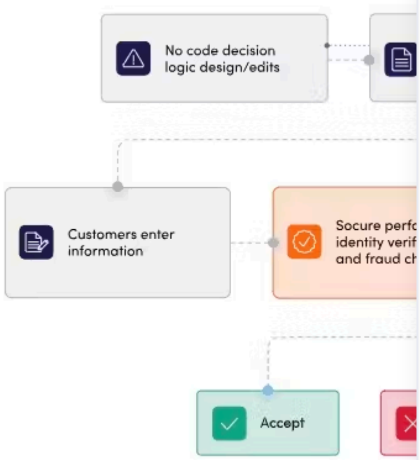
Socure Account Intelligence instan
to ACH payment transactions or fu
solutions, Socure delivers results in
rate (~90% account status coverag
only the customer name, bank acco
Account Intelligence to work. Socure is also a preferred partner of Nacha, the ACH governing body.

2021 study found that checks and ACH debits were the payment methods most impacted by fraud activity—a sign that Socure's Account Intelligence feature is in demand.

Decisioning

Socure also provides a no-code decision logic platform that enables companies to simulate, optimize, and automate their decision-making while remaining fully compliant. Teams can use the drag-and-drop decision module to implement complex automation sequences and then later on see the impact of changes either through simulations or deployment. Applicable use cases i

streamlining regulatory audit repor



Source: Socure

Customer

Source: Socure

Socure's customer profile consists of companies of all sizes that engage in digital-first
account opening, as well as custom
Socure sells into a variety of indust
telehealth providers, government a
marketplaces. In recent years, the C
profile as companies across many c
of necessity (i.e. remote payroll) or
prompted greater demand for prod
Socure customers doubling down c
pandemic's effect on Socure in Nov
how he saw "five to seven years of
period."

As one Head of Risk at an internati
modeling, having "excelled in taking
data sources base and then modeli
predictive" results. Socure has been
than others" in aspects such as fals
translate to $80 million of new cus
contrasts that of legacy solutions, which take a more qualitative approach to detecting fraud.

Long-time customers of Socure have reported improvement in model accuracy over the years, primarily due to new clients bringing unique data about end-user interactions that is fed right back into Socure's models. The previously mentioned Head of Risk has found Socure hard to replace given how embedded its products have become in processes like customer onboarding and transactional monitoring. Similarly, a Director of Product Management at a financial advisory firm believes that, compared to other options, Socure offers the "best chances of maintaining the conversion rates among our good customers."

Currently, Socure is trusted by 1.7K+ customers, including 4 of the top 5 banks, 250+ of the largest fintechs, 6 of the top 10 credit card issuers, and 3 of the top MSBs.

Market Size

According to one study, the global
billion in 2021 and is predicted to re
16.7% from 2022 to 2030. These fig
analysis, which valued the identity

This high expected growth rate car
the world becomes more digital, mo
verification solutions. In an analysis
throughout 2022, one study found
over-year. And as of June 2023, 89
planning to adopt one. Moreover, in
to experience significant growth in
grow sixfold by 2030 to $1.5 trillion
2026. Finally, President Biden's $1.6 trillion pandemic anti-fraud proposal in March 2023 signals a greater emphasis on combatting fraud going forward that will not only increase Socure's business in the government services industry but across businesses of all sizes who may find security products increasingly necessary.

Competition

Within the broader fraud detection space, Socure primarily competes with other all-in-one companies that leverage AI to deliver a suite of capabilities associated with identity and fraud authentication. While point solutions exist (such as email risk management), companies are increasingly optimizing for vendor reduction and subscribing to one-stop-shop solutions such as Socure. Additionally, newer players have centered their offerings around advanced machine learning models to drive precision and efficiency—a shift that incumbents have been slow to adopt. As to what differentiates the different players within the space, Socure CEO Johnny Ayers describes how companies are competing on the ability to open m
3-5% more customer accounts with
million of new customer value.

Jumio

Jumio is an identity verification co
validation products for mobile and
core KYX Platform or individual fea
verification while maintaining comp
is more centered around the docun
offers less integrated features for c
customer lifecycle. The company w
date. As of August 2023, it last rais

Persona

Persona is another identity verification platform that was founded in 2018. Like other key differentiator is that instead of drawing on its own database of information, Persona aggregates data from different databases, like that of LexisNexis, allowing clients to jump between different pools of data to achieve more accurate results. The company has raised a total of $217.5 million, and as of August 2023, it last raised a $150 million Series C led by Founders Fund in 2021.

Feedzai

Feedzai is a risk management platform that uses AI and advanced machine learning models to prevent, detect, and remediate fraud risk for its clients. Similar to its competitors, Feedzai offers API-bas transaction monitoring solutions. H the financial services market, where mid-sized financial institutions like was founded in 2009 and has raise like KKR and Citi Ventures.

Sift

Sift is a platform that uses a global positive user experience for fintech company draws upon AI and propri But Sift additionally offers features that is unique to its industry focus. million to date with involvement fro Square Ventures.

IBM

across all business workflows. The company is an incumbent competitor to Socure, with a built-out suite of security and identity tools that include Guardium (data encryption and management), QRadar (AI threat detection), and Trusteer (customer authentication). Compared to other players in the space, IBM is much larger in scale (345K employees) and provides greater product depth through the ability to integrate with other product suites (i.e. supply chain and DevOps) and AI tools like IBM Watson. Additionally, the company provides services globally, while Socure only currently operates in the United States. IBM was founded in 1911 and IPO'ed in 1915.

LexisNexis

LexisNexis is an incumbent compet
proprietary analytics technology, to
industries including financial servic
has access to a larger dataset and
unique to different industries and b
expand these offerings by acquiring
intelligence) and Emailage (email fr
flexibility and automation capabiliti
company was founded in 1970, with
billion acquisition in 2008.

IDology (GBG)

IDology is another incumbent and g
authentication, and fraud managen
a plug-and-play platform solution, comprised of individual features like identity verification, KYC/AML regulatory compliance, and fraud management. IDology was founded in 2003 and was acquired in 2019 by UK-based GBG for $300 million. Subsequently, IDology has been able to realize synergies with other GBG companies

Prove

Prove is another all-in-one identity management platform providing solutions like onboarding to multi-factor authentication. Prove differentiates from its competitors through its many partnerships which are listed on its API marketplace. Additionally, while the company sells to a variety of industries, its features are catered toward mobile customer interactions. Prove was founded in 2008 and has raised a total of $202.9 million from investors including Apax Digital and American Express Ventures.

Business Model

Socure operates on a flexible, clien
call basis (i.e. for a transaction or a
the products within the ID+ Platfor
as a standalone offering as well. Re
accessible via a single API powering

Although Socure is software-focus
incurs significant long-term costs,
databases are expected to continu
feedback data, these data costs ma
Socure CEO Johnny Ayers describe

Traction

company raised two rounds of financing, and Socure CEO Johnny Ayers reported that Socure achieved 221% year-over-year customer growth, 500% year-over-year increase in bookings, and five consecutive quarters of record year-over-year revenue growth. In 2021, the company also experienced a 600% year-over-year increase in customer acquisition in the online gaming market and maintained a churn of negative 160%, meaning that customers were more likely to spend more money on Socure every year. Customers who gradually replace point solutions with Socure's suite of products benefit from the increased efficiency that comes with having an end-to-end solution.

In March 2023, Ayers told TechCrunch that they had tripled their customer base in the past two years and developed more relationships with top banks and financial institutions. Around this time, the company also partnered with financial institution Alacriti and was added to the State

(StateRAMP) Progressing Product

financial and government services

According to Socure's website, the

the largest fintechs, 6 of the top 10

June 2023. Commenting on his cor

Ayers considered Socure to be the

fraud market globally." In March 20

make several potential acquisitions

June 2023, Socure announced the

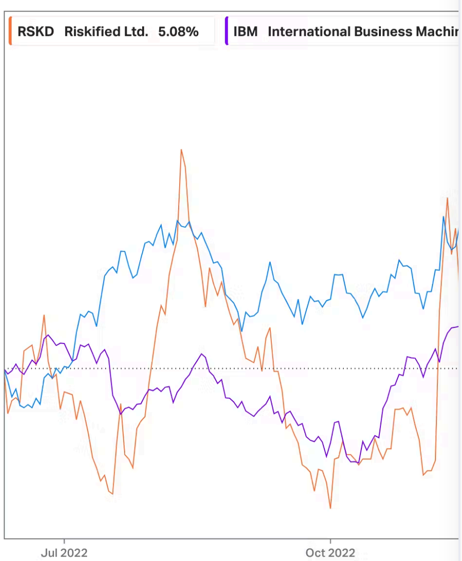
time, Ayers also indicated that over

by 50%.

Valuation

Socure raised a $450 million Series E, led by Accel and T. Rowe Price, in November 2021 company at $1.3 billion. As of August 2023, the company has raised $741.9 million to date.

After Socure's round of funding in 2021, CEO Ayers stated that the company "will certainly come to market here in the not-too-distant future" and was aiming for 2023 as a tentative IPO date. The only publicly announced news related to financing since then was a $95 million credit facility with J.P. Morgan, Silicon Valley Bank, and KeyBanc Capital Markets, which Socure closed in March 2023. In an interview with TechCrunch, Ayers stated that the credit loan was motivated by favorable rates and could "significantly strengthen the balance sheet and put [Socure] in a really good position to be offensive."



Source: Koyfin

Key Opportunities

Increased Demand for Security

In March 2023, President Joe Biden announced a $1.6 trillion anti-fraud proposal targeting synthetic fraud and identity theft catalyzed by COVID-induced digitization. As many companies shifted their business model or operations to remote during COVID-19, digital fraud increased by 70% in 2021. David Mattei, a senior analyst at Aite-Novarica Group, describes how "The use of document identification and verification solutions to verify a user's identity is growing due to the surge in online, digital interactions." Companies across all industries—especially those that are just now digitizing—are all liable to attacks and are increasingly recognizing the importance of purchasing identity verification solutions.

In 2021, the digital shift helped Soc
span of 7 months. Increased cautio
more opportunities for Socure to re

Continued Model Improvemer

The core of Socure's platform is co
trained on a database containing m
confirmed good and bad identities.
improving the accuracy of Socure's
continuous improvement using fee
representing multiple industries. Th
the platform, as more data increase
attacks. One Head of Risk Manager
visibly improved over the years due
industries and sizes.

Back in 2021 CEO Ayers stated how Socure was already "heading down on being the

If Socure continues to increase the precision of its features, the company could realize significant growth across both new and existing audiences.

Growth in Fintech

Due to the high potential for fraud and strict industry regulations, financial institutions represent a sizable portion of Socure's customer base. In recent years, fintech has continuously increased its share of the global financial services market, with banking fintechs expected to constitute almost 25% of all banking activity by 2030. Digital payments transaction volume is also expected to grow at an 11.8% CAGR between 2023-2027, reaching $14.8 trillion b

Socure has already made multiple s
company is not only the Preferred P
Prevention and Compliance, but it i
strategic solutions to the ACH netw
Alacriti, a fintech company speciali
synthetic identity fraud prevention.
itself as the leading provider for co

Growth in Gen Z Consumers

As of June 2023, Socure claims an
for 18 year-olds opening their first a
Verifying the identity of Gen Z cons
represents the largest demographic
of financial products like custodial accounts and BNPL. According to Bank of America Research, the Gen Z demographic born between 1996-2012 earns $7 trillion, with this number expected to grow to $17 trillion by 2025 and $33 trillion by 2030.

behind the feature update, Socure CEO Johnny Ayers remarked how attracting Gen Z consumers is "key to the longevity and growth" of Socure's clients. Continuing to target this growing audience will enable Socure to ride the tailwinds brought upon by the next generations of consumers.

Key Risks

Increased Fraud Sophistication

While the increased presence of fra
company must be wary of newer, m
capitalizing off of the trend of digit
to identity fraud in 2020, and one s
leaked, suggesting that businesses
asked about the advancement of fr

> "As data breaches continue
> attacks are getting more an
> time funds availability and r
> becomes very big, because
> of money that's available ac
> enterprise problem in proba

With bots that can perform hundreds of account takeovers in seconds and the existence of deepfake software, fraudsters are more sophisticated than ever before. While Socure's adaptable machine learning may catch many of these attacks, the

Regional Limitations

Up until 2022, Socure only operated within the United States. In October 2022, Socure announced plans to expand internationally into Canada, the United Kingdom, and Europe. However, international expansion has been a common pain point for identity verification solutions in the past, as companies often do not experience the same initial traction as in their home market and end up playing catch-up compared to other providers. This is because different countries have different sets of regulations (e.g. GDPR) and data sources stored in different locations, meaning that platforms often have to manually build out entirely new frameworks to provide the same KYC and fraud detection functionalities. For Socure, these limitations could create friction for its clients looking to expand their business in
with different regional providers in
checks across borders.

Reputation Risk

Within the identity and fraud mana
scandal can severely damage a firm
points — many of which are person
addresses — the potential implicati
no public history of the above, the
data is safe and protected in order
business.

Summary

As people continue to grow their digital footprint, fraud will become increasingly

Socure are becoming the main line of defense. While Socure's competition continues to increase, the company has the potential to solidify itself as the leader in the space if it continues to improve the accuracy of its models and prioritize a frictionless end-user experience. The key questions that still remain are whether Socure can keep up with rapidly advancing fraud and find the same success as it has in the United States across different regions around the world.

IMPORTANT DISCLOSURES

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Fellow

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