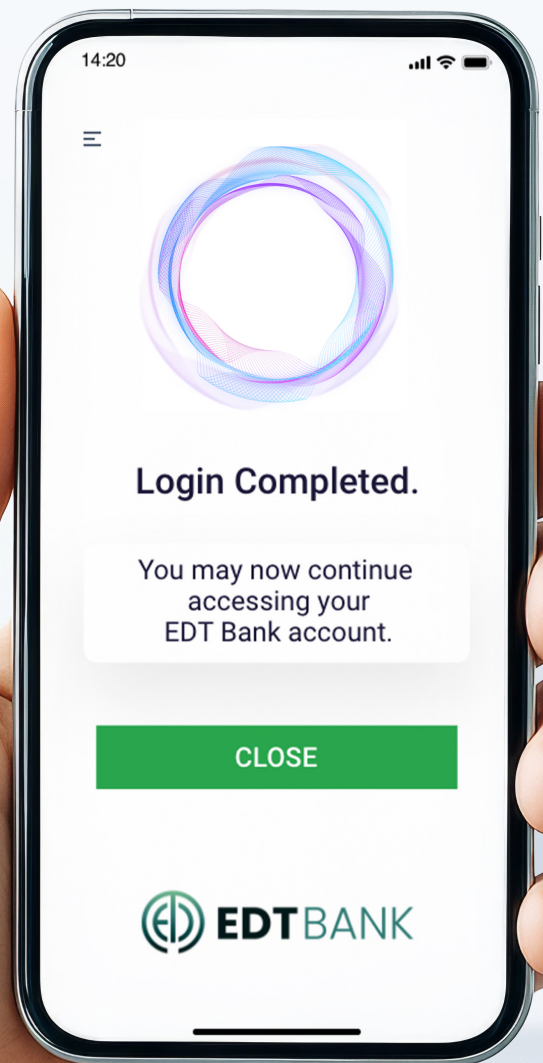


# The future of customer authentication: Lessons from an award-winning solution

How advanced authentication helps  
reduce fraud, strengthen security,  
and build lasting customer trust



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# Foreword

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## Our roadmap to futureproof customer authentication

Trust has always defined financial security. Yet today, that foundation is being tested as fraud grows more sophisticated and AI rapidly rewrites the rules of financial security. In this environment, authentication is no longer a background process – it's become the first and most critical line of defense for ensuring resilience and preserving customer trust.

At Entersekt, our vision is clear: unified, intelligent transaction security that protects customers without adding friction to their everyday financial activities, across digital banking and payments like e-commerce. We believe the future of authentication lies in solutions that deliver personalized authentication for each customer, wherever they're transacting, adapting in real-time to protect them from threats while keeping their experience effortless.

Our roadmap builds on this vision, turning seamless authentication into a source of competitive advantage. By aligning trust, innovation, and security, we aim not only to safeguard financial transactions today, but also to futureproof the industry for the challenges ahead.

Being recognized as an industry leader in fraud and scam prevention – most recently for the Best Authentication Innovation Category in the Datos Insights 2025 Impact Awards in Fraud, and as a Leading Vendor in Liminal's 2024 Link Index for Account Takeover (ATO) Prevention in Banking – strengthens this commitment.

It means we will continue pushing boundaries with solutions that redefine what's possible in customer authentication.

As you explore this ebook, we invite you to see how our approach can help your organization strike the perfect balance between security and customer experience. And, if you're ready to take the next step, we'd love to connect – whether that's through a quick conversation with **one of our experts** or a hands-on look at our solutions through a **customized demo**.

“  
The company's patented security innovations, including its Context-Aware Authentication technology, have positioned Entersekt as a global industry leader in authentication. ”

– Liminal's 2024 Link Index for Account Takeover (ATO) Prevention in Banking

**Pradheep Sampath,**  
Chief Product Officer, Entersekt



# The changing face of digital banking and payment fraud

According to Juniper Research, fraud is predicted to **increase by 153%** worldwide by 2030, costing financial institutions more than \$58 billion. Similarly, **American Banker** reports that approximately “1 in 3 risk and fraud professionals reported sharp increases in attacks over the past year — and the trend shows no signs of slowing.”

The rapid advancement of technology combined with the widespread use of AI tools by both businesses and consumers is reshaping the landscape — not only for financial organizations and their customers but also fraudsters, who now gain a technological edge.

Consequently, customers are at greater risk today of becoming victims of fraud as AI amplifies the effectiveness of scams and attack vectors, such as deepfake voice cloning and synthetic identity creation. Social engineering attacks are a particular concern, with 59% of FIs reporting a rise in these crimes, according to Datos Insights’ report, *Fraud Landscape: Attack Trends and Defensive Strategies*. When successful, these scams turn customers into victims, eroding their trust in their financial institution — often irreparably.

Along with AI-enhanced financial fraud, new threats like real-time payment scams add another layer of risk (and more pressure) for organizations due to the speed and irrevocability of these payments.

What’s also interesting is how we reached this point in the evolution of fraud where fraudsters can now trick customers into playing a central role in attacks, such as authorized push payment fraud. Typically, as the industry introduces new security measures to block fraud attempts, fraudsters consistently develop workarounds. For example, phishing attempts targeting usernames and passwords were initially curbed by adding in another factor of authentication: one-time passcodes (OTPs). But then fraudsters quickly pivoted to man-in-the-middle attacks to bypass OTP mechanisms as well.

This leapfrogging dynamic continued with attacks like vishing, followed by the adoption of biometrics to counter them. Now, modern-day scams can manipulate customers into authorizing payments directly to fraudulent accounts.

“ ————— ”  
The ability to create more convincing fraudulent identities at scale, coupled with deepfake technologies that can bypass biometric verification systems, creates a concerning outlook for 2025 and beyond. ————— ”

— Jim Mortensen, Datos Insights

**The pressing question remains: Are you ready?**

## Timeline: The evolution of fraud



**Attack vector:** Phishing

**Stat:** In 2024, phishing attacks increased by 77% year-over-year

**Entersekt's defense:** SMS OTPs



**Attack vector:** Man-in-the-middle

**Stat:** MITM attacks were responsible for 19% of successful cyberattacks in 2024.

**Entersekt's defense:** Transaction authentication with out-of-band push notification



**Attack vector:** Vishing

**Stat:** Vishing fraud up by 79% in 2025!

**Entersekt's defense:** end-point and biometric analytics



**Attack vector:** Authorized push payment fraud

**Stat:** APP losses in the US predicted to reach \$3.08 billion by 2028!

**Entersekt's defense:** Risk-based authentication and consortium data



**Futureproofing authentication:**

The road ahead with Entersekt

# The limitations of traditional auth: What makes award-winning customer authentication different?

Maintaining customer trust is essential. This becomes harder for organizations relying on outdated security measures like passwords and OTPs. While these traditional authentication measures once played a vital role in fraud prevention, moving from single-factor to multi-factor authentication, they are now easily intercepted or bypassed by fraudsters. To safeguard both transactions and trust, organizations need stronger, more adaptive methods of verifying who is actually behind each interaction.

Modern authentication offers that difference. Capabilities such as context-based authentication, biometrics, and real-time risk intelligence can provide both advanced protection and exceptional customer experiences.

“ **More than 60%** of financial institutions will be enhancing their fraud prevention measures as a top customer experience priority over the next 12 months. ”

— American Banker

Keep reading to see how Entersekt delivers award-winning authentication solutions that help FIs and merchants triumph over fraud and build lasting customer trust.



## Entersekt's end-to-end scam and fraud defense solutions

Entersekt capability	Impact	Value created
<b>Context Aware™ Authentication</b>	Enables personalized security experiences that balance protection with usability.	Real customers experience seamless transactions and additional protection when they need it for high-risk actions.
<b>Cross-channel data integration</b>	Breaks down siloes and shares vital customer and risk data across channels.	Unifies and strengthens fraud prevention measures.
<b>Advanced risk intelligence</b>	Enables informed risk decisions in real-time.	Delivers seamless, secure customer interactions.
<b>Multi-layered authentication</b>	Improves defenses with multiple layers of security, such as silent authentication, biometrics, and proximity authentication.	Every additional authentication layer reduces the likelihood that a fraudster's attack will be successful.
<b>Behavioral analytics</b>	Enables organizations to identify anomalies dynamically.	Delivers an optimal user experience unlike static risk rules that often result in false declines.
<b>Consortium intelligence</b>	Enhances fraud detection capabilities through shared scam and fraud intelligence.	Rich, real-time data can help organizations detect and actively prevent fraud as well as improve transaction success rates.



**Entersekt was the winner**  
*of the Best Authentication Innovation Category  
in Datos Insights' 2025 Impact Awards in Fraud.*

# Delivering proven fraud prevention outcomes

Relying on outdated authentication tools like OTPs to identify legitimate customers leaves gaps for fraudsters' evolving attacks. Modern authentication, like Entersekt's, leverages a wide range of data signals to build a detailed picture – or contextual awareness – of each customer and transaction. With this real-time, data-rich intelligence, the platform can effectively detect and prevent suspicious activity before it escalates.

Entersekt's solution also minimizes friction – during logins, high-risk transactions, and throughout the customer transaction journey – by combining both

active and silent factors of authentication, delivering strong security without increasing friction for the user.

“As fraud schemes evolve beyond traditional phishing to include SIM-swap attacks, account takeovers, and authorized push payment scams, financial institutions need authentication solutions that can adapt in real-time. Entersekt's platform addresses this by incorporating advanced risk rules and signals that provide contextual awareness for each transactional scenario,” says Jim Mortensen, Strategic Advisor at Datos Insights.

## Our impact in numbers



Account takeover prevention:  
99% reduction in phishing attempts within three months on average.



Payment fraud reduction:  
90% reduction in payment fraud.



Comprehensive fraud prevention:  
70% reduction in card-not-present fraud within one month.



Enhanced customer experience:  
98% frictionless logins.

“ In 2024, the Global Anti-Scam Alliance (GASA) reported that scammers stole over \$1 trillion worldwide. ”

# Futureproofing authentication: Why choose Entersekt

Innovation in transaction security is an iterative, forward-looking process. It's a cycle that begins with understanding how the industry is shifting and where customer needs are headed. Futureproofing authentication means recognizing emerging risks early – long before they escalate – and designing solutions that adapt and evolve with those threats.

By partnering with Entersekt, organizations can shift from a reactive to proactive authentication approach, enabling them to:



Stay ahead of increasingly sophisticated fraud tactics



Safeguard customers while strengthening long-term trust



Build resilience in a rapidly changing digital banking and payments environment

Being recognized by Datas Insights for Best Authentication Innovation, and as a Leading Vendor in Liminal's 2024 Link Index for Account Takeover (ATO) Prevention in Banking, confirms that our approach is delivering real impact – helping FIs and merchants, their customers, and the broader industry move closer to defeating fraud.





If you are looking for a future-ready authentication solution that can scale with emerging risks, consider asking these key questions to evaluate whether a product has the right capabilities today and for the coming years:

- Does the product deliver a **good user experience**, presenting familiar technology, a consistent experience across channels, and passwordless options?
- Can the solution **easily be scaled** to cover all channels and use cases?
- Can you **customize the step-up challenge** settings to match your risk appetite?
- Does the solution utilize **risk-based decisioning**?
- Can the product help **secure all banking and payment channels**?
- Does it enable **cross-channel insights**?
- Does the solution have **proven results across all modern threat vectors** – from social engineering and impersonation scams, to account takeover fraud, man-in-the-middle attacks and authorized push payment fraud?

At Entersekt, we understand that fraud prevention is a top customer experience priority, and we're here to transform that into a competitive differentiator for you.

**Explore how Entersekt's award-winning authentication helps reduce fraud, strengthen security, and build lasting customer trust:**



**Best Authentication Innovation Category in  
Datos Insights' 2025 Impact Awards in Fraud**



**Leading Vendor in Liminal's 2024 Link Index for  
Account Takeover (ATO) Prevention in Banking**

# About Entersekt

Entersekt, The Financial Authentication Company, provides financial institutions with digital banking fraud prevention and payment security solutions through its cross-channel, Context Aware™ Authentication platform that secures digital transactions and optimizes user experiences. Founded in 2008, Entersekt serves financial institutions around the world, and holds 120+ patents for its security innovations. In 2023, Entersekt acquired the Modirum 3-D Secure software business from Modirum, a

security technology firm based in Helsinki, Finland, positioning Entersekt as a global industry leader in authentication solutions for financial services. Entersekt processes 7.5bn+ transactions for 250m+ cardholders and 450,000+ merchants from nearly 900 banks in 70+ countries. Backed by companies like Silicon Valley-based Accel-KKR, one of the world's top private equity firms, Entersekt continues to expand its footprint across key regions.

For more information about Entersekt, or to speak to an expert, please visit [www.entersekt.com](http://www.entersekt.com) or email [info@entersekt.com](mailto:info@entersekt.com).



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