UNIKEN RECEIVES THE 2023 TECHNOLOGY INNOVATION LEADERSHIP AWARD

Identified as best in class in the global identity and access management industry

Best Practices Criteria for World-Class Performance

Frost & Sullivan applies a rigorous analytical process to evaluate multiple nominees for each award category before determining the final award recipient. The process involves a detailed evaluation of best practices criteria across two dimensions for each nominated company. Uniken excels in many of the criteria in the identity and access management space, and based on these findings, Frost & Sullivan recognizes Uniken with the 2023 Technology Innovation Leadership Award.

AWARD CRITERIA	
Technology Leverage	Business Impact
Commitment to Innovation	Financial Performance
Commitment to Creativity	Customer Acquisition
Stage Gate Efficiency	Operational Efficiency
Commercialization Success	Growth Potential
Application Diversity	Human Capital

Market Overview

Smartphone ownership has witnessed impressive growth globally, to the extent that they are now almost ubiquitous. Increased smartphone ownership coupled with low cost of data has contributed to an unprecedented growth in internet penetration in developed as well as developing economies. Increased internet usage of smartphones has been successfully leveraged by brands who have adopted digital as one of their most important channels for staying connected to their customers.

Notably, mobile-first business models are gaining steam across brands and many critical functions are now being served through mobile apps. While mobile apps are on track to become the primary point of interaction and transaction, a vast chunk of transactions still occur on computers, especially on the enterprise side. Irrespective of the devices, digital channels are becoming the preferred mode of transactions for brands and customers alike. Companies especially in banking, e-commerce and the travel industry have significantly benefited from digitization of business practices. Many of the brands in these industries have a purely digital presence and derive their entire revenue from online channels.

Realizing the importance of digital channels to current and future business environments, companies have invested significantly in developing feature-rich and user-friendly interfaces for web and mobile applications. While there have been significant improvements on the interface and functionalities end, security and access control components of websites and mobile apps remain a problem yet to be solved.

Security and access control is still seen as an inhibitor to smooth user experience, and weak access controls have been at the root of multiple major security breaches globally. Stronger security controls are at times perceived as an experience breaker as they normally involve complex procedures for user authentication that result in longer times and multiple steps for logging in. While such procedures do make the application more secure, they can harm the brand in a competitive market where customers look for convenience over complexity. In addition, there is also a disconnect or lack of uniformity between a brand's mobile app experience and its web experience, where the access controls are at times successfully deployed in one channel while the other channel remains vulnerable or weak. Access control mechanisms are designed as standalone for different channels and have limited uniformity and collaborative functionality, which further weakens the user experience and the overall security.

Passwords are one of the most widely used methods of authentication, but at the same time are also one of the weakest methods of authentication, which has been proved by multiple hacks. At times passwords are combined with other methods such as OTPs and security questions, but multifactor

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-Hiten Shah, Senior Consultant authentication is seen by some customers as a lengthy and inefficient process as they sometimes might forget their passwords or answers to questions. Biometrics is now emerging to be the most efficient and secure method of authentication as facial and/or fingerprint recognition becomes more accessible to users across the globe.

Amid this puzzle of user authentication and disconnect between mobile applications and web interface, there

is a need for identity and access management systems that can unify the user experience between smartphone and web-based authentication systems while avoiding the usage of complex authentication procedures for doing so.

Company Overview

A pioneer in cybersecurity with an initial focus on banking and financial services, Uniken serves customers of all sizes, worldwide, across a variety of industries. Uniken's stated purpose is to create a secure world where identity is a certainty, and in doing so, to accelerate business possibilities for its customers and their end-clients. With its REL-ID platform, Uniken secures customer journeys across all channels, end-to-end — from devices, applications, and network connections to customer authentication, transaction verification, and digital signing.

Commitment to Innovation

With a goal of reimagining the digital banking experience, Uniken developed a robust user authentication and security platform that enables banks and financial institutions to design applications that are secure by design and can protect users from security breaches at each stage of their banking journey. The REL-ID platform adopts a mobile-first approach and emphasizes crafting a uniform user experience across multiple online and offline channels such as mobile applications, web applications, kiosks and even inperson branch interactions. REL-ID has been adopted by banks across the globe and has enabled them to

accelerate their digitalization efforts by delivering a robust security solution that also enhances user experience.

Notably, to date, REL-ID has secured over 23 billion interactions between Uniken customers and their clients amounting to a total transaction value of over \$26 trillion without a single instance of fraud or compromise. One of the key factors contributing to the success of REL-ID's platform is its philosophy of leveraging modern security assurance methods such as app fingerprinting, device intelligence and user biometrics as opposed to password-based methods that are used by solutions in general. Passwords are known to be easy to compromise and combined with two-factor authentication and security questions, they also act as a hinderance to an otherwise smooth banking experience.

Importantly, the current security landscape has evolved rapidly, and the threat landscape of companies and applications has expanded significantly. However, the security world has been unable to keep pace with these developments and thus applications sometimes inherit a number of vulnerabilities from third-party applications that they interact with. In lieu of this, the REL-ID platform leverages a 1:1 cryptographic trust element to block third-party infrastructure and their vulnerabilities from affecting the banking applications. The REL-ID platform also does not use any personally identifiable information (PII) or any sensitive information about the user or device in use in any authentication process that it carries out and thus allows banks to remain fully compliant with regulations, such as GDPR and CCPA, which they are subject to as per the jurisdictions that they operate in.

Frost & Sullivan believes that Uniken's REL-ID has had game-changing effect on how access control and authentication systems are managed within banking applications and has contributed significantly to the improvement of security mechanisms in digital banking. More importantly, Uniken's solutions have made it possible for banks to offer their customers a uniform experience across all channels, encouraging them to expand their involvement in the digital economy.

Commitment to Creativity

At its core, Uniken's REL-ID platform is an authentication and identity verification platform that helps banks ensure that the right user is using its banking services from a secure device using a secure connection. The platform's capabilities are delivered to banks primarily via SDK which can be embedded into a bank's own applications. The platform works on three core tenets: Secure, Verify and Authenticate, which are the three main activities that the platform is designed to perform. Under secure, the platform continuously ensures that the device that is connecting to the bank's server is a secured device which is not affected by any malware and is not connected to an unsecured public network among other things. Under verify, the platform helps banks verify the identity of the customer that is using the app. To verify such identity, the platform relies on verification of phone number, email ID and most importantly, scanning of physical documents such as driving license and passport. The process also involves verification through traditional biometrics such as fingerprint and facial recognition. Notably, all the scans involving PII are performed entirely within the bank's servers and Uniken never has any access to an individual user's data, thus minimizing the number of accessing parties for privacy sensitive data. Post scanning, the Uniken platform uploads all the data stored in the local storage to the bank's servers for EKYC. In the process, the bank also involves the local governing bodies and AML databases to make sure that the customer does not have any history of financial wrongdoing. Post verification, in the authentication step, "While there is a six-step authentication process involved in verifying and authenticating the user, the user experience is prioritized, and the user only has to provide their fingerprint or facial scan instead of lengthy user names and passwords."

- Hiten Shah, Senior Consultant a private key is created within a device's secure element and in the bank's server, which is unique to the user, device and to the bank. For each session, the private key verification is performed in real time to set up a mutually encrypted channel between the user device and the banks server. Notably, while there is a six-step authentication process involved in verifying and authenticating the user, the user experience is prioritized and the user only has to provide their fingerprint or facial scan instead of lengthy user names and passwords, while

all the other steps are carried out in the background automatically. Additionally, banks can also leverage the mobile application as a single point of all authentication events, offline or online. In implementation, it means that a user signing into their account on web or talking to a customer care agent can verify their identity using biometric verification on their phone. It is also imperative to note that the authentication step continues for the entire session and not only during the log in, where the Uniken platform continues to monitor the network to detect any changes that can indicate the possibility of a breach or an unusual network event.

Interestingly, while being mobile first, Uniken has also built an OpenID Connect compliant solution for standalone web authentication, which allows banks to set up an authentication solution from scratch for users who do not have access to smartphones. So, in practice, Uniken's intelligent authentication orchestration determines the best multifactor authentication option for the user to log into web-based banking, which could be based on their access to the mobile app, or through other authentication factors such as passwords, FIDO keys (based on the WebAuthn standard), SMS or email-based OTP or in-built TOTP.

Frost & Sullivan believes that Uniken has designed one of the most user-friendly platforms for identity verification in the banking industry, while also redefining how security is implemented in banking applications.

A Solid Success Rate

Uniken maintains a strong global presence with its business expansion in Kenya and Singapore. In addition, Uniken has 22 regional and nine global partnerships, specifically in North America and Europe, integrating the frictionless security platform and solution into existing user applications. In June 2020, the company received the FIDO2 Server Certification for its simple and solid REL-ID solution. Interestingly, REL-ID today supports over 12,000 identity document templates from 247 countries and 138 languages.

"BlueShore was looking for a cybersecurity solution to provide a secure-gateway for our Temenos Infinity digital platform; Uniken was able to provide that, and much more. Uniken's cybersecurity platform has the capabilities to protect our clients across channels without impacting BlueShore's Financial Spa Client Experience, while not putting additional "technical" burden on our clients, or compromising our clients' cybersecurity protection."

Fred Cook, Chief Information Officer, BlueShore Financial

"We needed a comprehensive solution for new client identity verification security and authentication that met our unique local needs but provided us a platform to grow quickly in the region. Uniken provided just that in REL-ID. We couldn't be happier with our choice."

— Izzidin Abusalameh, Group Chief Operating Officer, Capital Bank of Jordan

Although Uniken centers its platform in the financial and banking industry, the company is leveraging its technology and platform across other business verticals. The company's clients use its technology for various applications, including retail and education spaces. Frost & Sullivan anticipates rapid, widespread technology adoption with the company's first-mover status strengthening its ability to leverage emerging opportunities.

Client Relationships Lead to Future Success

With its customer-led strategy, Uniken consistently brings a best-in-class security platform to the market. With the impact of COVID-19, multiple companies were adjusting to working remotely instead of an inperson environment, which imposed major security challenges. Uniken released a Work From Home (WFH) network access capability to address the needs of users working remotely during the pandemic. Uniken's REL-ID WFH enables users to receive the same digital protection by using mutual multifactor authentication and simple digital integration.

At the same time, Uniken incorporates user feedback into its product roadmap to maximize short-term growth opportunities while providing a path to future revenues. The company meets the customers' demands for a simple, safe, and consistent security solution by modeling its platform and design after those needs accordingly. Recently, the company added multiple languages to make the platform more accessible. By expanding into Indonesia, Africa, and France, Uniken was able to incorporate its users' languages to acquire new users with its REL-ID solution.

While evolving from a technology standpoint, Uniken never loses sight of its users' perspective. Its brand maintains its North America and India presence while meeting customer-specific needs. Given today's landscape, Frost & Sullivan believes the company is in a prime position to increase its market share in this highly competitive identity and access management industry.

Conclusion

Technology is a critical success factor for the identity and access management industry. Yet, with many options available, market stakeholders need to leverage the most appropriate and best technology-based solutions to optimize their market impact. With its security platform technology, Uniken delivers seamless integration and robust security. Uniken stands out from competitors based on its commitment to innovation and creativity while achieving commercial success. For its strong overall performance, Uniken is recognized with Frost & Sullivan's 2023 Global Technology Innovation Leadership Award in the identity and access management industry.

About the Technology Innovation Leadership Recognition

Frost & Sullivan's Technology Innovation Leadership Award recognizes the company that has introduced the best underlying technology for achieving remarkable product and customer success while driving future business value.

Best Practices Award Analysis

For the Technology Innovation Leadership Award, Frost & Sullivan analysts independently evaluated the criteria listed below.

Technology Leverage

Commitment to Innovation: Continuous emerging technology adoption and creation enables new product development and enhances product performance

Commitment to Creativity: Company leverages technology advancements to push the limits of form and function in the pursuit of white space innovation

Stage Gate Efficiency: Technology adoption enhances the stage gate process for launching new products and solutions

Commercialization Success: Company displays a proven track record of taking new technologies to market with a high success rate

Application Diversity: Company develops and/or integrates technology that serves multiple applications and multiple environments

Business Impact

Financial Performance: Strong overall financial performance is achieved in terms of revenues, revenue growth, operating margin, and other key financial metrics

Customer Acquisition: Customer-facing processes support efficient and consistent new customer acquisition while enhancing customer retention

Operational Efficiency: Company staff performs assigned tasks productively, quickly, and to a high-quality standard

Growth Potential: Growth is fostered by a strong customer focus that strengthens the brand and reinforces customer loyalty

Human Capital: Commitment to quality and to customers characterize the company culture, which in turn enhances employee morale and retention

About Frost & Sullivan

Frost & Sullivan is the Growth Pipeline Company™. We power our clients to a future shaped by growth. Our Growth Pipeline as a Service™ provides the CEO and the CEO's growth team with a continuous and rigorous platform of growth opportunities, ensuring long-term success. To achieve positive outcomes, our team leverages over 60 years of experience, coaching organizations of all types and sizes across 6 continents with our proven best practices. To power your Growth Pipeline future, visit Frost & Sullivan at http://www.frost.com.

The Growth Pipeline Engine™

Frost & Sullivan's proprietary model to systematically create ongoing growth opportunities and strategies for our clients is fuelled by the Innovation Generator $^{\text{TM}}$.

Learn more.

Key Impacts:

- **Growth Pipeline:** Continuous Flow of Growth Opportunities
- Growth Strategies: Proven Best Practices
- Innovation Culture: Optimized Customer Experience
- ROI & Margin: Implementation Excellence
- Transformational Growth: Industry Leadership

OPPORTUNITY UNIVERSE Capture full range of growth opportunities and prioritize them based on key criteria OPPORTUNITY EVALUATION Adapt strategy to changing market dynamics and unearth new opportunities OPPORTUNITY EVALUATION Conduct deep, 360-degree analysis of prioritized opportunities ENGINETM GO-TO-MARKET STRATEGY Translate strategic alternatives into a cogent strategy

The Innovation Generator™

Our 6 analytical perspectives are crucial in capturing the broadest range of innovative growth opportunities, most of which occur at the points of these perspectives.

Analytical Perspectives:

- Mega Trend (MT)
- Business Model (BM)
- Technology (TE)
- Industries (IN)
- Customer (CU)
- Geographies (GE)

