

FROST & SULLIVAN



# 2022 ENABLING TECHNOLOGY LEADER

*SOUTHEAST ASIA PASSWORDLESS  
AUTHENTICATION 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. VinCSS excels in many of the criteria in the passwordless authentication space.

AWARD CRITERIA	
<i>Technology Leverage</i>	<i>Customer Impact</i>
Commitment to Innovation	Price/Performance Value
Commitment to Creativity	Customer Purchase Experience
Stage Gate Efficiency	Customer Ownership Experience
Commercialization Success	Customer Service Experience
Application Diversity	Brand Equity

### ***Commitment to Innovation and Creativity***

Traditional password-based authentication approaches dominate the Southeast Asia (SEA) identity and access management (IAM) market. However, password-only authentication in the business environment is no longer adequate to manage the surge of applications, devices (IT and non-IT, including human and non-human entities), and network access from multiple environments. These factors create more complex environments that are difficult to monitor and manage, necessitating the adoption of multilayer authentication processes such as two-factor authentication (2FA) or multifactor authentication (MFA) with one-time password (OTP) and biometrics solutions to strengthen organizations’ existing password authentication policy.

While multilayer protection offers an extra layer of security for businesses, they are vulnerable to potential breaches. Authentication methods such as OTP and 2FA information can be stolen, compromised, and exploited, leaving users and organizations vulnerable to cyberattacks, particularly phishing attacks. Overly stringent password policy compliance can also cause dissatisfaction and poor user experience, affect employee productivity and operational efficiency, and increase management overheads for security teams to manage a consistent password policy across different environments.

Therefore, it is more vital than ever for organizations to implement a robust IAM approach that provides better authentication capabilities to protect users (identities, accounts, applications), devices, and data from password-related attacks. A truly passwordless solution is necessary to eliminate friction, complexity, and risks associated with passwords and their related requirements. Businesses need to

create and manage user accounts using passwordless methods that rely on FIDO2 standards and other methods, such as digital certificates, IP geolocation, one-time passcode tokens, smart cards, biometrics, mobile authentication, and credentials. This will help organizations eliminate the need for passwords at any layer and environment.

Cybersecurity startup VinCSS, established in 2018, aims to address this critical security need with innovative passwordless IAM capabilities for organizations. Headquartered in Ho Chi Minh City, Vietnam, VinCSS, a member of Vingroup JSC, is committed to driving technological innovation in R&D, manufacturing, and supplying IAM solutions and cybersecurity services. VinCSS is the first company in Vietnam and SEA to produce passwordless authentication solutions that use the FIDO2 protocol, which makes its products true passwordless solutions, i.e., no primary password is needed. It offers reliable passwordless IAM solutions that help customers minimize the need for passwords, reduce friction and complexity, and increase the operational efficiency of IAM strategies.

Since 2019, VinCSS has developed a comprehensive FIDO2 ecosystem to ensure strong or passwordless authentication using seven solutions encompassing servers, IoT and cloud services, transformation services, and software development kits (SDKs). The FIDO2 ecosystem enables businesses to address multiple use cases, including eliminating credential replay attacks with user presence checks to prevent

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Industry Principal**

malware hacking, providing authentication standard enforcement to ensure supply chain security, and addressing authentication redundancy to fast-track and support better compliance and audit requirements.

To cater to the rising demand for IoT security, VinCSS’s new IoT FDO solution securely sets up and configures IoT devices automatically. FDO (FIDO Device Onboarding), developed by the FIDO Alliance, is an automated onboarding protocol that addresses IoT device security concerns. It leverages asymmetric public key cryptography to provide industrial IoT with

a fast and secure way to onboard devices to any device management system. This makes the devices more resistant to attacks by substituting highly secure cryptographic keys for generic password credentials. Businesses benefit from the FDO standards’ simplicity, flexibility, and security. The solution is suitable for various IoT technology applications, such as automated factories, smart cities, logistics services, security cameras, smart cars, and businesses with complex digital infrastructures that need to scale quickly and effectively.

As passwordless authentication is a relatively nascent trend in the region’s IAM industry with a low perception among users, the solutions need to be as user-friendly as possible to integrate with other products and make the concept accessible and easy to use.

To make this happen, VinCSS prioritizes creativity by offering employees attractive reward programs to develop, enhance, and promote new solutions and ideas. The company allocates significant financial and talent resources to trial new employee ideas to improve and simplify its solutions, covering product R&D,

deployments, redesign, and support. Frost & Sullivan attributes VinCSS's agility to its lean organizational structure and innovation-driven approach that enables it to keep pace with the fast-evolving technological innovation, product development, and creativity, which competitors find hard to replicate.

The company invests heavily in R&D, innovation, and creativity, which allows it to develop a robust security ecosystem that closely integrates its seven solutions using the FIDO protocol. The solutions help companies strengthen their security posture, mitigate data breach risks and damages, enhance user experience, optimize operations, and save on operational costs by eliminating the need for password resets, device provisioning, and frequent customer support.

### **Commercialization Success**

Despite its relatively nascent presence, VinCSS FIDO2 products are adopted by several well-known domestic and international organizations in Vietnam. Within the domestic market, VinCSS solutions are adopted by banks and financial services companies, which integrate its IoT FIDO solutions with third-party IoT device products, such as security cameras.

To date, the company has appointed five domestic distributors in Vietnam and three foreign distributors, including Japan and Singapore, to roll out solutions in Japan and the SEA region. It is also in the final stage of negotiations to set up three distributors in the United States, Australia, and Europe.

VinCSS has also been chosen as one of Microsoft's identity and passwordless authentication partners since 2020 to ensure secure identity and access to Microsoft products. VinCSS also plans to make its passwordless authentication solutions available for sale on Amazon to tap into regional and global opportunities.

### **Application Diversity**

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Passwordless authentication is an inevitable and irreversible trend, largely owing to the inadequacies of traditional password authentication methods. Password-only authentication is vulnerable to phishing attacks and other cyber threats, leading to poor user experience, operational complexities, and business management costs.

The applicability of the FIDO2 and FIDO standards is vast. VinCSS utilizes the FIDO2 protocol to successfully build a product ecosystem with seven closely integrated solutions that have extensive applicability to any system that needs to verify people with the network, such as building and management.

Its IoT FIDO solution also aligns with the digitalization trend, given the growing prominence of IoT applications in automated factories, smart cities, logistics services, security cameras, smart cars, and businesses with complex digital infrastructures that need to scale quickly and effectively. VinCSS IoT FIDO, an extended application developed from the VinCSS FIDO2 ecosystem, can be used for applications that

need to verify and log devices into the network. It helps to promptly and cost-efficiently activate, securely install, and manage configurations for thousands of IoT devices.

This helps increase the efficiency of implementation, expansion, and ensuring the safety of IoT projects. The solution's compliance standards and tools also minimize the risk of supply chain attacks by securely managing or validating the IoT products of vendors and partners.

In the next five to 10 years, VinCSS plans to apply these solutions to smart cars manufactured by VinFast, which is also part of the VinGroup, highlighting the solution's application diversity.

### ***Customer Purchase and Ownership Experience***

Despite being a relatively new cybersecurity vendor, VinCSS's passwordless solutions are the choice of major domestic and international organizations due to their affordability, superior quality, and continuous updates. VinCSS applies a hybrid strategy to compete by offering premium solutions at affordable prices, enabling it to provide tailored solutions to suit various companies' requirements and budgets.

Customers laud VinCSS for its flexibility, reliability, and continuous updates that meet their requirements, including technical specifications, configurations, and service support. The company's partnership with eCommerce platforms allows it to expand its customer outreach and provide product information and real-time support via multiple channels. This has enabled it to boost industry acceptance, trust, and confidence from early adopters. VinCSS emphasizes user experience in its passwordless authentication product development by establishing User Experience Divisions to build a platform that monitors and improves customer services and product experience. With this, customers can experience the products and provide feedback to its R&D and design team to further improve its product and services.

## **Conclusion**

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VinCSS is committed to technological innovation in the passwordless authentication market. As a pioneer and the first company in Vietnam and SEA to join the FIDO ecosystem to promote passwordless IAM solutions. Despite its startup roots, the company is a formidable market player with extensive investment in R&D and industry-leading solutions that are gaining customer adoption domestically and internationally.

With its strong overall performance, VinCSS earns Frost & Sullivan's 2022 Southeast Asia Enabling Technology Leadership Award in the passwordless authentication industry.

## What You Need to Know about the Enabling Technology Leadership Recognition

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Frost & Sullivan's Enabling Technology Leadership Award recognizes the company that applies its technology in new ways to improve existing products and services and elevate the customer experience.

### Best Practices Award Analysis

For the Enabling Technology 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

#### *Customer Impact*

**Price/Performance Value:** Products or services provide the best value for the price compared to similar market offerings

**Customer Purchase Experience:** Quality of the purchase experience assures customers that they are buying the optimal solution for addressing their unique needs and constraints

**Customer Ownership Experience:** Customers proudly own the company's product or service and have a positive experience throughout the life of the product or service

**Customer Service Experience:** Customer service is accessible, fast, stress-free, and high quality

**Brand Equity:** Customers perceive the brand positively and exhibit high brand loyalty

