



# Digital Identity Validation for Payments Enabling Secure, Seamless, Single Touch, Future-Ready Transactions

A Report from NewNet Secure Transactions, Inc.



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### Overview

Digital Identity Validation is emerging as a cornerstone of secure, next-generation payment ecosystems. By integrating biometric authentication with national identity registries and associated databases, futuristic NewNet payment platform enables highly secure single touch eCommerce payments, high security in-store wallet/card transactions, while having the significant advantage of reducing fraud, enhancing compliance, and delivering seamless customer experiences.

The rapid growth of eCommerce and digital payments has amplified the need for robust identity verification. Traditional methods relying on passwords, PINs, OTPs, or static credentials are increasingly vulnerable to fraud and cyberattacks. Digital Identity Validation of payment initiating consumers in combination with national identity registries which are now available as a country wide repository for citizen's identity, and digital authentication with strong authorization mechanisms offering secure and accurate validations based on biometric authentication offers a transformative solution for high security, frictionless payments.

### Digital Identity Validation

National identity databases provide a trusted source of consumer identity. By validating payment credentials against these registries, financial institutions can ensure authenticity of the payer, prevent identity theft and synthetic fraud, meet KYC/AML compliance requirements with auditable verification. Integration with registries allows real-time validation during transactions and strengthening trust across the payment ecosystem.

### Biometric Authentication Technologies

Biometrics provide unique, non-replicable identifiers that enhance security, which is increasingly critical for payment transactions as identity frauds become more prevalent. These include Facial Recognition systems which match live facial scans against registry data for instant validation. Other major systems leverage Fingerprint Processing which use fingerprint templates stored in secure databases for authentication. A third option involves Iris Matching, which offers one of the highest accuracy rates, ideal for high-value transactions. These technologies reduce reliance on passwords and OTPs, delivering frictionless yet convenient and highly secure user experiences.

### Digital Identity Validated Payments

These identity validation mechanisms are hugely advantageous for multiple payment types including eCommerce Payments, payments at merchant locations, self-service kiosks, mass transit locations, event payments, hospitality check-ins and all relevant consumer initiated payment use cases.



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For Ecommerce payments the usage of digital identity validation enables instant checkout with biometric confirmation. This eliminates repeated credential entry, reducing cart abandonment and high-speed checkout completion with security and high level of accuracy.

In the case of Wallet or Card-Based Mobile Payments at In-Store Merchant Locations, the usage of digital identity validation using Biometric mechanisms at POS terminals ensures only the rightful owner can initiate and successfully complete authorization of payment transactions. This also enhances security for contactless and mobile wallet payments.

### **NewNet Payment Platform with Digital Identity Validated Payments**

NewNet's state-of-the-art platforms integrate digital identity validation into omnichannel acquiring systems, offering unified APIs for biometric and registry validation, cloud-native architecture for scalability and resilience, and cryptographic security module integration for secure key management. This solution has future-ready design supporting CBDCs, Stablecoins, and Web3 payments and is targeted at being fully conformant to the industry standards including FIDO. This platform acts as trust anchors, enabling secure and advanced payment processing functions across digital and physical channels.

NewNet solution also integrates the capability to support the passkey mechanism which forms part of the FIDO standards towards mobile device authentication which are associated with the customer payment process. With the combined capability to have consume mobile device authentication and further providing digital identity validation of the consumers making payment from these authenticated devices offer extreme security that is currently the highest practically attainable level of security in the industry. NewNet solution uses smart API integration with the respective biometric based validation technology solutions with high speed and highly accurate processing of large volume of transactions.

NewNet's payment platform with smartly integrated capability with biometric technology solutions holds major benefits including enhanced security offering stronger protection against fraud and identity theft, regulatory compliance which meets evolving KYC/AML and data protection standards, enhanced customer experience enabling frictionless, one-click payments with biometric convenience. On top of this all the operational efficiency of the NewNet payment platform is instrumental in rapid adoption of this payment solution and further automated identity validation reduces the need for manual checks and error avoidance.

The global digital identity market is projected to exceed several tens of billions by 2030, driven by eCommerce growth, regulatory mandates, and consumer demand for secure experiences. Payment providers that adopt digital identity validation will gain significantly with competitive differentiation as trusted platforms, expanded reach in emerging markets where national ID systems are strong (India's Aadhaar, Brazil's CPF, etc.), and future readiness for integrating biometrics with CBDCs and tokenized assets.



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### **NewNet Payment Solutions for Future**

Digital Identity Validated payments represents the next frontier in payment security and innovation. By combining biometric authentication with national identity registries, and embedding these capabilities into advanced payment platforms, the industry can deliver highly secure, seamless, and future-ready transactions. NewNet payment platform with the digital identity validation holds potential to redefine trust in digital commerce and position adopters as leaders in the global payments ecosystem.



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### About NewNet Secure Transactions, Inc.

NewNet Secure Transactions Inc. offers Digital Payment Infrastructure solutions for aggregation & acquiring payments with intelligent routing, switching, secure transport functions, and Cloud transformation, standards compliant Modernization for full spectrum of entities in the payment ecosystem. NewNet solutions provide integrated capabilities for Payment Transaction Routing, Secure Network Access, Real Time Payments, Payment Data Security, Transaction Analytics, AI Augmentation etc.. by smart utilization of flexible APIs enabling Omnichannel, Multimode, Integrated payments.

NewNet Secure Transaction delivers reliable and scalable solutions to Acquirers, Processors, Banks, PSPs, Payment Gateways, PayFacs, MNOs, NSPs, FinTechs, CSPs as well as Telco, Retail, ISV, GigEconomy, Hospitality Enterprises for Real Time Payments, A2A/P2P Payments, Aggregation, Acquiring, Processing of Payments, and Emerging Payments in the areas of Open Banking, CBDC etc.. in all geographic regions globally.

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