Solution Brief

Verify Digital Identity with Zumigo to Prevent Fraud, Improve User Experience

Zumigo solutions verify consumers' digital identity against a network of digital identity data so that businesses can prevent fraudulent activities across the consumers' digital engagement journey without adding friction.

Digital fraud continues to be on the rise. In particular, across the mobile channel user journey, increased fraudulent attacks during new account creation, user log-in, payment and password resets reached unprecedented heights in 2022. For example, attacks at mobile app log-in increased 104%, whereas at password resets, attacks increased 231%¹.

However, almost 90% of users indicate that the ease of registration, login and authentication determines who they choose to transact with². For businesses to compete, it is imperative that antifraud solutions are effective without increasing consumer friction.

The Zumigo mobile identity platform helps businesses across all industries automatically verify and authenticate their consumers across the entire digital engagement journey.

Zumigo leverages real-time mobile carrier and authoritative third-party information to verify the mobile device phone number being used for completing transactions; creating new accounts; and accessing existing accounts. A trust score of the consumer and transaction based on fraud and risk indicators is instantly presented. With this score, businesses can decide whether to approve a new credit card application, fulfill an online transaction, or open a new online account.

- 1. Trust and Collaboration as Foundations to Fight Fraud: The LexisNexis Risk Solutions Cybercrime Report 2022
- 2. Global Digital Fraud Trends: Rising Customer Expectations Amid Evolving Fraud Threats 2022 by TransUnion

Leverage Zumigo Across the Entire Consumer Digital Journey

The Zumigo platform addresses the following key use cases to prevent revenue and customer loss from fraud; improve user experience; accelerate business growth; reduce operational expenses; and simplify KYC regulatory compliance as well as fraud and risk management.

Key Use Case #1: Safely Open a New Account

Fraud occurs when bad actors open a new account – including credit card, bank, insurance, utility, or e-commerce – using all or part of someone else's Personally Identifiable Information (PII). Because of data breaches, much of this information has been leaked and is easily accessible to career criminals. This usually allows the fraudulent application to pass traditional identity verification checks. Zumigo mobile identity verification adds an additional layer of authentication and includes:

- Comparing the name and address provided by the consumer to the name and address on file with their mobile service provider.
- Return mobile identity risk signals that incorporate account standing/status, the type of account, tenure of the account, etc.



Key Use Case #2: Prevent Online Purchase Fraud

Online purchases made with stolen payment card credentials cost merchants millions in chargeback expenses. Such card-not-present transactions are risky and easy for fraudsters to take advantage of. Zumigo helps businesses reduce chargeback risk by ensuring that the credit card, address and mobile phone all belong to the consumer; that the name and address used match the name and address on file; and that the mobile phone is in a location that geographically makes sense for the transaction.

Key Use Case #4: Improve Conversion Rate and Purchase Process with Pre-filled Form

Filling out personal information on a mobile phone with small virtual keys is high friction. To speed up and reduce abandonment in the account origination or checkout process, auto form-fill and express mobile checkout automatically populate mobile forms with the required PII. This approach increases rate of conversion, speed at checkout, and provides a delightful consumer experience

Zumigo captures the mobile number from the device plus other PII data supplied by the consumer, and upon verification, delivers additional information from its digital identity network such as the name and address on file to populate the form. In the case of express mobile checkout, the credit card information can also be populated based on the consumer's choice of payment method.

Key Use Case #3: Enhance Security in Authentication by Adding One-time Passcode (OTP) Request

When a password reset request is issued, or when businesses need two-factor or multi-factor authentication to keep accounts safe from hacking and breaches, an additional authentication method such as OTP is often utilized. OTPs are usually sent to mobile phones. However, fraudsters can intercept OTPs by:

- Providing their own mobile phone number during the reset request
- Porting the phone number to another carrier or MVNO
- Swapping out the SIM card by calling the carrier and reporting the phone was lost, damaged, or stolen, or by account takeover (ATO) attacks
- Remotely enabling call forwarding for the mobile phone number to receive forwarded OTPs
- Adding their own device to the consumer's iCloud account to receive all text messages

Zumigo not only verifies ownership of the mobile phone number to prevent interception of OTP requests, but also checks for porting, SIM swaps, device changes, and call forwarding to thwart the more sophisticated fraud attempts.

Zumigo Mobile Identity Verification and Authentication Platform

The Zumigo mobile identity verification and authentication platform can be leveraged via a simple API connection - the Identity Service API, featuring the following:

- The connection is secured with HTTPS and multiple authentication methods
- Requests are sent via JSON, with fast realtime responses received
- One single API supports multiple requested data elements
- Access to a scalable platform with high TPS support

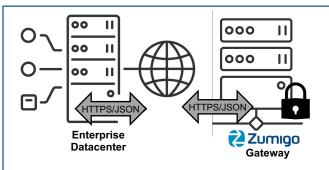


Figure 1: Simple API connection gives access to Zumigo platform

The Zumigo solution includes the following products:

Zumigo Assure Authentication: provides dayzero sign-up and sign-in consumer authentication

- Verifies phone number via silent authentication
- Delivers multi-factor authentication (MFA) to consumers to ensure possession of the phone, via SMS, SMS link, voice OTP, and QR code
- Ensures strong authentication via public/private asymmetric key pair SDK for a frictionless, passwordless experience
- Transfers the authenticated and verified trust from phone to the desktop/laptop/tablet

Zumigo Assure Identity: verifies identity using PII associated with the consumer

- Obtains real-time insight from mobile carriers and authoritative third-party data providers
- Provides subscriber information including associated secondary accounts
- Verifies consumer age to comply with age limitation requirements

Zumigo Assure Risk Assessment: brings together real-time insight to the consumer's digital identity for a holistic risk score to represent the risk associated with the consumer

- Provides score on whether the phone can be trusted; and the risk of the consumer interaction
- Detects the swapping of SIM cards and port out events
- Assesses risks relating to call forwarding and account takeover attacks
- Confirms the validity and ownership of the email address and provides score on whether the email can be trusted
- Detects inbound social engineering calls and blocks outbound spoofed voice calls
- Verifies the bank account status and ownership before linking to the consumer's digital payment accounts or wallets
- Assesses the risk of bank accounts having enough funds for pending debit, or credit being rejected because the account is closed or suspended
- Assesses the trust of a mobile phone number by analyzing a variety of related real-time and suspicious activities (e.g. deactivations and porting events) across a network of businesses, and provides a risk score

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Zumigo DeRiskify Suite of Products: includes OrderRisk and InstaAuth to protect e-commerce merchants from fraud, eliminate chargebacks, and streamline customer experience.

- Assesses validity of orders by verifying customer identity and payment card details
- Improves shopper sign-up/sign-in experience with secure passwordless access to reduce friction and increase conversion
- Reduces checkout friction by automatically filling customer shipping and billing information
- Provides fraud-related insights to purchases and transactions
- Authenticates phone possession by sending a verification link via SMS
- Verifies landline phone number by making an outbound call

Zumigo Monitoring Services: proactively detects phone number risk based on status changes, and sends alerts

- Provides daily updates on risk profile changes on consumer's phone number, including deactivated, ported, sim swaps and enablement of call forwarding
- Provides real-time call-back API alerts for risk profile changes, or FTP batch updates at select frequency

Zumigo Assure Radius: detects a user's mobile or computing device's IP location

- Obtains on-demand mobile and IP network location of the consumer's mobile phone or computing device; OR
- Uses mobile app-based location

Summary

The Zumigo platform leverages real-time mobile carrier and authoritative third-party information for day-zero account origination identity verification and continuous verification. The trust scores based on a broad spectrum of fraud and risk indicators allow businesses to take the appropriate action with the consumer's transaction to prevent downstream fraud.

Zumigo solution is:

- Real-time: Zumigo verifies and authenticates consumer identity using real-time authoritative data sources. The resulting risk signals instantly adjust and respond to suspicious events, so that fraudulent activities are prevented before they have a chance to materialize.
- Authoritative: No static history or predictive analytics! Zumigo uses real-time information from multiple digital sources to provide conclusive risk scores and data. Businesses can determine whether to approve or fulfill an activity or transaction.
- Accurate: With a layered approach using realtime and definitive information sources, Zumigo reduces more false positives and negatives than other traditional authentication methods. Businesses build trust with their consumers faster with Zumigo.

About Zumigo

Zumigo is on the frontline of digital identity verification that helps the world's largest enterprises protect transactions, devices and accounts. With a multi-layer approach, Zumigo validates consumers against a unique identity intelligence network that spans global carrier providers, authoritative third-party data sources, and payment information. Learn more at www.zumigo.com.