

E-BOOK



Minding Your Business

Strengthen Security & Reduce Risk With Phone Verification





WHEN IS A NEW ACCOUNT ACTUALLY A PERSON?

IF YOU RELY ON EMAIL TO VERIFY USERS, BE PREPARED FOR FAKE ACCOUNTS

For decades, businesses have typically relied on a series of back and forth emails to verify a new user; a customer opens an account, the business sends an email, the customer replies proving they have access to the email address submitted, and they're in. The problem with email is the ease at which email accounts can be created, even automated by software robots. This allows bad actors to create fraudulent accounts for reasons such as:

-  • Opening accounts in someone else's name as part of identity theft
-  • Registering social accounts for spamming and attacking legit users
-  • Signing up to abuse free trial services in your application

Regardless of what industry you're in, as you grow your business, you must constantly look to minimize these risks, especially today with the rise of identity theft and stolen account data widely available for sale on the dark web. Even a small security breach can result in a degradation of the customer trust you've worked so hard to build, which in turn can have long-lasting repercussions on your brand, your future business prospects, and your bottom line.

Moving away from email to verify account creation and activity is the first step to stronger security for your business. Luckily, there's a better way that's even more convenient for your users.

UP NEXT: UNCOVER THE SECURITY BENEFITS OF PHONE VERIFICATION. >

15M



**2016 SAW OVER
15 MILLION CASES OF
CONSUMER IDENTITY
THEFT OR FRAUD.
THAT'S THE HIGHEST
FIGURE RECORDED
SINCE 2004.**

- JAVELIN RESEARCH



A MORE SOPHISTICATED SECURITY EXPERIENCE

FINDING BALANCE BETWEEN SECURING ACCOUNTS & ENSURING CONVENIENCE

Gone are the days when an email address and password was sufficient to reliably establish the identity of a new user. For starters, creating a new (or fake) email account takes no time and costs nothing, so attackers regularly exploit applications that verify accounts solely by email, filling up their application with thousands of fake users. To combat this, developers are adopting a better way to be certain that account activity is initiated by a real person: phone verification.

Creating fraudulent phone numbers require extra effort, time, and expense. Attackers need to obtain a SIM card per phone number, which requires opening accounts with legit telecommunications companies. Compared with creating fake emails, buying and swapping SIMs into devices isn't an economical or effortless choice. All in all, verifying phone numbers presents a significant barrier to automating the creation of fake accounts.

To verify a number and prove a user is who they say they are, a code is delivered via SMS (or voice call for non mobile users) and requires the recipient to enter the code back into the application or website. And since [nearly 63% of the worldwide population](#) own a mobile phone with [50% soon to own smartphones](#), there's no user-training needed. The whole process is fairly friction-free.

Since phone verification is globally acceptable, and the messaging within completely customizable, mobile phones are clearly the best way for modern businesses to verify user identity. In fact, if you already offer your services through a mobile app, there's really no excuse not to offer phone verification for additional security.

UP NEXT: PHONE VERIFICATION USE CASES IN GAMING, ENTERTAINMENT, AND ECOMMERCE. >



**ACCOUNT TAKEOVER
FRAUD ROSE 31%
IN 2016. AND NEW
ACCOUNTS OPENED
IN A CONSUMER'S
NAME ROSE 20%.**

- JAVELIN RESEARCH



CASE STUDY



MERCADO LIBRE: PROTECTED BY AN INVISIBLE SAFETY-NET

One of the 50 most visited websites in the world, Mercado Libre has been connecting millions of Latin Americans in a superior online shopping and auction marketplace for nearly two decades.

While the company's strategic focus is to provide the best possible buying and selling experiences, Mercado Libre knows that cumbersome security processes can get in the way. Testing showed that complex security drove users to abandon the platform altogether. Still, as a public company they were cognizant of being SOC II compliant, an audit designed for service providers storing customer data in the cloud.

To complicate matters further, many Mercado Libre sellers are not tech savvy — some are not familiar with online security at all — but their livelihoods are dependent on the platform and the security it provides. To protect sellers, Mercado Libre needed to provide a strong safety net that was virtually invisible in the context of the selling experience.

A creative security solution was needed to address unique issues while still allowing merchants, especially top-tier, high volume sellers, to access the platform with ease. To this end, Mercado Libre initiates a phone verification event when witnessing suspicious or unusual transactions: either a user publishing something that is out of their normal value range or an account that abruptly changes its buying patterns. In cases like these, Mercado Libre brings the user through a screening process that includes account verification via phone.

Mercado Libre's focus on creating a superior and secure customer experience has earned them one of the highest Net Promoter Scores (NPS) for customer experience and loyalty. They rank among the top five Latin American brands to receive this recognition and the number one e-commerce brand, judged against more than 60 companies in 12 industries.



This was the first time we decided to buy a solution instead of building our own. Twilio met all our needs and was very easy to integrate.

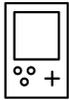
Pablo Abad,
Product Development,
Mercado Libre



**mercado
libre**



CASE STUDY



EPICNPC: GETTING INTO THE ACCOUNT VERIFICATION GAME

EpicNPC, a leading online community forum and marketplace platform for gamers, sees a consistently high volume of games, services, and gaming accounts bought, sold and traded. So, when online auction leader eBay disallowed the sale of virtual items on their website, EpicNPC saw an enormous market and growth opportunity.

However, as the activity grew, so too did the challenges of preventing unwanted scammers or previously banned users from accessing the site and swindling EpicNPC's 540,000 members and sellers.

Although the company relies heavily upon a monitoring system to ensure that new members are legitimate and not known bad actors, they also rely on Twilio's Phone Verification to protect both the site and its members from unwanted visitors.

EpicNPC had been working with another phone authentication company for several years but made the switch to take advantage of the innovative features, and more robust data, that Twilio delivers.

Integrating phone verification was painless, says the company CEO: "We did it ourselves and were able to do it quickly; in about a day or two."

Now, anyone looking to buy, sell, or trade gaming accounts, items, or services via EpicNPC site has to verify their phone through Twilio's Phone Verification before they can register and begin making sale threads.

In this way, EpicNPC is able to cost-effectively block account creators using certain types of service providers, like VOIP, and can monitor track and block unwanted accounts.



We were a little worried that adding another step to the registration process could cause friction for new users. But we found that wasn't the case. It hasn't slowed our growth at all.

Mike Zihal,
CEO,
EpicNPC

EPICNPC



CASE STUDY



WUNDERMAN: CURBING TICKET SCALPERS IN LATIN AMERICA

When Movistar, Latin America’s largest telecommunications company, looked to reward loyal mobile customers with free concert tickets, their marketing agency, Wunderman, was faced with huge challenge: how best to create a digital experience that ensured tickets went to actual Movistar customers, and not to the general public, or to scalpers.

The agency’s verification solution had to focus on three distinct issues:

- 1 Confirm users have Movistar as their mobile provider
- 2 Ensure users are registered with the Movistar app
- 3 Provide only one ticket per mobile phone

Building and maintaining an SMS verification system can be fraught with resource challenges, so Wunderman opted for an off-the-shelf API solution. In addition to its technology,

support, and integration options, Twilio’s Phone Verification API was chosen because it stops accounts from being created by bots and can reduce fraud and associated costs by blocking premium, and toll-free numbers. And since no specific experience with telephony or SMS is required, the Wunderman developer team found implementation to be easy.

Additionally, because Twilio translates both SMS and voice verifications into 29 languages, Movistar can go global with successful regional campaigns. The service automatically selects language translation based on the phone number country code, or developers can override to choose a preferred language.

The results? Using Twilio’s Phone Verification, the Movistar Free Music Festival offer saw a conversion rate of over 85%.



We ran our first prototype in a matter of hours. We quickly presented our ideas to the client, and moved forward with implementation. The entire process took two to five days.

Francisco Facal,
Technology Director,
Wunderman





PHONE VERIFICATION HAS NEVER BEEN EASIER

BUILD ROCK-SOLID VERIFICATION WITHOUT SMS DELIVERY WORRIES

Thinking of incorporating phone verification into your account security processes? Consider that delivering SMS messages across the globe isn't easy. In many countries, local telecom carriers can block a message or incorrectly identify it as spam. Rules and regulations vary depending on geography, carrier, and message type, and are constantly subject to change.

It shouldn't take a deep understanding of the complexities of the global communications infrastructure just to adequately verify your users. And by implementing the [Twilio Phone Verification API](#), it's not. We take care of the behind-the-scenes aspects of phone verification so you can concentrate on your business.

If you develop apps for Google devices, use the [Twilio Verification SDK for Android](#) which fully automates verification, removing the need for users to retype codes. Google has partnered with Twilio because of our vast experience in building user-friendly communications platforms that reach nearly any phone worldwide. Here's why this SDK might make sense for you.

- > **ABSTRACTS GOOGLE PLAY SERVICE:** Out-of-the-box integration via a small, lightweight SDK.
- > **TOTAL AUTOMATION:** End-to-end handling of the phone number verification process.
- > **REDUCED DEVELOPER TIME:** Implement Google's SMS Retriever API in a single sprint.
- > **EASY UPDATES:** Simplified phone verification can be added to all new, current, and legacy apps.
- > **BETTER END-USER EXPERIENCE:** Friction-free app signups using just a phone number.
- > **MORE SUCCESSFUL SMS:** With our API, delivery of SMS is more timely and reliable.

READY TO GET STARTED? READ ON. >



TWILIO VERIFICATION SDK IS EXCLUSIVELY AVAILABLE FOR GOOGLE ANDROID PLATFORMS, AS APPLE DOES NOT ALLOW PROGRAMMATIC ACCESS TO IMESSAGES OR SMS.

Google



WHAT'S NEXT?

Regardless of your industry, email addresses and passwords no longer cut it as a secure way to verify that your new customer is actually a real customer. To confidently verify your user's identity and protect your app or your service from data loss, fraud, and malicious attacks, you'll need a better solution.

Twilio Phone Verification is:

- > SOC 2 compliant as audited by the American Institute of CPAs
- > As easy for developers to implement as it is for users to use
- > Entirely configurable to meet your business needs
- > Global in reach
- > Reliable

Our out-of-the-box API is built for scale and speed: there's no need to write code for each step. And our step-by-step tutorials and 'how-to' documentation provides in-depth information about built-in functionality, response formats, user self-help, and common troubleshooting tips. Plus, our 'pay-as-you-go' policy has no upfront costs, so it's as little as pennies per verification.

PLUS YOU DON'T NEED TO HAVE SPECIAL SMS, TELEPHONY, OR CYBERSECURITY KNOW-HOW TO GET STARTED.

Ready To Improve User Verification?

We'll walk you through product demos, user experience, ease of integration, pricing, and next steps.

[→ CONTACT US](#)

Developers: Want to start building?

[→ START NOW.](#)

EMAIL: SECURITYSALES@TWILIO.COM

We hope that this phone verification guide inspires you, and we can't wait to see what you build.

