

OUTBOUND CALLS BEING MARKED AS SPAM OR BLOCKED?

Find Out What You Can Do About It!

Customers Don't Trust the Phone

Close to 90% of calls to customers go unanswered because customers don't know who's calling so they don't answer the phone.

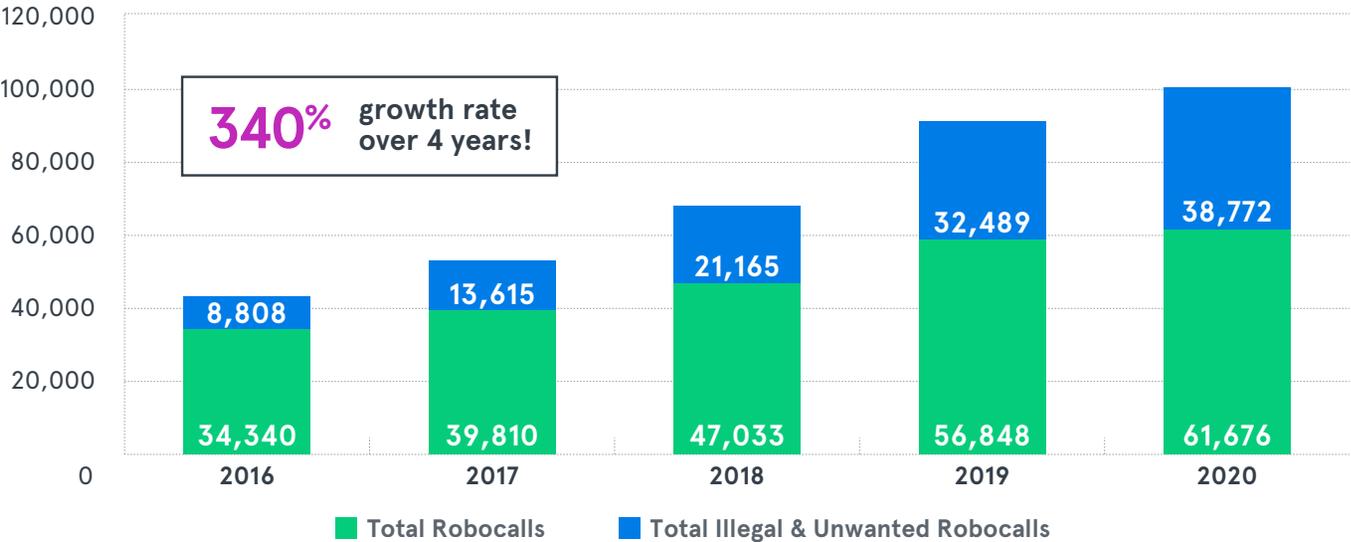
The consequences of unanswered calls include a poor omnichannel experience, decreased revenues, lost customers, increased costs, and more.

A recent whitepaper by Juniper Research, [Brand Authentication and Call Experience Management, 2021](#), shows the massive increase in robocalls in the U.S.—340 percent in just over four years, and the far-reaching impacts of the resulting negative call experience.



88%
of consumers
don't answer when
they can't be sure
who is calling

TOTAL NUMBER OF ROBOCALLS RECEIVED IN THE US (m), 2016-2020



And **75%** of enterprises
report losing more than
10% revenue as a result of
negative call experiences

Mis-tagging of Calls and Blocked Calls Add to that Lack of Trust

When legitimate calls are deemed suspicious, and marked as “spam”, most of us ignore the call. Sometimes, customers never even see the call, because they are mistakenly blocked. When asked about the impact of their calls being wrongly blocked or flagged as spam, respondents in the recent Omdia study, *Rebuilding Trust in Calls, 2021*, listed increased costs after loss of sales/revenues, and reduced answer rates.

A recent Omdia survey, [Rebuilding Trust in the Phone, 2021](#), shows:

90%

said more than 20% of their outbound calls were blocked

82%

said more than 20% of calls were mislabeled as spam

86%

are very or extremely concerned the problem is only going to get worse



Sometimes Calls are Mis-tagged or Blocked by Input from STIR/SHAKEN

The FCC's [June 30, 2021](#) STIR/SHAKEN implementation deadline has come and gone. But the impact on enterprises will hang around for a long time.

STIR/SHAKEN is the first of many measures to reduce robocalls and restore trust in the phone channel, and represents tremendous collaboration across the telecom ecosystem to stop this scourge. As more service providers implement the framework, there's a greater risk that legitimate business calls that originate with carriers that have not deployed it won't receive the highest attestation level and will fall into what is being termed the "attestation gap."

When calls get a low attestation level, they are more likely to be labeled as spam, or blocked.

What's STIR/SHAKEN?

The TRACED Act mandated that all Communications Service Providers (CSPs) implement STIR/SHAKEN as the caller ID authentication framework in the Internet Protocol (IP) portion of their networks by June 30, 2021.

STIR [Secure Telephony Identity Revisited](#)

SHAKEN [Secure Handling of Asserted Information Using Tokens](#)

It's more important than ever for Communications Service Providers (CSPs) to carefully assess how call attestation levels are impacting their valuable enterprise customers.

And, enterprises must understand what options they have to ensure outbound calls are signed consistently with the highest appropriate attestation level.



Attestation: a Multi-Step Process.

STIR/SHAKEN uses vital information about the originating caller to determine an “attestation” level for the call – A, B, or C. These attestation levels are flags set by Originating Service Providers (OSPs) indicating how confident they are that the outgoing call is being made by the actual owner of the number – the call is not being spoofed.

The STIR/SHAKEN framework outlines the following process:

STEP 1

The Originating Service Provider (OSP) digitally assigns an attestation rating to a call, indicating whether they have authenticated the right of the caller to use the phone number, using these three criteria:

- Do I have a direct business relationship with this customer?
- Did I give the telephone number (either from my block or a TN leased from another carrier) to this customer?
- Did the call originate from my network?

Based upon the answers to these questions, the OSP assigns a commensurate attestation level.

STEP 2

Often, a call will pass through multiple carriers (transit carriers) before it reaches the called party's service provider. These carriers pass authenticated traffic without modification.

STEP 3

The Terminating Service Provider (TSP) uses a decryption key to validate the call has not been tampered with and then determines call treatment based upon analytics and the attestation level.

STEP 4

Depending the call treatment algorithm used by the service provider, the recipient of the call will be notified with a symbol, verification keyword, or some form of an alert indicating that the incoming call has been validated.

A = FULL

The OSP has the highest level of confidence in the caller. The OSP has verified the caller's right to use the number and origin of the call.

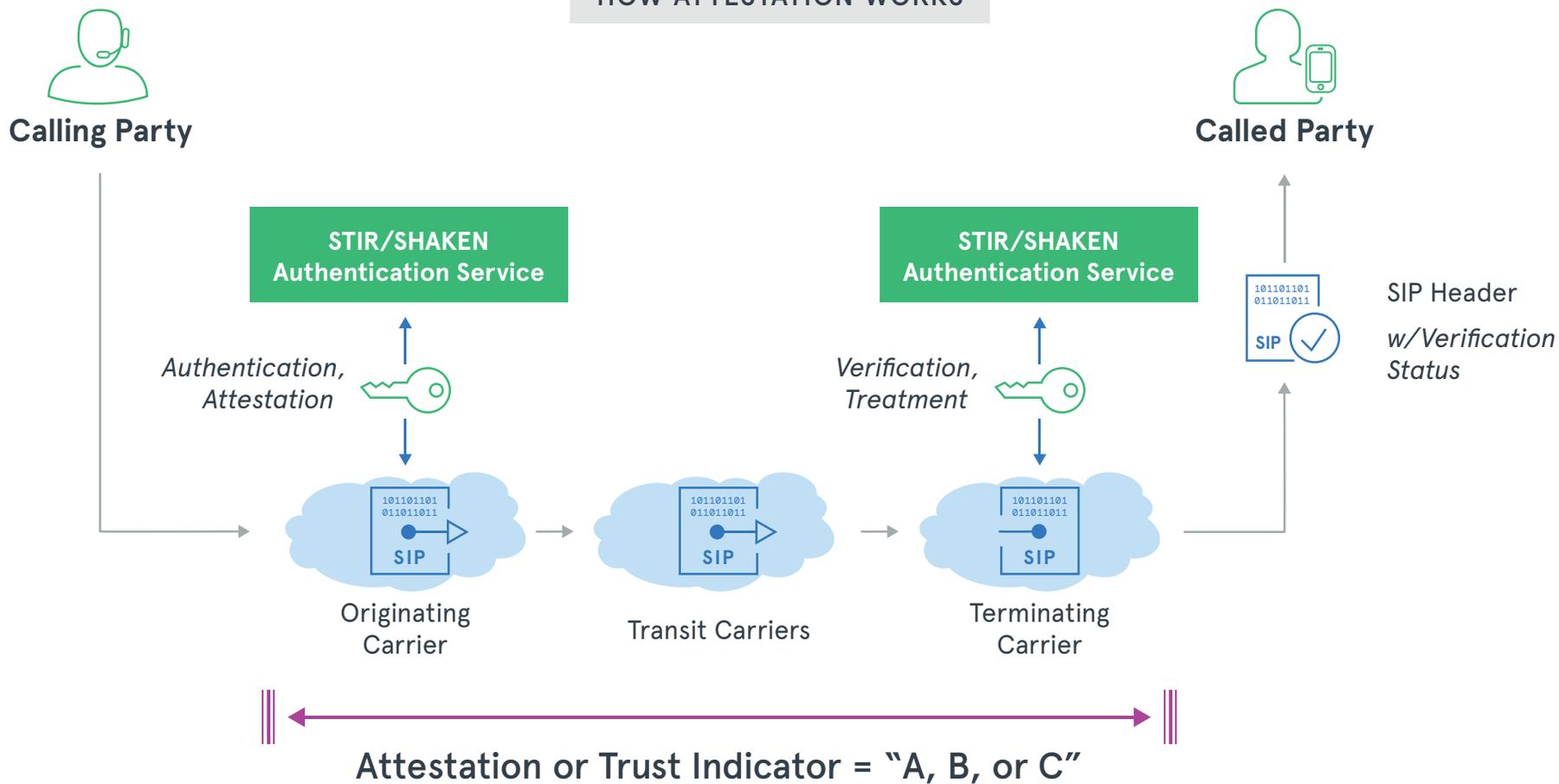
B = PARTIAL

The carrier knows the caller's identity but hasn't verified the right of the caller to the calling number. The originating carrier has no verifiable relationship with the phone number.

C = GATEWAY

Usually assigned to calls received from an international gateway or legacy systems. While service providers can determine where the call came from, they can't authenticate the caller ID or the caller's right to use the originating phone number.

HOW ATTESTATION WORKS



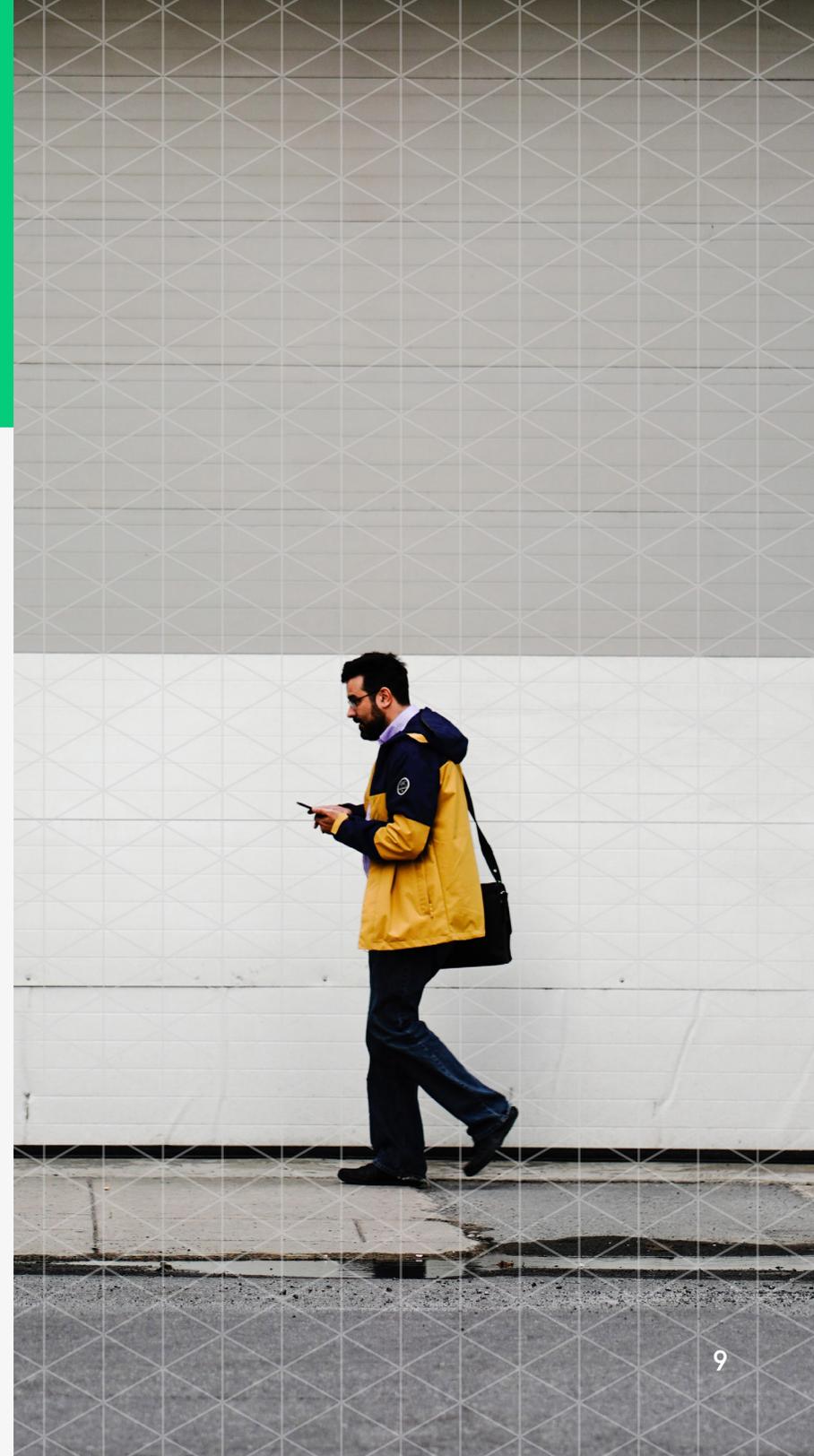
If the attestation level for the call is not an "A" or the call can't be verified, the TSP may block the call and/or alert the called party to a potential scam call.

It Gets Complicated with Multiple Service Providers.

Enterprises that get their phone numbers and voice services from a single carrier are likely to receive an “A” attestation because the originating carrier is certain of their identity, the source of the number, and originates the call on their own network. But there are many cases where calls are falling through the cracks.

Below are some common use cases where a problem exists:

- Enterprises that outsource to contact center providers
- Contact centers and enterprises that receive number blocks from multiple carriers, and use Least Cost Routing (LCR) for outbound traffic
- Contact centers and enterprises who receive SIP trunks from carriers and manage their own numbers



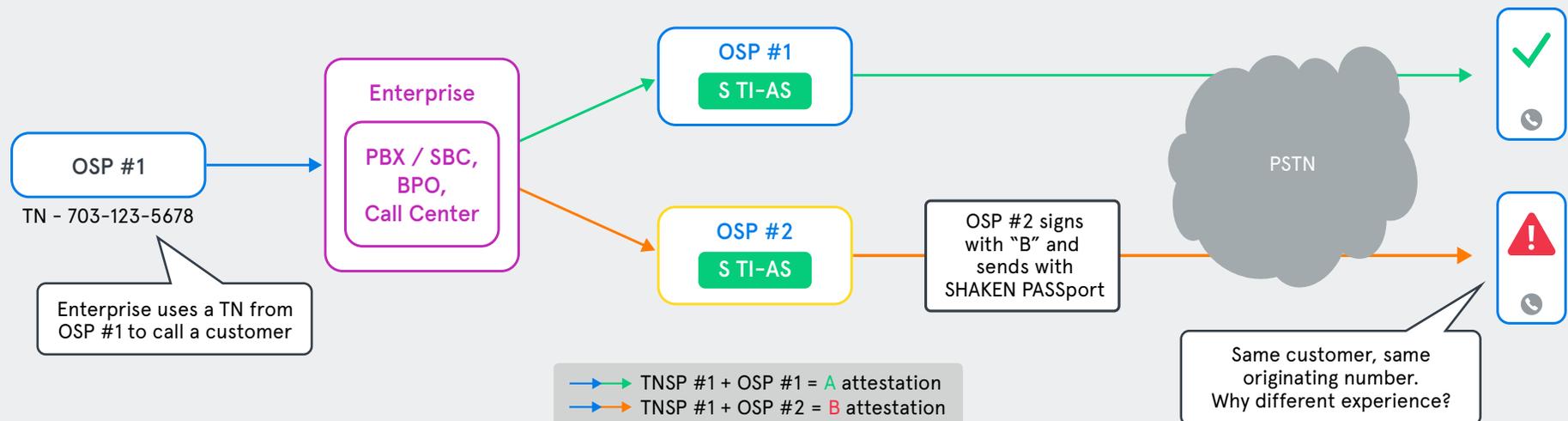
The diagram below shows an example in which an enterprise has obtained telephone numbers from multiple sources and has multiple service providers (OSPs). A common practice is for an enterprise to use the same telephone number and send calls to different trunks based upon costs, time of day, etc.

An enterprise call to the same consumer, using the same originating number, can have different results!

Attestation level is determined by combination of:

- Which carrier (TNSP) is the source of the phone number
- Which carrier (OSP) originates the call

Attestation Gap Creates Confusion



How to Get the 'A' in Attestation.

One way to resolve the attestation issue is for enterprises to authenticate their own calls using their own certificate(s). Unfortunately, most enterprises currently don't meet the requirements to obtain their own certificate, but they still want to ensure they receive an A-level attestation.

Several options exist to bridge the gap:

Name	Description	Status
OPTION 1: STIR Certificate	Enterprises can sign their own calls by working with their Originating Service Provider (OSP) – the vendor providing telephone services – to use one of these two STIR PASSporT delivery options: <ul style="list-style-type: none"> OSP validates and consumes STIR PASSporT and re-signs with SHAKEN OSP validates and transmits STIR PASSporT to TSP along with the OSP's SHAKEN PASSporT 	<ul style="list-style-type: none"> Standard: based upon STIR RFC 8226 standard Industry adoption: tested in lab environment and ready to deploy
OPTION 2: Delegate SHAKEN Certificate	After it's been approved by the Policy Administrator (PA), supporting the use of official PASSporTs, enterprises will be able to sign their calls using a SHAKEN certificate, through one of these two options: <ul style="list-style-type: none"> OSP validates and consumes delegated SHAKEN PASSporT and re-signs with SHAKEN certificate OSP validates and transmits Rich Call Data PASSporT to TSP along with SHAKEN PASSporT 	<ul style="list-style-type: none"> Standard: Based upon standard ATIS-100092 – approved by STI-GA and STI-PA Industry adoption: Tested and available now
OPTION 3: Telephone Number Database (TNDB)	The Telephone Number Database (TNDB), acts as an authoritative source of TN-to-Enterprise association, including delegated authority by enterprises (e.g., to call centers.)	<ul style="list-style-type: none"> Standard: Discussed in standard ATIS-1000089.v002 Industry solution: local and national databases being deployed now
OPTION 4: Sign Your Own Calls	<ul style="list-style-type: none"> Sign calls (generate PASSporT) with a standard SHAKEN certificate 	<ul style="list-style-type: none"> Standard: must meet criteria outlined below Must be an Interconnected VoIP Provider (IVoIP) that has: a 499A on file with the FCC, an Operating Company Number (OCN), IVoIP Numbering Authority approval from the FCC, completed a STI-PA Test Plan with the Policy Administrator, obtained valid certificates from an approved Certificate Authority, implemented STIR/SHAKEN in your network

OPTION 1

STIR Certificates – Available Now!

Enterprises can sign their own calls by working with their Originating Service Provider (OSP) - the vendor providing telephone services.

Currently, Neustar's recommended approach is for enterprises to work with their OSP to agree on one of two STIR PASSporT delivery options:

- OSP validates and consumes STIR PASSporT and re-signs with SHAKEN
- OSP validates and transmits STIR PASSporT to TSP along with the OSP's SHAKEN PASSporT

OPTION 2

Delegate Certificates.

The use of Delegate Certificates, to ensure enterprises receive proper attestation, has been approved by the STI-GA and the STI-PA.

Now enterprises can sign their calls using a SHAKEN certificate, through one of these two options:

- OSP validates and consumes delegated SHAKEN PASSporT and re-signs with SHAKEN certificate
- OSP validates and transmits Rich Call Data PASSporT to TSP along with SHAKEN PASSporT

OPTION 3

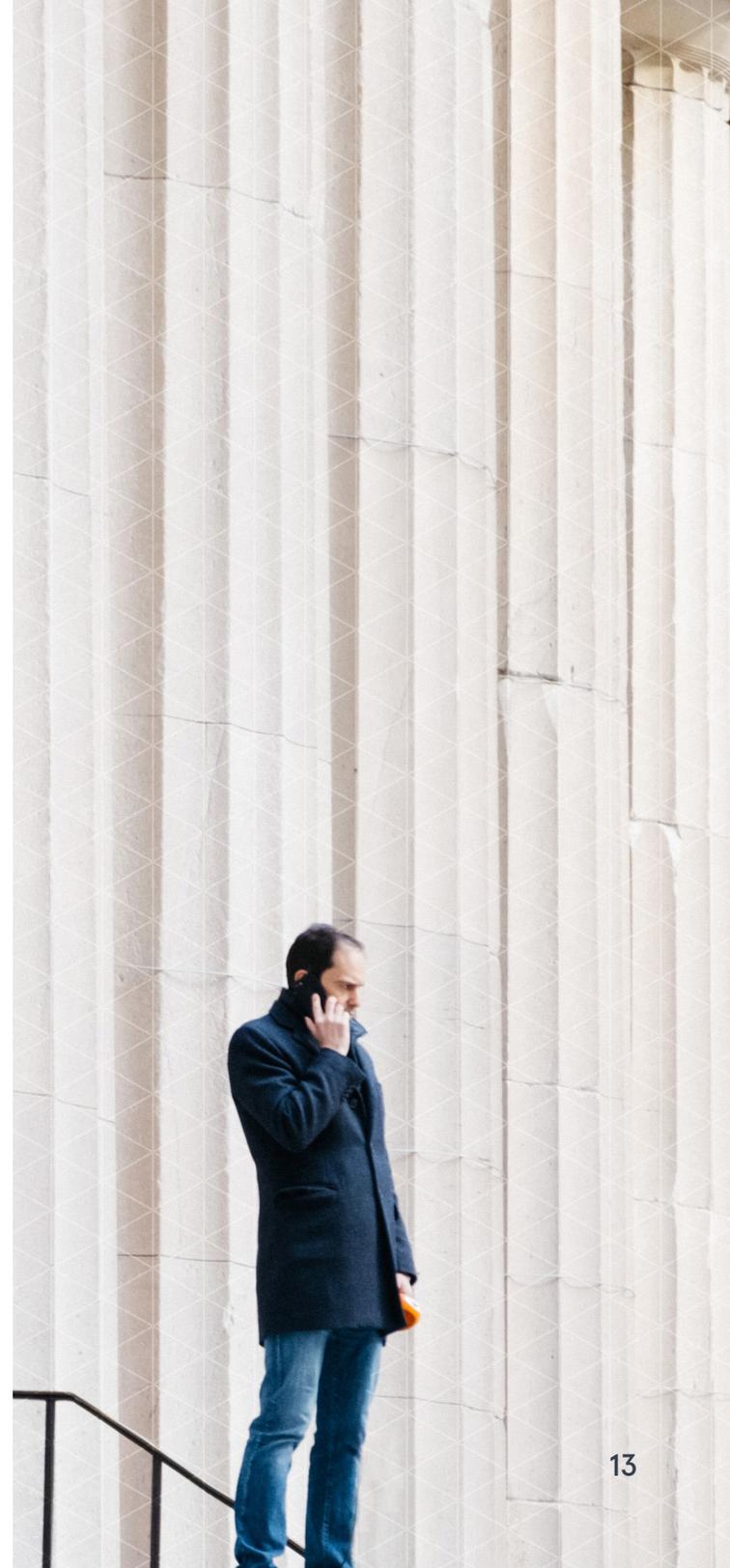
Telephone Number Database (TNDB).

A third prospective solution is the Telephone Number Database, which acts as an authoritative source of TN-to-Enterprise association, including delegated authority by enterprises (e.g., to call centers). For the telephone numbers and enterprises to become trusted, they must first be vetted by a trusted neutral third party like Neustar, a TransUnion company.

OPTION 4

Sign Your Own Calls.

Many service providers are considering signing their own calls to ensure that their calls are not blocked by downstream providers if they do not have the highest attestation level. However, many service providers are now eligible to obtain a Token so they can control their calling experience and sign their own calls. This takes considerable effort, and analytics tools often take other indicators into account that may impact call treatment. For more information on signing your own calls, email callerid@team.neustar.



There's More Enterprises Can Do to Control the Call Experience!

Whether your situation is simple or complex, there are steps you can take, including:



Understand the STIR/SHAKEN landscape and your business impact.



Investigate the use of [Branded Call Display \(BCD\)](#). Ensuring end-to-end authenticated calls further allows the presentation of pre-vetted rich call data to the mobile display to provide additional context, so recipients are reassured about who's calling and answer the phone. Research shows that early adopters of branded calling have improved answer rates on first-call attempts by over 56%.



Assess Certificate Delegation, TN-Database, and/or STIR Certificate options and determine which best aligns to your business needs.



Visit our [Trusted Call Center](#) to learn about the seven-step trusted call journey.

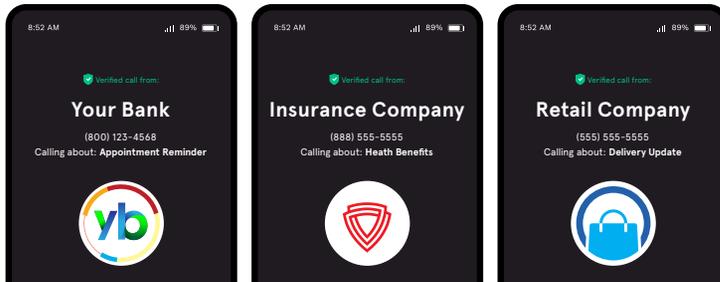


For others in the ecosystem to trust your calls and provide favorable treatment, enterprises should investigate [vetting](#), which is also outlined in CATA Working Group's [Best Practices](#).



Take our free [outbound calling assessment](#). You'll receive a custom report with scores that will point you toward specific actions and next steps your business should take to ensure your calls get through to customers.

The Benefits of Branded Calling Can Be Seen Across Use Case and Industry



INDUSTRY	ANSWER RATE IMPROVEMENT
Financial Lender	34%
Insurance Provider	34%
National Retailer	65%
Opinions & Survey	56%
Rideshare Service	30%



Financial Services Co.
Live answer rate KPI improvements compared to baseline

Market Research Co.
Live answer rate KPI improvements compared to baseline



Automotive Communications Co.
Live answer rate KPI improvements compared to baseline

Businesses can improve answer rates by up to **56%** with Branded Call Display (BCD)!

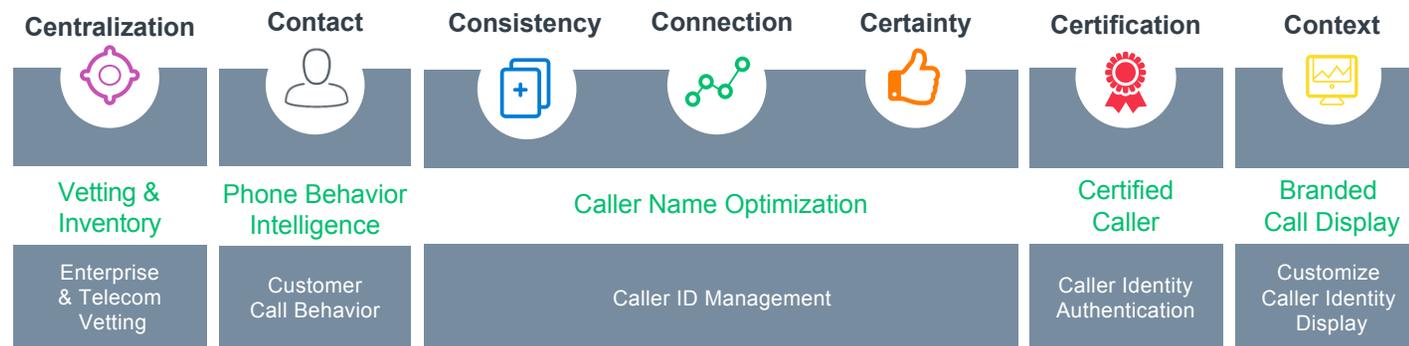
Source: [Branded Calling Solutions - A New Revenue-Generating Opportunity for Telecoms Operators](#), Analysys Mason 2021

BCD is Part of Our Trusted Call Solutions Suite

When you choose Branded Call Display (BCD), you benefit from our integrated, comprehensive, market-leading suite of Caller ID solutions for mobile and landline. Visit our Trusted Call Resource Center to learn about the seven-step journey our industry experts developed to help you optimize outbound call operations, increase contact rates, improve the customer experience, and protect your brand reputation.

7 Steps to Deliver a Trusted Call Experience

No matter what stage of the journey you are in, Neustar's suite of market-leading integrated solutions can help.



Learn More.

Learn more about **Branded Call Display (BCD)** and visit our **STIR/SHAKEN Resource Hub** to learn about insights, resources, and solutions.

Email **callerid@team.neustar**.