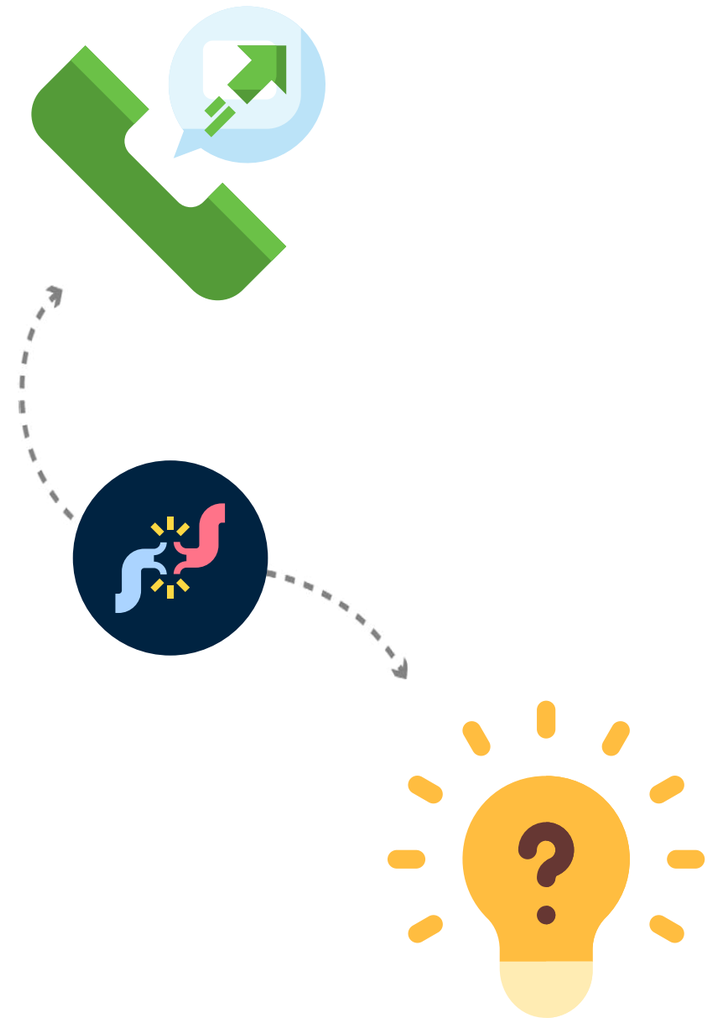
NOBELBIZ WHITE PAPER

Why Outbound Calls Don’t Always Connect



nobelbiz®
Contact Center Technology

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Introduction

At first glance, making outbound calls in a contact center appears to be simple. However, telecom experts within a company delivering the services know various factors impacting one's ability to make calls efficiently and have them connect.

This document will discuss the significant factors carriers consider regarding the nature of outbound traffic. We will look at the challenges posed by different types of traffic, telecom-related challenges within the carrier networks, and how to optimize your ability to deliver high-quality outbound calls with high completion rates.

The Problem

Contact Centers making outbound calls expect their calls to connect but not every carrier is equipped or willing to provide service that meets their business needs. As we will see, not all outbound traffic is equal in the eyes of a carrier. This is why choosing the right carrier can be difficult if you don’t have high-quality call stats.

Understanding Outbound Calling in a Contact Center Environment

The four KPIs carriers use to measure the quality of outbound calls

1. Short Duration Calls (SDC) percentage

Short Duration Calls Percentage represents the percent of calls that are 6 seconds or below. From a carrier's perspective, the lower the SDC, the better.

- **What are the main drivers of a high SDC?**

  AMD (Answer Machine Detection) increase your SDC

  Making calls to people who are not expecting your call and have no interest in speaking to you

  Not leaving a Voice Mail

- **Why is SDC important?**

  The carrier uses many network resources with very little to be billed. This means spending finite resources on calls that are not profitable

  No carrier wants large amounts of short duration calls

  Carriers can have stiff penalties for having too high an SDC percentage

2. Average Call Length or Average Call Duration (ACL/ACD)

This is the total talk time across all the traffic types divided by the number of connected calls. From a carrier's perspective, the longer the calls, the better.

- **Drivers of high Average Call Length**
  - Outbound calls that are expected
  - Leaving Voice Mails on outbound calls
  - Outbound calls to people who want to talk to you
- **Why is ACL important?**
  - Longer calls mean network capacity consumed by billable events that generate good profit

3. The Percent of Tier 1 Calls

This is the percent of calls made to or from the most populated areas in the country. From a carrier's perspective, the higher the percentage, the better.

- **Drivers of a higher Tier 1 percentage**
  - Calls to the Major cities in the United States
  - Low to no calls to rural or low population destinations
- **Why is this important?**
  - Calls to rural areas are more expensive, and calls to major population centers are less expensive

4. ASR Answer Seizure Ratio (ASR)

ASR is the percentage of telephone calls that are answered. From a carrier's perspective, the higher the ASR, the better.

- **Drivers of a low ASR**

  Human or automated processes that hang up the call before a person or machine answers the call

  Invalid numbers

  Numbers that are out of service

- **Why is ASR important?**

  Calls that don't connect can't be billed by the carrier that initiates them, which means network capacity is consumed without the ability to bill for it

How do carriers make money? Why does it matter?

Carriers make money on the usage. They are usually charging a per-minute fee. There is a finite amount of telecom network capacity to make or take calls, and maximizing each call attempt with the ability to charge for it is ideal for a carrier.

If you make a call through a carrier's network, the carrier can begin to charge you when the call connects. Carriers can put in rules to make sure you don't make too many calls they can't charge. They can also penalize you in some way if you have too many non-billable or low-billable calls.

"Bad" Traffic

Suppose the nature of your calling is high in short duration calls, low in average call length and/or low Tier 1 traffic. If so, from a carrier's perspective, the cost of doing business with you will increase, and the contract will become resource-consuming without the ability to bill and make a profit.

"Good" Traffic

Reversely, if your calls are long and to/from Tier 1 destinations, your traffic is highly sought after by a carrier.

Knowing your telecom stats and where your profile fits in the scheme of great vs. poor traffic allows you to be a more educated consumer and gives you the ability to negotiate with the providers for the best rates and quality.

Three Common issues experienced when making outbound calls on a carrier not designed for Contact Center traffic

- Calls not connecting
- Ringing on calls that were answered
- Dead air on calls
- Calls that seem to ring longer than they should

Most all of these issues can be attributed to the following types of problems:

1. False Answer Supervision (FAS):

FAS occurs when an outbound call receives answer supervision (is picked up) without actually terminating to its intended destination. These types of calls incur billing but may give the impression that the call is still in progress (caller hears ring tone upon answering). Or a false belief is made regarding its disposition such that the caller is led to believe that they've reached a wrong party, perhaps a voicemail box, or maybe just dead air.

The Legal and historical context of the FAS: FAS calls are considered fraudulent but were relatively rare until 2015 when the entire industry experienced an upsurge in FAS activity on US domestic routes. The majority of them occur on rural destinations and are suspected of having begun as a response to rule changes adopted by the FCC in 2013 to combat low completion rates and call quality problems on calls made to rural destinations (FCC: source).

Before 2015, fraudulent calls of this nature targeted expensive offshore or international destinations primarily as the lower cost of US domestic destinations was a lot less profitable.

Before mandating a high completion rate threshold, carriers were naturally incentivized to protect their margins and avoid terminating such calls. However, with the new mandate and accompanying penalties for not adhering to stated thresholds, FAS became a way for some bad players to game the system with inflated completion rates while avoiding the high cost of completing these calls or making additional margin fraudulently.

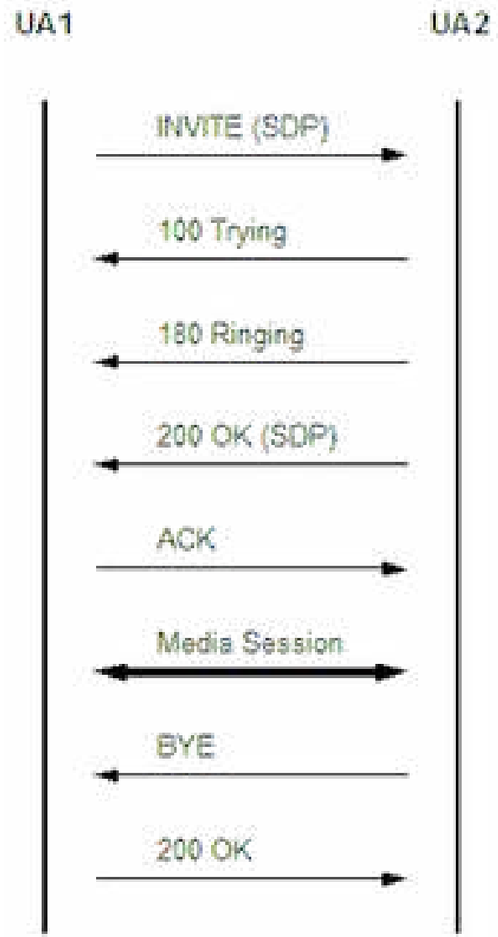
2. Post Dial Delay (PDD):

PDD is the time between call initiation and the receipt of progress tone indicating the call is ringing at the far end, awaiting pick-up.

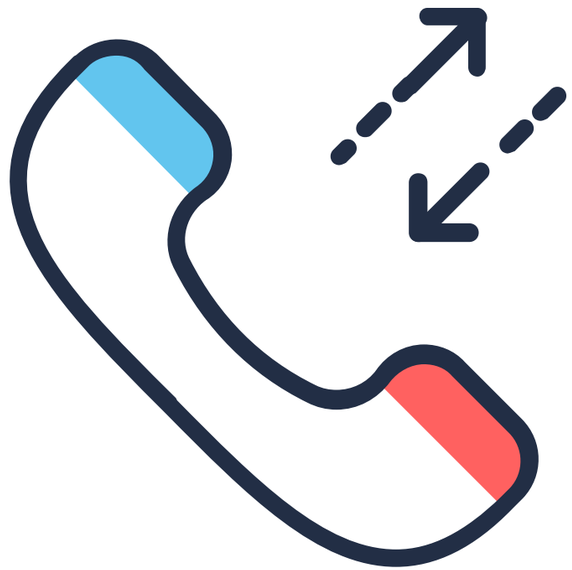
While PDD technically exists on all calls, it is only noticeable when it becomes excessive. The most common cause of PDD is the dialing of an invalid number. Due to the redundancy mechanism built into call termination, all calls that generate “re-routable” codes such as SIP 503 are retried if the initial call attempt doesn’t complete. Given the potential depth of a routing table, calls to invalid numbers may experience a long PDD as multiple routes are tried and retried until all options are exhausted and the call gets rejected.

Behind an auto-dialer, calls that get rejected for long PDD don’t generate answer supervision and wouldn’t be noticed by agents. However, manual-dialing agents would perceive the duration of call setup.

It may also create a perception that the overall duration of the call attempt is far longer than expected. However, this would be a false impression; the call is not initiated until the receipt of the progress tone (SIP 180/183), which indicates ringing. The PDD occurs at an earlier stage of the call setup process; PDD timers typically begin their countdown upon receiving the SIP 100 Trying message.



3. Call Per Second (CPS) Limits:



CPS limits are put in place for a variety of reasons which include:

- limiting capacity to maximize network use,
- distribution to preserve network integrity,
- to protect carrier relationships or downstream equipment.

Downstream switch capacity is also finite, and equipment in certain cities and towns have limited resources and cannot terminate more calls than can be serviced, causing calls to be rejected.

Some providers can limit companies to below 10 CPS, while others provide more than 100 CPS. Companies who require higher limits CPS generally have calls rejected, reducing productivity and can cost companies money.

Solutions

Minimizing FAS and PDD

The unfortunate aspect of dealing with FAS and PDD at the carrier level is a lack of visibility to the problem.

A FAS call appears as a regular call; the only indication of a problem is the agent experience. Because the rural routes that the FAS typically takes belong to micro-telcos that are part of NECA pools, even large carriers need to hand the calls to them.

This means there will always be third-party carriers in the routing mix, often beyond the first hop where call hand-off takes place between your carrier and an upstream carrier, further obscuring where exactly such a problem occurs.

Fortunately, carrier-specific PDD due to congestion is relatively easy to detect, as monitoring for increases in failed call attempts and a highly congested carrier will cause a spike in call time-outs. Invalid numbers that are part of unallocated carrier blocks would also not affect NobelBiz customers, as we do not maintain routes for such numbers and would reject call attempts to them immediately.

While the process of troubleshooting, in either case, requires timely feedback from end-users so that our NOC can trace back the affected calls to the particular trunk, the actual mitigation is to temporarily remove carriers from the route until those carriers can audit their routing and purge the invalid routes. Unfortunately, for the FAS problem, there is no permanent fix at this time. No carrier is free of it, though response time to detected issues helps minimize the impact of the problem. Our ability to mitigate this issue lies with the depth of our routing table and the redundant nature of our network.

As an inter-exchange carrier (IXC), NobelBiz is cross-connected to most of the major carriers in the country, which gives us several routes to each destination across our POPs (Points of Presence). Therefore, when a carrier-specific issue such as FAS is detected, our priority is to isolate that particular carrier from customer traffic and work through the problem with them after service to the customer is restored.

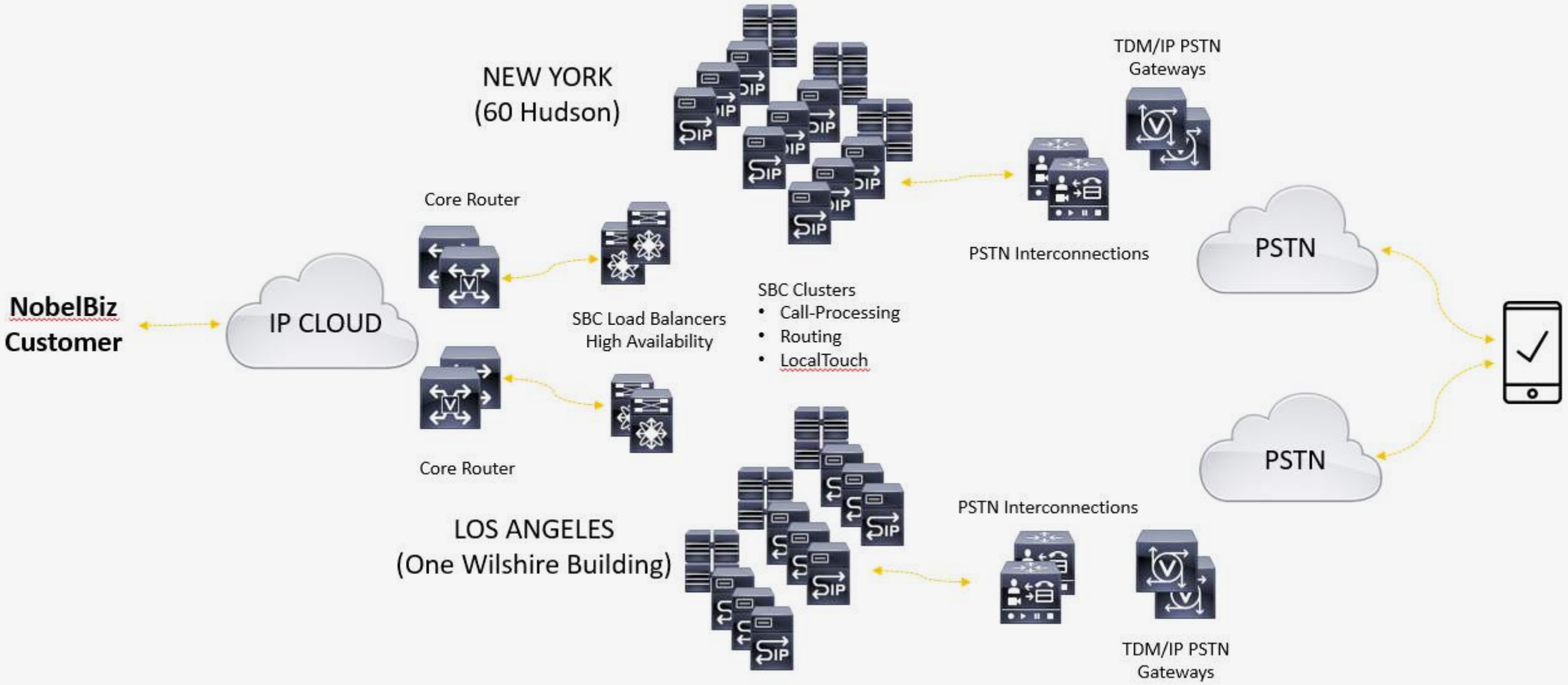
How can NobelBiz provide a high call completion rate for all types of traffic?

- Our Purpose-built network is designed for call center traffic using secure top-notch data centers, backup power, diverse multi-data provider circuits in each facility, and clusters of redundant equipment
- Active management of many high-quality routes in place to distribute calls among top carriers
- Downstream carriers competing for your business delivering high uptime and excellent call quality
- The ability to immediately remove a carrier from route to minimize your downtime
- Maintain high-quality standards by firing providers who consistently don’t perform

The NobelBiz Voice Carrier Network Design

Each data center is one of the most secure and core COLO's in the United States with redundant:

- **Power:** Each facility has backup power and generators
- **Equipment:** In clusters and load-balanced set up in high availability
- **Data circuits:** From several Tier 1 providers to reduce hop counts and provide diversity
- **Downstream providers:** Multiple Tier 1 Inbound Toll-Free carriers proactively managed



Conclusion

Many companies make change painful and difficult. This is why choosing the wrong provider can be catastrophic to your job and company. Doing business with a provider should be based on their ability to best serve your needs as a business across all aspects of the relationship.

Contact-Center-focused providers such as NobelBiz act as an extension of your company in alignment with the essential parts of how their service is critical to your ability to conduct business.

Service providers who have purpose-built networks explicitly designed for Contact Center traffic will handle more types of calls and volumes while also maintaining high-quality standards.

KEY TAKEAWAYS

Managing carrier relationships takes time, expertise, and resources. Partnering with companies whose business is to do all of this footwork for you and provide an environment where carriers compete for your business gives you:

BETTER UPTIME

CONNECTION RATES

HIGHER QUALITY CALLS

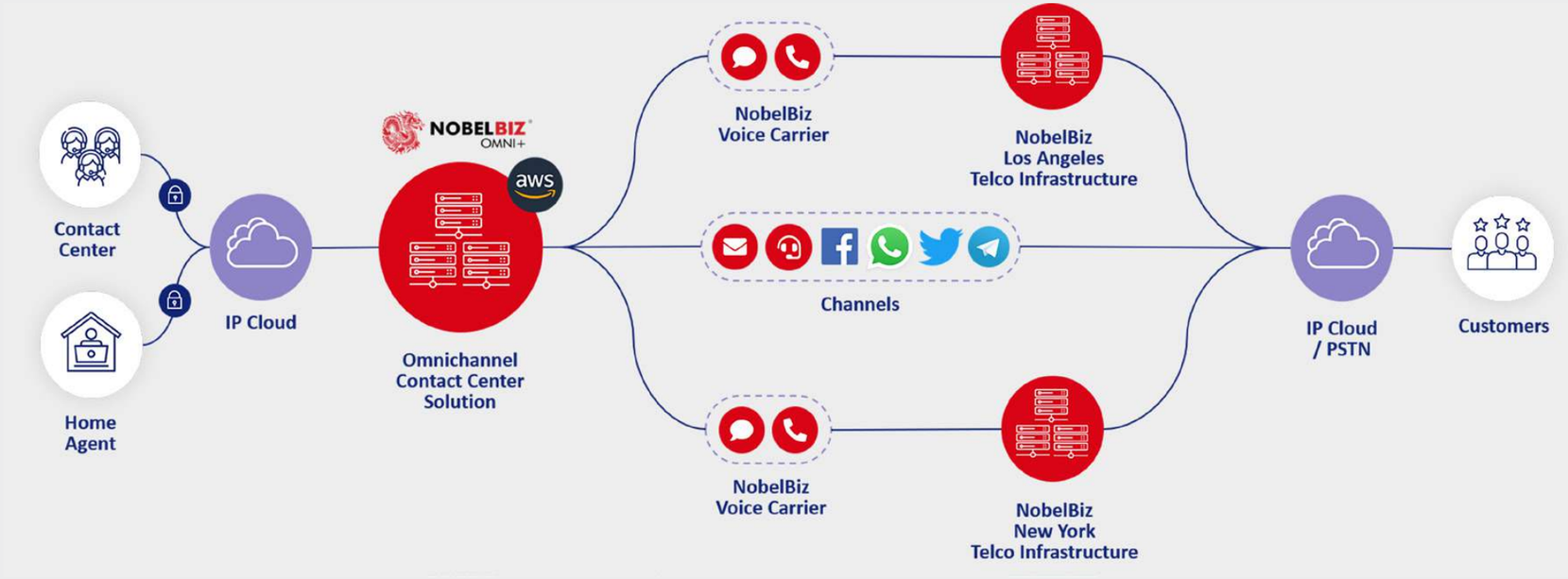
BETTER SERVICE AND SUPPORT

Who is NobelBiz?

NobelBiz is a world-class Telecom and CCaaS company with 20 years of experience delivering complete solutions for contact centers across the globe, irrespective of size, industry, or activity.

The **NobelBiz Voice Carrier Network** is the only network built from the ground up to serve contact centers, offering the most versatile selection of smart tools to increase contact rates, mitigate impacts of call labeling and blocking, and provide all-around compliance.

The **NobelBiz OMNI+** cloud contact center software has a unique blend of capabilities: from Omnichannel, Impressive API integrations, and fast implementation, to simple cross-channel campaign setup and remote work.



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If you have questions or concerns about the items we outlined, NobelBiz can definitely help you with this.
Get in touch with one of our experts today!