

**BANDWIDTH REPORT 2024** 

# State of Messaging



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### **SECTION 01**

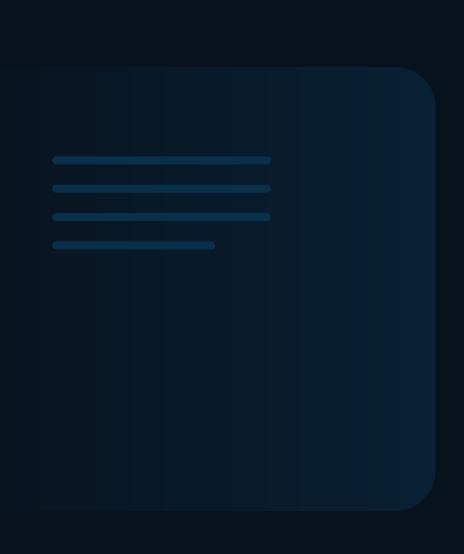
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My colleague Caitlin's lease ran out this year, so she needed new wheels, and not just any wheels—she decided it was time for her dream car: a shiny new Ford Bronco. Within hours of registering her interest on a car shopping website, she was chatting 1:1 with local salespeople. Rather than spending hours driving across town, standing in cold parking lots, being pitched by pushy salespeople, only to find that a dealership didn't have her preferred model in stock, Caitlin shopped right from her phone.

Caitlin's personalized shopping experience is an example of a major 2024 theme. Messaging is more than a communication channel. It's a conduit for personalized conversational experiences.

In fact, the two big trends we're seeing this year are:

- 1. Widening options for senders
- 2. Better experiences for recipients

We surveyed over 1,600 consumers and businesses this year to decode how messages are being sent, and received, on both sides, and serve you up with relevant, fresh information to guide your messaging strategy in 2024.

This is my fifth annual State of Messaging report and I've never felt more confident about the positive impact of messaging on businesses and consumers.

In 2020, we talked The Renaissance of messaging. SMS wasn't a new thing, but it was gaining fresh traction as a marketing tool. At the time we were talking about Verified SMS. Well, times have changed and Verified SMS was retired in 2023.

In 2021, we introduced The Reformation and shared our "How to choose a provider" checklist, which is still relevant today – you'll find it included again at the end of this report.

2022 brought us The Restructure. This is when we started seeing new infrastructure in the messaging space around registration and verification. And with that came a rising need for guardrails in the market, and increasing costs. A running trend that continues through today.

Last year, we announced The Realization. Texting is now standard practice across industries. Consumers are used to it, and businesses have mostly adjusted to the expectation of registration requirements.

The "R-" theme may have run its course, but I'm calling 2024 a Rich New World of Messaging because of the deeper, more colorful use cases we're seeing.

Grab a cup of coffee and scroll on to get our insights, tips, and stories on how this Rich New World is being created.



Brad Roldan
GM/VP of Product, Programmable Messaging

# Section 01



Where messaging is at in 2024

Section 02



Messaging in major industries

Section 03



Reaching farther with messaging



# Chapter 1

# A wider range of options supports better resiliency



According to Cellular Telephone Industries Associations (CTIA), consumers are exchanging more than 2.1 trillion text messages per year.<sup>1</sup>

Options are a good thing. And the messaging space has more options now than ever. In this chapter, we'll cover a two significant industry changes creating more options in 2024:

- Updates in the aggregator space
- Diversification and flexibility of channels

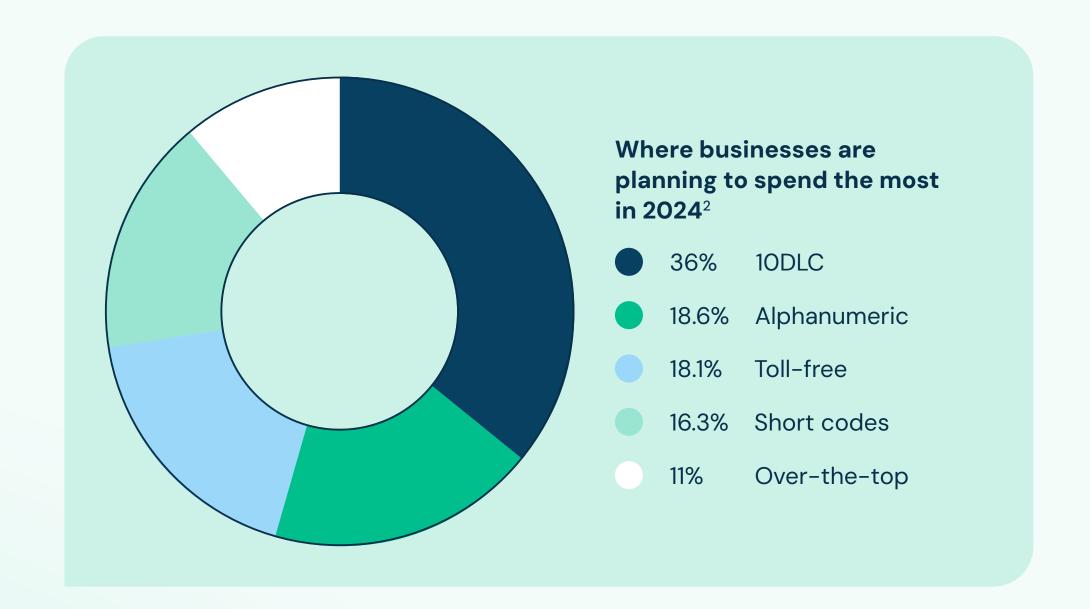
### **Options for Aggregation**

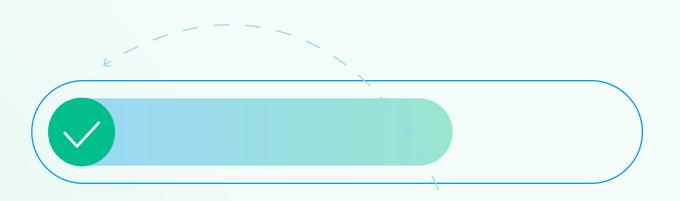
The list of Direct Connect Aggregators (DCAs) are changing and diversifying.

### 1. More than one path to the carrier

For a while, Syniverse and Sinch were the only direct connect aggregators (DCAs) for 10DLC and person-to-person messaging. Likewise, all toll-free messages had to go through ZipWhip, which our astute readers likely know is owned by Twilio, although operated separately. Now, more providers are forming direct connections with carriers, and are/will be able to bypass the third-party aggregator step.

What's that mean? More providers with DCA status means there will be more options to choose from if a direct path to the carrier is high on your buying list priorities.





### 2. More ways to work with The Campaign Registry

The Campaign Registry (TCR) is still the primary vendor for 10DLC campaign registration. For the last few years, carriers have trusted TCR to handle campaign registration. And the drive to register traffic has only become more formalized and reinforced as carriers started adding fees for non-registered traffic in 2022 and 2023.

Brands can choose to go straight to TCR, or partner with providers like Bandwidth for support with registering with the TCR. Often, going directly to TCR is still the most efficient method, but it's not the only game in town anymore.

### **Channel Flipping**

There are three channels for texting in the U.S. and Canada: short codes, toll-free, and 10DLC. Often, companies choose which channels to use arbitrarily, and then stick with their decision. But each has its pros and cons:

### 1. Choose your channel, change your channel

More and more, we're seeing companies using all three channels for different use cases across one customer journey. It's beautiful to see businesses seamlessly flowing between two-factor authentication messages on Short Codes, helpful updates on toll-free, and two-way conversations with sales reps on 10DLC.

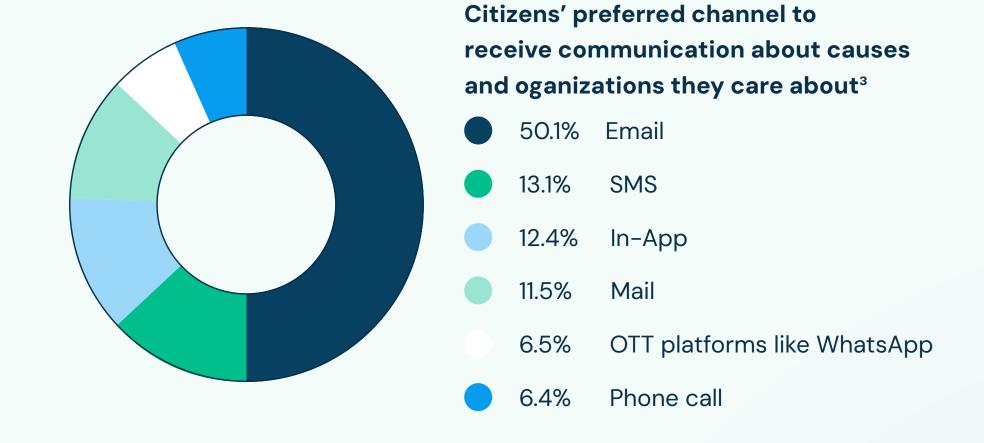
# Messaging Examples by Business and Channel

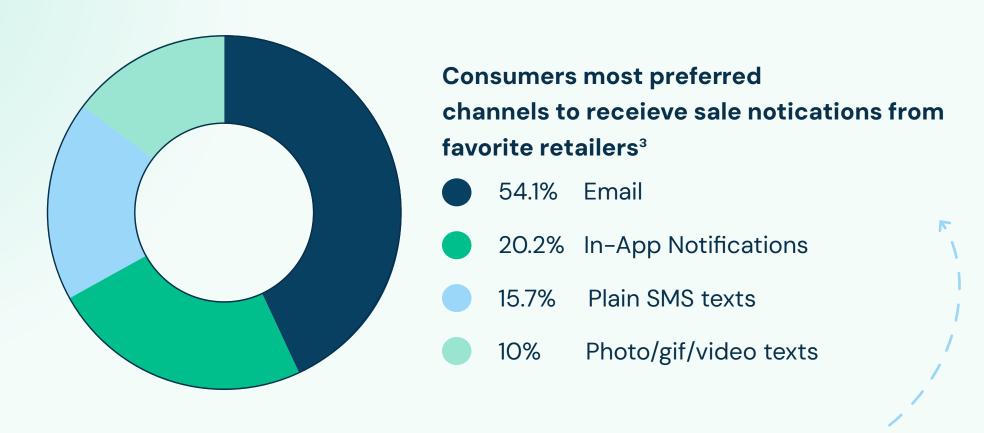
	Short code		Toll-free	10DLC	
	Orthodontics practice	Two-factor authentication Use code 654321 to reset your portal password	Tuesday, April 1st at 1:00 PM Reply "C"		
	School updates platform	System-wide updates All classes cancelled tomorrow due to	Local updates Stars Hollow preschool curriculum night is next Tuesday. Reply with your questions.		
•	Retail fashion brand	Nationwide sales alerts Black Friday starts now. Get 15% off and free shipping.	Opt-in confirmation Reply YES to confirm you want messages from LUXEATHLETE	Regional promotions  A heat wave is hitting Wake  County this weekend. Save 20% on swimwear.	
	Car dealership	Announcements Our newest import dealership is now open on Wade Avenue!	Service alerts It's time to get your winter tires on. Call now to schedule your appointment.	Delivery notifications  Hi Caitlin, Your Bronco will be ready for pickup today at 5:00. I'll meet you at the dealership entrance with your keys!	

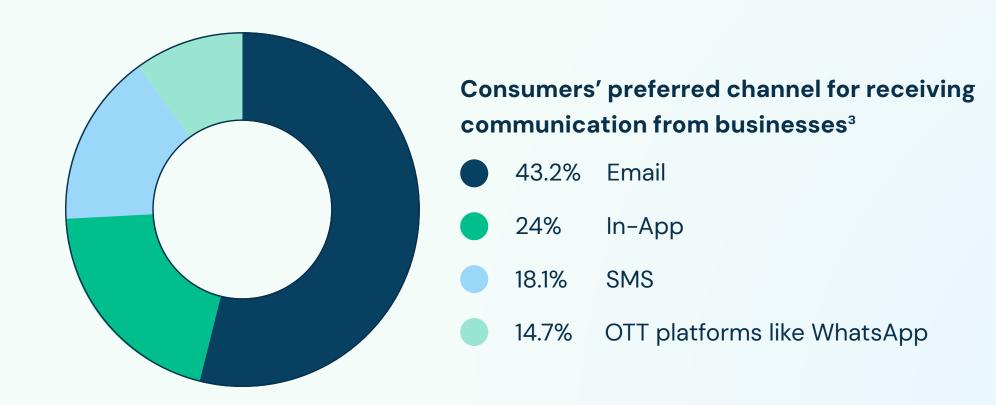


Not only does mixing and matching your channels give you flexibility across the customer journey, it also adds a layer of redundancy and resilience. You can make sure that you have campaigns registered on like for like channels based on use case so that if, goodness forbid, one channel has an outage, the issue doesn't halt your existing business on other channels. For example, you can set up short codes as a failover for a highly critical toll-free campaign, like one-time passwords.

Consumer preferences are shifting as more channels become available, too. Here are some consumer preferences to keep in mind when developing a communication strategy your customers' use case and business type:







3. Bandwidth consumer survey



12345

Your car is due for an annual inspection

**(800) 123-4567** 

Center Tire: It's the mid-winter sale! Save big on snow tires and more.

(415) 123-4567

Brad, your car is ready to pick up!

**Anthony Bartolo** 

How's that report coming along?

### Mom

Check the forecast before you pack.

(919) 987-6543

Earn double rewards on lattes at our Raleigh store – today only!

**(800) 987-6543** 

Thanks for your donation to save the sharks \$\figstar{9}\$

98765

Your fantasy football verification

code is 2225

Toll-free verification is the approval process for toll-free SMS sending. The aggregator verifies that the number is indeed owned by the business which applied, reviews the content that will be sent on the number, and makes sure there is a clear opt-in, opt-out, and privacy policy in place. Once the number is verified, it is then tied to that brand.

# Three channels, unlimited potential

### 2. Choosing your primary channels

As we said earlier, we often see businesses make arbitrary decisions about what channels to pursue first. If you're wondering about this too, we've got some guidelines for you.

### Short codes

The OG of text channels, Short codes, are available in the U.S. and Canada and allow for MMS video messages as well as basic SMS messages.

### **PROS**

- Most reliable delivery rates
- Typically offers the highest throughput rates
- Sometimes considered the cadillac of texting

### CONS

- Longer time to market
- Usually a higher startup cost than 10DLC or toll-free
- Not voice-enabled

### Toll-free

Toll-Free texting gives you the same MMS and SMS capabilities that short codes do, but you can also use voice-enabled numbers. That's great for customer service use cases because you can text your opted-in users and then they can just call back to complete their issue resolution.

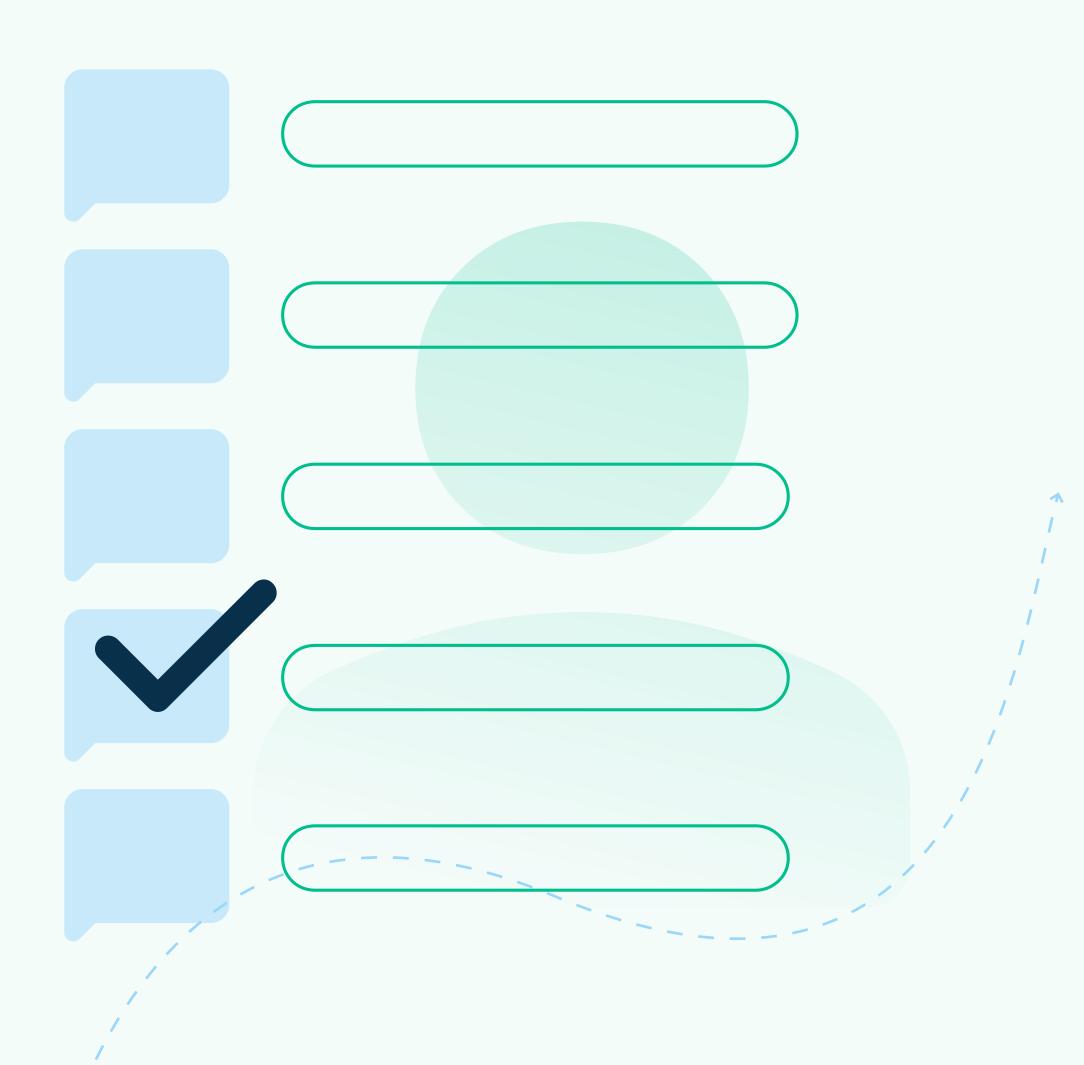
 ✓ Note: effective Jan 31st, 2024, the industry's toll-free aggregator will disallow any sending on non-verified toll-free numbers.

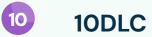
### **PROS**

- If available, you can use your providers' API to help with number verification
- Consumers know and trust toll-free numbers

### CONS

- Required verification means a longer time to market
- Usually a little more expensive than 10DLC





Regular long codes are meant for person-to-person (P2P) communication, or conversational SMS. As such they don't perform well in high-volume application-to-person (A2P) use cases where businesses are sending high volumes of messages to customers and users. The newest addition to the messaging landscape, 10DLC, solves for this with a sanctioned A2P channel for long code in the U.S. As with Toll-free numbers, you can use MMS, SMS, and voice-enabled numbers.

Note: 10DLC is not a sanctioned A2P channel in Canada, which means the throughput is low and there are no registration requirements...yet. We'll keep you updated as that situation develops.

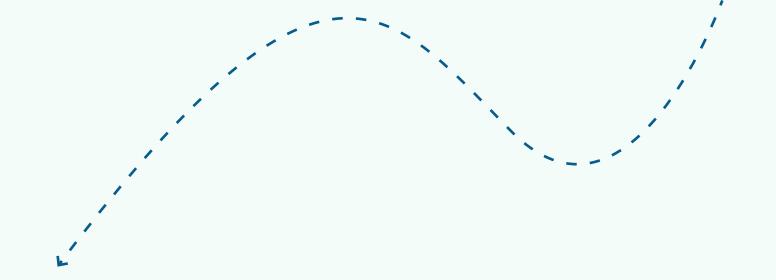
### **PROS**

- Choose any U.S. area code to create a feeling being "local" for your nearby customers
- Shortest time to market
- Usually the lowest price per message

### CONS

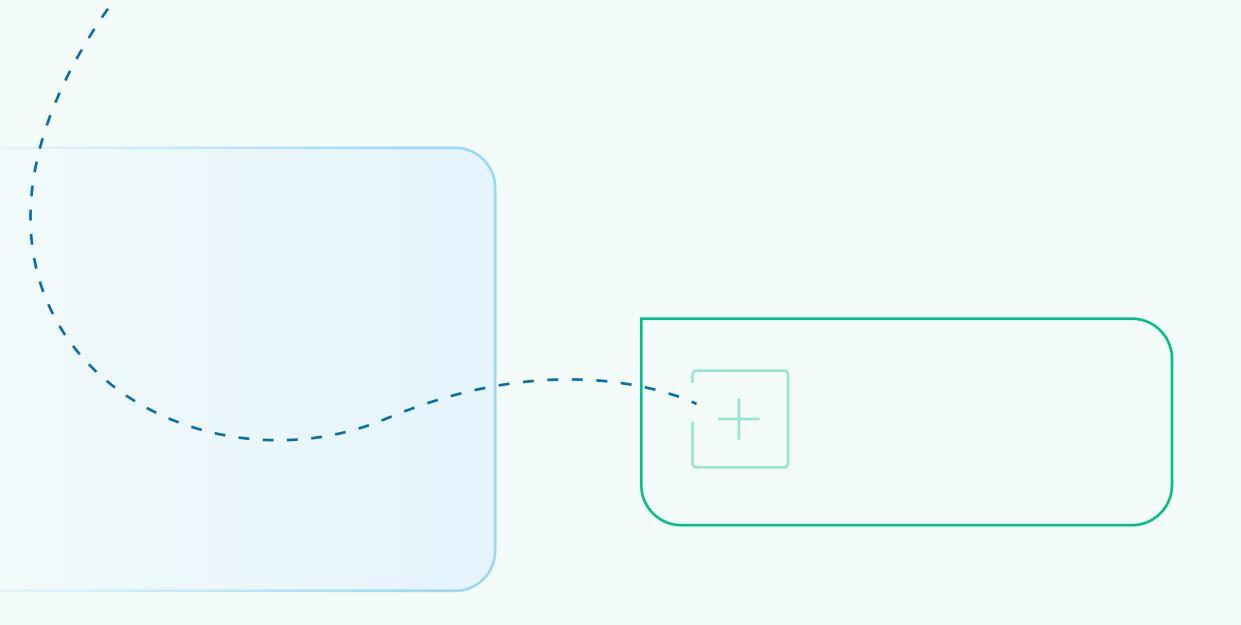
- Lower reliability compared to other channels
- Highest volume of changes as it's the newest channel to be sanctioned for A2P use
- Note: 10DLC numbers are not designed for crisis alerts. Urgent notifications in the US should typically be sent on short codes for the most reliable delivery.

Now that you've gotten an overview of the three most common channels for the U.S. and Canada, let's see how they fit into the larger messaging landscape.



# The Ultimate Messaging Channel Feature Guide

	NOTIFICATIONS			CONVERSATIONS			
Feature	Short codes	Toll-free	Alphanumeric SMS	10DLC	Global 2-way SMS	RCS	Over-the-top (Ex: WhatsApp)
Geographic availability	Globally with country-specific codes	US/CAN	180+ countries not including U.S.	US (CAN as P2P)	Globally	Globally on wifi or cellular data	Globally on wifi or cellular data
Voice capable	No	Yes	No	Yes	Yes	Yes	No
SMS 2-way	Yes	Yes	No	Yes	Yes	Yes	Yes
Multimedia capable	Yes	Yes	No	Yes	No	Yes	Yes
Expected time to market	8 weeks	3-4 weeks	Varies	1 week	Varies	Varies	As soon as same-day
Expense	\$\$\$	\$\$	\$\$	\$	\$\$\$	\$\$	\$\$



# ma

MEA Financial still runs into new customers who've been using outdated short codes, so updating their customers messaging strategy is important. MEA likes having all three U.S. messaging channels in their pocket to serve the unique needs of each local bank.

### Factors include:

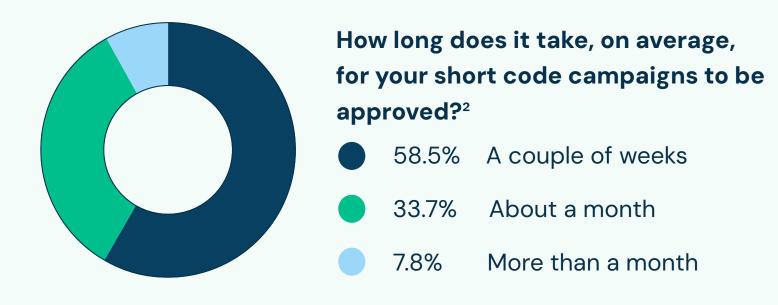
- Which numbers the bank already has
- What use cases they're considering
- Their local customers' preferences
- Cost vs. reliability

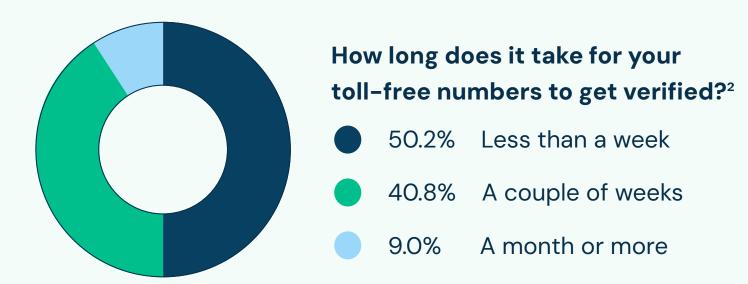
Learn more in our Fintech chapter →

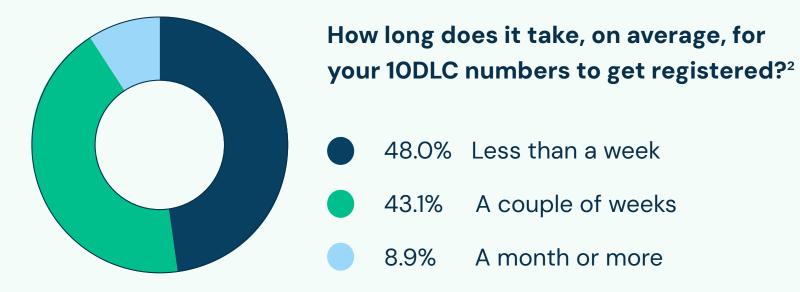
By having a provider for 10DLC, Short Codes, and Toll-free, MEA develops a unique messaging plan for each customer.

### It's about time

Your mileage may vary, but these are the times we're seeing businesses face for the three main U.S. messaging channels:









### Options that go beyond SMS

# We're not being dramatic about the future of over the top

Billions of users turn to apps like Apple Business Chat, Facebook Messenger, and WhatsApp to chat with friends and communicate with businesses, bypassing their phone's built-in text inbox.

These messaging applications are known as over the top, or OTT, and allow for voice, text, photo, and video messages. Since they're sent over the internet instead of via phone networks, they're ideal for international peer-to-peer communication. But, you can't use them when you're in an area that doesn't get internet service.

- More benefits of OTT messaging:
- Wide reach (WhatsApp has 2.7 billion users worldwide)
- Like SMS, these apps are used on a daily basis so you can trust that people will see your messages
- Competitive pricing in an expensive global messaging space
- You don't have to go through aggregators and carriers—it's a straighter line to your recipients

WhatsApp is the go-to messaging platform for social texting in many countries, supplanting even native Apple and Android text inboxes. WhatsApp Business is also a hit in many regions.

"If I hired a local electrician to fix something in my home, he'd send me a WhatsApp message," said one of our team members in Spain.

OTT isn't a panacea though. The drawbacks include the requirement for wifi, which still isn't available in all rural areas. And of course, the recipient has to have that specific app installed on their devices.

### Speaking of a rich new world

Rich Communication Services (RCS) is a type of messaging that originated with Android devices, which make up 69.67% of global mobile users<sup>3</sup>. Apple, after resisting for years, announced that it would adopt the RCS messaging standard in 2024, adding another 29.65% of global mobile users to the potential RCS audience.

It's an alternative to SMS and MMS and has some features you'd typically get with OTT messages, like read receipts and an indicator when the recipient is typing a reply. RCS messages are also free from the media size restrictions of SMS and MMS. Some carriers support up to 100MB attachments vs. the current 500KB constraints for MMS. Another perk: the chance to build trust as a verified sender with a logo for instant brand recognition. Early experiments show that RCS and SMS can play well together as a part of a multichannel strategy.

### You've (still) got mail

We're obviously big fans of text messaging. We love that it gets higher open rates and better ROI than email. But, we're not ready to break up with email altogether.

We use email for our own business—in marketing, customer survey collection, etc. In fact, you may have heard about this very report through one of our emails.

What we hear from our messaging platform customers over and over is that it's best to maintain as many diverse channels in your arsenal as possible. Because when it comes to communicating with humans, you need repetition, and you need redundancy.

<sup>4.</sup> DemandSage, "WhatsApp Statistics of 2023"

<sup>5.</sup> Statscounter GlobalStats, "Mobile Operating System Market Share Worldwide"

### Mo' options, mo' problems?

If you've been feeling frustrated with messaging this year, you're not alone. Increasing requirements like 10DLC campaign registration, increasing carrier surcharges and inconsistent application of rules and content flagging by industry aggregators can make messaging in 2024 feel like a minefield.

"This has been a very interesting and at times frustrating two years... [keeping up with verification] is almost an additional full-time job."

### **Andre Prudhomme**

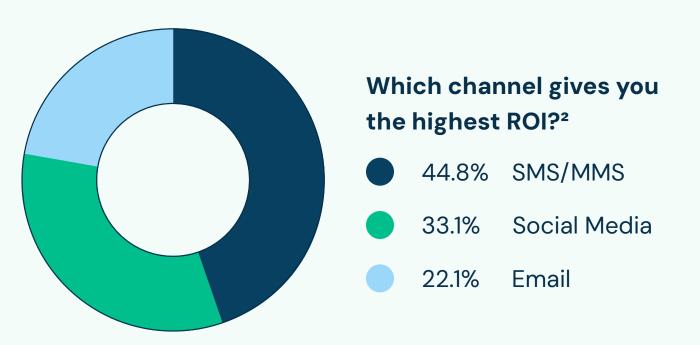
Group Product Manager Fivestars by SumUp

Click here to hear from Andre Prudhomme himself →



The fact is, companies are still getting remarkably high ROI on messaging. It still beats social media and email for reach:

- It's still simpler than developing your own app, getting people to download it, and maintaining it.
- · It's much more user friendly than calling with alerts and reminders.
- Text messages still get open rates above 98% where business emails hover around 20%⁴ and organic social reach is typically well under 10%⁵ and paid social prices continue to climb.



In short, messaging will continue to pay dividends to companies which invest in smart messaging strategies in 2024. So don't give up if you hit a few snags along the way.

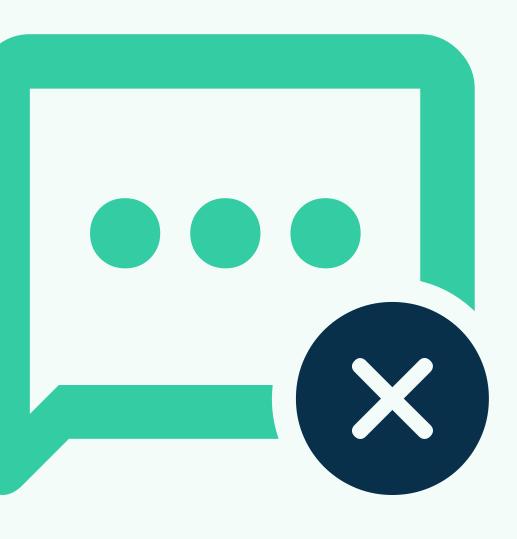
"SMS is the most powerful marketing channel and I think we all have a shared responsibility to keep it that way."

### **Andre Prudhomme**

Group Product Manager Fivestars by SumUp

<sup>6.</sup> Gartner, "The Future of Sales Follow-Ups: Text Messages"

<sup>7.</sup> RivallQ, "2023 Instagram Stories Benchmark Report" and "2023 LinkedIn Benchmark Report"



### Warning, changes ahead

The messaging space is not without hazards, threats, and significant shifts. To keep your balance, make sure you're on the lookout for these challenges:

### **Higher carrier fees**

We hate to break it to ya, but you probably already know, the fees on messaging have increased. And they aren't going anywhere soon. Across the industry, carriers are using surcharges to drive change and improve the health of messaging traffic on their networks, with the ultimate goal of maintaining trust and confidence in texting.

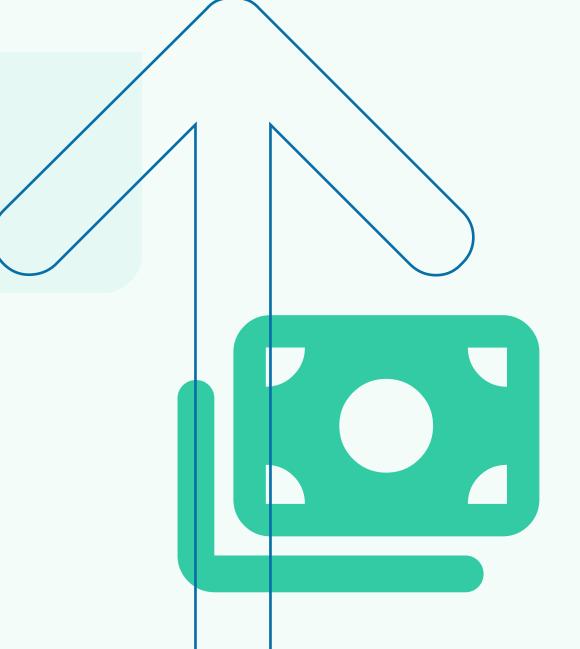
- T-Mobile increased their surcharge for unregistered 10DLC traffic on a bi-monthly basis through the end of 2023
- AT&T is increasing their rates across every messaging channel, in addition to increasing their surcharge for unregistered 10DLC traffic
- Verizon implemented a surcharge for unregistered 10DLC traffic for the first time in 2023

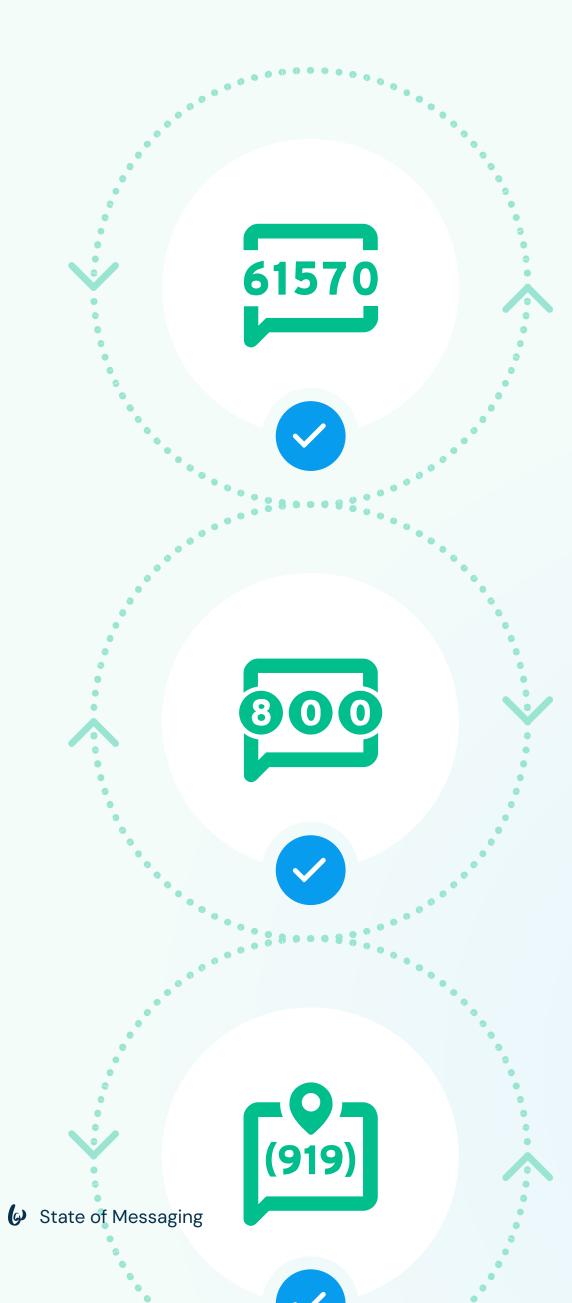
### **Blocked legit traffic**

Carriers have led aggregators and industry players, including Bandwidth, to be on the lookout for bad traffic and SPAM, and will block messages if they raise red flags. This is a good thing.

# 49% of respondents

reported facing higher costs due to changes in messaging regulations.





SHAFT is an industry term defined in the Short Codes Handbook by the Mobile Marketing Association (MMA).

You should be aware of prohibited content, like SHAFT-C, so you can help educate your customers. That's an acronym that stands for:

- Sex
- Firearms
- Hate
- Tobacco
- Alcohol
- Cannabis

Systems can't always differentiate between messages that promote those topics, and those that advocate against them, or include neutral terms which are also used within those topics. For example, a healthcare company sending educational content about the harm of vaping could get flagged for tobacco-related content.

For this reason it's important to know your customer (KYC) and help educate them on prohibited topics so they can craft campaigns accordingly. Home and personal security companies, healthcare providers, and any organizations that connect to emergency services need to be especially vigilant. Make sure you are using appropriate channels, and ensure your provider can provide accurate delivery insights in real time.

### Campaign drift

This happens when messaging campaigns are registered for an appropriate use case, but over time their content or usage "drifts" away from the original carrier-approved intent. Major carriers and aggregators are putting more effort into checking and vetting previously approved campaigns across number types, and making sure they're still up to snuff.

### **Increasing competition**

Sure, it makes us industry folks shiver a bit, but more competition is usually a good thing—especially for customers. So, do your homework, choose a provider wisely, and enjoy standing out even in a more crowded space.

Stressed about registration? You're not alone.

# 71% of respondents

reported feeling anxious about registration requirements in the last year.

### More hoops to jump through

Yep, you've got to do stuff like register your 10DLC campaigns, verify your toll-free numbers, and submit your short codes for verification. Yes, it takes time. Yes, it can feel frustrating to not be able to start sending on day one. But those extra steps up front ensure a healthier ecosystem for everyone, and better deliverability for you. From our perspective, it's a long-term win.

# Not convinced?

Ok get another cup of coffee and a consolation cookie and keep reading. Because while there are certainly challenges, there are a lot of new opportunities in messaging right now.

Chapter 2

# It's time to create conversational experiences

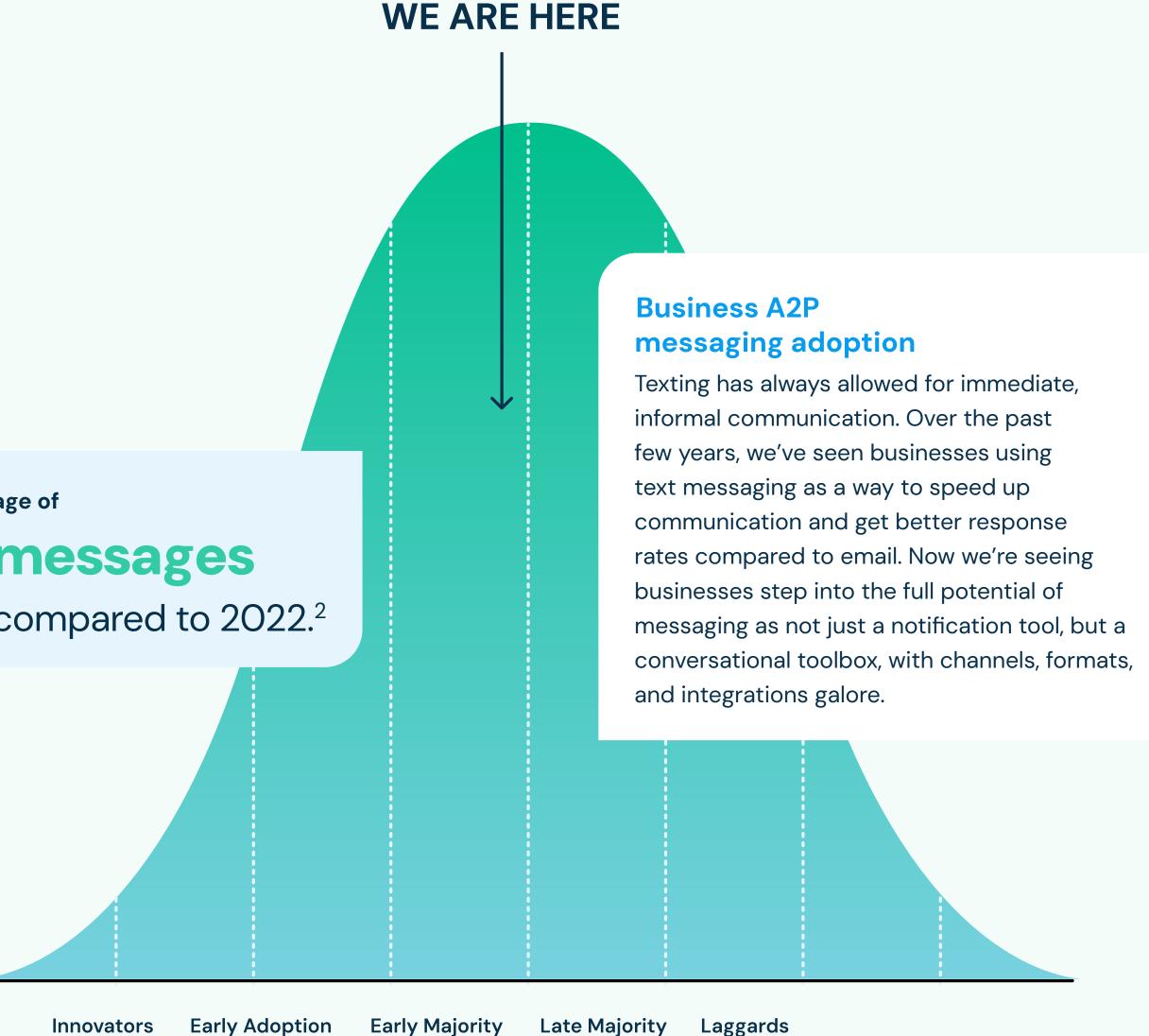
Business respondents sent an average of

36% more text messages

text messages in 2023 compared to 2022.2

# 42% of respondents

report receiving more texts from businesses in organizations in 2023 than in 2022.3





We're really excited to see how companies in industries that run the gamut from healthcare and foodservice, sports management and trucking, and even nonprofits and government agencies, are taking advantage of the unique properties of messaging as a channel to create richer experiences for opted-in mobile subscribers.

):19

Best text ever Today 9:15 AM

919-345-6789

It's Election Day – Every Vote matters

Polls close 7:30p

Voting info: vote.gov

Photo ID req

Text STOP to quit

### Making everyday life a little easier

Texting is making life better, period.

It's a technology that's been around for decades, but recently we've seen its potential fully realized as companies get creative with ways to use texts to make life better for humankind.

Think about doctors' appointments in the '90s. No shows were a constant drain on clinical efficiency, costing providers thousands every year. And mitigating that by hounding patients to show up required an administrative staff to get on the phone and call patients one by one.

Now, texting has changed that. Yosi, a healthcare messaging platform based in California, found that implementing text confirmations and reminders reduces the no-show rate by up to 75% and saves \$42,000 per physician annually.9

Turns out, a text a day keeps the doctor profitable and on time. But it's not just providers who benefit: patients who show up actually get care. And save the hassle and cost of missed appointment fees and rescheduling with busy clinics.

Check out Chapter Three on Healthcare for more on how texting is transforming the industry →

8. Yosi Health, "Leveraging Tech to Improve Outcomes, Lower Costs, & Enhance the Patient Experience"
9. Center for Health Care Strategies, "Yosi"



Now you can unlock your phone and see the biggest sales from your favorite brands in seconds. There's no reason to ever miss a 40% OFF sale ever again.

If you want to stay vigilant about monitoring your credit, you once had to call your bank or log in on your computer to check your balances.

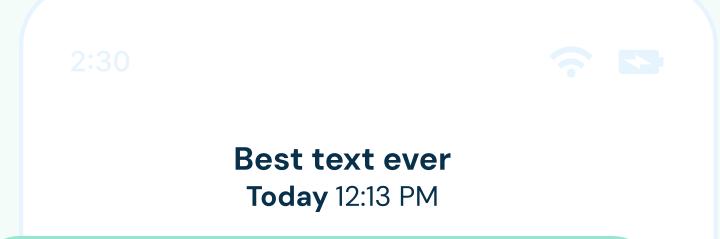
And many consumers still do. But now, you can easily get credit card transaction notifications in real time. Your teenager headed to the mall? Don't sweat it: get instant alerts on every purchase.

Texting is the best way to reach drivers with important safety recall information.

# 27% vs. 5-10% vehicle recall completion rates

with CellARide's text system compared to traditional systems.

CellARide found that texting is the most useful, immediate tool for communicating about vehicle recall announcements and reminders, because it's widely used across generations. And it serves multiple stakeholders very well. Josh Holstein, founder and CEO said "We work with automakers, who care about government compliance and their customers' safety. We also work with dealerships, who care about safety and have an ROI to think about. With texting, we're able to accomplish both—showing an ROI up to 30x and making a positive impact on safety."



### 201-822-5728

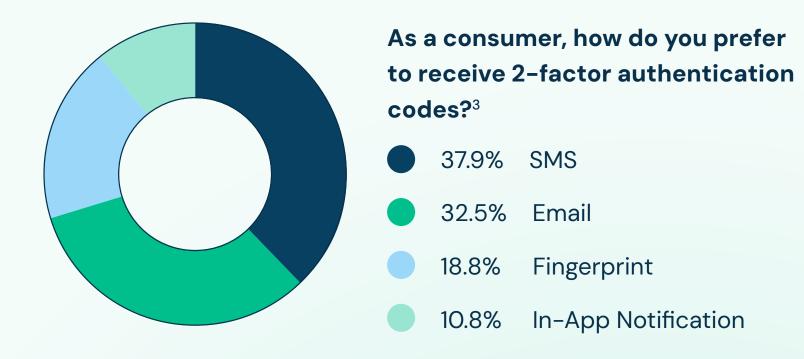
Hi from The English Garden! You sent Victoria Anniversary flowers last year. Visit us at englishgardenraleigh.com or (919)341-6650 to send again!

### People welcome SMS messages for daily communication

87.7% of consumers we surveyed received the same or more texts from businesses and organizations in 2023 than in 2022.<sup>3</sup> The increasing volume also correlates with consumers feeling more in texts from businesses.<sup>3</sup> Consumers are nearly twice as likely to say they trust texts from businesses, as they are to say they distrust texts from businesses. In fact, consumers show strong preferences for SMS as a channel for some business communications, like two-factor authentication.



Car dealership	360° video of a crossover SUV that just arrived on the lot	
Ecommerce clothing	Gift featuring new arrivals	
Elementary school	Poster advertising the Valentine's breakfast complete with dress code and requests for items	
Preschool	Video of parents' child going down the slide on their own for the first time	
Enterprise HR	Morale-boosting photo of free donuts in the breakroom	
Finance	JPG chart of current mortgage interest rates	
Restaurant ordering platform	A carousel of this week's featured dishes	
Healthcare	Appointment reminder with a map of where Radiology is located within a multi-provider building	
Cruiseline	A highlight video of the next Caribbean cruise's ports of call	



A large CRM company told us they get

### 45x ROI on MMS

compared to 37x ROI on SMS.

### MMS is adding color and movement to messaging

Multimedia Messaging Service, or MMS, used to be a cherry on the top for business messaging. And yes, MMS is typically double or even triple the price of SMS. But, in the scheme of things, it's still pretty cheap and the ROI is often worth it.

With MMS, shoppers see the neon running shoes with their own eyes. They feel the cadence of a runner demonstrating the shoes in a video. Suddenly, the customer has motivation to click through the link and buy their next trainers.

# 65% of energy/utilities

report more efficient usage among customers opted in to receive text messages.

### No industry left undisrupted

Every vertical is being impacted by messaging in a big way this year. In the next three chapters, we'll dive deeper into Retail & Ecommerce, Hospitality & Tourism, Healthcare, and Fintech. But we wanted to give a special shoutout to Education and Hospitality this year, too.

From infant daycare to postgraduate programs, messaging is integral to the education space in 2024.

Here are a few of our favorite use examples:

**SchoolPulse** sends messages to give students an outlet to share their feelings in an effort to assess well-being and prioritize students' mental health.

**ParentSquare** lets schools and teachers send 1:1 messages, group chats, and alerts and notifications with class updates.

**MyTextMade** helps university students stay on track by sending assignment reminder texts.

Cardstock helps teachers focus on one-off communication to celebrate kids' wins at school with direct text messaging.

### **DeansList**

Watch how DeansList wins with SMS →



### SMS: an equalizer in education

At an elementary school in Boston, 30% of the parents speak Spanish, and a total of eleven different languages are represented in the student body. In years past, teachers had to call in translators for parent–teacher conferences. Most of the time, quick daily check–ins were neglected because it wasn't realistic to translate short, frequent messages.

Now, the school uses DeansList, a messaging platform that automatically translates both sides of a 2-way SMS conversation into 192 languages. Suddenly, all parents are getting frequent updates in their native language.

And SMS is a key here, because DeansList CEO Matt Robins has seen that home internet and even smartphones are still not universal in lower income school districts. SMS is the only channel teachers can use to reliably communicate with parents on a daily basis.

Frequent teacher-family communication increases

homework completion rates by 40%.<sup>10</sup>

10. Journal of Research on Educational Effectiveness, Kraft, M. A., & Dougherty, S. M. (2013). "The effect of teacher—family communication on student engagement: Evidence from a randomized field experiment."

# Hospitality and tourism, reliant on guest satisfaction, are often at the cutting edge of new CX technologies.

Ever since the pandemic, many hotels have struggled to stay fully staffed, leaving front office employees struggling to provide a welcoming customer experience while maintaining cleanliness and administration. SMS to the rescue! Confirmations, reminders, and 2-way customer service conversational texting has helped ease the staffing strain.

### Messaging: the host with the most

Vintage Hotels, a chain of boutique hotels in Ontario, Canada turned to texting to cut down on front desk calls and help guests explore their surroundings. They chose Revinate's Ivy platform and started sending:

- Confirmations at check-in
- A text 30 minutes later encouraging guests to explore the property
- 2-way texting for questions, requests, and problem reporting
- Alerts for situations like power outages

One of their general managers, Kelly Exelby, shared "despite the messages being mainly automated, our guests feel like they are talking to someone directly. And so, the experience with lvy is highly personalized. This can be seen in our guest satisfaction surveys, which often highlight and thank lvy for providing 'exceptional service."

Cruise lines have spotted a revenue opportunity to help groups of friends connected while on board without racking up hefty international roaming fees by coming out with their own proprietary texting apps like the Carnival HUB App.<sup>12</sup>

Best text ever Today 11:21 AM

123-456-0987

Richard, your stateroom is ready.

Please make your way to the ship.

11. Revinate, "How Vintage Hotels drives guest engagement with Ivy, Revinate's text messaging solution"
12. Carnival, "Stay Connected Via Text!"

Section 01



Where messaging is at in 2024

Section 02



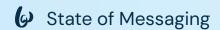
Messaging in major industries

Section 03



Reaching farther with messaging







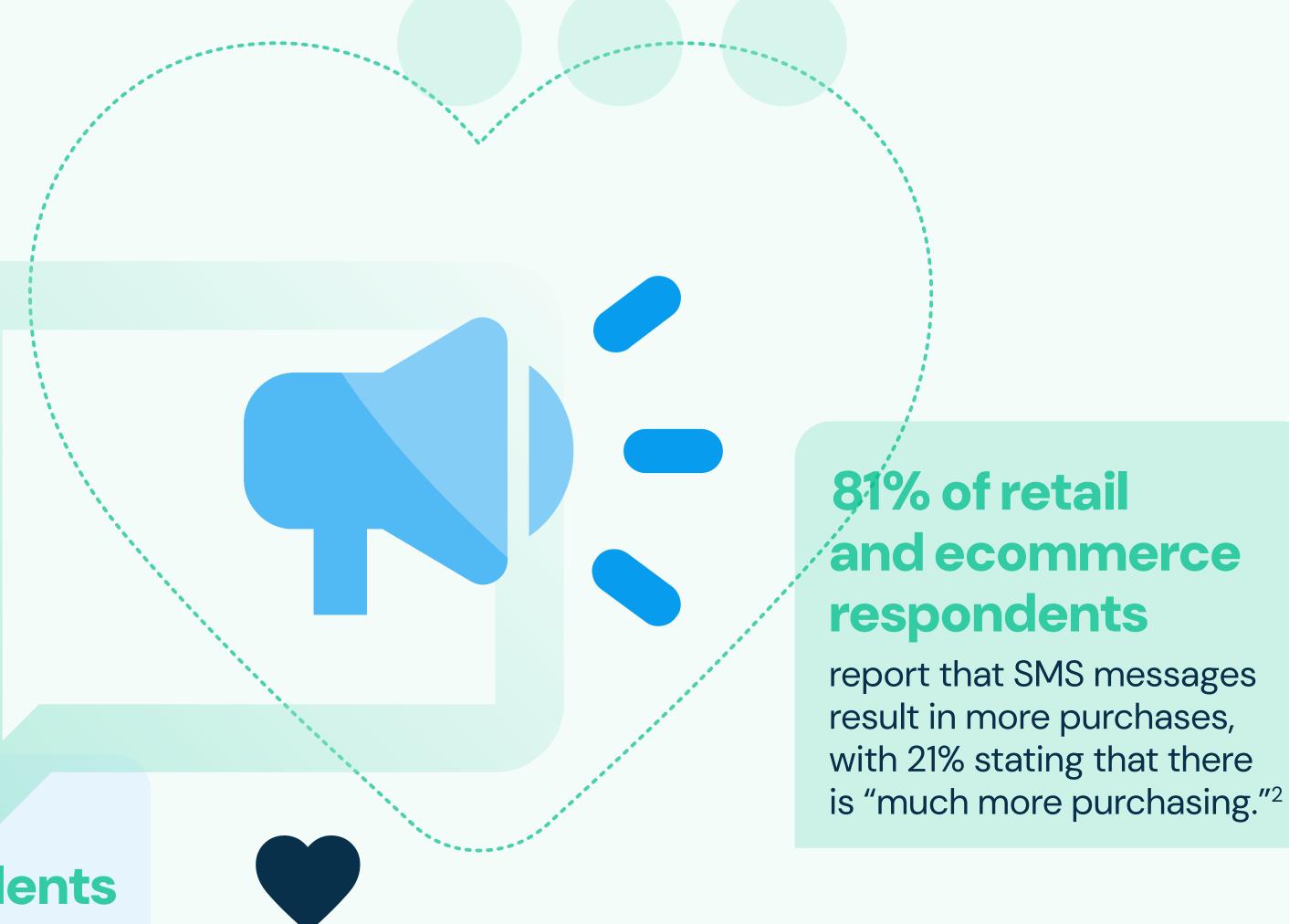
# Ecommerce

## 55.1% of consumers

regularly open shopping alert texts.<sup>3</sup>

# 78% of retail and ecommerce respondents

report that MMS messages result in more purchases, with 23% stating that there is "much more purchasing."<sup>2</sup>





### Messaging is mainstream

The digital consumer expects to get marketing texts now but brands are still shy about full message marketing. Meanwhile, early adopters are getting the chance to experiment, figure out best practices, develop communities of opted-in users, and win big!

How your ecommerce customers are using messaging:



### Sale alerts

Advertise your biggest sales with a series of SMS or MMS messages on toll-free, short codes, or local numbers.



### **Special promotions**

Running an end-of-season sale on snow shovels? Sounds like it's time to send an SMS to clear out your inventory!



### **Product features**

Got feature-rich gizmos? Help consumers understand the features and benefits with quick, frequent bursts of product education.



### **Product demos**

Infomercials are still running for a reason: blenders are just more interesting when you see what they can do to frozen pineapple. Film mini demos and share them via MMS.



### **Featured reviews**

Show off your five-star reviews and build a body of social proof by including customer quotes in your SMS messages.



### Social proof

Spot a celebrity ambassador sporting your sneakers? Make sure all of your shoppers know they're officially in the cool club with an MMS photo.



### **New arrivals**

Keep your customers in the loop on new stuff by sending MMS photos and videos to showcase your latest arrivals.



### **Requesting reviews**

Brands can get more positive exposure on sites like Google and Yelp when they use an SMS-driven review request process. (800) 555-1234

"Yes" to opt-in

Get the opt-in with SMS
Marketing best practice →

Not only are consumers browsing via mobile, they're increasingly purchasing via mobile. In 2023, 59% of global consumers surveyed said they'd purchased a product via their mobile device, up 5% from 2022.<sup>13</sup>

It's easy to assume that ecommerce messaging is all about marketing. And we cannot overstate what an important marketing tool it is. However, there are also amazing customer research and service use cases to explore.

# How ecommerce companies' customer service is being revolutionized with messaging

SMS can make online shopping feel safer and more comfortable. Instead of losing customers who abandon carts, you can turn customer service queries into a win for your brand.

Attentive found that when encountering checkout issues, 86.6% of shoppers would prefer a 1:1 connection to help get them sorted. The same goes for shipping issues with 88.4% desiring 1:1 communication.<sup>14</sup>

Our top use cases for customer service:



### **Account alerts**

Notify your customers when they've reached the next rewards thresholds so they can cash 'em in and keep shopping.



### Satisfaction surveys

Send links to quick surveys so you can collect key data and improve CX.



### 2-way service agent conversations

Open up an easier way for your customer service team to answer questions with 2-way SMS.

### Customer research just got easier for ecommerce companies

Texting isn't just about sales and problem-solving. It's a rich medium for getting to know your current market. And, unlike a big formal survey, text surveys and focus groups are easy to implement, change, and develop on an ongoing basis.



### **Preference surveys**

Your customer's deciding between olive corduroy and burnt umber velvet for their winter collection? Let customers cast their votes via 2-way SMS.



### Focus groups

Create group MMS threads for VIP opted-in customers to collect reactions on fresh ideas all year long.

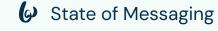
### Does your messaging provider have your back?

Reliability is crucial for retail and ecommerce. Limited time promotions during events like Black Friday can put a strain on every piece of the sales funnel, from email platforms, landing pages and websites, chatbots, and even fulfillment and logistics software. If your texts don't arrive on time on Black Friday, you're going to lose out on orders. (And don't forget that postpurchase, texts are a critical channel for reassuring customers and managing expectations!)

Key planning ahead to-dos:

- Make sure that your customer's campaigns are registered.
- Vet your messages for size and content to prevent them from being blocked.
- Build a relationship with your provider's support team before the big day.

13. Mobile Ecosystem Forum (MEF), "General Mobile Behaviours, 2023"14. Attentive, "The Global State of Conversational Commerce 2023"





# Healthcare



Cardiovascular patients were

# 70% more likely

to refill a prescription when given text reminders.<sup>16</sup>

### The bigger picture: Texts are saving lives

SMS messages from healthcare providers aren't just about convenience, they also can help improve health equity, because they're available to patients who don't own smartphones.

An example of improved outcomes was seen clearly in COVID Watch, a program developed by a team of researchers at Penn Medicine, delivered twice daily symptom monitoring questions to COVID-positive patients. Patients texted back and their responses were monitored by a small team of nurses. The results: a life saved every three to four days.<sup>15</sup>

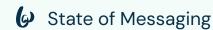
M. Kit Delgado, who co-led the study, stated "It's crucial that we found all major racial and ethnic groups benefited because non-white and low-income communities have had disproportionately higher infection rates, lower access to care, and higher death rates. This implies that this model of care could have reduced disparities in COVID outcomes if it was scaled up more broadly to these communities."

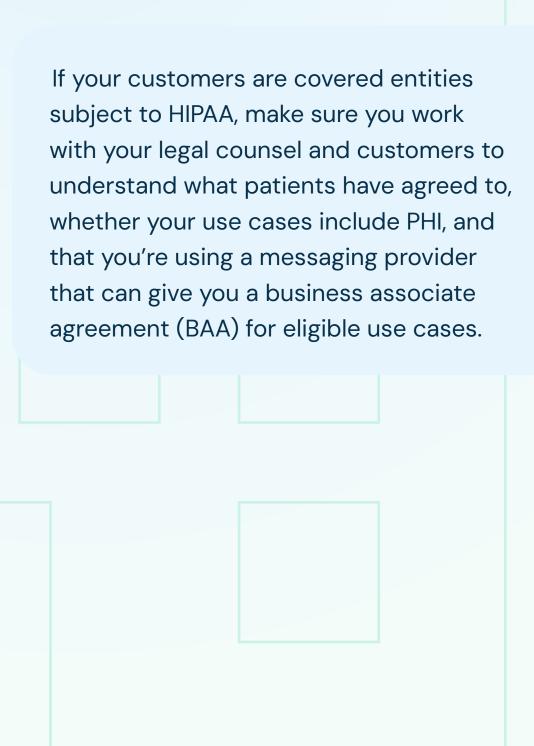
# There are myriad use cases for messaging in healthcare, including:

- Appointment reminders
- Prescription refill updates
- Medication adherence reminders
- Patient satisfaction surveys
- ...just to name a few

- Scheduling
- Aftercare instructions
- Health education
- Nutrition and exercise prompts

15. Penn Medicine News, "Automated Texting System Saved Lives Weekly During First COVID Surge"
16. American Heart Association Journal Vol. 14, No. 5





### Yes, HIPAA does allow for messages

Concerns about patient privacy used to mean you couldn't get pertinent updates directly on your phone—you might get a notification about test results, but then you had to log into your portal to see them.

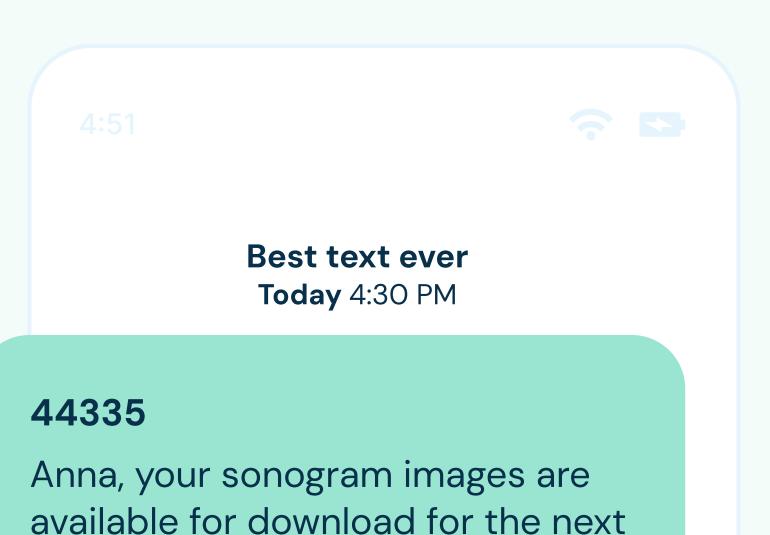
Some provider networks still operate that way for certain sensitive information, and you want to make sure patients understand what they are opting in for when they give their cell phone number. Privacy and security are still top of mind, but creating a HIPAA-safe messaging strategy is both doable and desirable.

10:00

Best text ever
Today 10:01 AM

### 77789

Cancellation notification: earlier PT appointment available tomorrow at 3:45 PM. Reply YES to confirm for Abe.



### Patients now demand texting

30 days.

Palm Beach Pediatrics, a practice based in West Palm Beach, Florida, found that "...this new generation of parents, they don't want to fill out long forms, they don't want to have to make phone calls, they want to text or email." The office uses Yosi to provide a suite of patient communication services including two-way texting which have drastically cut down on the paperwork burden for admin staff.

The new approach is also a way to serve busy, tech-native parents who find traditional paperwork and phone calls to be an added stress on top of managing ill children.





# 88% of patients

expect digital communication options.<sup>3</sup>

### A nimbler way to interact with patients

Nimblr is an AI tool that lets providers like mental health professionals and nutritionists communicate with patients "like a human would." Their main product is "Holly" an AI assistant which helps schedule appointments, initiate follow-ups, and manage payments. Holly removes the workday hassle for patients by simply being available 24/7. In fact, 30% of Holly's conversations with patients take place outside of business hours.

CEO Juan Vera said "SMS Messaging is key as the last mile communication channel with patients. It's my favorite channel because it's personal and direct, patients tend to stay away from in-app messages, and that's crucial." While Holly operates via multiple channels including web, phone, and email, Vera says "Messaging enables us to have the highest engagement rate you could have with patients."

And it's not just basic SMS messages either. Vera reports that Nimblr sees huge upsides in MMS messaging: "We believe it's super important, especially for educational content. Think about where to find the nearest parking—it's easier to look at a simple picture with specific indications than to use Google Maps."

# 79% of patients

will expect communications from healthcare providers to be personalized.<sup>3</sup>

# 41% of patients

will switch healthcare providers if they don't offer texting.<sup>3</sup>

# Keeping providers in business by improving profitability

Healthcare providers are under more budgetary pressure than ever due to inflation, higher wages, staffing shortages, and shifting population density.

Let texting take the pressure off. Instead of having administrative staff tied up for hours on the phone, they'll be able to get their essential work done and clock out on time.

Instead of losing money to no-shows, a consistent reminder system helps more patients keep their appointments.

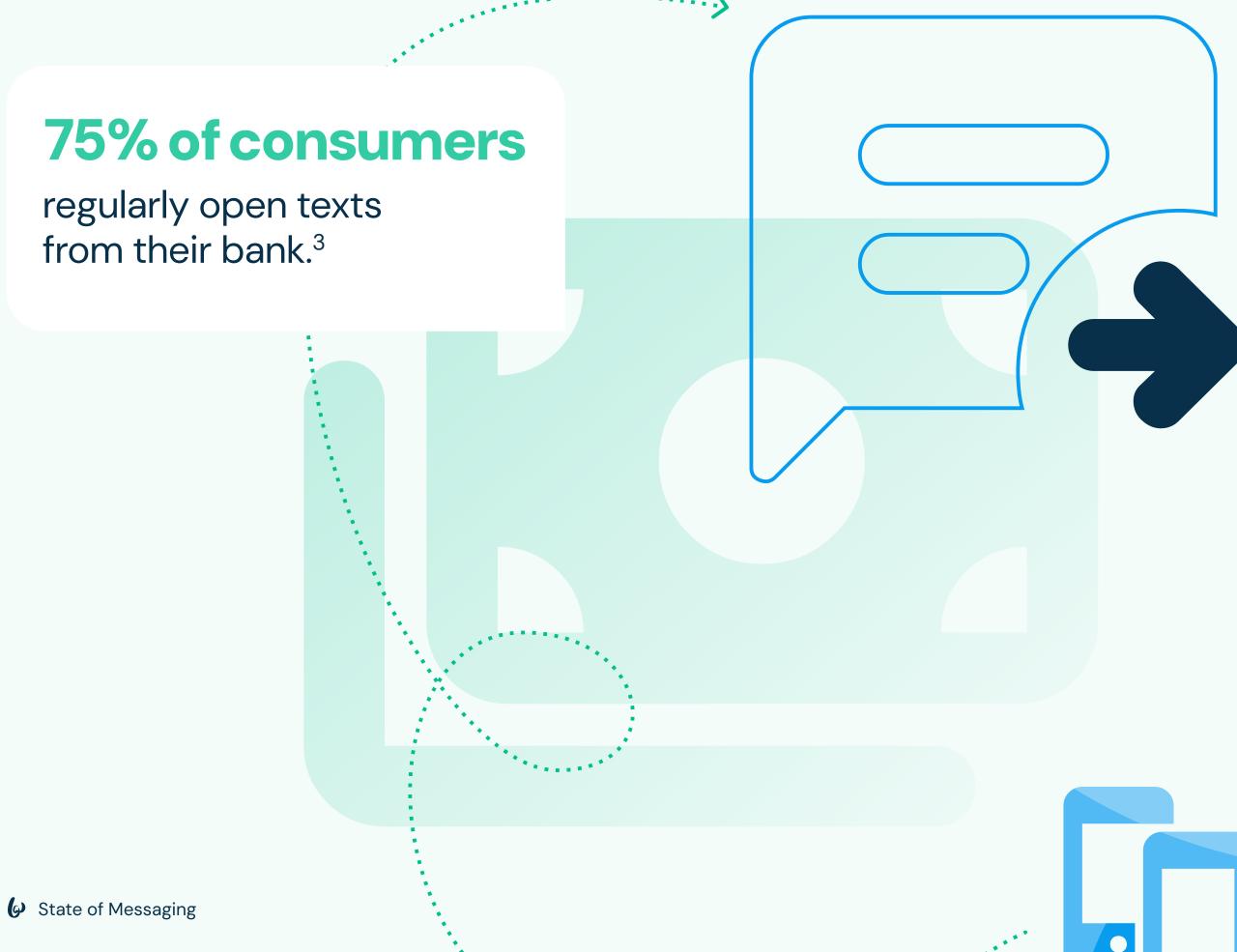
Yosi gets providers

## 50% fewer no-shows

70% less phone burden thanks to their text-forward platform.



# Fintech



### A vault of business cases for using messaging in fintech

Whether you're in fintech, or you just want to learn from an industry that's doing it well, here are a few of our favorite industryspecific use cases, each with a your-accountant-would-approve business case:



### **Identity protection**

Two-factor authentication texts help keep accounts secure and prevent identity theft.



### Faster security responses

Account notification texts let customers more easily monitor their accounts for suspicious activity and stop breaches more quickly.



### **Account balance alerts**

These alerts help customers monitor their finances and avoid overdraft fees.



### Better record keeping

Transaction receipts at point-of-sale allow both merchants and end users to see and track transactions in real time.



### Better customer service

Two-way SMS allows for customers and agents at financial institutions to communicate more easily, cutting out the frustration of waiting on hold, and allowing agents to pull up needed details asynchronously.



### **Customer retention**

When merchants can message their customers, they can answer questions, share helpful instructions, create welcoming experiences, and offer appropriate cross-sell and up-sell offers.



# Messaging is where customer convenience and security meet

Texting marries two sides of the business: security, and customer experience. It has potential to help information security and user experience teams align on shared goals.

### It's not just 1-way alerts anymore

One of the biggest players in payment services recently implemented 2-way SMS as an option for merchants to have their agents exchanging SMS directly with customers. They found it was their fastest adopted service, EVER.

Companies are champing at the bit to use 2-way messaging because it works and it makes agents more efficient and makes users a lot happier. And it makes sense. Which would you prefer? Waiting on hold to speak to someone? Or texting back and forth while you're also folding laundry, feeding kids, or answering work emails on the train? Texting for the win, again.



### A Customized Approach in a Regulated Industry

MEA Financial is a software company serving nearly a thousand banks and financial institutions across the U.S. and texting is a key part of their product suite.

Customers come to them at all stages of their messaging maturity and types of use cases. MEA focuses on making sure they have easy access to numbers so they can set their customers up for success. Two key focuses for MEA:

- 1. Finding sufficient support: Not all messaging providers have dependable support teams ready to answer questions around the clock and do the necessary investigative work to provide real answers.
- 2. Streamlining providers: MEA wanted to simplify their vendor list and find a provider that offered both voice and text services.





Section 03



Reaching farther with messaging











Way back in 1973, the Concorde delivered passengers from NYC to London in less time than it takes to finish an NFL game. And we've been Skyping friends and family around the world for nearly two decades. But for all the ways distance has shrunk and boundaries have been erased, it's taken a while for global texting to take hold because different countries have unique number formats, regulations, fee structures, and carrier choices.

Did you know that the oldest United Nations agency was set up initially to help countries connect their communication systems? The International Telecommunication Union (ITU) has been around since 1865 and formally joined the U.N. in 1949. ITU committees create the standards that govern radio waves, communications satellites, internet protocols, and even video compression. Without these standards, we wouldn't be able to call internationally. But despite all of these common standards, there are still separate phone numbering systems businesses have to navigate to send messages around the world.

# 66% of respondents

say global messaging is a priority for 2024.<sup>2</sup>

17. International Telecommunication Union, "Discover ITU's History"

"It is very complicated to try and simplify the global network as one. You start with this beautiful goal of one messaging use case and then oops, the UK does it differently, India does it differently. And then you have to find a partner who is willing to work with you to get those approvals together. And usually it comes down to minimum viable deliverability, right? And that's where I think 10DLC is very powerful. And not only that, finding a good partner is very important."

### **TJ Thinkaran**

Founder and CEO of CasselRoad Consulting Strategy Advisor, CTIA Content and Strategy Advisor, MEF **Brad's Delivery** Brad here, your delivery is ready... **StateBANK** Download the StateBANK app: h... Tech Hello This is Sammy with Tec... **Shoe Wearhouse** Thanks for the purchase, can you... **TUCKER** 

In keeping with this year's theme of broadening options, international messaging is becoming more streamlined as providers offer multiple global channels. Bandwidth, for example, recently introduced global messaging as a part of our Messaging API. One dashboard login now gives you access to alphanumeric, one-way messaging reaching 120 countries.

There are a few terms to be familiar with when expanding from the U.S. / Canada to international texting.

### Over-the-Top Messaging

We've got a section on this in Chapter One, but any conversation about international messaging needs a mention of OTT apps like WhatsApp that are commonly used for personal and business texting in non-North American countries.

### **Alphanumeric SMS**

Alphanumeric SMS allows for 1-way texting between a business and an opted-in user. Instead of coming from a phone number, they're sent from a string of letters representing a brand's name. Alphanumeric SMS is available in most of Europe, the Asia Pacific region, and Latin America.

International brands are using alphanumeric messaging for general alerts, product news, promotional announcements, and other 1-way updates.

Stan's Auto

Good afternoon! We just sent yo...

Use Case for Alphanumeric SMS	Common Industries
Event or appointment reminders	Healthcare, Education, Recreation/Travel, Real Estate
Sales promotions	Ecommerce, Recreation/Travel, Food/Hospitality,
Employee communications	HRIS
Critical alerts	Education, Utilities, Civic Engagement
Notifications with CTA engagement links	Ecommerce, Recreation/Travel, Healthcare
Two-factor authentication	Ecommerce, HRIS

Use Case for 2-way global SMS	Common Industries	
Customer service & support	Healthcare, Ecommerce, Recreation/Travel	
Reservations & confirmations	Gig economy, Food & Hospitality, Real Estate	
Sales engagement	Recreation/Travel, Marketing Automation	
Scheduling & employee management	HRIS	
SMS Surveys	HRIS, Ecommerce, Gig-Economy, Food & Hospitality, Recreation/Travel	
Point-of-Sale transactional notices	Hospitality, Restaurant, Retail	

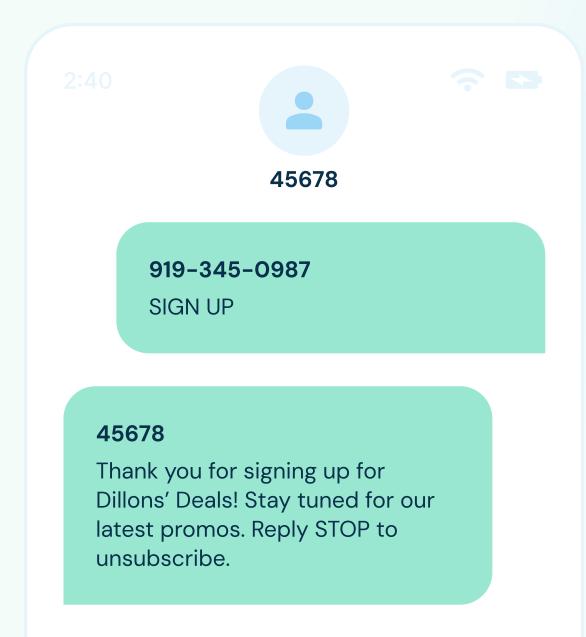
One of the biggest benefits of alphanumeric messaging is that customers recognize the brand at a glance. One common best practice for other number types is beginning a message with the brand's name so that customers recognize who messages are coming from. With alphanumeric, your customers don't have to eat into their character counts, because their name automatically appears!

## **Global 2-Way SMS**

You might see this called Mobile Messaging or Global A2P 2-way in some settings. This method of two-way SMS uses a distinct, national number type.

The big benefit is getting that conversation with opted-in users.

Global 2-way lets your customers provide better customer service, resolve questions and support issues faster, and create ongoing engagement more easily.



"Because international SMS is more expensive, our initial foray into international markets is going to be taking the cream off the top and focusing on sending the messages we know absolutely perform the best."

#### **Andre Prudhomme**

Group Product Manager Fivestars by SumUp

#### No pump zone

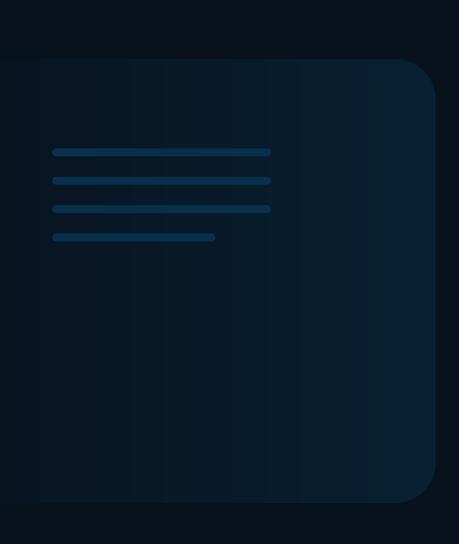
If you have a global messaging program, you've probably noticed that prices fluctuate wildly. Every time you check your billing portal it can feel like that one time you opened your A/C bill after accidentally leaving your house set at 68F/20C over summer vacation. One of the big reasons international message rates spike is due to Artificially Inflated Traffic (AIT) or SMS pumping.

SMS Pumping happens when bad actors fraudulently pump up messaging volume and take advantage of legitimate messaging senders to do it. Bad actors do this by using number input fields on businesses' websites to input their own numbers. They then get money for each text sent, while the business sending the messages to these fraudulent entities is left with a hefty bill. Make sure you have the appropriate tools in place to detect this type of fraud if you plan to go global with your messaging portfolio.

#### Some cities do sleep

Here in the States, it's not unusual for me to get sale notices on Labor Day, or 4th of July greetings from brands while I'm at a barbeque. But some countries set limits on when you can send messages. France, for example, has quiet hours from 10:00 PM to 8:00 AM, and they shut down promotional messaging on Sundays and holidays, too. Be sure you know the local rules so you're not saying au revoir to money spent on messages that never arrive.





# CONCILIAN and our predictions

### Conclusion

# It's raining messages: Our annual forecast

Let us get out our greenscreens and our doppler radar-it's time to make our predictions for what's coming next in messaging.

"Customers expect transparency in marketing. They are smart and savvy, and they increasingly demand the brands they work with to be smart and savvy, too. A privacyforward marketing strategy helps to earn trust and make a strong impression."

#### Laura Chipman

Vice President and Deputy General Counsel, Privacy and Marketing Bandwidth

#### **Expect climate change**

There's a cold front that's sweeping through and threatening to put a chill on messaging across a few channels.

#### Consent

Consent is king for messaging. Requirements for opt-in consent to receive messages, especially in the marketing context, have been implemented and enforced around the world under the ePrivacy Directive and GDPR in Europe, PECR in the UK, and the TCPA in the United States, just to name a few. In addition, privacy and data protection laws govern how any business collects data about end users and manages their consent. Consent is a crucial consideration to keep your messaging above board.

#### **Action plan:**

- □ Check your process for getting clear opt-in consent from message recipients when required.
- ☐ Make sure that your messaging provider is familiar with compliance rules.
- □ Work with your legal counsel to review your messaging strategy for compliance.



From 2021 to 2023, the average cost for a brand to send an SMS internationally nearly

doubled from \$.033 to \$0.064.18

"Higher rates have caused me to think about how you ratchet up the value of every message to keep your ROI multiple even as the underlying costs increase."

#### **Andre Prudhomme**

Group Product Manager Fivestars by SumUp

#### **Cookies are crumbling**

Oh cookies, the deliciously easy way we used to know if any of our marketing efforts were actually working. They're over.

#### **Action plan:**

- □ Invest in first party and zero party data tracking. (You can do this! Yes, it's a pain, but it's worth it in the long run.)
- Engage with your opted-in audience directly to grow your relationship.

#### **Increasing carrier fees**

Carriers are businesses too, and they need to make profits. When text messaging first came on the scene, they were delivering messages without profiting from them. How lovely! We know you probably wish the world could continue this way forever, but it can't. Surcharges remain the most effective way for carriers to drive adoption of the registration requirements they are using to improve the health of their messaging traffic. Messaging is getting more expensive. Just like your morning latte.

#### Action plan:

- Be proactive with your budgeting process. Make sure you're being strategic with which messages you're sending.
- Weed out inactive users to reduce list size with a number lookup tool.
- □ Keep calculating your ROI, you'll likely see that messaging continues to be a great buy for your business.

18. https://www.mobilesquared.co.uk

State of Messaging

## 68% of respondents

reported feeling either more optimistic or the same about the regulatory ecosystem in 2023 compared to 2022.<sup>2</sup>

Phishing/smishing attacks are

## down 9% in the U.S.

but up in several countries including Brazil, China, and France, according to MEF survey data.<sup>19</sup>

#### **Bad apples**

SPAM messages, phishing scams, smishing, and other forms of bad traffic still manage to get through. This can reflect poorly on good senders and result in legitimate messages getting blocked.

#### **Action plan:**

- □ Do your part by making sure your traffic is 100% registered.
- □ Check that you have clear opt-ins from all users.
- Regularly monitor your traffic to ensure you're complying with CTIA guidelines.

#### **Security risks**

2023 saw way too many large scale data breaches happening across contact centers, customer support portals, and more.

#### **Action plan:**

- Invest in security, including two-factor authentication, in every part of your system, from your internal communications platform, to your contact center, to your messaging platform.
- Make sure you have a robust vendor due diligence process in place
- ☐ Get your CTO, CIO, CISO, and CMO collaborating to find the best solutions that balance security and CX.

19. https://mobileecosystemforum.com

"The past year in messaging has left me dizzy. We've essentially seen over a decade of change in the span of 12-18 months. That said, messaging had a lot of catching up to do with other communication channels, and I do think we're getting to a place of more stabilization. I'm excited for the future of messaging because as we see stabilization, I anticipate we'll see businesses able to dedicate more time and energy to evolving new features and more awesome and sophisticated use cases."

#### **Caitlin Long**

Director Commercial Product Management
Bandwidth

# 71% of respondents

say they're somewhat or very optimistic about the future of text messaging.<sup>2</sup>

#### Sunny days are ahead

#### Al comes to your inbox

Al will be popping up in more and more messaging use cases going forward. It's a tool that simultaneously allows for more efficiency, and richer personalization. In fact, companies are already finding creative ways to make their messaging stronger with Al tools. Wyndham Hotels & Resorts recently launched a platform for guests to interact with hotels by text and get replies from either an Al assistant, or, for questions Al cannot yet answer, a staff member.<sup>20</sup>

#### Stepping into the future

We're bullish on messaging because in our work we get to see how both notifications and conversations via text are benefitting both companies and consumers. We continue to expand our own global coverage in messaging, and are committed to helping our customers grow their own messaging strategies in ways that help create a healthy industry ecosystem.

#### Your next step

Flip over to our messaging provider checklist and make sure you're joining forces with a partner who can help usher your messaging program to new heights.

"I believe text messaging will continue to be the best and most effective personal communication channel."

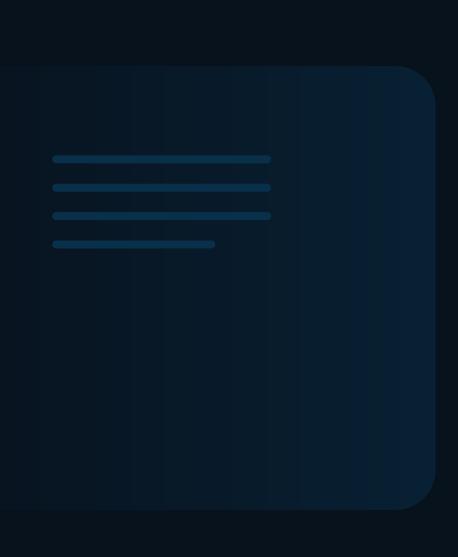
Juan Vera

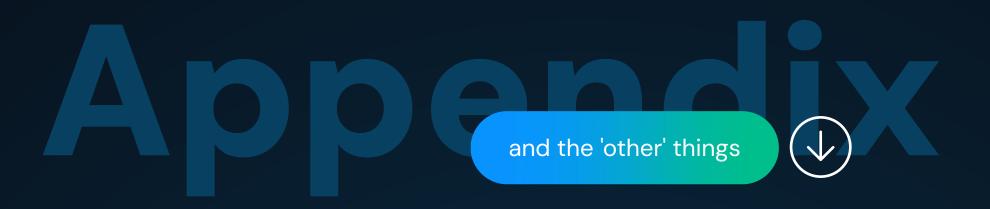
CFO

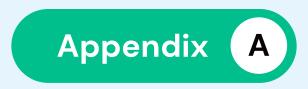
Nimblr

20. https://www.customerexperiencedive.com

State of Messaging







# Handy Messaging Provider Checklist

## How to choose a messaging provider

Choosing the right provider is the difference between smooth, efficient messaging, and a nightmare of undelivered messages, non-responsive support, and clunky processes.

<b>⊘</b>	Providers transparent industry update information with in-depth explanations of changes	×	Withholds or only provides industry information via support documentation without any explanation
•	Dedicated human point of contact to ask questions and consult on messaging/business strategy	×	No dedicated point of contact and no planning for strategies that align with your business' needs
•	Interested in co-creation and a true partnership that benefits both of you, integrating your feedback into their product roadmap	×	Product direction and development indicate they may be competing against you or have conflicts with your business
<b>⊘</b>	Practices what they preach, following stated best industry guidelines	×	Does not follow stated best industry guidelines
•	Proactively works to identify and resolve issues before they become problems/before they impact your business	×	Requires you to put in support tickets for issues that are impacting your business





# Compliance & Deliverability 101

#### Navigate requirements like a pro

Times might be changing, but we're keeping up! Messaging is a bit of an outlier communication channel in the U.S., because it's not regulated the same way that TV, radio, and telephone calls are regulated by the FCC. That doesn't mean it's the wild west though. The CTIA is the wireless communications industry coalition that includes carriers, phone manufacturers, messaging providers, app developers and more, and implements guidelines for the messaging ecosystem. In addition, each carrier is free to set their own requirements for certain aspects of messaging.

All of that means you need a messaging provider who has positive relationships within the industry and keeps up with new changes.

You can start your journey to becoming industry expert by reviewing the basics, with these quick videos:



Toll-free Verification →



How to register a 10DLC Campaign →



10DLC Registration Fact vs Fiction →

## 52% of respondents

rank deliverability as the most important factor in choosing a messaging provider

#### Get your messages delivered

Tuning in for the \*big game\* (see Legal, no trademark infringement here) to a blank screen and then realizing you just forgot to plug in the TV after you vacuumed. Scary false alarm. Your messages getting blocked because of a false alarm on content? Much, much, worse. If you're running into deliverability issues, start your troubleshooting with this list of things that could be impacting your campaigns:

- □ Unregistered traffic
- □ Campaign "drift" away from your original use case
- □ No clear opt-in for list
- □ No clear opt-out option
- □ No privacy policy
- □ Carrier-banned content
- □ Content that mimics carrier-banned content
- □ Inappropriate channel selection
- □ Messages with too many characters, or too large MMS files
- □ Send volume over your account's limit



Message Deliverability: A2P vs. P2P Messaging →



Message Deliverability: It's not as simple as hitting send →



# Messaging Glossary

#### 10DLC

10DLC stands for 10 digit long code. 10DLC messaging allows businesses to send sanctioned A2P messaging traffic over local phone numbers in the U.S., also known as "long codes".

What is 10DLC? →

#### **Alphanumeric Messaging**

A type of text message used in many countries in which businesses send messages from their registered brand name instead of a string of digits.

#### **Application Programming Interface**

Application Programming Interface (API) is a set of subroutine definitions, protocols, and tools for building application software. Communication APIs are APIs that control voice calling and text.

### Application-2-Person (A2P)

A2P Messaging (Application-to-Person Messaging), refers to SMS or MMS messages sent from a business to a person. Unlike P2P (Person-to-Person/Peer-to-Peer) messaging, A2P Messaging allows businesses to automate text messaging for appointment reminders, two-factor authentication, text message alerts, text based sales.

#### **Bulk SMS**

Bulk SMS is sending an SMS/MMS message to multiple end-users simultaneously. Bulk SMS is typically a "broadcast" or "one-to-many" type of message and differs from a Group Message, which is considered "many-to-many."

### **Campaign Drift**

Campaign drift happens when a number is registered for one use case, and over time begins to carry unrelated traffic. In response to campaign drift, carriers, aggregators and providers are instituting more vetting for already-registered campaigns to ensure they continue carrying the same kind of messages for which they were registered.

#### **Delivery Receipt**

Also referred to as DLR SMS, delivery receipts acknowledge receipt of SMS/MMS messages in downstream systems and sometimes even receipt on a handset if the corresponding carrier(s) sends acknowledgment of receipt. Typically DLRs are shared via a series of designated codes assigned to indicate success or a range of causes for failure.

## **Group messaging**

Group Messaging is characterized by an SMS conversation among 3 or more recipients at the same time. This is a many-to-many exchange of messages. Group messaging is typically sent as MMS messages. Bandwidth offers a ready-to-use API for Group Messaging besides the ability to send group messages over its MM4 platform.

#### **Hosted SMS**

Hosted SMS is a service that allows Bandwidth customers to enable non-Bandwidth owned/operated phone numbers for messaging. These phone numbers will not route any voice traffic over the Bandwidth network.

#### MMS

MMS (Multimedia Messaging Service) is used to send messages that contain multimedia content like pictures and videos to and from mobile devices. The MMS extends messaging capabilities, allowing messages to be greater than 160 characters in length.

#### Mobile Originated (MO) Message

MO Message refers to where a message originated from or was received from via a mobile device. Also referred to inbound messages.

## Mobile Terminated (MT) Message

Mobile terminated messages or MT SMS are messages terminated on or delivered to a mobile phone. Also referred to outbound messages.

#### **Multipart Messages**

A Multipart Message refers to a single SMS message (longer than 160 characters) being broken into as many multiple 160-character SMS messages as needed to facilitate the sending of longer messages.

#### Over-the-Top

Over-the-Top (OTT) apps and services that are typically used over the Internet rather than over the networks of a traditional wireless, wireline, or cable operator.

### Person-to-Person (P2P)

Person-to-Person (P2P) generally refers to messaging traffic exchange that is typical of human-to-human communications as opposed to application-based communications services.

#### **Programmable Messaging**

Programmable Messaging refers to the ability to control SMS and MMS functionality via software (in this case, communication APIs). Bandwidth offers programmable messaging through our REST APIs.

#### **RCS Messaging**

RCS messaging, where RCS stands for Rich Communication Services, is a communication protocol that enables users to send messages with rich multimedia experiences and advanced functionality compared to SMS.

#### **Smishing**

A variation of phishing, smishing is an attack via malicious SMS that's meant to trick a recipient into sharing personal data which can be used to steal or create harm.

#### SMS

SMS meaning is an acronym for "Short Message Service" that allows the exchange of plain text messages of up to 160 characters primarily between mobile devices, but also via telephone and internet, using protocols that are shared across all these platforms.

#### What is SMS? →

#### Snowshoeing

Snowshoeing involves spreading similar messages across multiple numbers as a way to avoid per number rate limits and volume limitations. Snowshoeing is a common technique used by spammers. Adopting this technique often results in your messages being blocked based on your message content, including your URLs.

#### **Software Development Kit (SDK)**

Software Development Kit (SDK) is a programming package that enables a programmer to develop applications for a specific platform. Typically includes one or more APIs, programming tools, and/or documentation. An SDK is an API.

# Appendix D

# The History of Text Messaging

## 9 1933 The German Reichspost (Reich postal service) introduces the first "telex" service

9 1992 SMS messaging is used for the first time when Neil Papworth, a 22-year-old test engineer for Sema Group in the U.K., used a personal computer to send the text message "Merry Christmas" via the Vodafone network

## 9 1994

Finnish Radiolinja becomes the first network to offer a commercial person-to-person SMS text messaging service

#### 9 1996

The first QWERTY keyboard is introduced to make sending text a whole lot easier-Thanks, Nokia

#### 2001

The first wireless intercarrier messaging meeting happens in Vegas. All participating carriers commit to supporting intercarrier functionality

#### 2003

AT&T sponsors American Idol, launching the first "text to vote" program and introducing short codes to the American public

#### 2010

The International Telecommunications Union reports that 200,000 text messages are sent every minute. 6.1 trillion texts are sent worldwide over the entire year

#### 2015

The CTIA releases SMS Interoperability Guidelines, incorporating non-wireless services and traffic exchange

#### 2017

The CTIA releases the first Messaging Principles and Best Practices document, defining volumetric guidelines to help identify person-to-person (P2P) or consumer traffic from non-consumer traffic (also called applicationto-person or A2P)

Friedhelm Hillebrand conceptualizes SMS while working for Deutsche Telekom

Finnish phone-maker Nokia debuts the first mobile phone to send texts. Early text messages—which had to be painstakingly entered on numerical keypads—are free but can only be sent between two people on the same network

American Personal Communications (APC), the first GSM carrier in America, provides the first textmessaging service in the United States

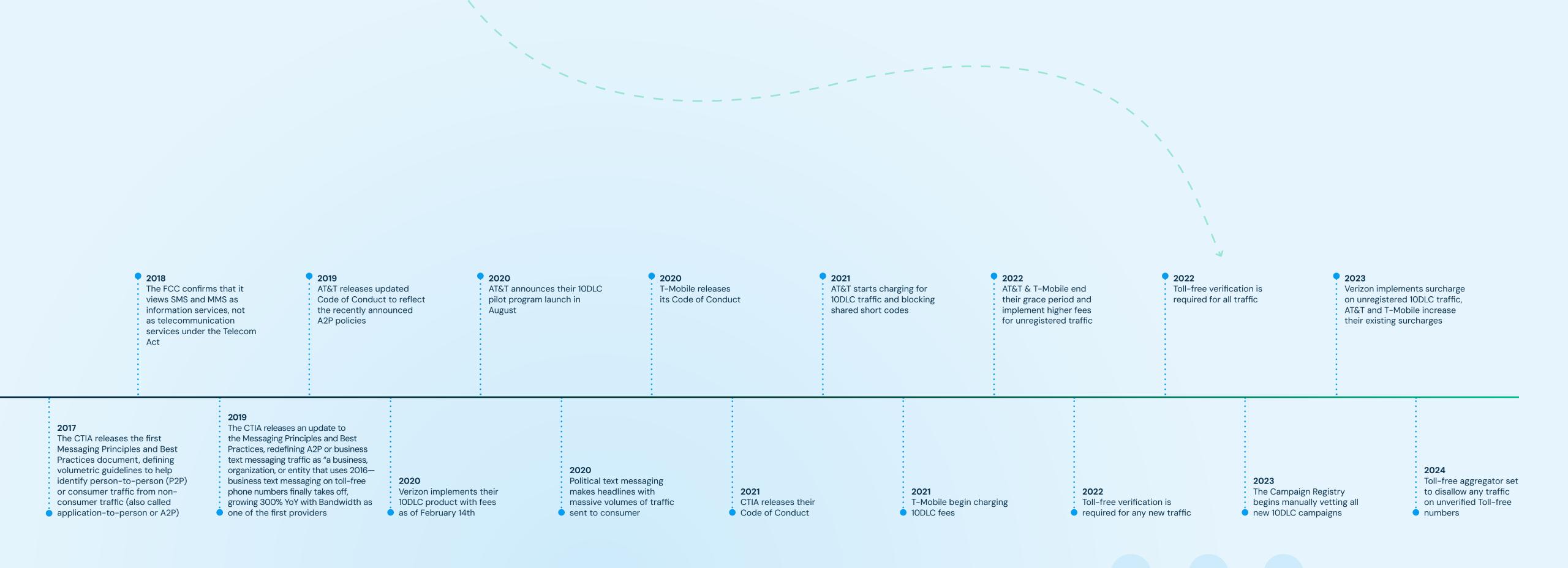
Now capable of texting with their friends on other networks, Americans begin sending (a now comically low) 35 texts per month

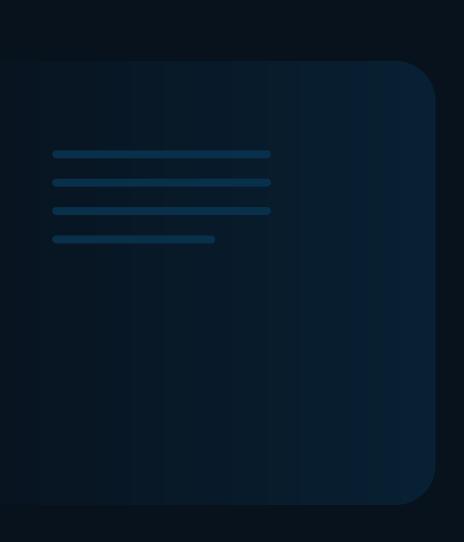
The U.S. wireless carriers allow subscribers from other networks to send and receive SMS to and from their subscribers

The first year that Americans exchanged more text messages than phone calls per month, and the year the iPhone debuts, bringing with • it the era of the smartphone

The first toll-free phone numbers are enabled for text messaging

Business text messaging on toll-free phone numbers finally takes off, growing 300% YoY8, with Bandwidth as one of the • first providers



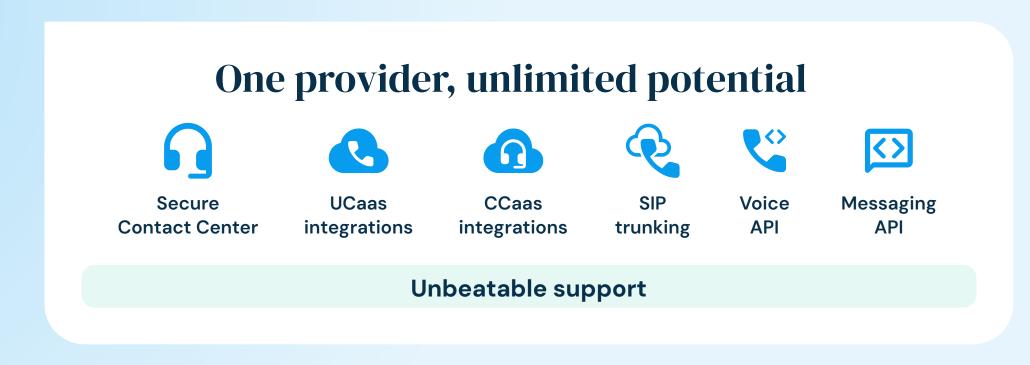




**About** 

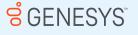
# Bandwidth is Solving Telecomplexity

We provide messaging, voice, and emergency communication services for enterprises and resellers worldwide. And because we own our own voice network, our customers get the advantages of owner economics. When you work with Bandwidth, you get subject matter experts at your beck and call: software know-how layered on telecom expertise.



























"I tell our Bandwidth account manager all the time that I don't know what I'd do without her."

#### **Josh Holstein**

Founder and CEO CellARide

Considering a switch? Here are three reasons businesses come to Bandwidth for messaging:

#### Industry expertise and know-how



Bandwidth's unique place in the industry as an IP network owner, and our longstanding relationships with carriers mean we can keep pace with each and every policy change.

#### **Deliverability and insights**



Our spam and fraud prevention platform is built to give your customers maximum delivery predictability. For every message sent, your customers get real-time status codes with actionable delivery status.

#### Support, support, support



Get in touch with us whenever, wherever. We're here to help you strategize, troubleshoot, and navigate any situations that arrive.

If you've outgrown your messaging provider. Let's talk. You'll find that we provide support that can't be beaten, plus insights and expertise to increase your deliverability.

Learn more at bandwidth.com →