



# The Customer Data Platform Report

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2021

# The CDP Report 2021:

## ***A new era for customer data platforms***

*Welcome to the Segment's second annual Customer Data Platform Report, an in-depth look into how organizations are using CDPs – exploring the data they're collecting, and the apps they're using to manage that data.*

In spite of significant headwinds in 2020 – a global pandemic, economic uncertainty, technology budget cuts – CDP growth is booming.

What happened? In two words, digital acceleration.

Businesses – even the most digitally resistant or under-served – have been forced to make the majority of their customer interactions digital – whether that's e-commerce shopping, on-demand fitness, or virtual doctors' appointments.

New customer behavior has resulted in an influx of new data. New channels have seen tech stacks grow and evolve. And all of this has meant that customer data platforms have become a foundational piece of technology to adapt to this "new normal". (This is the last cliché you'll read in this report, we promise.)

Over the past 12 months, we've been lucky enough to have a ringside seat to see these trends happening in real-time. Over 20,000 customers use the Segment platform to manage their customer data, and we're ranked as the #1 CDP in market share by the IDC.

With a vast amount of data flowing through the platform, our team is uniquely equipped to identify trends in how companies are using CDPs and make some educated predictions for where the market is headed in 2021.

# Executive summary

1

2020 saw an exponential growth in customer data. By the end of the year, Segment was processing over 1 trillion API calls a month.

2

With the increased adoption of digital channels, 73% of companies report that a CDP will be critical to their customer experience efforts.

3

The past year saw companies building out their tech stacks significantly. On the Segment platform, the average number of apps used has increased from 8 in 2019 to 11 in 2020.

4

Digital advertising apps are booming as companies go all-in on digital spend to match consumer behavior, with advertising apps rising to the #2 category on the Segment platform.

5

Twilio's acquisition of Segment introduces a new era for CDPs, as the market shifts from pure-play data platforms towards integrated customer engagement platforms.

# The CDP Report 2021

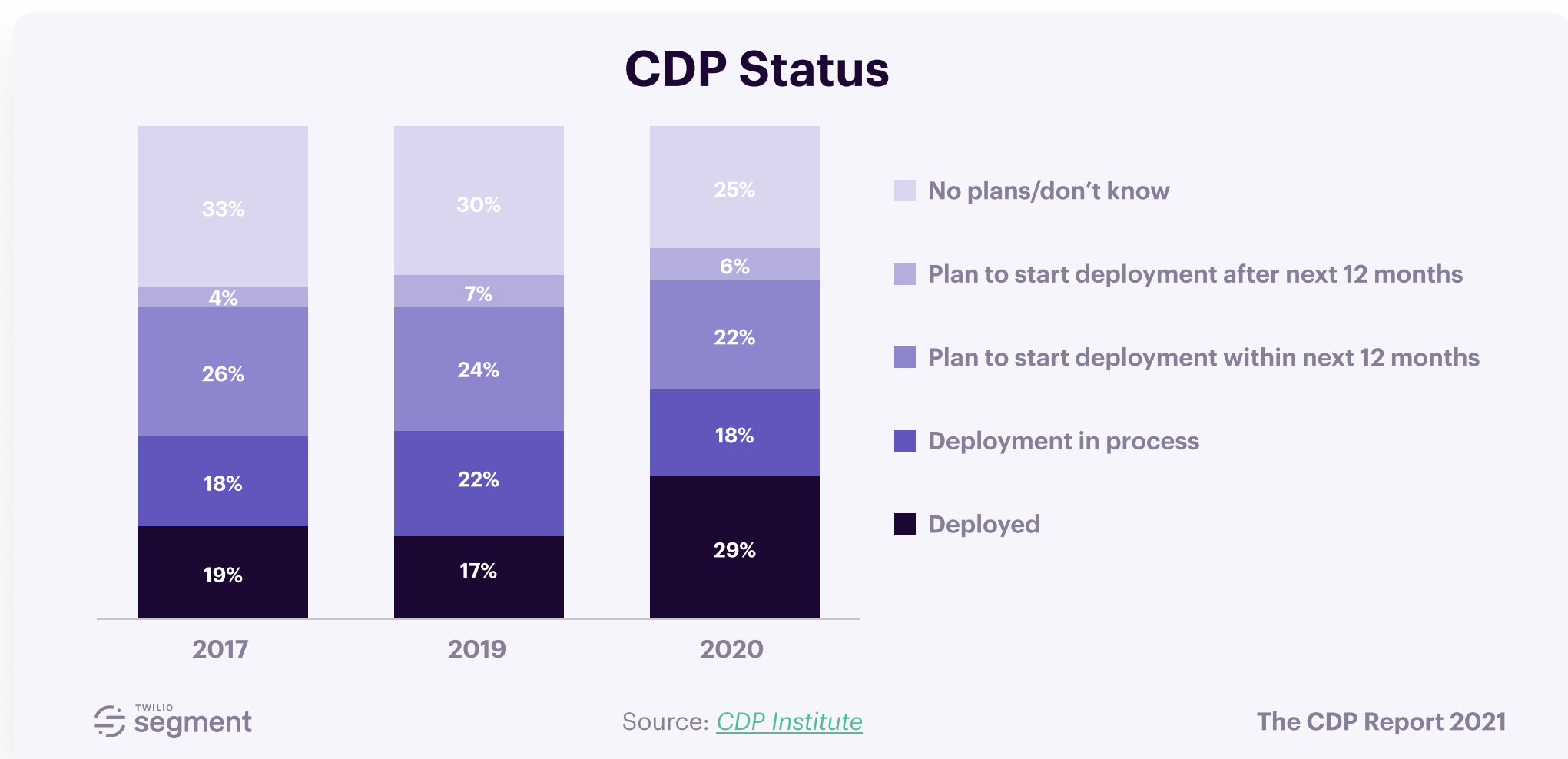
## Table of contents

<b>From billions to trillions: Why customer data platform growth continues to boom</b>	4
<b>The omni-channel revolution continues: How companies used customer data platforms in 2020</b>	9
<b>Bigger and better tech stacks: The most popular apps of 2020</b>	13
<b>Expansion and consolidation: What to expect in 2021</b>	24



# From billions to trillions: Why customer data platform growth continues to boom

According to the CDP Institute, there has been a sharp increase in the number of companies that have [deployed a CDP in 2020](#) compared to recent years.



At the time of this survey, **29% of respondents had already deployed a CDP in 2020, more than 1.5 times the percentage of respondents as the previous year.**

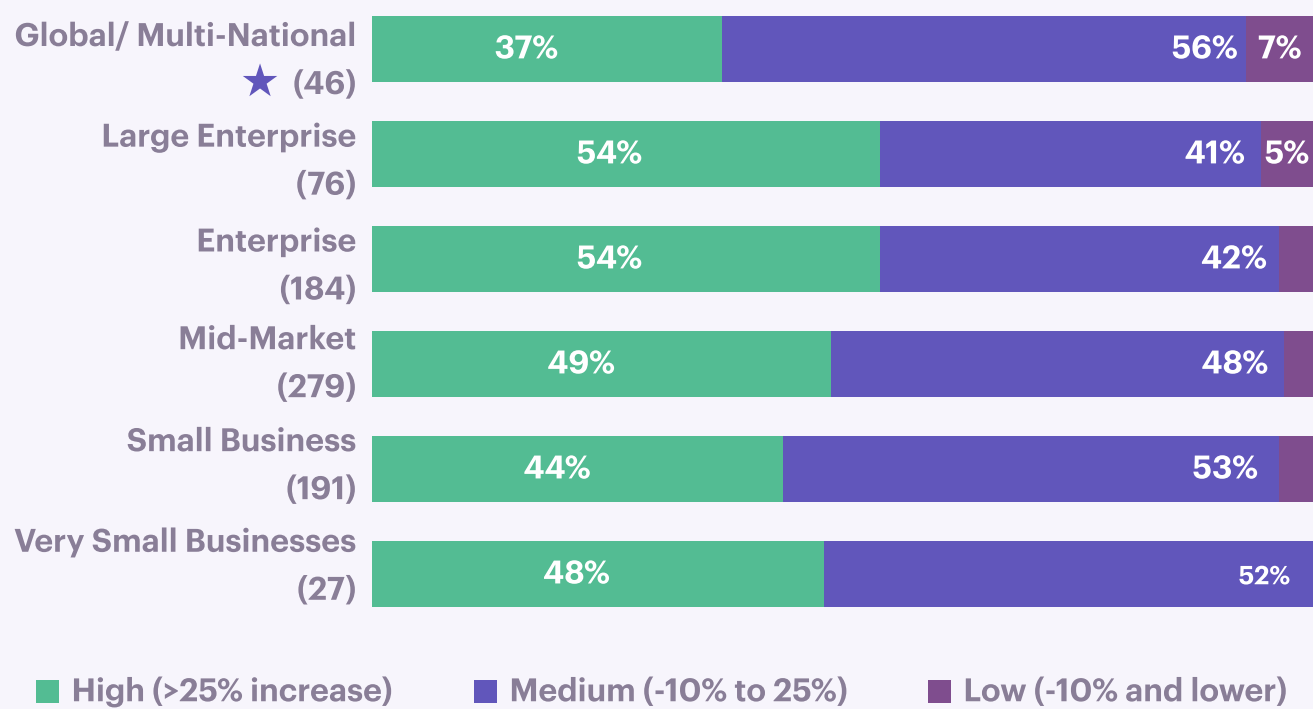
“Deployment in process” and “plans to start deployment” are slightly down from 2019 (which could be a factor of COVID-related budget cuts) but those that had the means seem to have prioritized moving ahead with CDP deployment.

While data from the CDP Institute suggests that new CDP investments are slightly delayed, businesses that have already deployed CDPs see it as an integral part of their infrastructure.

This is illustrated best by the budgets being devoted to CDPs in 2020.

In our survey of 4,684 customer data decision makers, [47% of respondents said they will increase their CDP budget](#) by more than 25% in the next five years.

## From 2020-2025, how much do you expect your CDP budget to grow?



TWILIO  
segment

Source: The 2030 Today Report - Segment

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In conclusion, 2020 saw businesses deploying more and spending more on CDPs.

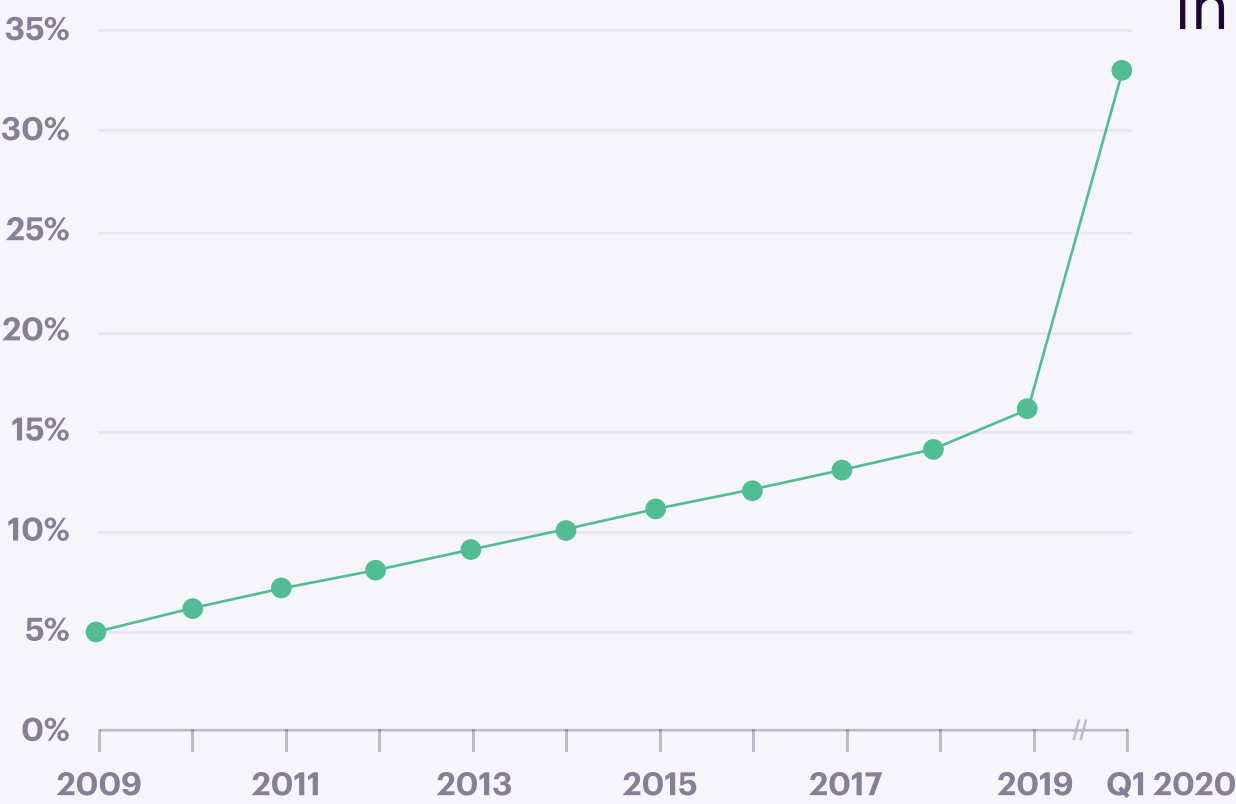
So what's driving the adoption?

### An exponential increase in customer data

In 2020, businesses were faced with a stark choice – go digital, or go dark. For the most part, businesses chose the former. Within the first three months of the pandemic alone, [e-commerce experienced 10 years](#) of growth in just 90 days.

### US e-commerce penetration

10 years' growth  
in 3 months



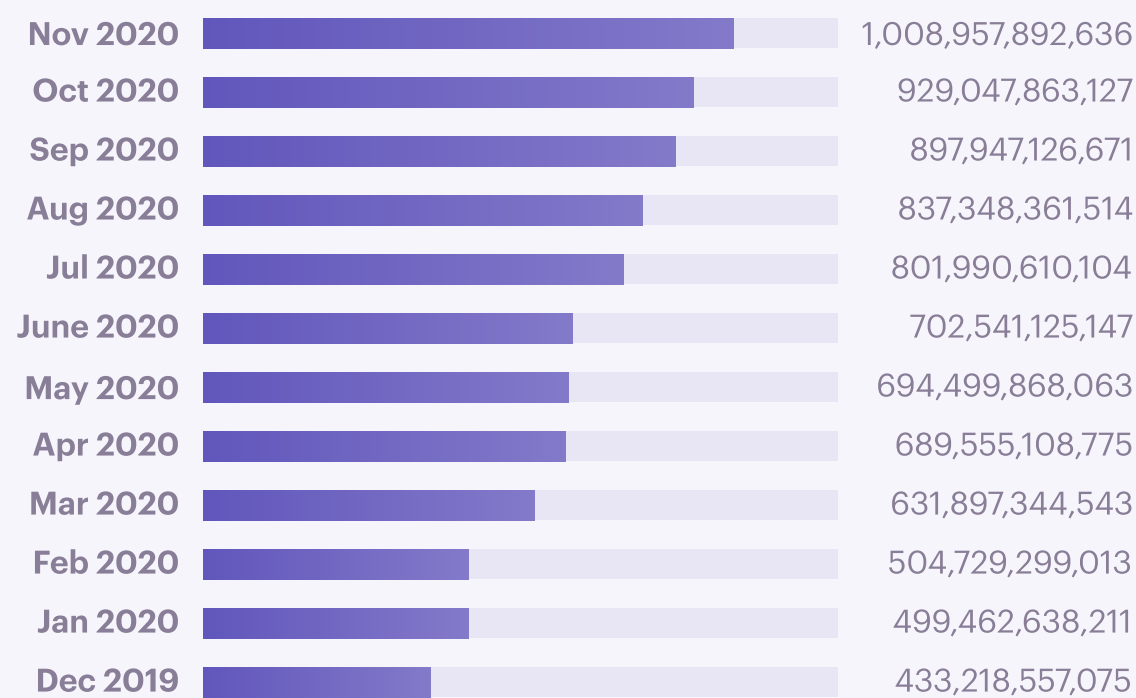
TWILIO  
segment

Source: [McKinsey](#)

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As the number of digital interactions increased, so did the volume of customer data. 2020 saw a huge increase in the volume, velocity, and variety of data being tracked across organizations. As an example, Segment processed over 1 trillion API calls in November alone.

### Customer data growth in 2020



API calls tracked on the Segment platform

The CDP Report 2021

As the scale of data in business continued to grow, so too did the demand for piping and storing it. In 2020, customer data platforms became the de facto way for businesses to use their data intelligently and efficiently.

Moreover, it's hard to see exploding data volumes declining any time soon. We only have to look back at the 2003 SARS epidemic in China to see that digitization wasn't easily replaced. SARS was a watershed moment for the Chinese digital economy ([most notably Alibaba](#)), driving new habits around online behavior that replaced existing ways of doing business (payments, grocery, healthcare, etc.) permanently.

### An exponential rise in customer expectations

The growth in customer data being created during 2020 was matched equally by the growth in customer expectations. [60% of customers](#) now have higher expectations of their digital experience than before COVID-19.

As software becomes increasingly commoditized, and product features replicated in a short period of time, businesses are differentiating on the quality of customer relationships.

Yet too often, inaccurate or poorly managed data makes quality customer relationships impossible.



In an interview with Stratechery, Jeff Lawson, CEO of [Twilio](#), highlighted the gap between expectation and reality:

“

*We've all had those horrible experiences where you go to a website, you've been browsing around for men's shirts, you filled out your email and you left and you start getting marketing the next day for like... toddler shoes or whatever.*

”

In response, businesses are moving away from marketing based around sketchy and speculative third-party data and towards prospecting with first-party data collected from multiple departments across the business, a tailwind that CDPs have capitalized on.

In our recent survey, [73% of respondents](#) said that a customer data platform will be critical to their customer experience efforts in the coming years



**73% say a customer data platform will be critical to their customer experience efforts.**

Source: The 2030 Today Report

## **A customer and company-centric approach to data management**

Historically, customer data management has been “channel-centric”. Data was collected and organized according to the channel where it was created (email, call center, etc), and kept in siloed, inaccessible databases.

Data from e-commerce doesn't speak to data from retail. Retail data can't speak to call-center data.

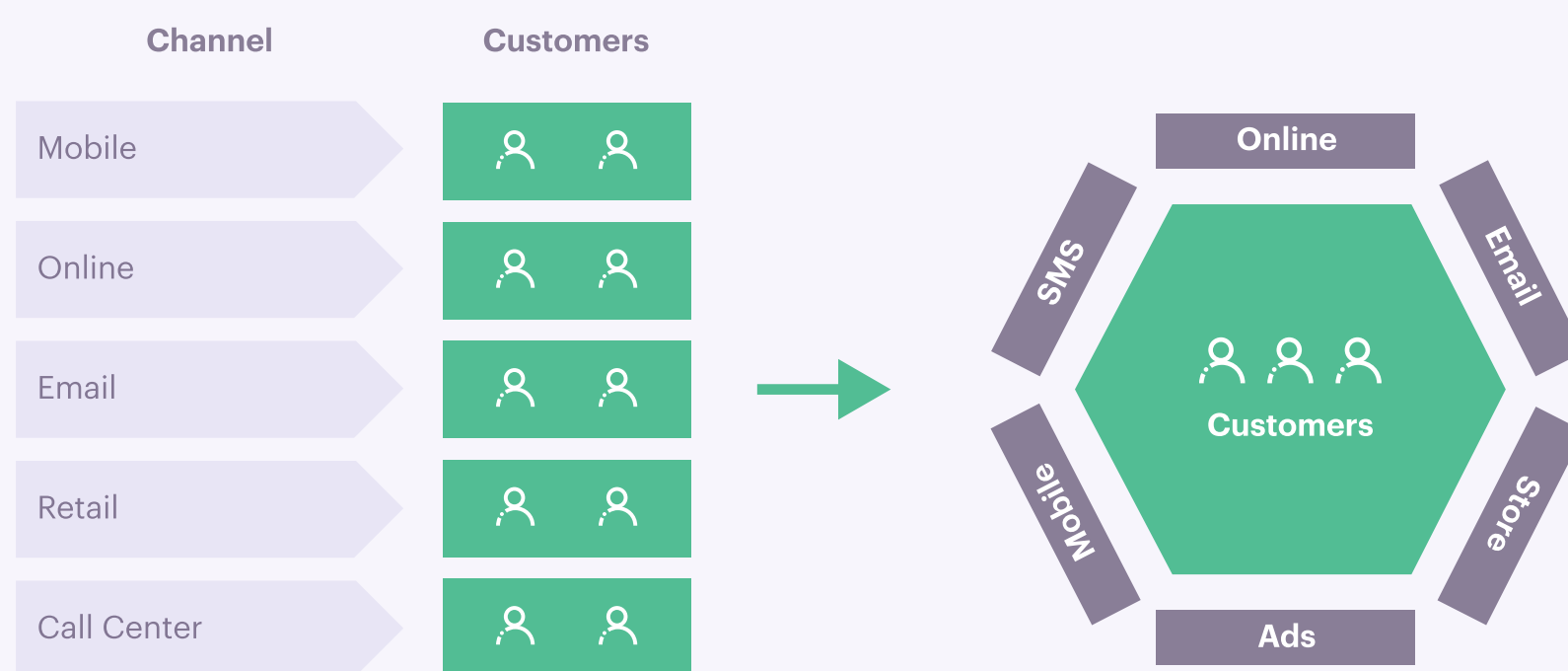


In 2020, the limitations of this way of working became quickly apparent.

1. Customer behavior (curbside pickup, telehealth, etc) saw people jump from channel to channel like never before. Companies could easily have customer data spread over dozens if not hundreds of different systems.
2. Remote work highlighted the operational inefficiencies of having data spread across disparate systems and functions throughout an organization. Companies were forced to invest in new tools to improve access to data across their organizations.

Rather than take a channel-based approach to customer data management, 2020 witnessed companies integrating their data strategies around the customer. This holistic approach was a net positive for both customers and businesses.

## Channel-Centric Approach vs. Customer-Centric Approach



Businesses could easily reference and utilize data generated in entirely different functions within their organization. And customers could benefit from intelligent and informed communication, irrespective of the channel.

# The omni-channel revolution continues: How companies used customer data platforms in 2020

As the [#1 CDP](#), according to the IDC, and holding more than double the market share of the second-ranked CDP, Segment is in a unique position. By analyzing our internal data, we can generate a high-level overview of how CDP usage is evolving.

Before we dive in, it's important to understand how we analyzed and interpreted the data.

- The data is pulled from a snapshot of data from 1/1/2020 to 12/31/2020.
- The data is sourced from the anonymized usage behavior of Segment's 20,000+ customers.
- We have only included tools that have active integrations in the [Segment catalog](#) as of 12/31/2020.
- Categories are based on whether or not they are in the [Segment catalog](#) with that category tag.
- The data is based on the number of customers using each destination/source, rather than the number of workspaces. In some cases, a customer may have multiple Segment workspaces.

Now that we've established some ground rules, let's dive into the data.

## What sources are companies collecting data from?

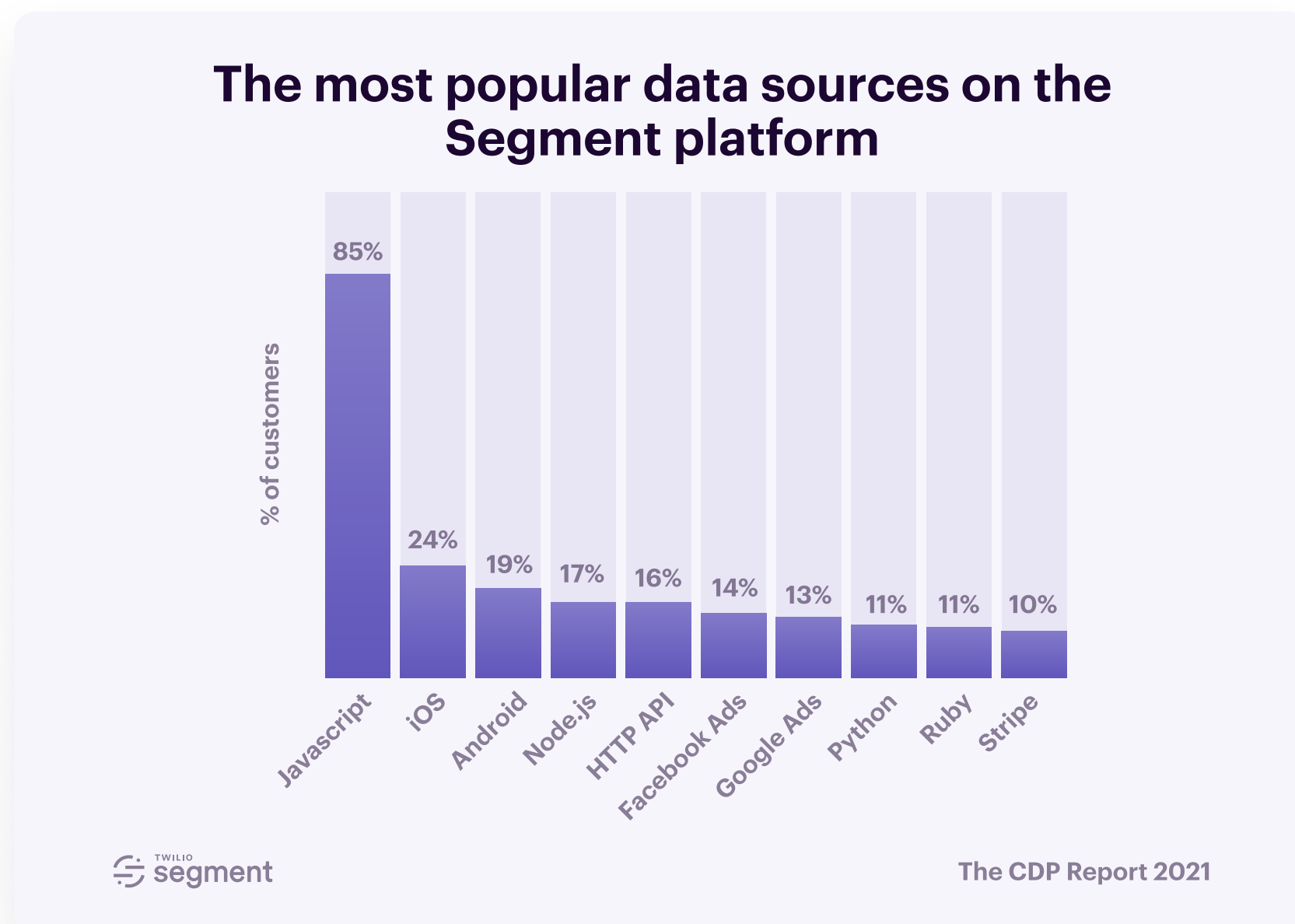
As we saw earlier, the potential of a customer data platform is that it lets you collect and unify all of your customer touchpoints, not just what's happening on one channel.

Our data bears this out.

Customers aren't just clicking around on your website or app. They're chatting with support teams via live chat, talking with your sales team via email, clicking on your Facebook ads, and much more. Companies are bringing a wide variety of data into customer data platforms to get a complete picture of their customer interactions.

If we examine the data sources connected to Segment's customer data platform, we see four main types of sources: Web (JavaScript), Mobile (iOS, Android), Server (HTTP API, Node.js, etc.), and Cloud (e.g., Stripe, Sendgrid, etc). This breadth of data sources proves in a visceral way how the customer journey is happening across multiple channels.

Last year, Javascript came out on top as the number one data source on the Segment platform, and it shouldn't come as much of a surprise that it has come out on top once more.



JavaScript is evolving at a faster rate than any other widespread computing language, not to mention the fact that JavaScript tags have become the ubiquitous method for data collection. Barring any cataclysmic events, we expect Javascript to reign supreme for years to come.

Mobile platforms saw broad adoption in 2020 too, with iOS and Android taking the number two and three spots, respectively.

Also included in the top 10 data sources are Facebook and Google Ads. Digital advertising has had a breakout year on the Segment platform (more on that later).

By [connecting their advertising data sources to a CDP](#), companies can quickly aggregate data from multiple ad channels to understand and analyze their acquisition costs and revenue attribution.



Finally, a notable new addition to our list of top data sources is Twilio SendGrid. Over 6% of Segment's customer base pulled in SendGrid data to better understand the complete customer experience.

## Where are companies sending the data they collect with their CDP?

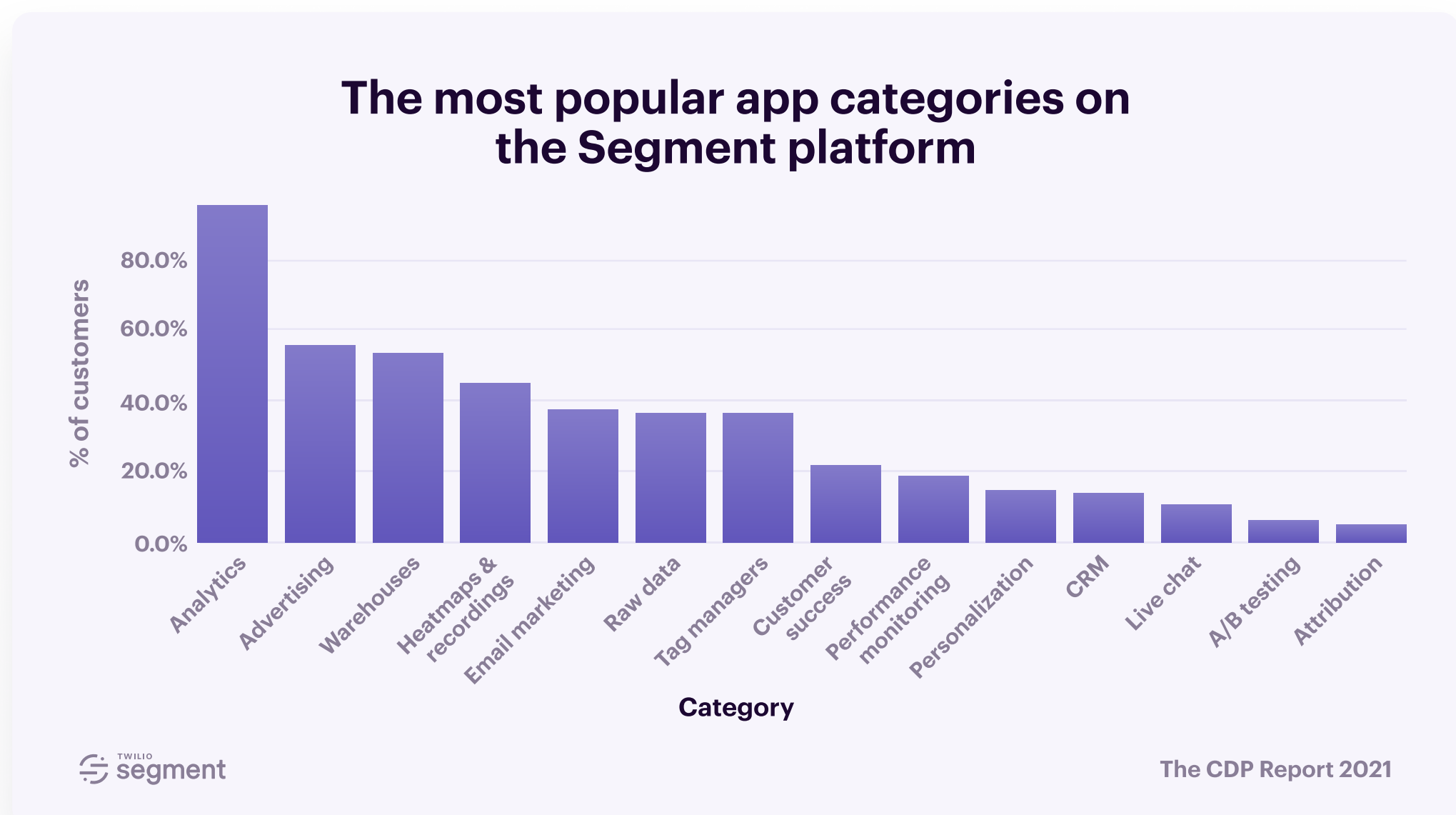
Segment's CDP helps businesses collect and manage data from various sources, but it also helps customers *send* this data to a variety of tools. This gives us a unique insight into how tech stacks evolved in 2020.

The past year saw companies building out their tech stacks significantly to adapt to accelerated digitization brought on by COVID-19.

On the Segment platform, the average number of apps customers are sending data to has gone up from eight in 2019 to 11 in 2020.

While we saw both large and small customers adopting more technology, the number of apps varied depending on the company. The average number of apps used by enterprises stands at 14, while small to mid-market companies use nine.

Diving deeper into the types of apps being adopted on Segment's customer data platform, we can get an in-depth view of business priorities over the past year.



Firstly, our data shows that digital advertising tools are booming, with advertising apps rising to the #2 category on the Segment platform.



Considering the economic uncertainty caused by the COVID-19 pandemic, analysts predicted a decrease in advertising demand [worse than the 2008 recession](#). However, our data shows climbing adoption for both Google and Facebook Ads, which is in-line with the [rebounding usage](#) reported by Facebook, Google, and the other major ad platforms throughout the year.

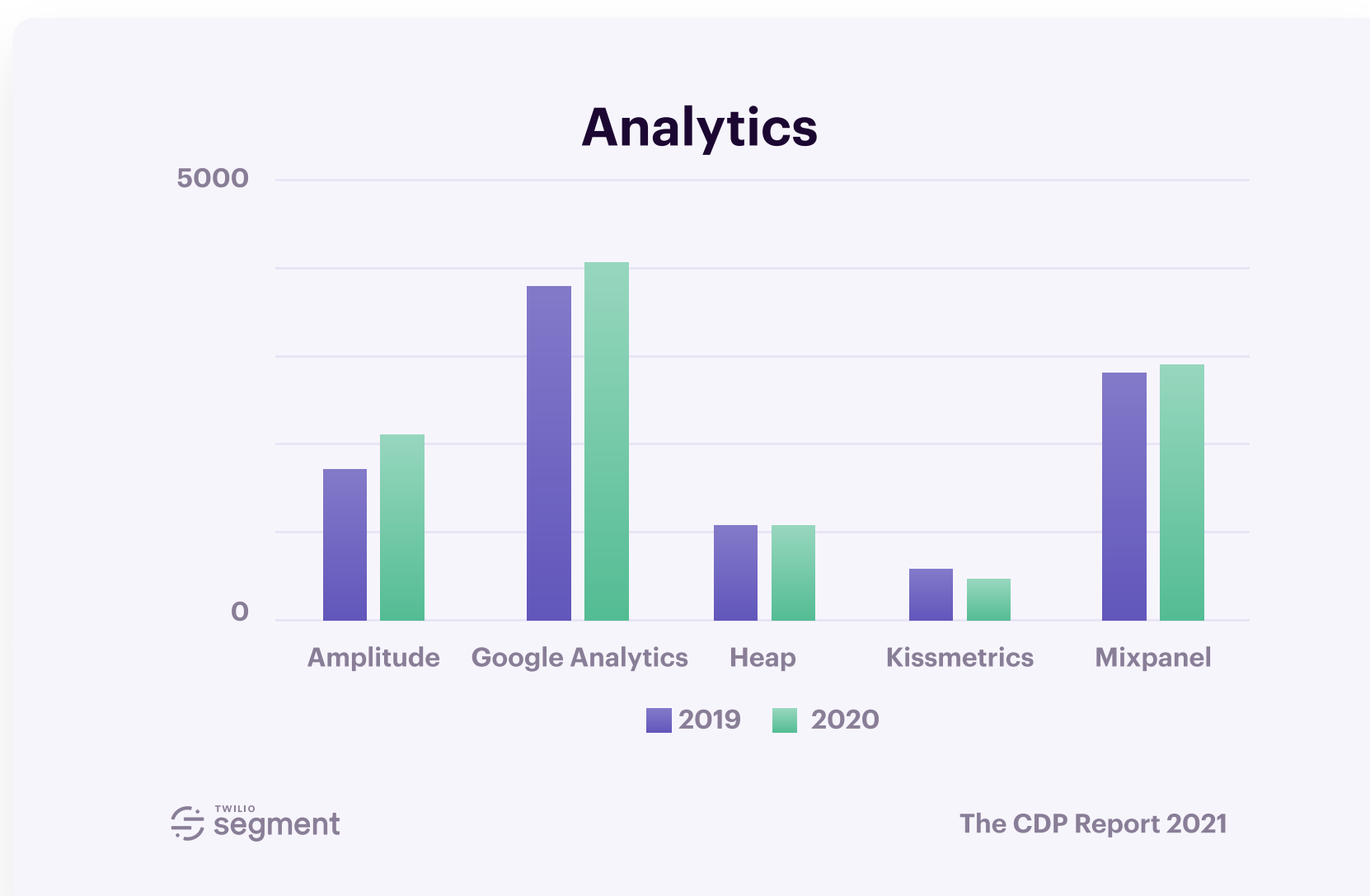
Meanwhile, there is growing adoption of what can be broadly categorized as customer engagement tools. Based on Segment's data, customer success, email marketing, and heatmaps/recording tools all saw increased adoption in the region of 18-25%, indicating that many companies are continuing to lean into digital engagement and transformation efforts, despite the uncertain economic circumstances.

# Bigger and better tech stacks: The most popular apps of 2020

Drilling down further into individual categories, we can see the most popular tools where people are activating their customer data.

## Analytics

In the Analytics category, [Google Analytics](#) once more takes the top spot as the most widely adopted analytics tool on the Segment platform.

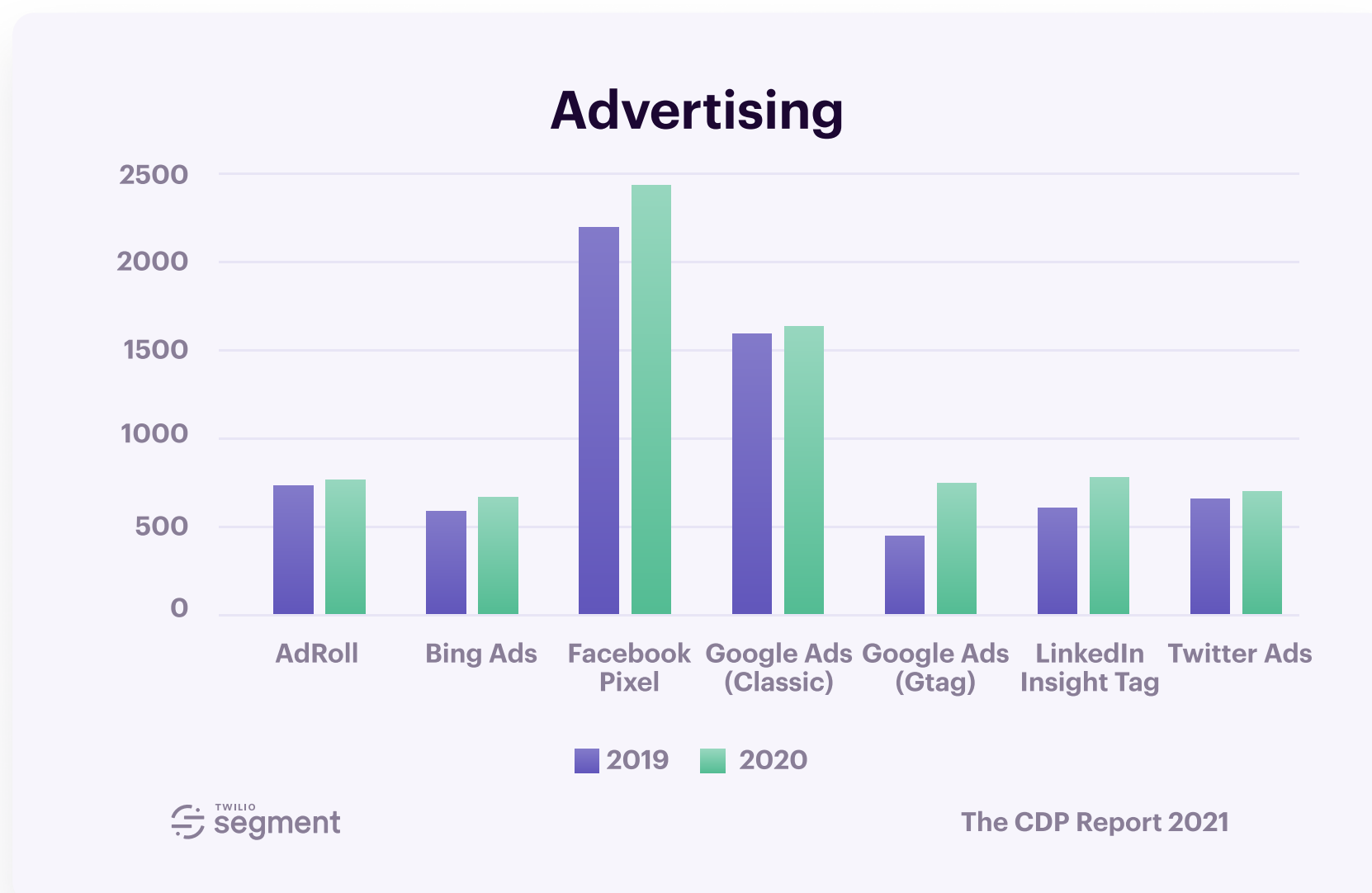


Seeing as [Google Analytics](#) has [28.8 million users](#), its popularity with Segment users makes sense. Most websites have Google Analytics. That said, it's not a monopoly. Other analytics providers such as [Amplitude](#) and [Mixpanel](#) are more than holding their own, offering capabilities different from Google Analytics to help companies dive into their data in additional ways.

[Find out how to choose the best data analytics tool for your business >](#)

## Advertising

In the advertising category, [Facebook Pixel](#) maintained the #1 spot as the most-enabled advertising app on the Segment platform.

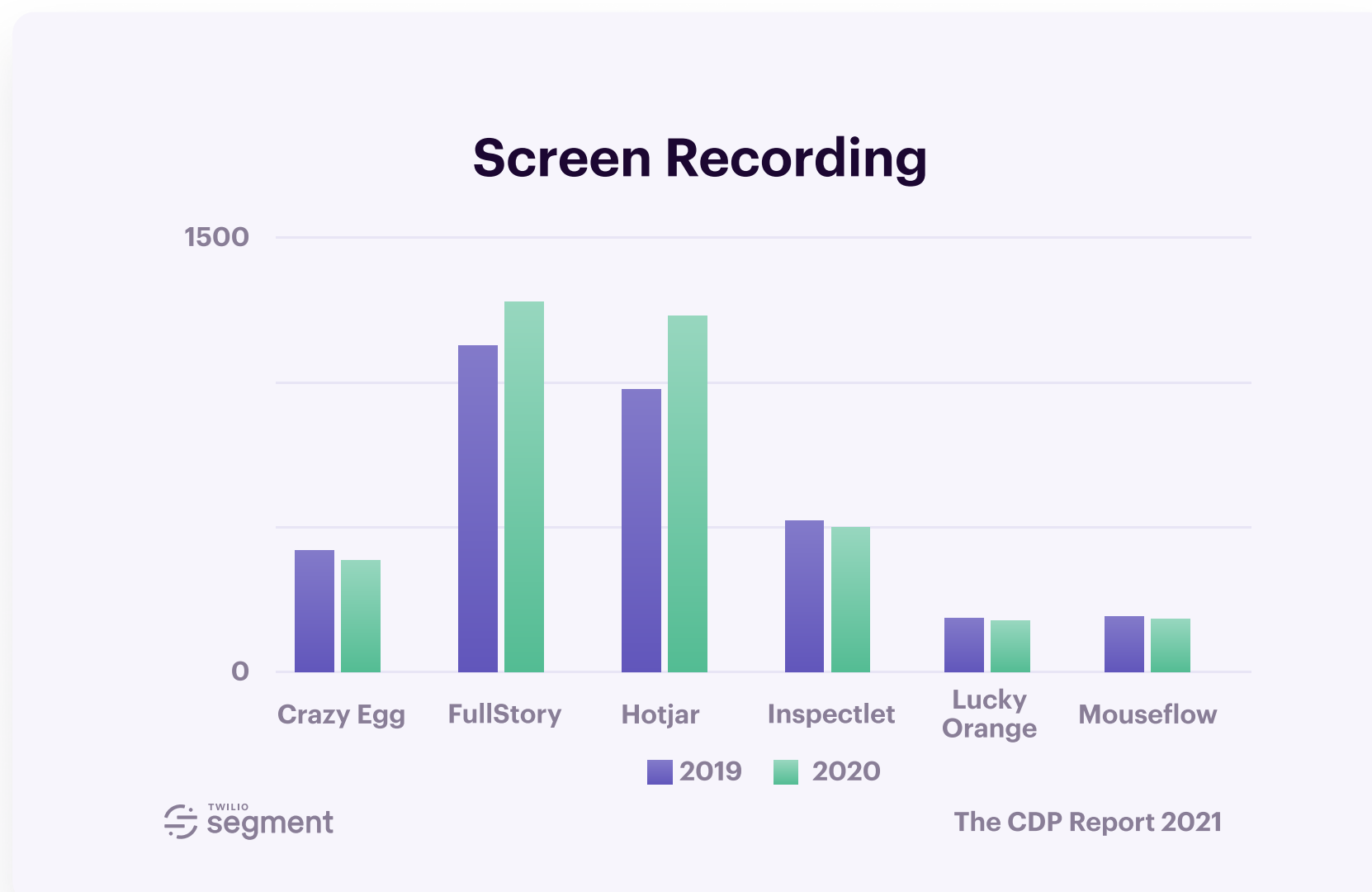


Facebook is closely followed by Google Ads, which also saw broad adoption amongst Segment's customer base.

Although the two platforms are often positioned as competitors, for Segment's customer base it's not an either-or situation. Our data shows customers using a broad range of advertising tools, and many companies leverage the strengths of both Google and Facebook in concert to achieve maximum advertising visibility.

## Screen recording & heatmaps

With an increased focus on the customer experience in 2020, screen recording and heatmaps have risen to the #4 most popular category on the Segment platform. (up from #7 last year).



2020 was an interesting year in the category, as big players like Microsoft entered a category historically dominated by point solutions. It will be interesting to see if their free tool — Clarity — can take market share from established players in the category.

In the meantime, FullStory and Hotjar dominate the category on the Segment platform and have grown in popularity year over year.

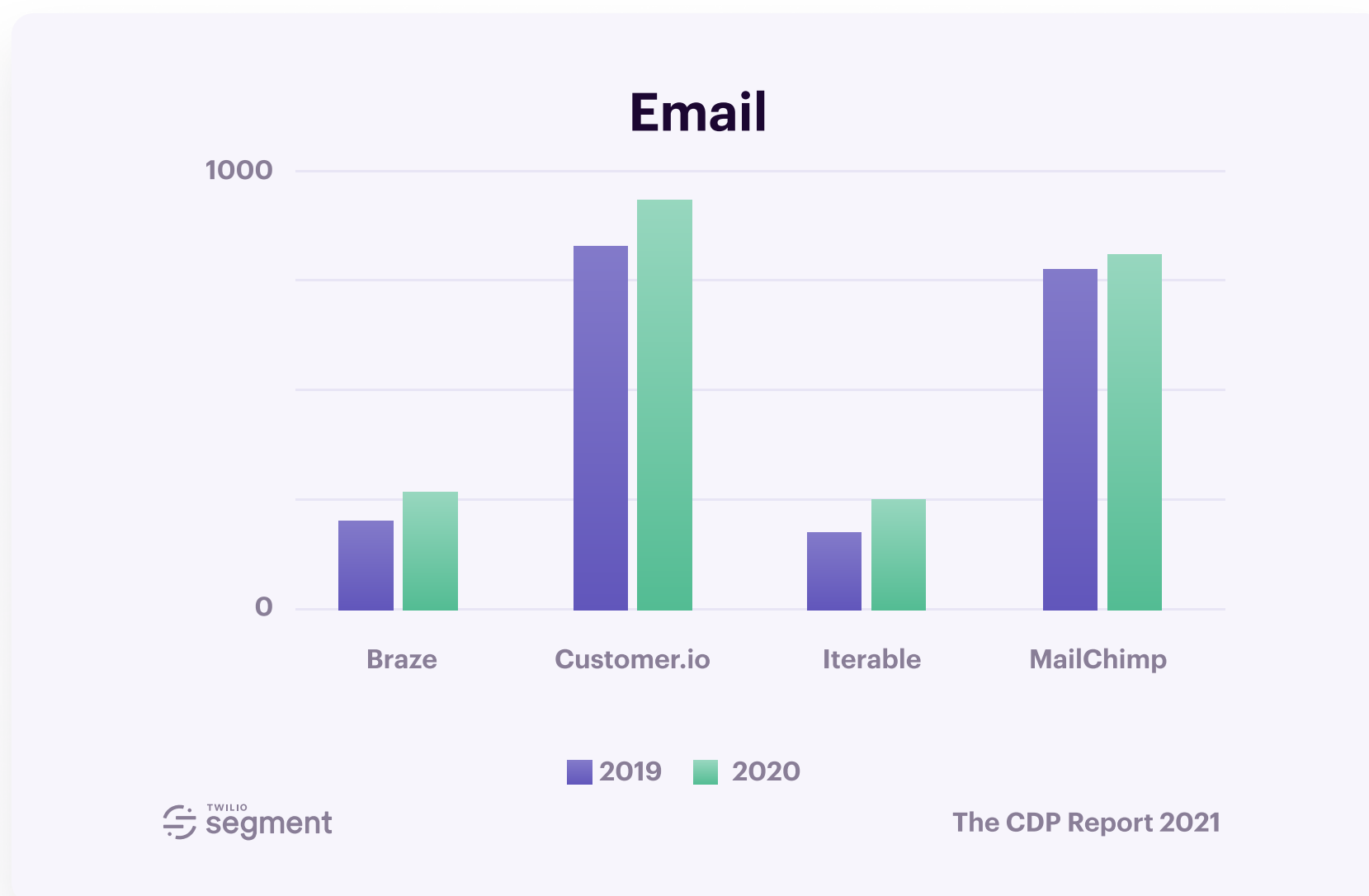
## Email

Over a third of Segment customers have an email marketing tool connected to their account.

In 2020, two companies [Customer.io](#) and [Mailchimp](#) continued to battle it out for the top two spots in the email marketing category. Both of these tools target SMB businesses, and benefit from a self-service motion that helps drive broad adoption amongst smaller startups.

[Braze](#) and [Iterable](#), by virtue of being broad customer engagement platforms as opposed to pure-play email marketing tools, saw less adoption in this particular category, but both saw increased adoption in 2020.





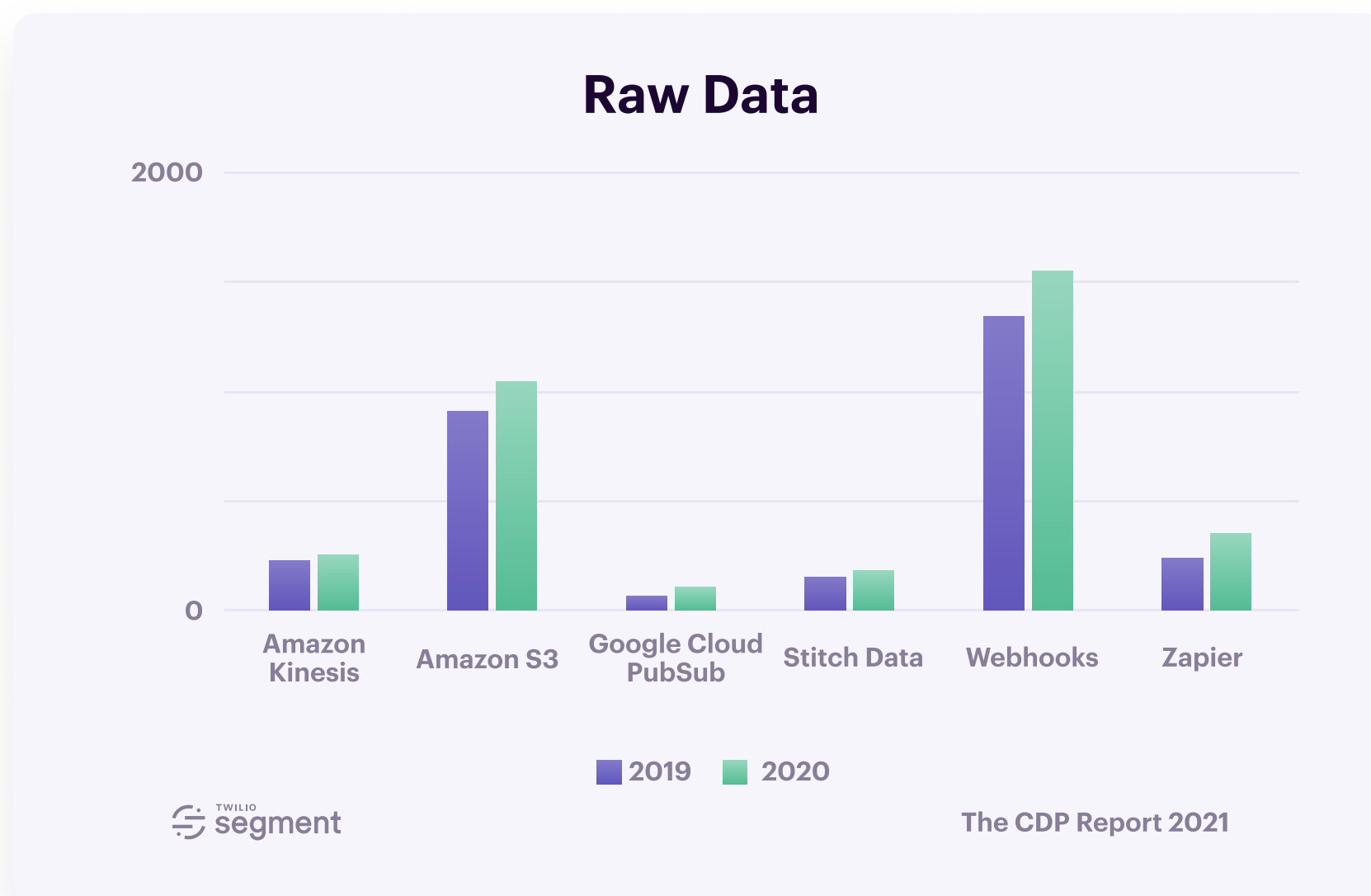
What's particularly interesting about this category is that most, if not all the best in breed email providers in the category (e.g., Braze, Iterable, etc) use Twilio SendGrid to deliver email – often exclusively and at an eye-watering volume ([1 trillion emails in 2020, to be precise](#)).

We will touch on this in more detail in the SMS section below, but Twilio – by owning the pipes that drive customer communication – is commanding a significant influence on the martech ecosystem, but at the infrastructure layer as opposed to the application layer.

[Learn how to choose the best email service provider in 2021 >](#)

## Raw data

Given that Segment is a developer-first company, it's no surprise that raw data apps are one of the most popular categories on the Segment platform. Combining managed data collection tools like a CDP with cloud services provided by Amazon, Google, and others now enables developers to wield data more powerfully than ever before.



Like last year, a number of customers are building on the Amazon Kinesis and S3 connections. Both benefit from being part of a large, consolidated ecosystem: a coherent data infrastructure approach is easy with tools from the AWS suite.

Webhooks are an interesting exception to the other “products” in the category, as a [webhook](#) is more of a concept than a company – it gathers data from a website and sends it to appropriate locations for use and analysis.

Many customers use webhooks to forward their event stream to custom proxies that apply transformations or enrichments to the payloads before forwarding them on to one of the other services in the Segment catalog, or triggering some action in their application.

## Customer success

As reported earlier in the year in our [Covid Tech Stacks report](#), an increased focus on customer experience during the pandemic saw customer success become one of the fastest-growing categories on the Segment platform.

What changed in 2020 was that an expansionary ecosystem of customer success tools became dominated by one of the largest players in the industry.



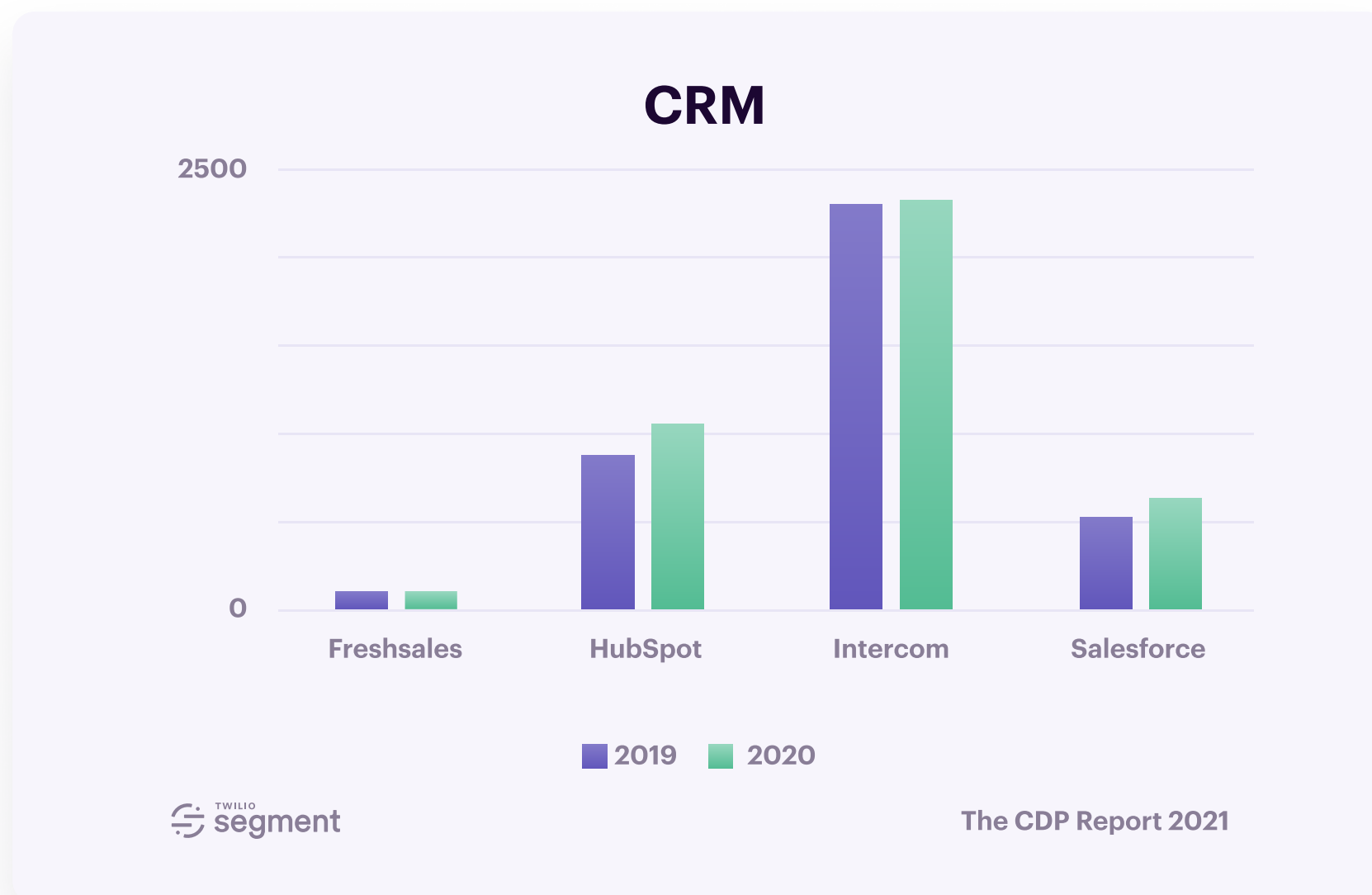
On the Segment platform, [Zendesk](#) is the most widely adopted customer success tool right now, taking both #1 and #2 spot (through its acquisition of Zopim back in 2014, now known as Zendesk chat).

Zendesk's all-in-one suite of products is popular amongst enterprise customers, but its growth amongst SMBs is just as impressive, and has kept other customer success tools like Help Scout, Gainsight, and SatisMeter at bay.

[Choose the best customer success tool for your business >](#)

## CRM

Customer relationship management tools, [not to be confused with CDPs](#), are essential tools for many companies to manage prospect relationships.



Although [Salesforce](#) has been a [long-time industry leader](#), it sits at a surprisingly modest #3 position for CRMs on the Segment platform. [Intercom](#) which straddles the line between customer service management and customer relationship management, instead takes the lead in the category.

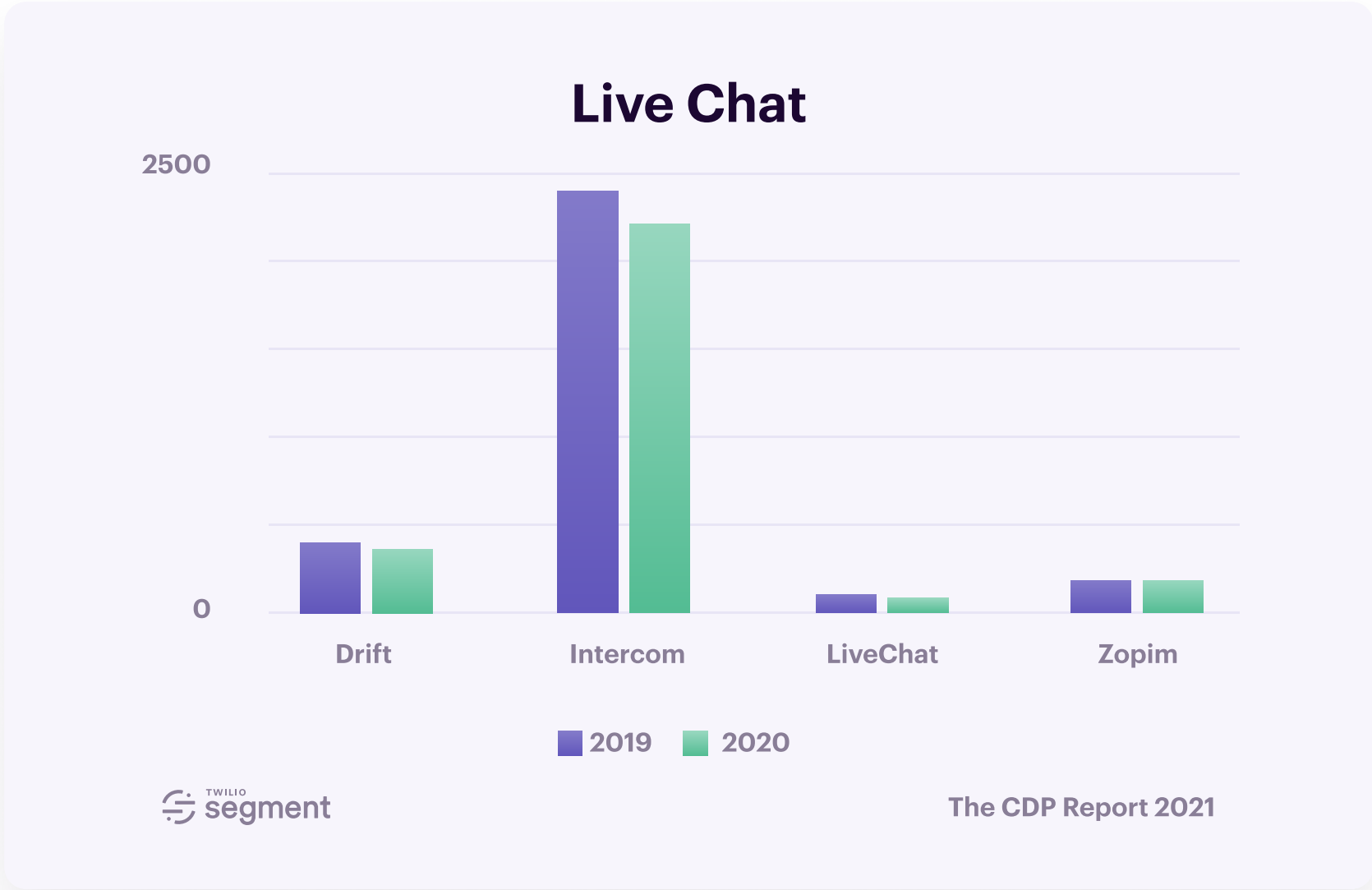
It's worth mentioning the growth of Hubspot in this category too, which grew by over 5% last year and has been growing steadily year-over-year. HubSpot is ideal for smaller organizations, those less versed in the technical aspects of CRM, and especially organizations leveraging the HubSpot platform for marketing too.

## Live chat

COVID-19 [accelerated e-commerce growth by up to ten years](#), meaning customer service agents had to deal with significant spikes in support requests. This meant that live chat became a foundational part of your company's tech stack, not just a nice to have.

[Intercom](#) pioneered the concept of live chat messaging back in 2011, so it's no surprise that it's the most used live chat app on the Segment platform. Intercom casts a wide net, covering customer support, marketing, and sales. Just like we observed in the customer success category, 2020 was notable in seeing a gradual shift in [preference for integrated suites](#) over best-of-breed solutions.



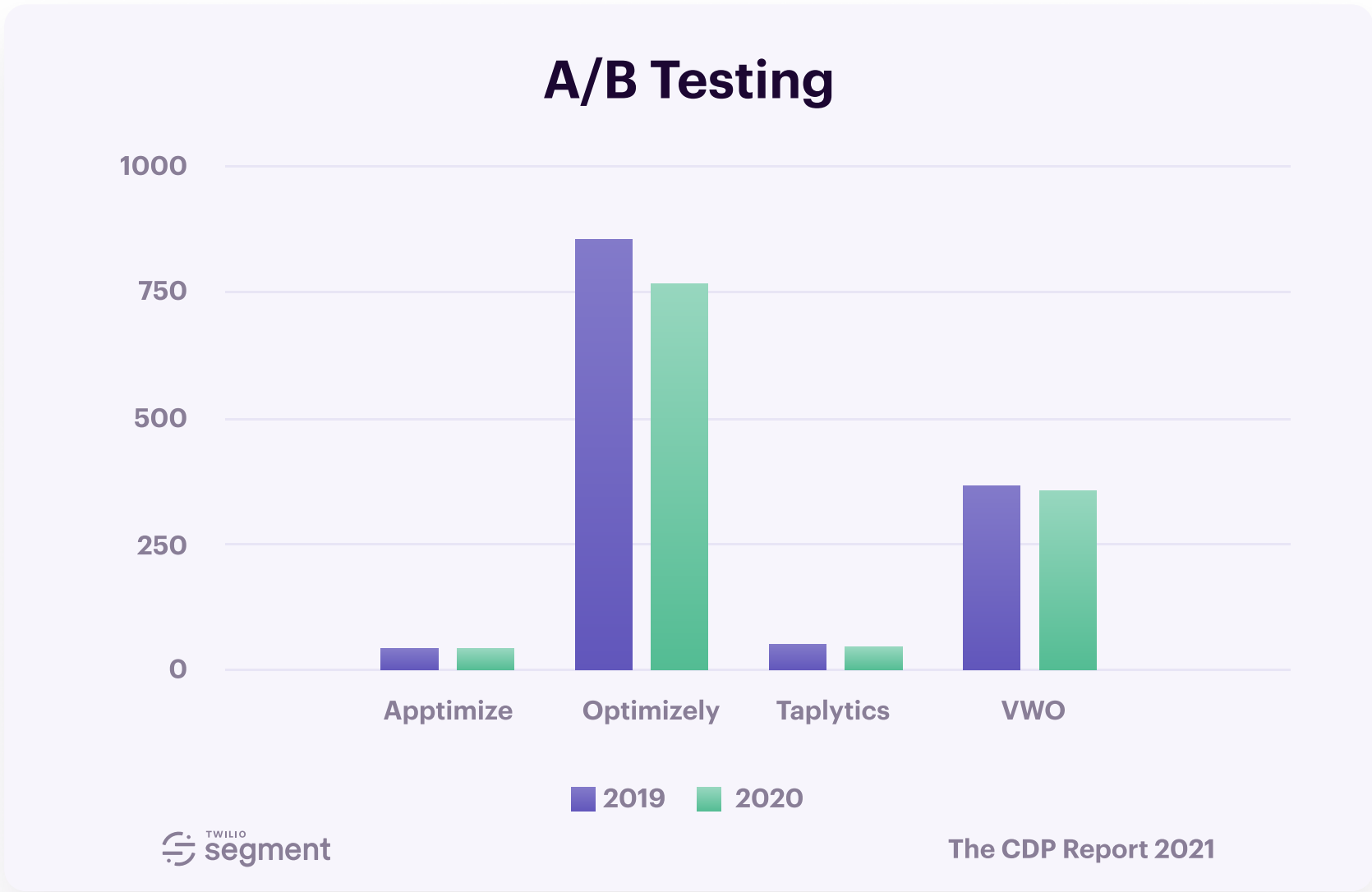


The number #2 product in the category is [Drift](#), a live chat product focused on sales and lead generation.

[Find out more about the best live chat software in 2021 >](#)

### A/B testing

It's been an interesting year for A/B testing. The big news was that [Optimizely was acquired by Episerver](#), signaling the categories' demand for increased capabilities around content and commerce.



Despite that, the proportion of A/B testing tools used on the Segment platform hasn't changed much year-over-year. [Optimizely](#) was one of the first companies to enter the A/B testing market in 2010 and has maintained the majority of the market share since.

That said, [Visual Website Optimizer](#) (VWO) is showing promise as a runner up. Over the last few years, it's evolved its A/B testing software into what it calls a "[Conversion Optimization platform](#)." It currently offers a host of user-research features like heatmaps, surveys, and website experience targeting.

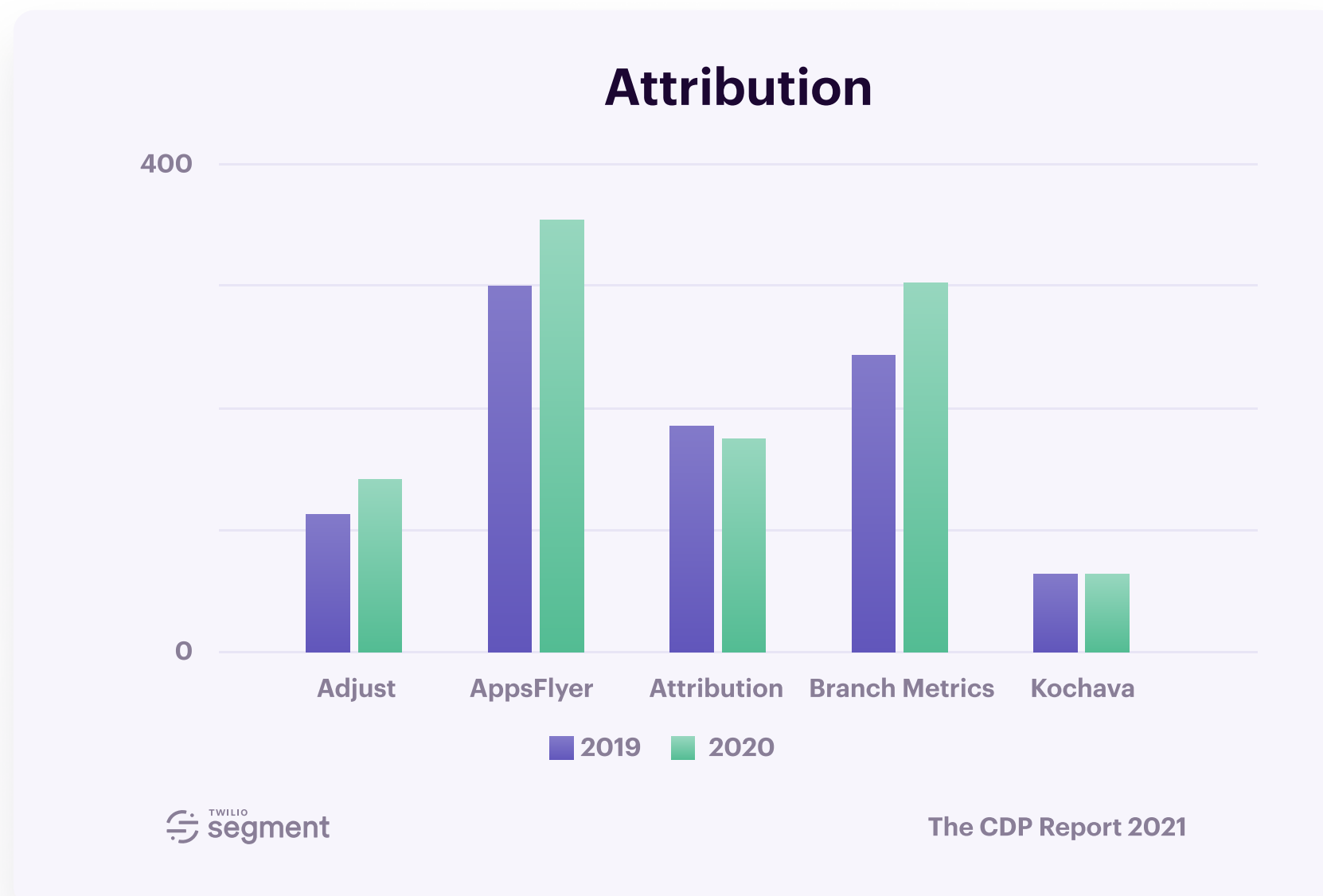
[Find out how to get the most from your A/B tests with Segment >](#)

## Attribution

Throughout 2020, marketing budgets came under significant pressure, [facing cuts of anywhere from 10-25%](#).

As a result, attribution became critical to get a full picture of marketing performance, spot the new and high-quality acquisition channels, and eliminate the ones that were under-performing.

In the attribution category, [AppsFlyer](#) takes the lead as the most popular attribution tool on Segment's platform. [Branch Metrics](#) saw the most gain in 2020.

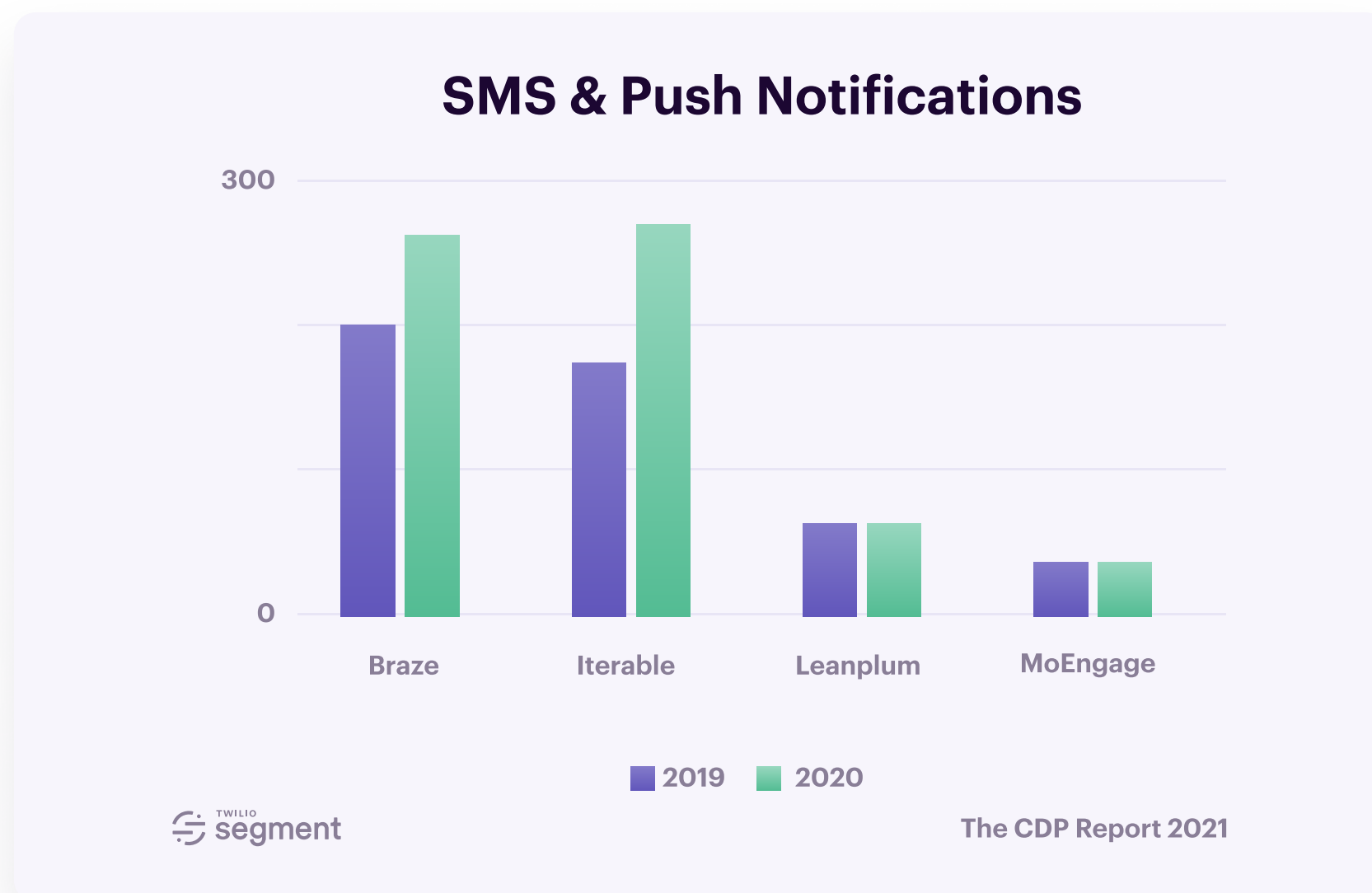


All of the top attribution tools used in Segment, with the exception of Attribution, specialize in mobile attribution. This tells us that CDPs are especially helpful for mobile app creators to understand where their users are coming from.

[Automate attribution with the best attribution tool for your business in 2021 >](#)

## SMS and push notifications

This year, the SMS category was dominated by two players – Iterable and Braze. [90% of B2C brands are set to have an app by the end of 2021](#), driving increased adoption for mobile engagement automation vendors.



If you're familiar with the space, you might spot a notable omission – Twilio.

Given [Twilio's recent acquisition of Segment](#), this seems surprising. But dig a little bit deeper and you'll notice vast numbers of customers using Segment and Twilio behind the scenes, without even knowing it.

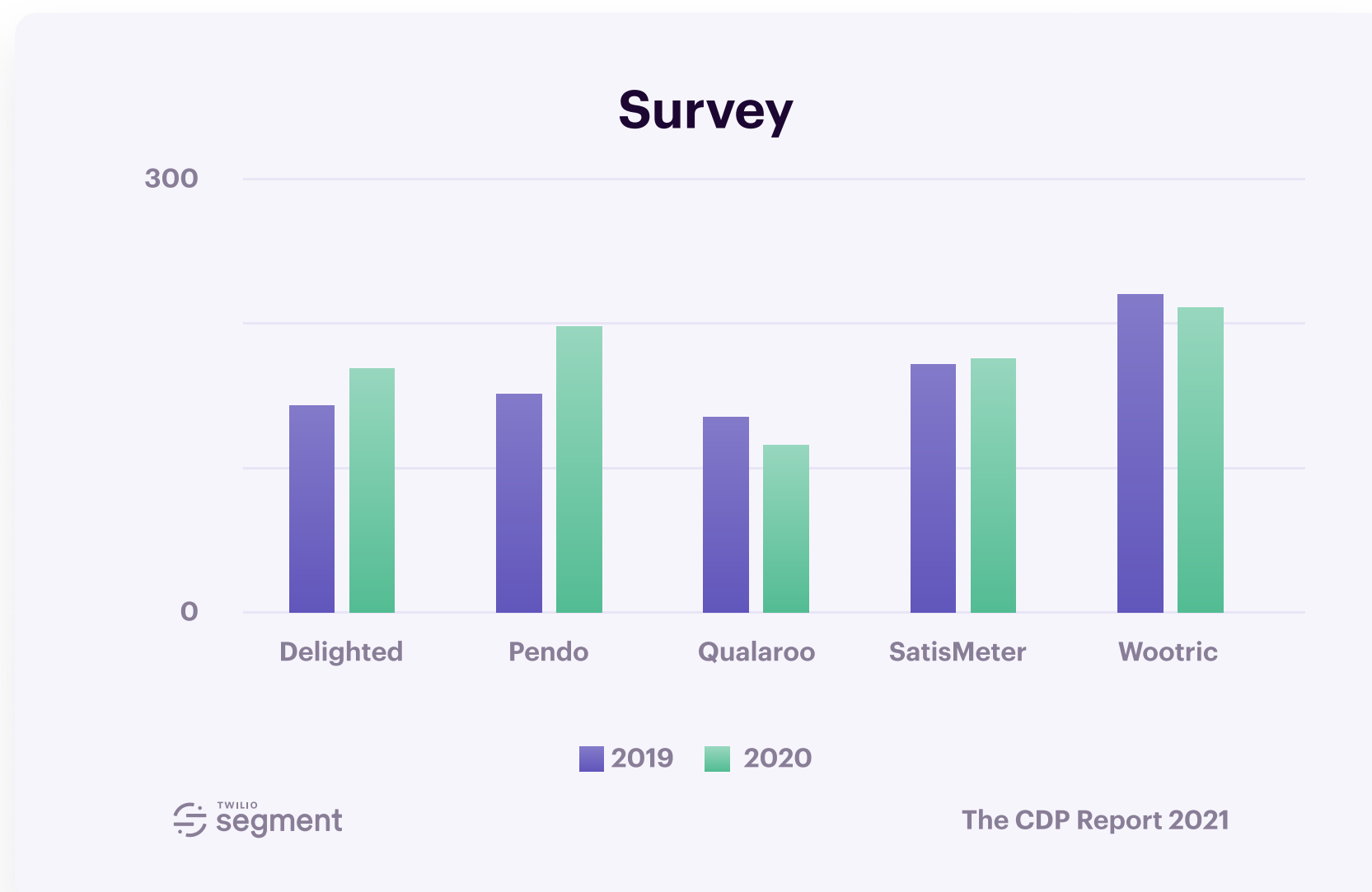
The [personalized SMS/push notification use cases](#) (for which Segment data is most beneficial) are usually implemented through mobile marketing platforms such as Iterable and Braze, rather than directly via Twilio.

Yet behind the scenes Twilio is the “digital supply chain” powering a lot of these specialist vendors. Twilio operates the foundational/infrastructure layer of the stack enabling specialist vendors to be the abstraction layer on top.

To see Twilio's APIs in action, [build an SMS app of your own in 5 minutes or less with one of these app templates.](#) >

## Survey

Customer feedback survey software has seen an overall increase on the Segment platform in the past year. Facing rapidly changing customer habits and preferences, companies can use survey feedback to implement appropriate product changes and retain more customers.



[Pendo](#) saw the largest increase in percentage of Segment users YoY, while Wootric maintains a lead with the most connections in the Survey category.

Use the Segment API to build your ideal tech stack in a fraction of the time. [Get started here > \)](#)



# Expansion and consolidation: What to expect in 2021

Our data tells a compelling story about how companies have used customer data platforms over the past year. But it also allows us to make some informed predictions about what might be around the corner in 2021.

## App expansion and consolidation aren't mutually exclusive

At first reading, two dominant themes in our report – the increased app adoption on the Segment platform and the trend towards consolidation – appear to contradict one another.

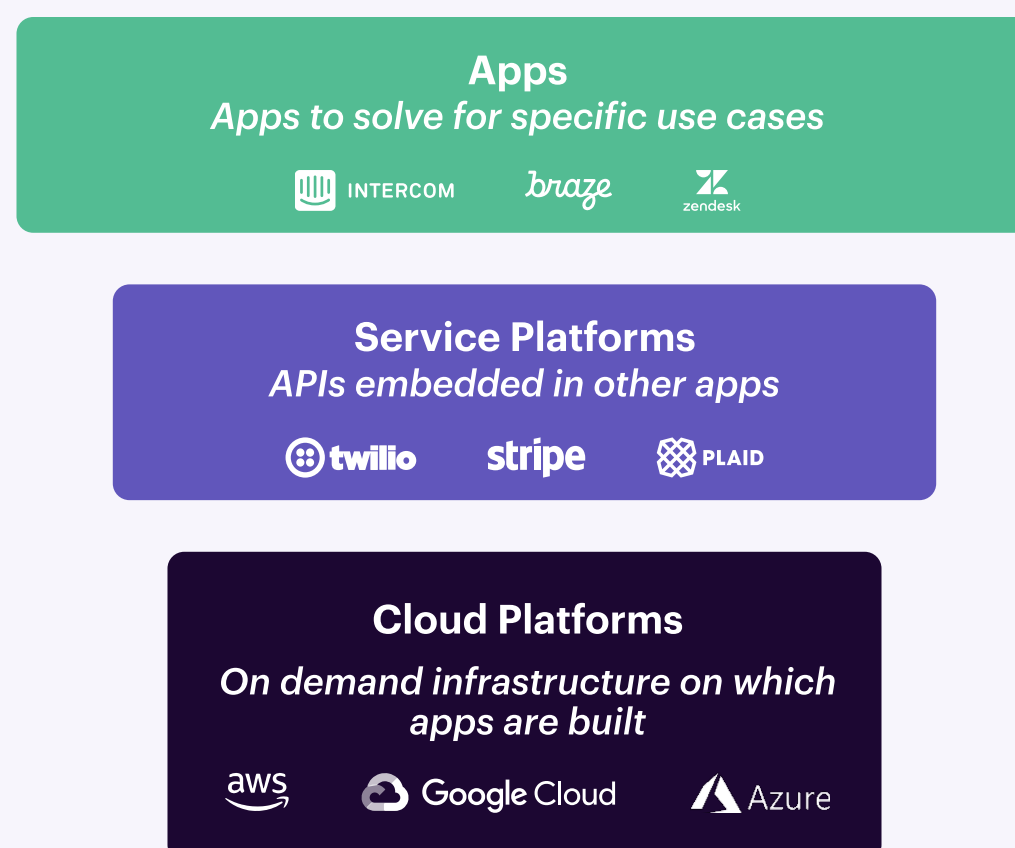
How can marketers and developers be using more and more apps, while simultaneously leveraging consolidated platforms like AWS and Twilio?

There is, in fact, a symbiotic relationship between both of these trends.

Software platforms like AWS and Twilio, by providing the common infrastructure and foundation for apps to be built upon, have reduced the barrier to building software to zero. This has led to a flourishing ecosystem of apps built on top of both platforms, all designed to help businesses solve very specific use cases.

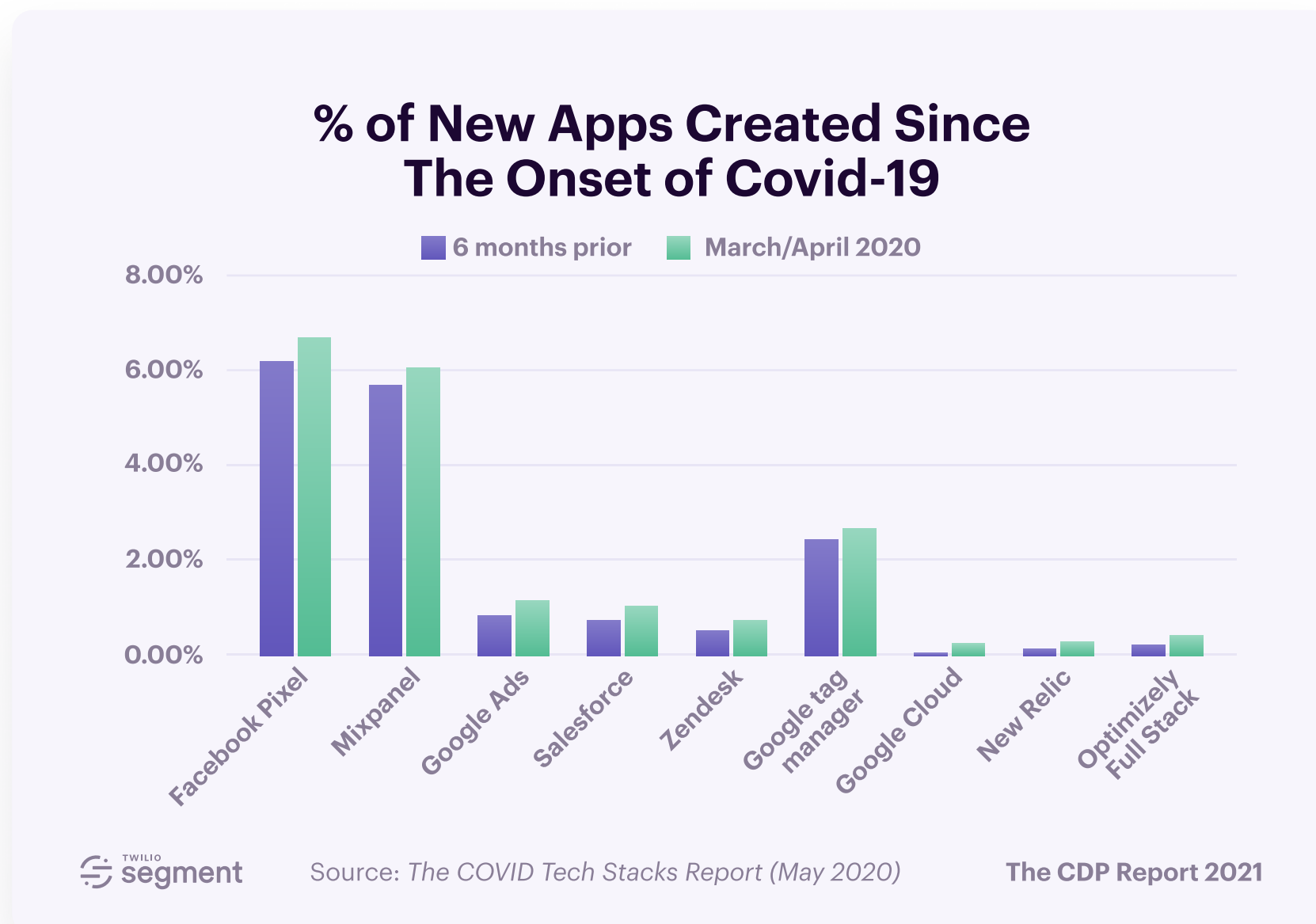
We're witnessing expansion and consolidation simultaneously.

### The Building Blocks of Customer Engagement



## CDPs will play a critical role in the digital advertising story

[Earlier this year](#), we reported that Facebook Pixel and Google Ads were the first and third fastest-growing apps on the Segment catalog, respectively.



We hypothesized that as COVID-19 accelerated the shift to digital advertising, companies would start to go all-in on digital to match consumer behavior.

Fast-forward to the end of 2020, with advertising becoming the second most popular category on the Segment platform, we can see this story has played out.

However, gone are the days where you can rely on Google Ads or Facebook Ads to chase your prospects around the internet. New laws and announcements regarding third party cookies have seen businesses increase their focus on advertising via first-party data sources, which customer data platforms are uniquely positioned to handle (via server-side event-tracking / audience building).

While we expect the boom in digital advertising to continue well into 2021, it will be driven by companies who are looking beyond cookie-based advertising strategies.

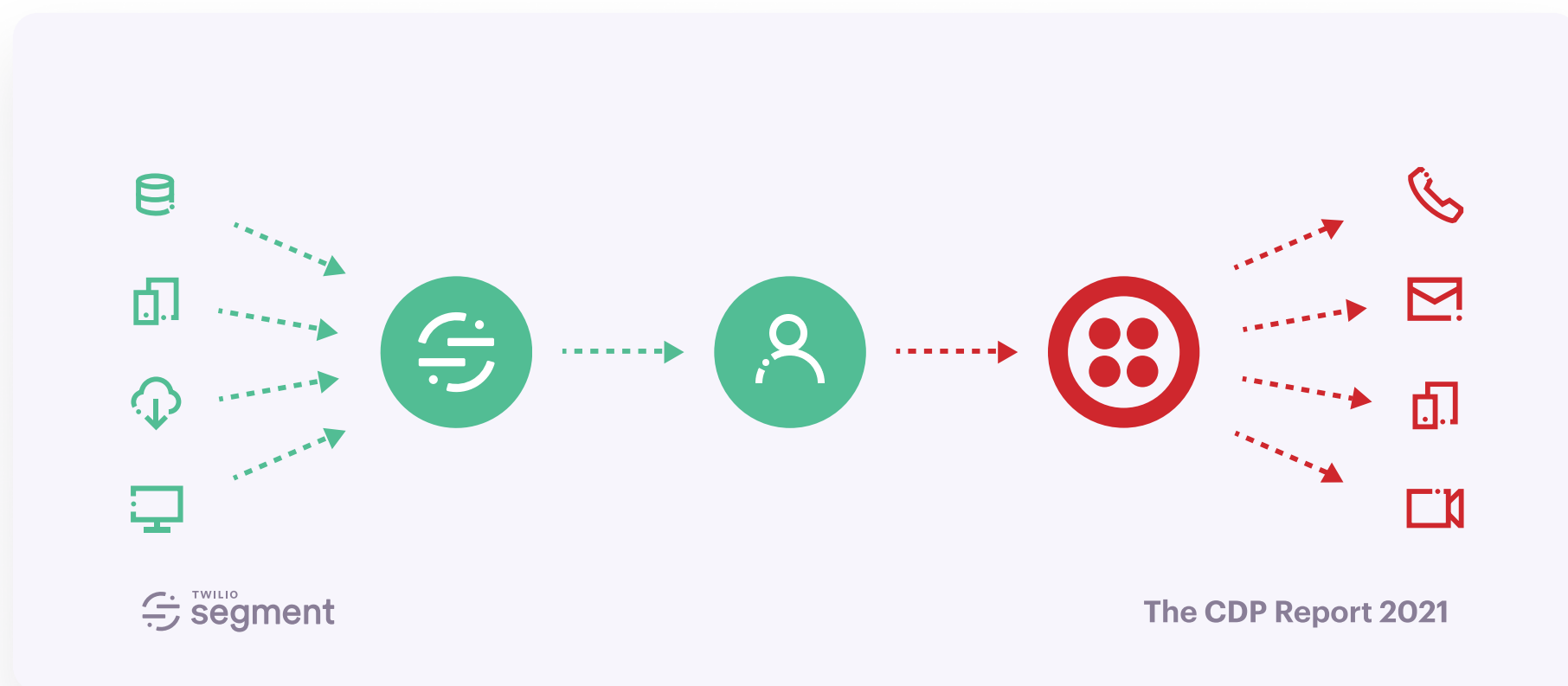
## From customer data platforms to customer experience management

While there have been several “flavors” of CDPs down the years, the most common implementation is as a tool that collects and unifies data from multiple sources, and then pipes that data downstream to one tool or another.

It's meant that collecting customer data and engaging with customers are often approached as two separate problems. In fact, they're **two parts of the same problem**.

You need to collect data to understand your customers, which is what a CDP excels at, and then you need to act on that data and actually engage your customers.

Twilio's acquisition of Segment gives us a glimpse into how these two problems can be tackled at once. Companies can access a central data source to assemble and share unified customer profiles, and activate that data through one of the many channels on the Twilio platform.



We predict that this won't be the last CDP acquisition in the industry over the coming years, as more and more companies seek to bring customer data and journey orchestration under one roof.

More importantly, these acquisitions are a vision writ large – confirmation of customer data platforms as the central nervous system for any modern business.



# Take your customer data to the next level

As the unprecedented explosion of data and digital adoption continues, customer data platforms have become the must-have infrastructure for any serious digital-first business.

Join 20,000+ businesses who are using Segment to power world-class customer experiences.

Get in touch at  
[segment.com/demo](https://segment.com/demo)

## Additional reporting

### The COVID Tech Stacks Report

An inside look at how tech stacks have evolved since the onset of COVID-19.

 [Read now](#) >

### 2030, Today

We surveyed 4,000+ decision-makers to get their predictions for the customer data industry.

 [Read now](#) >