Data to Dollars:
How 3 Companies
Saved Millions
with AI

TWILIO
Segment

Contents

Introduction

Unless you've been living on a remote island for the past 12 months, you've likely heard about the exceptional advancements and everyday uses of Artificial Intelligence (AI).

Rapid advancements in machine learning techniques, coupled with increased computational power, have led to significant breakthroughs and novel applications, from DALL-E 2 to ChatGPT.

But with so much focus on the potential output of AI, it's easy to lose sight of what it takes to get the desired results. According to analysts like Gartner, it's estimated that anywhere from 70-85% of AI projects fail to deliver the desired ROI to a business.

In most cases, the problem lies not with the AI models themselves, but the fact that many organizations expect AI to be an overnight success story, delivering cost savings right out of the box.

But AI isn't a magic money tree. Like any new technology, it takes upfront investment to ensure value is realized.

What follows is three stories of companies who have invested slowly and methodically in infrastructure to help them utilize AI effectively, and are getting real returns from AI as a result.

All have learned along their journey that AI is fundamentally data-centric; you need good quality data sets in order to train AI to do its job the way you want it to.

Without this investment, any AI project is at risk of failure when the lack of high quality, first-party data leaves the model without a solid foundation to properly learn.

Read on to find out how they did it.
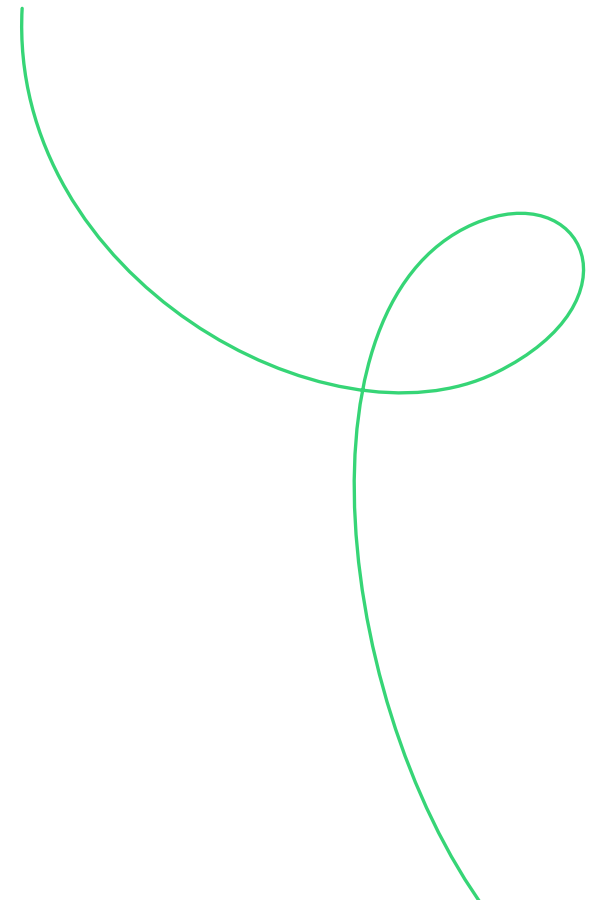
The Two Key Elements of an AI Strategy
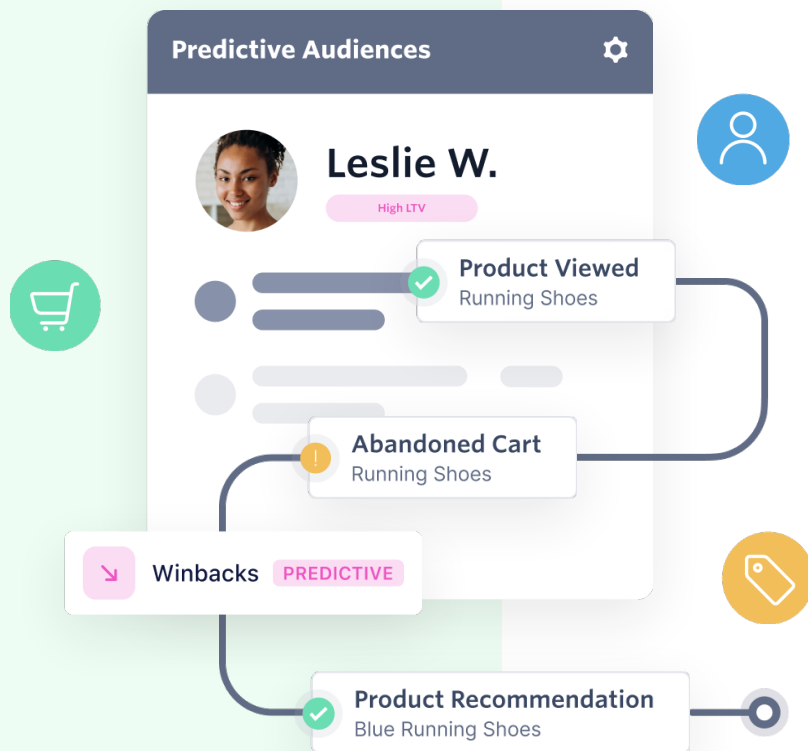
1. Predictive Audiences

The businesses leading the way in customer engagement seem to have a preternatural sense around users' needs, preferences, and behavior.

This kind of business acumen and "intuition" isn't the product of some sixth sense. It's a strategic combination of data, machine learning, and artificial intelligence that fuels predictive analytics.

Predictive modeling is by no means new, but it's certainly gotten more advanced in recent years in regards to specificity, scale, and speed.

From advancements in AI to the exponential rise in data being generated, businesses now have the ability to unlock incredibly nuanced customer insights in a fraction of the time it once took. This is where AI-powered tools and software are democratizing the playing field, giving both large-scale enterprises and up-and-coming startups the foresight to anticipate what customers will do next and the adaptability to tailor their strategy accordingly. Case in point: Twilio Segment's latest feature, Predictive Audiences.

Predictive Audiences empowers businesses to target users with an increased likelihood of performing an event. In short, it helps businesses move from a reactionary approach to a proactive customer engagement strategy.

Segment offers five out-of-the-box audience templates pre-built with Predictions, like "ready to buy" or "potential VIPs," making it even simpler (and faster) to get up and running. You can also build custom Predictions to create bespoke audiences using any event you track in Segment.

For example, you can create a Predictive Audience targeting users who are most likely to make a referral.

Predictive Audiences also operate completely on your own customer data. This is crucial for two reasons. First, the insights are unique to your business. Second, you can rest assured that the data fueling these predictive models meets your internal standards for accuracy, cleanliness, and compliance.

AUDIENCE	TARGET	BUILT WITH
Ready to buy	Customers who are likely to make a purchase	Likelihood to buy Order completed
Long shots	Customers who have previously interacted with your brand but aren't currently engaged	Order Completed Likelihood to purchase
High LTV	Customers with a high predicted lifetime value	Predicted LTV
Potential VIPs	Recently active customers with high predicted lifetime value and high propensity to purchase	Page Viewed Likelihood to Purchase Predicted LTV
Dormant	Inactive customers who are unlikely to purchase	Page Viewed Likelihood to Purchase Predicted LTV

The above table shows the five available audience templates ready for use in Twilio Engage, and what events & traits were used to create that audience.

In fact, you have full transparency into how the prediction was calculated – from the top events that contributed to this model to the confidence in its accuracy (based on metrics like AUC, lift quality, and log loss).

But to further tap into the potential of predictive intelligence, businesses need to pair it with fast action – which is where generative AI comes in.

With Twilio Engage, businesses have been able to orchestrate multi-step customer journeys spanning multiple channels. Now, teams can go a step further with Generative Journeys, a new feature that automates campaign creation.
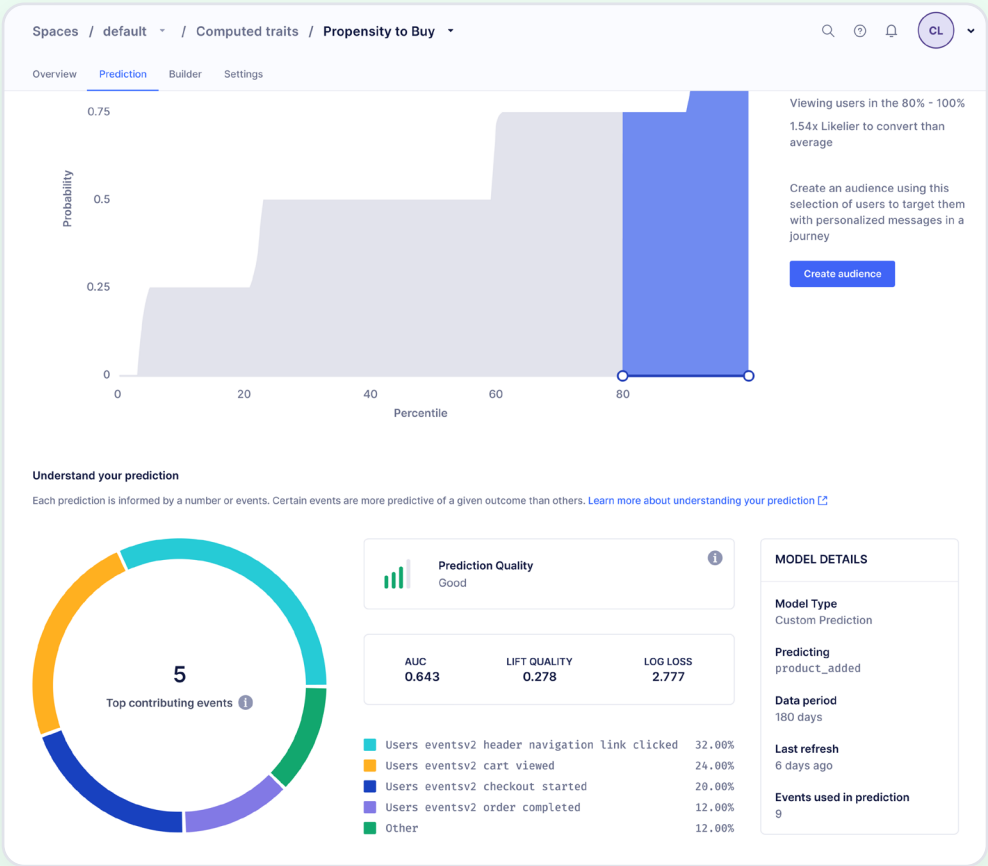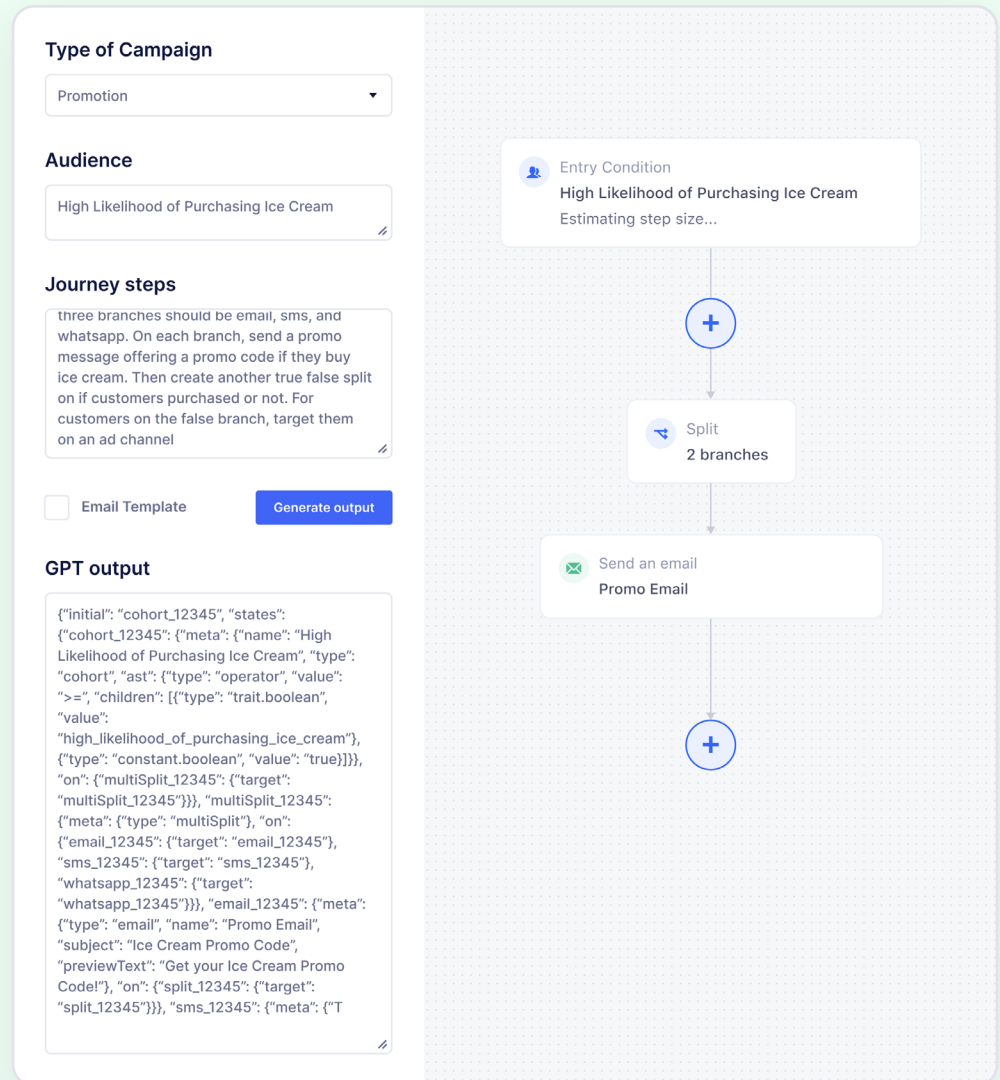
Let's use the example of an ice cream chain hoping to encourage people to visit their stores and make a purchase. They decide to launch a promo campaign specifically targeting customers most inclined to buy.

First, they select the Predictive Audience created for users with a high likelihood of making a purchase. Then, they write out the different steps for their campaign (e.g., send a promo message to customers' email, SMS, or WhatsApp depending on the channel they prefer. If a user doesn't click the promo offer, include them in a retargeting campaign).

From there, generative AI will start building out the campaign, producing the various different steps and conditions in a matter of minutes.

These campaigns can also pull in specific traits from users' profiles, providing even more customization. Keeping with the example above, this could be anything from the person's favorite ice cream flavor to the nearest store location – details that are dynamically added to each promotional message.

Type of Campaign

Promotion ▾

Audience

High Likelihood of Purchasing Ice Cream

Journey steps

three branches should be email, sms, and whatsapp. On each branch, send a promo message offering a promo code if they buy ice cream. Then create another true false split on if customers purchased or not. For customers on the false branch, target them on an ad channel

☐ Email Template   **Generate output**

GPT output

{"initial": "cohort_12345", "states": {"cohort_12345": {"meta": {"name": "High Likelihood of Purchasing Ice Cream", "type": "cohort", "ast": {"type": "operator", "value": ">=", "children": [{"type": "trait.boolean", "value": "high_likelihood_of_purchasing_ice_cream"}, {"type": "constant.boolean", "value": "true"}]}}, "on": {"multiSplit_12345": {"target": "multiSplit_12345"}}}, "multiSplit_12345": {"meta": {"type": "multiSplit"}, "on": {"email_12345": {"target": "email_12345"}, "sms_12345": {"target": "sms_12345"}, "whatsapp_12345": {"target": "whatsapp_12345"}}}, "email_12345": {"meta": {"type": "email", "name": "Promo Email", "subject": "Ice Cream Promo Code", "previewText": "Get your Ice Cream Promo Code!"}, "on": {"split_12345": {"target": "split_12345"}}}, "sms_12345": {"meta": {"T

Entry Condition
High Likelihood of Purchasing Ice Cream
Estimating step size...

Split
2 branches

Send an email
Promo Email

Delivering this kind of one-to-one personalization at scale previously felt impossible. But with this combination of predictive intelligence and generative AI, businesses are advancing by leaps and bounds when it comes to launching intricate, multi-channel marketing campaigns.

Now, let's take a deeper look at the data that's not only powering AI, but responsible for its accuracy: the unified customer profile.

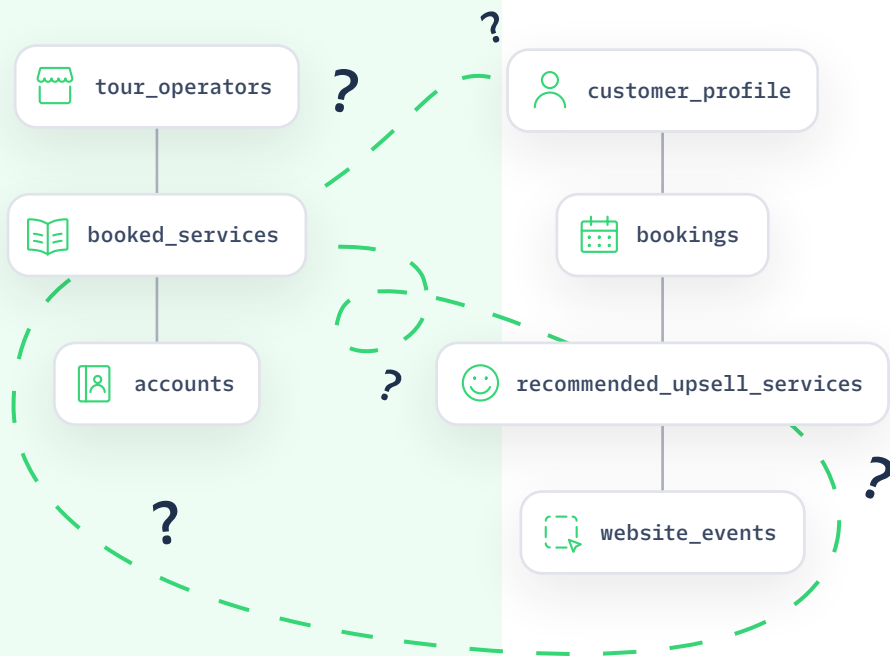Hey {{ profile.traits.first_name }}, looking for a way to beat the heat? 😅

Head on down to our {{profile.traits.default_store}} store now and enjoy a {{profile.traits.favorite_flavor}} scoop today!

$3.00 off any ice cream
Use code SUMMER at checkout

2. Unified Customer Profiles


```
tour_operators          ?              customer_profile
       |            ?                          |
booked_services                             bookings
       |                   ?                    |
    accounts         recommended_upsell_services
                 ?                              |
                                          website_events
                            ?
```

The above illustration shows just how disconnected JetSet's data flows were.

As we've learned so far, AI requires large amounts of data for accurate predictions and learning. But when your customer data is locked in data warehouses or data silos, it's impossible for AI models to make those predictions.

Without access to all the customers' different touchpoints, it's very hard to understand how customers relate to their accounts, organization, households, and more.

To solve this, Twilio Segment recently introduced Unify, a warehouse-first solution that allows you to enrich your AI models with any and every customer event, regardless of where it's stored.

To illustrate, let's use the story of JetSet, a travel company who provides once-in-a-lifetime vacation experiences.

JetSet has two arms:

- B2C allows customers to book travel and experiences
  – Rely on bookings, recommended upsell services, and website events
- B2B serves local tour operators running these excursions
  – Rely on operator accounts info and book services.

While both arms collect a significant amount of customer data, ensuring that data was accessible and actionable for both respective business units was a largely unsolved challenge.

That is, until they adopted Unify.

With just a few lines of configuration to connect all their ready-to-use data in the warehouse to Twilio Segment, JetSet's data team could relate the bookings made in the B2B arm, with AI-based recommendations for the B2C arm.

Once these unified customer profiles were created, teams across the JetStream business could use this record to elevate everyday customer experiences.

Engineering and data teams can use these portable, easy-to-use data sets that help companies build AI and ML models and solve some of the most complex customer engagement use cases for their organization. Customer support teams can query customer data in real time and make informed in-conversation recommendations. Marketing teams can deliver personalized customer experiences that increase loyalty and retention.

Now that you're familiar with the fundamentals of AI data strategy (predictive and unified) let's look at three companies who are putting it into practice.
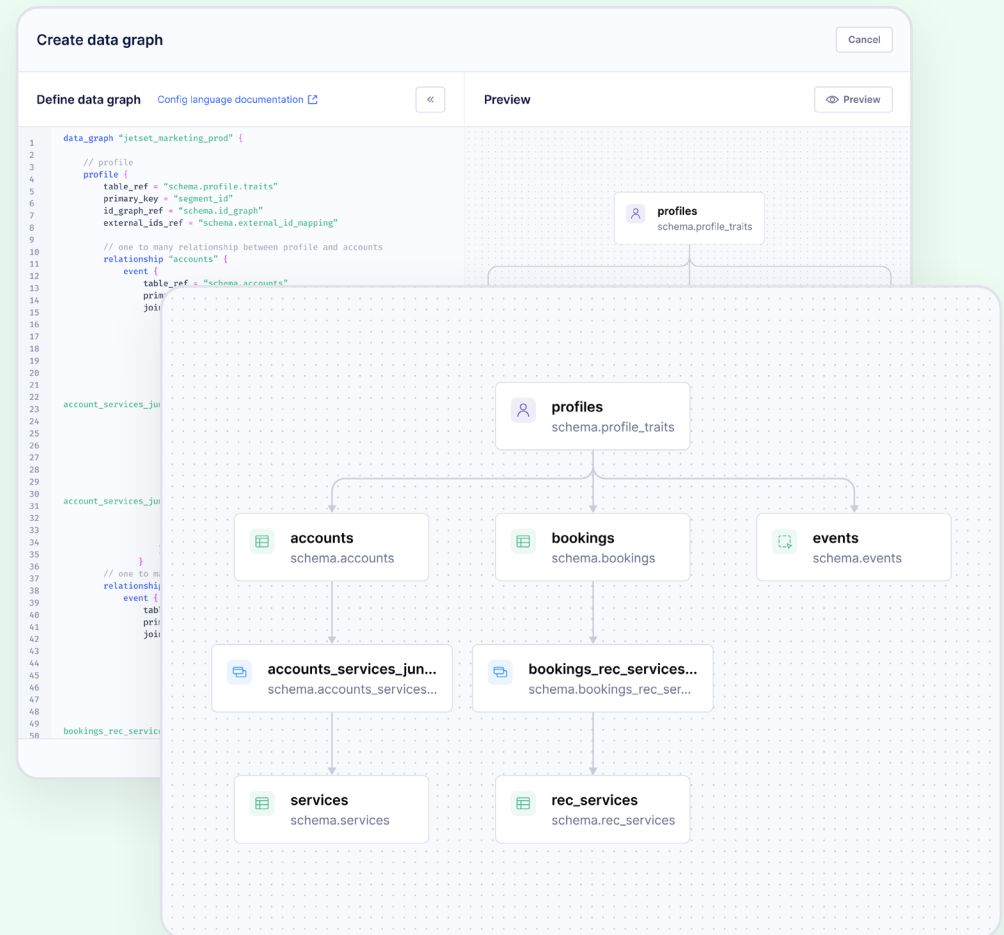
How Autodesk AI Lab Unlocks a New Era of Personalization Using Twilio Segment CDP

AUTODESK

Most companies have no shortage of customer data; the challenge lies in consolidating this data effectively for actionable, personalized insights. In the construction industry, data silos lead to wasted time, resources, and budget – a reality as visible as the overflowing waste in a construction site dumpster.

That's where Autodesk, a global leader in design and engineering software comes in. The company saw firsthand how breakdowns in communication can lead to upwards of 20% of wasted project spend, exacerbating the already low-margin, high-risk nature of the construction business. They resolved to build a collaboration platform where customers can be on the same page at every stage, connecting them to their project data from design to done, ultimately reducing risks, protecting profits, and increasing predictability.

The ultimate goal? Turn the construction industry into a high-margin, low-risk industry through the power of their cloud-based software.

But like many large-scale companies, Autodesk had a data problem. With a variety of silos across their many business units, it wasn't just a question of not having enough data. It was that their current approach to using it was resulting in a lack of personalization, such as mismatched marketing messages, a lack of coherent customer journeys, and in their own words, "one giant bucket called prospects and customers".

Autodesk recognized that, in order to really serve the diverse needs of the construction industry, they needed a thorough understanding of customer requirements and preferences. More importantly, they identified the need for a platform that could not just consolidate this data, but also leverage it for informed decision-making and personalized customer experiences.

The company began using Twilio Segment's CDP to do just that, with incredible results. Connecting their various sources (such as product licensing, subscription servers, and first-party warehouses) to one centralized place allows the system to feed user data into Twilio Engage and really inform the team about who their customers are and what they need, right now.

And this is where the magic really happens. Now that they've streamlined their data collection from various touchpoints, Autodesk is able to fuel its AI models for extremely personalized customer engagement.

12 months

from a transactional customer journey to pioneering an audience-first culture

Autodesk's path to customer data maturity was complete in under 12 months

They can now utilize predictive modeling for tailored content and customize the website based on each visitor's attributes and behavior. For example, Autodesk can predict what a contractor might need next, whether it's a new software solution for 3D modeling or a specific toolset for construction management. This level of personalization is only possible with a reliable real-time data platform such as Twilio Segment's CDP.

By integrating Twilio Segment CDP into its platform, Autodesk has not only broken down its data silos, but team and organizational silos in the process. This strategic move toward real-time data consolidation and AI-powered personalization is setting a new standard, which in time will continue to transform the construction industry from the inside out.

Hear more about Autodesk's story in this SIGNAL session.

"We use Twilio Segment to help define audiences for personalization at scale. And part of that scale is leveraging AI for the diversification and expansion of our testing programs. As an example, utilizing and leveraging AI to suggest content or segments, imagery, etc. It's incredibly powerful to be able to use AI-based predictive behaviors instead of going through layers of content writing and image and design approvals. Using AI for that purpose is one of the biggest opportunities in our industry."

Justin Diaz
Growth Marketing Manager, Autodesk

The ROI of AI: How Cisco Uses Segment CDP To Power Product-Led Growth

CISCO

Cisco was originally established as a supplier of networking gear known for switches, routers, and firewall security systems, but the company has undergone an evolution and now specializes in cloud-native, API-first solutions for both applications and infrastructure. You can see this transformation clearly in their strong focus on Product-Led Growth (PLG).

The company introduced "Outshift by Cisco," a tech incubation engine designed to fuel innovations in emerging technologies, as well as develop strategies for more effective customer engagement.

Data & AI-powered go-to-market strategies

Segment played a pivotal role in Outshift by Cisco's PLG execution, catapulting them to the forefront of the digital revolution. The CDP provided Cisco with invaluable visibility into their customer data, and guided them through every stage of the funnel, from cultivating marketing brand awareness and onboarding customers to nurturing and retaining loyal accounts.

Alan Zhang, Ph.D, the Head of Growth Analytics & Marketing Operations at Cisco, shared how he decided to combine the data science and marketing operations teams. Bringing both teams under one roof enhances operational efficiency and establishes the groundwork for seamless data collection and real-time user interaction monitoring.

This allows the marketing operations team to quickly capitalize on the powerful insights, a crucial skill in the fast-moving world of AI and predictive models. By leveraging Segment's vast capabilities, the team built a unified data pipeline that unleashed the power of PLG, propelling Cisco into new product categories.

"I believe product-led growth works because of the funnel, and the funnel works because of Segment. Segment is the way my team can make the right data available to all our internal customers, marketing, sales, product, and engineering, and those customers use that data to power our PLG engine."

Alan Zhang, Ph.D.
Head of Growth Analytics & Marketing Operations, Cisco
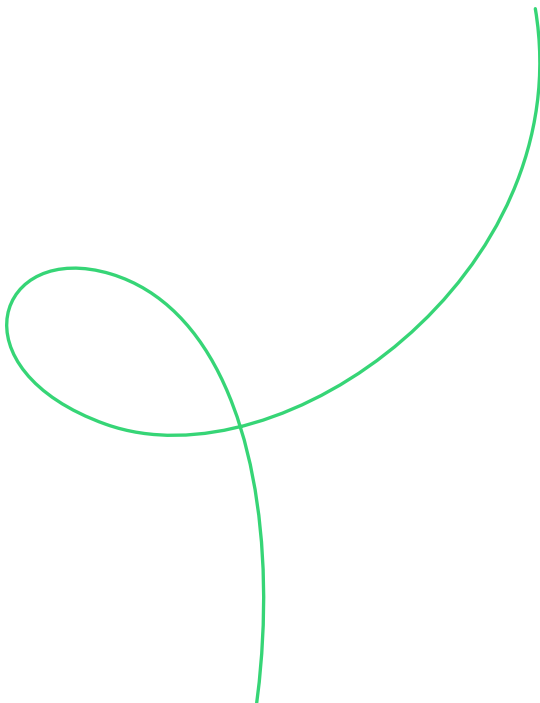
Addressing the leaky customer funnel: Cisco's data-driven solution

For Cisco, the success of product-led growth hinges on a grasp of the customer funnel and understanding the transitions between its various stages. Alan's team maintains a clear focus on this funnel, observing how customers navigate it, devising ways to monitor their progression, and ensuring that other teams receive actionable data to prevent customer drop-offs.

Alan likens a leaky funnel to "a universe without Segment." In this universe, critical insights remain hidden. There's uncertainty regarding visitor identities, their origins, be it through paid or organic channels, the specific pages they engage with, their interactions such as button clicks or CTA engagements, their onboarding progress, and the extent of their journey if they've signed up. Without knowing these important actions, it's hard to steer customers in the right direction.

A universe without Segment

What is their behavior?
- ✅ What page were they on?
- ✅ What buttons did they click?
- ✅ What assets have they downloaded?

Who visited?

Where did they come from?

Are they already a customer?

What Channels did they use?
- ✅ Social post?
- ✅ Display ad?
- ✅ Influencer campaign?
- ✅ Lead magnet?

Paid or Organic?

How far have they onboarded?

Enhancing sign-up flow: A/B testing boosts email validation by 20%

Despite the best-laid plans, sometimes website users will surprise you. That's what happened at Cisco. The UX team had invested significant effort into designing an aesthetically pleasing thank you page, complete with a progress tracker, status confirmation, and an overview of all the steps. However, insights from an Amplitude report, fueled by behavioral data collected through Segment, revealed a substantial drop-off within the sign-up funnel due to user confusion and information overload.

To solve this problem, the team embarked on a journey of user research and customer interactions. This led them to simplify the thank you page to a single request for email validation. A/B testing revealed a 20% increase in email validation rates with the simpler design, a solution driven by key funnel insights provided by Segment data.

Sign up flow leakage

Sign-up flow before implementing Segment customer data insights

Sign up flow leakage... Fixed!

20%

increase in email validation

Sign-up flow after implementing Segment customer data insights

Revolutionizing efficiency: 90% reduction in data pull and reporting time

In late 2022, Cisco adopted customer engagement solution Twilio Engage to craft their first ever behavior-driven email nurture campaigns, enhancing user onboarding and product experiences. This provided Cisco with a way to unlock the rapid definition of audience cohorts. "Because Segment collects user behavior from within our own products, it's possible for us to create this audience based on the actions users are taking moment to moment," said Dr. Zhang.

By integrating Segment with Snowflake – Cisco's data warehouse – the team was able to reduce data retrieval and reporting time by 90% and elevate data accuracy. Furthermore, with the incorporation of HubSpot for CRM integration and Clearbit for profile enrichment, their sales team can harness enhanced prospect insights, accelerating the pace of deal closures.

Segment also empowers Cisco to build audiences based on real-time touchpoints and user interactions, allowing for the delivery of precisely timed, targeted marketing messages to the right audience. The results speak for themselves, with Cisco boasting a **40% email open rate** that doubles the industry standard and an **11% click-through rate**, 1.5 times higher than the industry average. Dr. Zhang added, "Once Segment is configured, it automatically channels new cohorts into our CRM daily for behavior nurturing." This streamlined process guarantees that Cisco can continually enhance user onboarding with minimal maintenance efforts.

40%
Email Open Rate
Software/IT industry average 20%

11%
Click-through Rate
Software/IT industry average 7.2%

2x
Kubernetes Clusters Connected

Elevating user onboarding and lead scoring with Reverse ETL

Cisco implemented Segment's Reverse ETL to seamlessly transfer data from their data warehouse to various downstream destinations. This enabled the team to transmit tailored attributes of free-trial users from Snowflake to HubSpot, unlocking the potential for more sophisticated marketing campaigns and enhanced sales engagement.

The advantages gained from this interconnected system can be seen in their improved sign-up process as detailed above. But Segment also proved to be invaluable for lead scoring. With so many customer traits, Cisco grappled with the challenge of understanding and harnessing their available data. With Reverse ETL, Cisco seamlessly extracts data from their warehouse, leading to precise lead scoring and actionable prioritization.

Reverse ETL: data flows from Cisco Snowflake warehouse through Segment to downstream apps

What lies ahead: Cisco's path to the future

Always on the leading edge of technology, Cisco is developing an AI model geared towards forecasting users' propensity and readiness to upgrade to a paid version of their products. The model is being trained on product analytics data collected through Segment. Cisco's forward-thinking strategy involves employing Reverse ETL to seamlessly integrate this predictive score into their CRM, driving downstream initiatives like targeted nurturing and refined sales engagement. This is just one exciting example of AI-driven marketing in action, powered by the capabilities of Segment.

Hear more about Cisco's story in this SIGNAL session.

Predictive Personalization: How TechStyle Uses Customer Data In The Age of AI

TechStyle

Connecting the right customer with the right product is the lifeblood of any ecommerce brand. But increasingly, the ability to predict a customer's needs, and provide proactive recommendations based on this understanding, is reshaping how businesses interact with their customers.

Look no further than TechStyle Fashion Group. To feed the appetites of the millions of customers of their disruptive fashion brands – Fabletics, JustFab, Shoedazzle, Yitty, and FabKids – they need to know their customers inside and out, and predict which products are right for each one.

To accomplish this, they needed three critical ingredients:

1. A significant amount of first-party data, collected from across different properties (mobile, web, etc).
2. A system that could validate that data for accuracy, and unify those data-points into customer profiles.
3. A reliable, real-time platform that could feed its AI and machine learning models to drive accurate, product predictions.

Due to their strong product & engineering DNA, TechStyle had originally planned to build these capabilities entirely in-house. Instead, they landed on a hybrid "built & bought" data platform.

Combining proprietary in-house features, and the out-of-the-box data infrastructure offered by Segment Customer Data Platform, TechStyle were able to offer truly differentiated customer experiences.

This was particularly important as TechStyle began to add more brands to their product portfolio.

Segment's suite of products and features, such as Protocols and Violation Reports, helped maintain data consistency and quality across their multiple websites, leading and improved data-driven decision-making.

Better yet, having access to this single source of high-quality, first-party data meant that data from one website be used to inform a product recommendation with another brand in the TechStyle portfolio, leading to greater cross-sell conversions.

Finally, Segment CDP, in combination with their homegrown AI and ML models, has helped TechStyle bridge the gap between data generation and actionable insights. For the past 15 years, the volume of data generated by customers has far eclipsed the amount of data analysis that was possible (a combination of time and cost constraints)

Central services team

FABLETICS

JUSTFAB

shoedazzle

FABKIDS

yitty
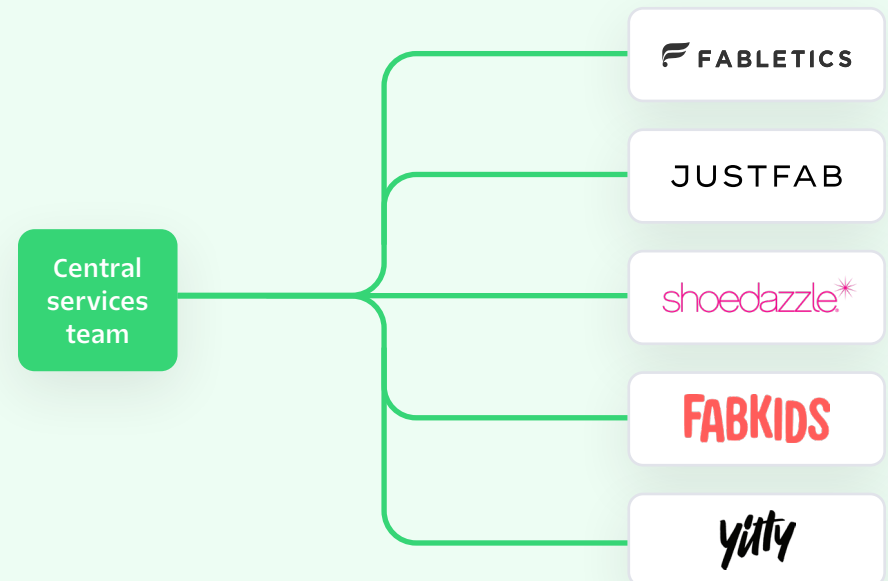
+13%

Product Recommendations Improved
Order Conversion Rate

The rise of AI, and the host of tools that have emerged alongside it, have narrowed that gap. Data processing, validation, and aggregation can be largely automated, meaning more time can be spent on valuable analysis, a win-win for both customer and business alike.

Hear more about TechStyle's story in this SIGNAL session.
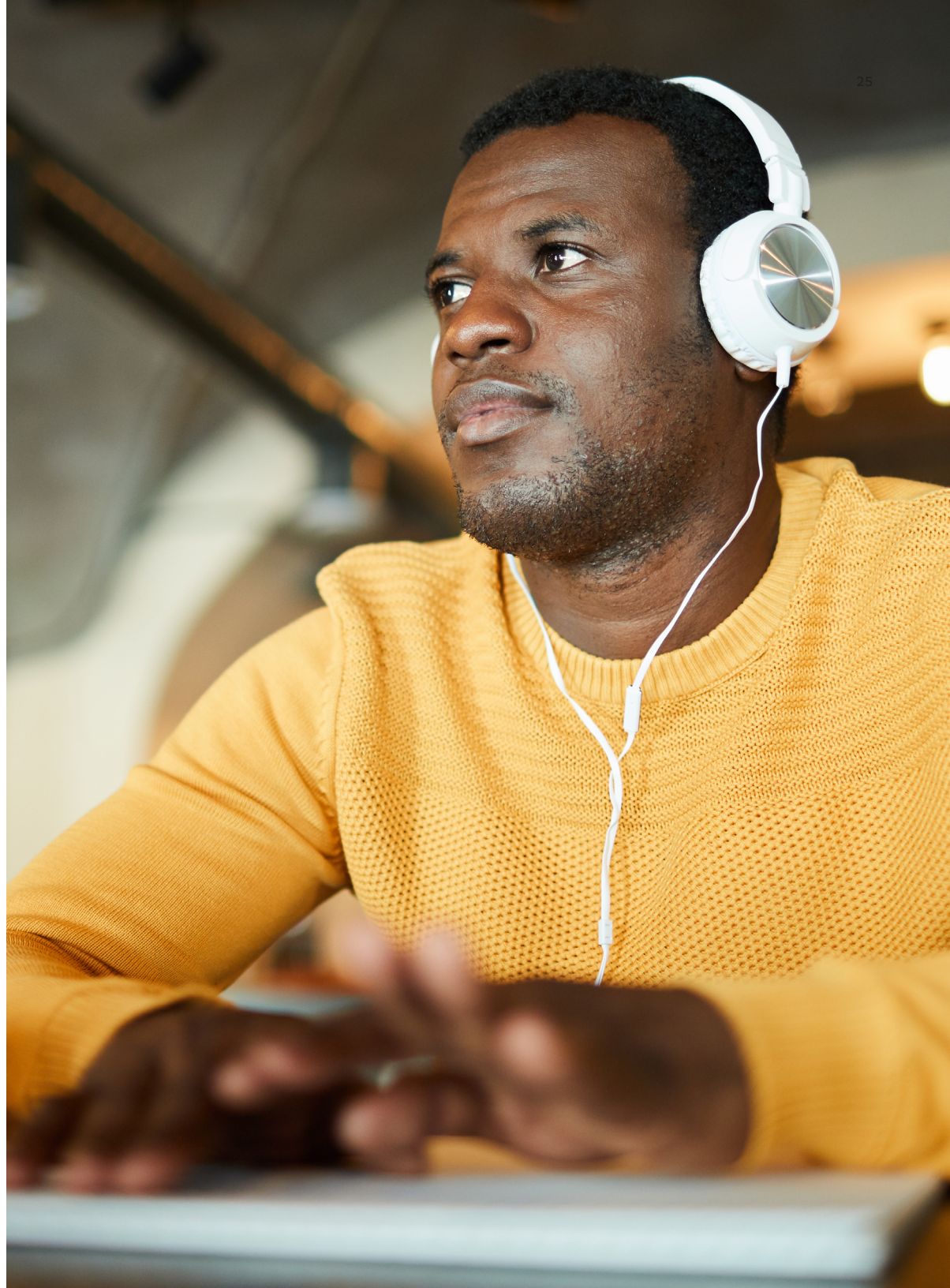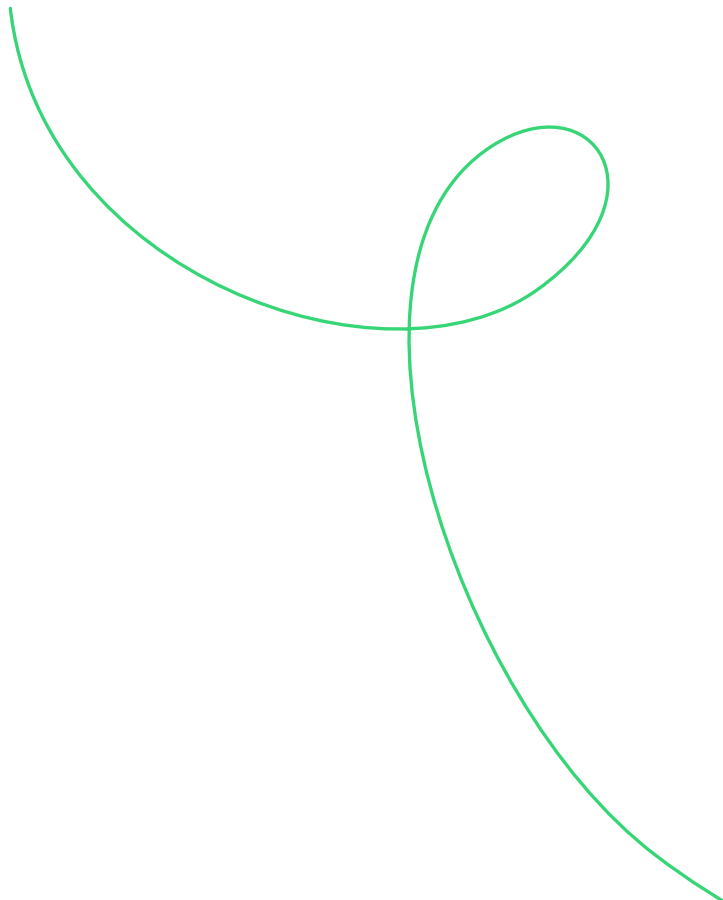
Conclusion
Turning Data into AI-Driven Success
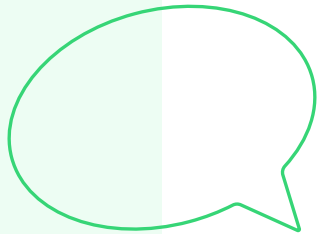
The transformative power of AI is no longer a concept confined to speculative articles or future-gazing conferences. It's an evolving reality that is redefining how businesses operate, engage with customers, and drive value.

The journeys of Autodesk, Cisco, and TechStyle reveal a shared blueprint for success in this realm – an unwavering commitment to understanding customer data and harnessing its potential through AI.

Yet, despite their varied industries and unique challenges, these companies converge on one salient point: the adoption of a Customer Data Platform. Twilio Segment serves as the foundation upon which their AI strategies were built, ensuring that high-quality, real-time data is always at the ready.

"Data to Dollars" isn't just a catchphrase – it's a testament to the paradigm shift in today's business world.

As these three leading companies have demonstrated, when data is coupled with AI and supported by the right infrastructure, it becomes an unparalleled force multiplier, transforming challenges into opportunities and aspirations into tangible ROI.

About Twilio Segment

Twilio Segment is the leading CDP with more than 450 pre-built integrations to different data sources and destinations. It provides a complete solution that eliminates the need for manual data cleansing, complex data engineering processes, and analytics reporting functions.

By automating all of the backend customer data operations, Twilio Segment puts companies in a position to get the most out of their first-party data and retain customers at a higher rate.

As consumer sentiment, industry trends, and regulatory enforcement push companies away from depending on third-party data, the need for an alternative source of customer data cannot be understated. First-party data is the solution, bringing a competitive advantage as it fills the gaps where third-party data falls short: accuracy, relevance, and building customer trust.

Schedule a demo to learn how to get the most out of your customer data with Twilio Segment.

Recommended reading

Personalization in the Age of AI: How 4 Brands are Shaping the Future

See how top businesses harness the power of AI-driven personalization and leverage real-time customer data to fuel growth.

Read the guide >

7 Ways to Use AI to Supercharge Your Marketing Strategy

From automating manual tasks to optimizing ad campaigns, here's how marketers can use AI to work smarter, not harder.

Download the guide >

How to Collect, Unify, and Activate Customer Data to Drive your AI Strategy

Learn how to lay the groundwork for a successful AI strategy that unlocks a holistic customer view and helps deliver powerful personalized experiences.

Watch the webinar >

Thanks for reading

If you would like to learn more about what Twilio can do for your business,
please contact the Segment sales team.