



Twilio Cookbook: Improve Product Notifications and Communications with AI

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Introduction

Just like a skilled chef who carefully selects the finest ingredients to craft a masterpiece, as a product manager, you hold the power to create meaningful and innovative products that solve real-world problems. Your role as a chef in the kitchen of product development is to bridge the gap between technical teams and end-users, ensuring every element of the product contributes to an exceptional customer experience. Every notification and message is a key ingredient that can either elevate or diminish the overall flavor of your product's journey, and ensuring you deliver high quality communications is a key contributor to this.

In this ebook, we will explore how Twilio's unique set of messaging tools, combined with the magic of artificial intelligence, empowers you, the chef, to deliver quality experiences - by ensuring high deliverability, preventing fraud that diminishes your customer experience and harvesting valuable data that will guide your decision-making process. So, put on your chef's hat and let's embark on a culinary adventure of baking delightfully data-driven customer experiences.

Crafting delectable product experiences with AI-driven messaging insights

In the culinary world of product management, the quest for excellence lies in the pursuit of exceptional quality. Just like the meticulous art of baking, we delve into the nuances of crafting tantalizing communications that leave a lasting taste on your audience's palate. In this cookbook, we highlight the way you can use Twilio's built-in artificial intelligence to improve the overarching quality of your messaging.

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Chapter 1:

Increase deliverability of critical messages

As the master chef in the realm of product management, you understand that the key to creating a mouthwatering experience lies in the seamless delivery of critical messages. Creating high-quality messaging means that ensuring your messages reach your customer when you want them to, and your messaging provider's deliverability is a key ingredient in this. Just like a skilled baker skillfully prepares a delicate macaron, Twilio empowers you with a range of AI-powered features that ensure your messages reach their recipients with the utmost precision.

Picture Twilio's patented, real-time routing algorithms as the precise measurements of a recipe – the tool automatically detects even the slightest hints of latency or outages by monitoring over 900 million data points. Just as a watchful chef keeps an eye on the oven, these algorithms rebalance around any issues every 75 seconds, guaranteeing that your messages are delivered at the perfect moment. Twilio's Traffic Optimization Engine includes routing and throughput capabilities that work on your behalf across use cases,

senders, geographies, and network capacity to ensure high deliverability.

In addition, the Super Network, like a well-organized kitchen brigade, provides the human touch, technological prowess, and follow-the-sun support, ensuring your messages reach customers across the globe flawlessly. With 24/7 monitoring, an extensive global network of carrier connections, and end-to-end testing, akin to a chef's meticulous taste-testing, the Twilio Super Network cleverly circumvents SMS deliverability issues. It detects and resolves a staggering 99% of incidents, proactively routing your messages around problems, and, like a trusty kitchen timer, triggers alerts within 15 minutes of detecting an issue. This ensures that we are able to catch 95% of incidents before the carriers, ensuring the smoothest delivery of your critical messages. With these culinary-grade AI features at your disposal, your product management kitchen will produce delectable messages that leave your audience craving for more.



*3% increase in message deliverability with Twilio Messaging us, other providers, which resulted in \$1.4 million in net margin benefits.**

*Source: The Total Economic Impact™ of Twilio Messaging, a commissioned study conducted by Forrester Consulting on behalf of Twilio, April 2023. Results are for a composite organization representative of interviewed customers.



What does it look like when a chef gets deliverability right?

NatWest's deliverability rises by 2% with Twilio's flawless recipe

In the bustling kitchen of modern banking, NatWest Group knew delivering impeccable customer interactions was the secret recipe to success. Like a master chef orchestrating flavors, NatWest sought to redefine customer interactions, craving immediate connection and adaptability. To achieve this, NatWest turned to Twilio, their trusted AI-powered sous chef, infusing their digital banking with hyper-personalized communications.

Twilio's Programmable Messaging API provided high deliverability rates, scalability, and personalization, ensuring delightful messages reached customers like freshly-baked delicacies. The results were mouthwatering – a 2% increase in deliverability, no outages, and no complaints.

With Twilio as their trusted kitchen companion, NatWest is building a great customer experience, leaving a flavorful impression in their hearts.

Recipe for deliverability

Ingredients needed:

- Programmable Messaging
- Twilio Super Network and real-time routing algorithms
- A thirst for improved deliverability

Read how NatWest served up the best deliverability dish of the day:

<https://customers.twilio.com/natwest/>



Note from the Kitchen:

“Not only has NatWest found the digital solutions they need with Twilio, they’ve found a partner to support their overall strategy as an organization. They aspire to continuously create customer experiences that are better, faster, and more cost effective.”

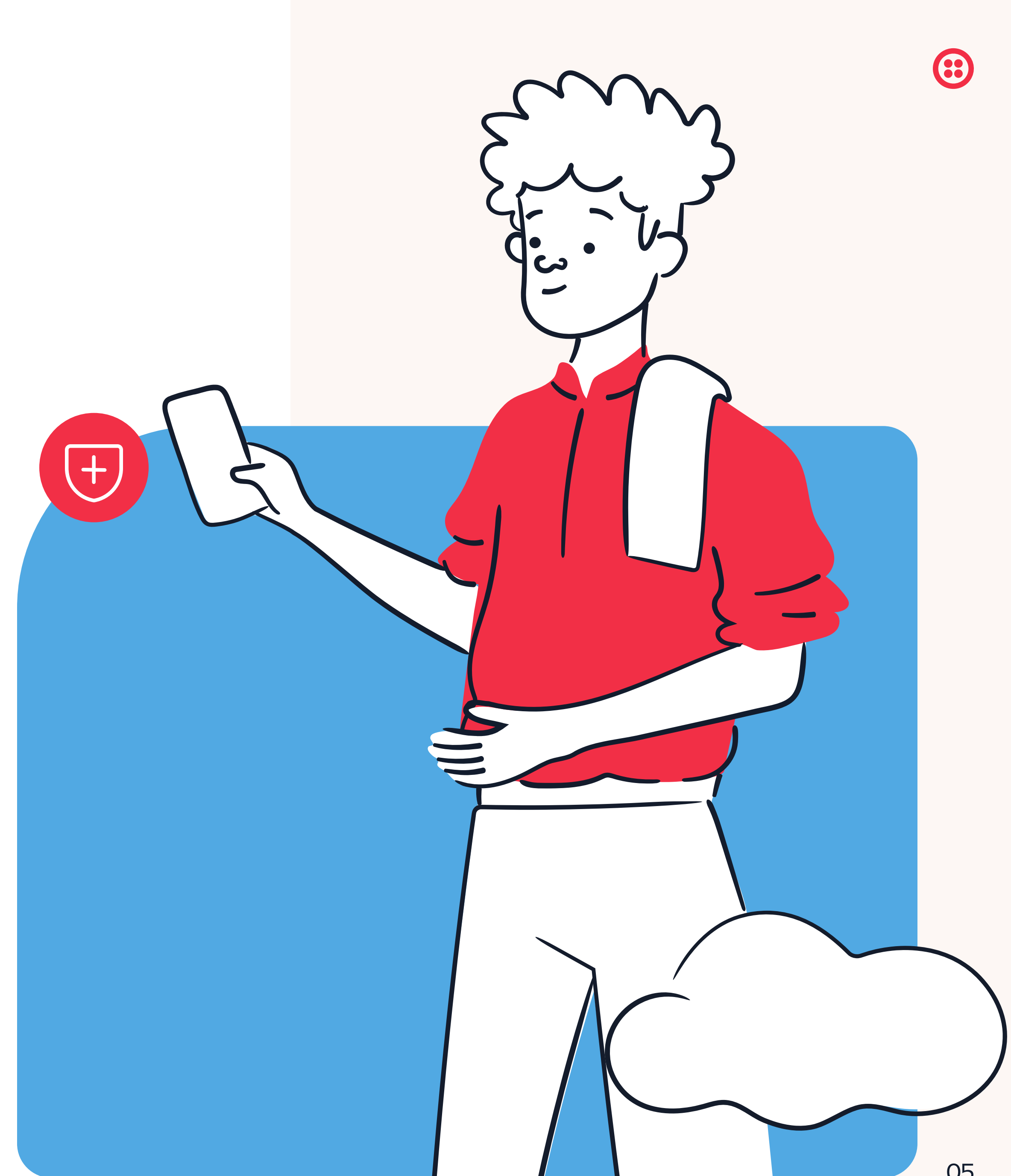
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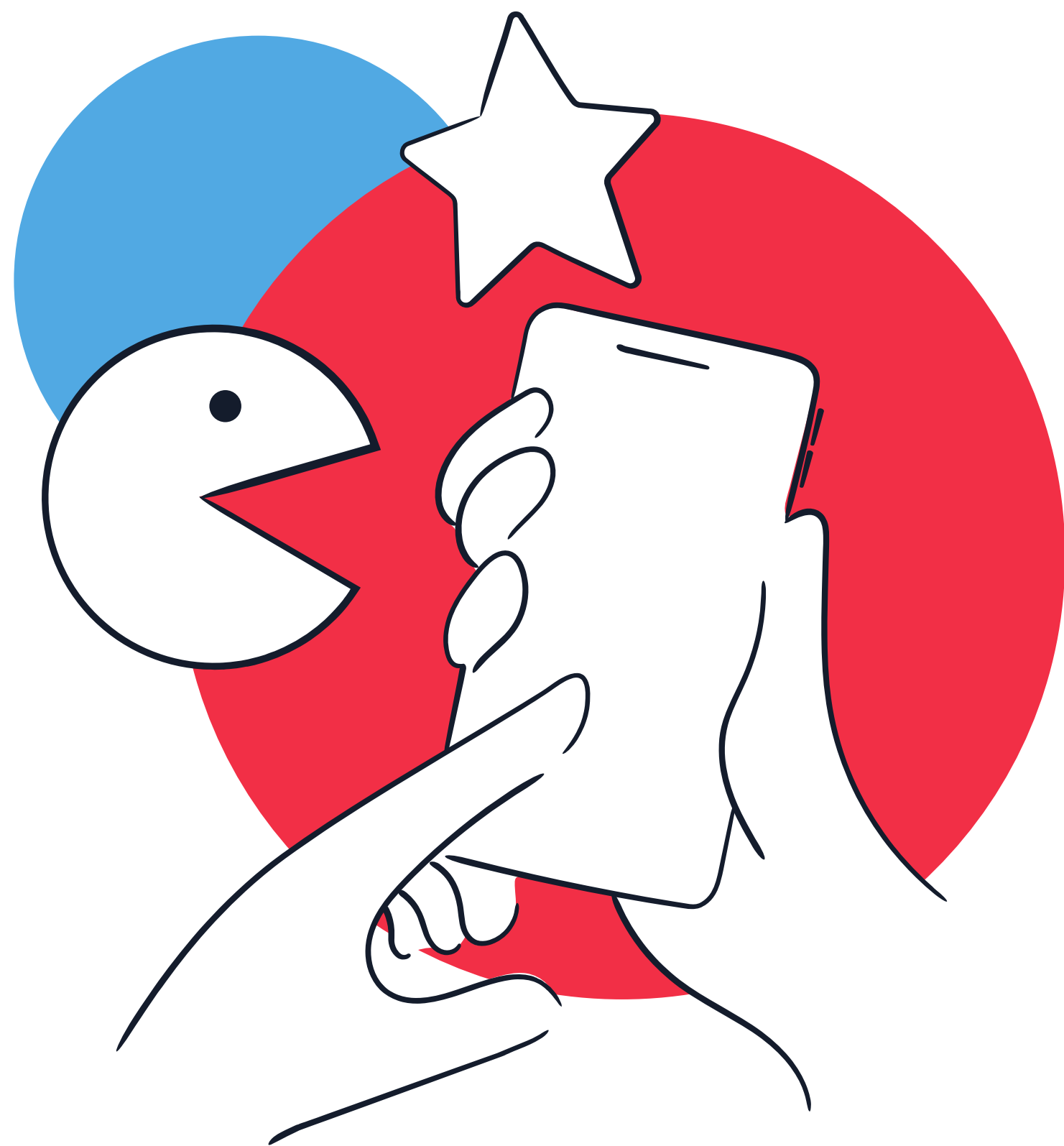
Combat fraud using notifications

SMS fraud is a blocker to delivering high-quality messaging - fraudulent traffic can drive up your messaging costs and reduce your conversion rates. In the bustling kitchen of combating fraud, Twilio's innovative tools offer a sizzling solution to one of the greatest challenges facing our "chefs" - SMS pumping fraud. This is when fraudsters take advantage of your phone number input fields (such as those for one-time passcodes, app download links, or promotional codes) to send SMS to numbers they control and receive a share of the fraudulently generated carrier revenue, driving up your messaging costs in the process. Just like a vigilant baker ensuring the finest ingredients are used, product managers at the company understand the impact of fraudulent messages that drive up SMS costs, which for one Twilio customer would have been as high as \$300k in one month without Verify Fraud Guard.

But fear not, as Twilio's use of artificial intelligence comes to the rescue! For verification use cases, Twilio offers Verify Fraud Guard, built directly into our Verify API to detect and block SMS pumping. And with its SMS Pumping Protection offering, built right into the Programmable Messaging API, Twilio automatically detects and blocks these fraudulent activities. With these features, Twilio uses the power of data to identify fraudulent messages and block them. It's like a foolproof recipe, protecting businesses with OTP use cases, ensuring that their messaging remains secure, cost-effective, and fraud-free.

Twilio's defense against SMS pumping fraud empowers our product managers to be confident, like a masterchef, that they are serving up a delightful experience for their customers while safeguarding their bottom line.





Note from the Chef:

“In general, I believe Twilio’s key success factor is the simplicity and self-service nature of all of its products.”

Andrey Birman

Chief Technology Officer, Papaya Gaming

Papaya Gaming achieves a delectable 97% conversion rate with Twilio security tools

In the dynamic world of gaming, where the flavors of innovation delight players worldwide, Papaya Gaming has emerged as a true culinary maestro, captivating over 21 million players with their revolutionary mobile games. As the gaming industry surges, predicted to reach a market value of \$450.8 billion by 2029, the pandemic-induced boom brought not just players but also an increase in fraud to the digital table.

With the belief that password-based authentication is not enough, they turned to the sizzling solution of SMS one-time passcode verification, adding an extra layer of security without compromising on accessibility.

Twilio Verify proved to be the perfect partner, delivering global coverage, high delivery rates, and compliance with regulations. With Twilio’s seamless implementation,



Papaya Gaming achieved a remarkable 97% conversion rate for account registration, serving up a delightful experience to their players with every message sent.

Recipe for combating fraud

Ingredients needed:

- Phone Verification
- Two-Factor Authentication
- A desire to keep 21 million players’ accounts safe

See how Papaya Gaming kept the flavor, but cut out the fraud

<https://customers.twilio.com/papaya-gaming-builds-trust-among-users-with-twilio-verify/>



Chapter 3:

Assess the effectiveness of messages and notifications

In the bustling kitchen of crafting effective messages, product managers face a challenge that resembles the art of creating a perfect casserole – ensuring their messages not only reach their customers but also satisfy their appetites for information. Like a skilled chef seeking to delight with every dish, these product managers know that understanding the impact of their messages is crucial for optimizing their future communications to drive engagement, which helps to sustain customer satisfaction and loyalty.

Enter Twilio's Messaging Insights, the secret seasoning that provides them with the data and insights they need to fuel their AI model. This real-time dashboard offers a delectable array of reports, from delivery rates and errors to responses and OTP conversions, enabling them to analyze their messaging's performance, and providing them the data to add to their AI tools to identify and resolve issues, optimize delivery, and elevate engagement with their end users.

Just like a master chef who relies on the freshest ingredients, these product managers turn to Messaging Insights, residing in the Twilio Console, to uncover the answers to questions that drive their messaging success. They savor the data and use it to create a harmonious blend of perfectly crafted messages that leave their customers asking for seconds.

Twilio Intelligent Alerts, now in private beta, proactively scans your traffic for anomalies and alerts you when errors arise, without you having to tell Twilio what to monitor or set thresholds. This helps to keep you informed in near-real-time about problems with deliverability, so you can resolve issues quickly without having to dig into your dashboards to identify the problems.





UC Davis Health blends a gourmet 40% reduced no-show rate and seamless integration

Note from the Chef:

“Having control over all the data allows us to automate workflows and improve patient outcomes. By integrating into our Digital Davis platform, we can create a flexible and customized experience, avoiding the need to rely on multiple point and click solutions or startup products. Our goal is to offer a seamless experience, through the “UCNOW” text brand, like a perfectly fitted Armani suit, tailored specifically to UC Davis Health.”

Ashish Atreja

CIO and Chief Digital Health Officer

UC Davis Health donned their aprons and stepped into the kitchen of healthcare innovation, aiming to craft a delightful experience for their diverse California clientele. Like expert chefs, they knew that serving up timely appointment reminders was the key to a satisfying patient journey.

Enter Twilio Messaging, their secret ingredient, seamlessly folded into their digital recipe. With Twilio, they whisked up SMS reminders, resulting in a 40% reduction in appointment no-shows – a sweet success!

But this wasn't just about cost savings; it was about creating a perfectly baked patient experience. Twilio's Messaging Insights allowed UC Davis Health to see effective delivery and response data, giving them an opportunity to adjust and refine their interactions in real-time.

Looking ahead, UC Davis Health envisions adding more layers to their recipe, with tools like Twilio Segment and Flex.

These will add extra flavor to their patient experiences, setting a new standard in healthcare delivery. With Twilio, they're baking a bridge to inclusive, top-quality healthcare, ensuring every patient gets a taste of excellence. This partnership is a delightful blend of innovation, data, and patient-centricity – the perfect recipe for healthcare transformation!.

Recipe for combating fraud

Ingredients needed:

- Twilio Messaging
- Drive to deconstruct the patient experience to serve them better



Check, please!

In the ever-evolving culinary landscape of product management, we have embarked on a flavorful journey through Twilio's Chef's Cookbook, discovering the essential ingredients for crafting delightful product experiences leveraging artificial intelligence. Just like skilled chefs orchestrating a symphony of flavors, product managers have learned the importance of delivering impeccable notifications and messages to satiate their customers' appetites for information.

From the art of combating fraud with Twilio's AI-powered solutions to the savory data insights offered by Messaging Insights, we have witnessed how Twilio empowers these product managers to create a virtuoso of communications that leaves a lasting impression on their audience.

As we look to the future, the aroma of innovation lingers in the air, promising even more delectable advancements. With Twilio as their trusted sous chef, product managers are set to explore new frontiers of AI in notifications and communications. The kitchen of product management will witness the rise of AI-driven personalization, like a master baker customizing each cake for the discerning palate. Just as the perfect recipe evolves with every dish, AI will continue to enhance the art of crafting meaningful messages that deepen customer loyalty and drive business success.



Explore the Future of Customer Engagement!

Unlock the power of seamless communication and artificial intelligence with Messaging - your ultimate solution for centralized messaging excellence.

Explore Now ↖



Today's leading companies trust Twilio's Customer Engagement Platform (CEP) to build direct, personalized relationships with their customers everywhere in the world. Twilio enables companies to use their communications and data to add intelligence and security to every step of the customer journey, from sales to marketing to growth, customer service and many more engagement use cases in a flexible, programmatic way. Across 180 countries, millions of developers and hundreds of thousands of businesses use Twilio to create magical experiences for their customers.

For more information about Twilio (NYSE: TWLO), visit: www.twilio.com.

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