CELENT

Solution Brief

PLAID FULL STACK ONBOARDING SOLUTION

Driving Value Through Connected Components

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EXECUTIVE SUMMARY

A customer account — whether at a fintech or a bank — opened without appropriate controls is dangerous, while an inactive one is worthless. Plaid has been building out and acquiring the key building blocks to deliver a full stack onboarding solution that not only supports smooth and secure account opening, but also helps customers activate and start using those accounts.

Context

Celent has long had a view that for efficient customer onboarding, smooth and secure account opening is a must, but it does not stop there. The bank has to create incentives and make it easy for the customer to activate and start using the account.

Figure 1: Celent's Definition of Onboarding and Chime's Approach

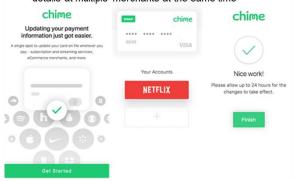


Smooth and secure account opening

- Fully digital
- Less than 2 minutes
- Customer only needs to enter basic details

- Activating and giving customer value from account

- Customers receive and activate a debit card
- They are then invited to make their Chime debit card a primary payment method at online merchants and popular subscription services (e.g., Amazon, Netflix, Hulu) and offered a simple workflow to update card details at multiple merchants at the same time



Source: Celent Model Bank 2018

Note: Chime won Celent Model Bank 2018 award for Consumer Account Onboarding

Company and Solution Overview

According to the company profile on Celent's VendorMatch, "Plaid is a data network that powers the apps and services millions of people rely on to live a healthier financial life. Plaid provides a suite of products to help you onboard customers, create better experiences, and grow your business. By partnering with Plaid, you can build a safer and more open financial ecosystem for your

customers." The company works with thousands of the most widely used fintech apps and connects with more than 12,000 financial institutions in the US, Canada, the UK, and Europe.

In January 2022, Plaid announced the acquisition of Cognito, "an identity verification and compliance (KYC, AML) platform that makes it faster, easier, and safer for people to verify their identity when signing up for financial services online." The company's products are already being used by more than 300 companies, including many of Plaid's clients, such as Affirm, Brex, Coinbase, Current, Republic, and Wyre.

After the dust has settled, we sat down with **Alain Meier**, the CEO and founder of Cognito and now the head of Identity at Plaid, and **Kevin Young**, responsible for communications at Plaid. We were keen to better understand not just the capabilities that Cognito brings to Plaid, but also the broader vision of where the combined company is heading.

KEY BRIEFING TAKEAWAYS

With the addition of competitive identity verification capabilities, Plaid now offers a full stack onboarding solution. Since all the components come from the same provider and are tightly integrated, the solution improves the quality of the end-user experience, increases conversion rates, improves back-office processes, and helps prevent fraud.

Adding Identity Verification to Plaid Family of Solutions

Plaid is best known for its account-linking products, enabling customers to verify a user's account, ownership, and available balance (Auth, Identity, and Balance), and for its ability to initiate payments from bank accounts through its APIs and an ecosystem of payment partners. In May 2022, the company announced Transfer, a turnkey solution that combines account authentication, risk assessment, and ACH processing in a single API.

In other words, Plaid's strength has always been at the back end of the onboarding process — making the account useful for the customer. With the addition of Cognito's capabilities and the launch of Identity Verification and Monitor products, Plaid is moving into the early stages of customer onboarding and offers a complete verification, AML, and KYC compliance solution. The products are available without any further integration work for most Plaid customers. The company estimates that 90% of Plaid customers need some level of KYC solution.

Smooth and secure Activating and giving customer Onboarding = account opening value from account Identity/ KYC Account Linking **Payments** Selected **Identity Verification** Auth Transfer Plaid Monitor Identity **Products** Balance Recent Addition to Plaid's **Family of Solutions** Plaid's Traditional Stronghold Better end-user experience Improved conversion rates

Figure 2: Towards a Full Stack Onboarding Solution

- Improved back office processes
- Better fraud prevention

Source: Celent based on discussions with Plaid

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With so many vendors offering identity verification capabilities, why would a fintech or a financial institution go with Plaid's solution? Well, the client would have to believe in two conditions: that Plaid's solution for identity verification was as good as the competing alternatives, and that the client would gain synergies from going with a single provider for a broader set of solutions. According to Plaid, it meets both of those conditions.

Plaid's Identity Verification: A Closer Look

Plaid's Identity Verification solution combines:

- A flexible orchestration engine for the back office, allowing customers to specify rule-based workflows on how they want to manage the identity verification process and various fallback options, with country-specific compliance built into the process.
- The arsenal of tools for identity verification from external data checks to document authentication, to selfie capture and liveness detection.
- User experience optimized for conversion and global requirements.

According to the company, this combination of user experience and back-office capabilities is one of its differentiators in the market. Some players are focused on doing "one thing very well," while others provide a decisioning platform / marketplace into which the client can plug in a multitude of third-party tools as required. Plaid's approach has been to build out its toolkit through licensed and proprietary development and tightly integrate all the components so that they work in tandem, delivering the best combination of customer experience and fraud prevention.



Our approach has been to pre-vet and pre-produce the highest-quality single checks for each vertical, so that everything is amazingly compatible and delivers the lower fraud rates and the customer experience that we and our clients expect.

Alain Meier, Plaid, 2022

The identity verification process can be as simple as entering a name and phone number, with Plaid's background checks delivering a confidence score. Of course, the phone number is very public information, so the checks are all about the actual real-life usage of that phone number, such as whether it's been used for government (e.g., voting) or financial services, and for how long. The company does not automatically dismiss certain types of numbers, such as Voice-over-IP, and goes deep to build out a risk profile based on how the phone has been used.

If needed, the customer can add further checks, such as document verification or a selfie check, with workflows defined and updated without any need for coding.

Incidentally, a selfie check with liveness detection can be used separately from document verification; in that case the image is not compared against the photo on the document but serves as a powerful deterrent to the fraudster who doesn't want to expose his or her face. Plaid's selfie checks utilize advanced deep-learning image-processing technologies.

Figure 3: Plaid's Identity Verification: Defining the Workflow Rules

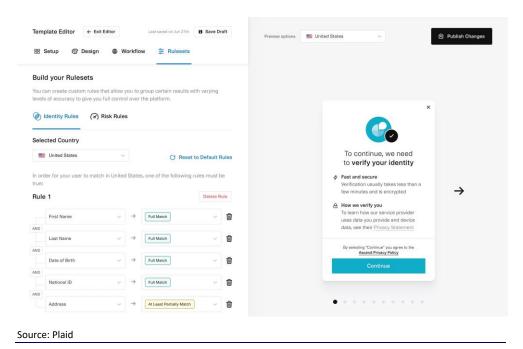
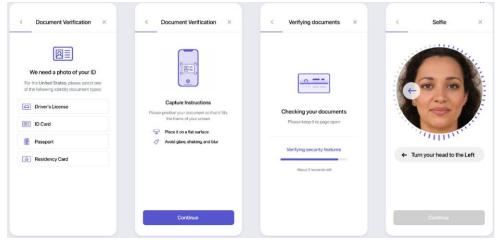


Figure 4: Plaid's Identity Verification: Document and Selfie Verification



Source: Plaid

Plaid can support customers in 36 countries with data source verification, verify identity documents from 200+ countries, and support 16 languages for optical character recognition (OCR). The company describes its solution as "drop-in" — it is integrated once, includes best practices and hyper-optimized user experience from Day 1, and is updated in perpetuity.

The solution is deployed in the cloud in a multi-tenant environment. Given how quickly anti-fraud models must change, the company believes anyone running such a solution on-premises is exposed to a big risk of relying on potentially outdated fraud models.

Synergies with Other Solutions

Although Plaid's Identity Verification is a robust solution on its own, the true power lies in combining it with downstream Plaid capabilities for account linking and payments.

Many fintechs today use multiple solutions when onboarding their clients. According to Plaid, it is not uncommon for a company to use 6–12 solution components supporting identity verification, account linking, and other aspects of onboarding. Because the solutions are "stitched together" from different providers, it means that "their own quirks, issues, and incompatibilities have not been ironed out between each permutation of solution combinations."

Conversely, Plaid ensures that everything works together seamlessly, resulting in four main benefits for the client:

- 1. **Better end-user experience:** With less friction, more seamless interaction, and one set of user interfaces, the client doesn't have to jump from one provider to another.
- 2. **Improved conversion rates:** Since users have a better experience, they trust the provider more, resulting in lower dropout rates. Companies benefit from Plaid's conversion-optimization efforts across millions of users' experiences. Based on client implementations to date, Plaid IDV can improve onboarding conversion rates by 10%–20%.
- 3. **Improved back office processes:** The back office tools and automation can help reduce administrative work and manual reviews. One recent client reported raising the onboarding pass rates that don't require manual review from 60% to 90%+, a 50% increase, by switching to Plaid Identity Verification.
- 4. Better fraud prevention: Plaid is able to leverage information across all the different steps, from identity verification to account linking to payments, including its latest fraud prevention products, Signal and Guarantee (see the sidebar on the next page). The company is also able to bring unique insights from the Plaid network across all three areas. Such a network-based approach to fraud prevention is typically only possible for card networks and the largest banks.

This last point is worth exploring further. Plaid has noticed that some of their larger fintech clients have multiple fraud teams set up around specific solutions, such as payments, compliance, identity fraud, etc. This poses a risk of "fraud at the fringes," i.e., in between those different solutions and teams. For example, a fraudster may try to manipulate the differences in various name-matching algorithms, such as those used during the identity verification and when linking the bank account. If different vendors use different approaches for name

Plaid Signal and Guarantee

The complexity of fraud in financial services continues to increase. To help companies better protect their customers, Plaid is bringing two fraud prevention tools that leverage insights from its growing network of over 12,000 data partners, more than 6,000 customers, and hundreds of millions of connected consumer accounts. Both address two key challenges with ACH for account funding today: time and certainty of settlement.

Signal uses machine learning to analyze more than 1,000 risk factors and deliver insights that provide more certainty that a transaction will settle, so clients can accelerate access to those funds without increasing risk. According to Plaid, early customers have seen significant reductions in unauthorized returns and reduced NSF fees by as much as 57% while introducing hold times to less than 2% of transactions.

Guarantee is powered by Signal and other data sources to provide a real time transaction decision and guarantee the settlement of ACH transactions by passing the liability of the transaction on to Plaid.

matching, fraudsters may be able to exploit it, e.g., use a family member's bank account but link it to the identity of a child or a deceased grandparent. Of course, there are many other ways these gaps between solutions can be manipulated, and that is where a single integrated solution can be of huge help.

Another challenge for the fraud teams is that when looking at the cohort of applications, there are often two clear groups of "obviously good" and "obviously bad" actors. But often, there is also a large group of those where the line is not as clear cut and there's much more ambiguity — they could potentially be either fraudsters or legitimate users, as they may have failed some tests but passed the others. Again, being able to capture multiple risk signals and compound them, as the user moves from one step of the process to another, enables the fraud teams to make a more accurate decision and approve more good actors, reducing the false positive rates.

TO CONSIDER

Digital banks and other fintechs that already know Plaid now have the option to expand the scope of engagement and reap the benefits of a tightly integrated solution from a single provider. Larger banks should also consider how Plaid's expanded offering can support them in their efforts to help their customers connect to the digital economy.

Many digital banks and other fintechs already know Plaid and use it to help their customers connect bank accounts. Some, like Affirm, Brex, Current, and others, already use identity verification capabilities alongside other Plaid solutions. Now, many others have the option to expand the scope of engagement.

Unless it's a new startup, most fintechs and digital banks will already have a partner for identity verification. However, if they already work with Plaid, the additional capabilities are available without any further integration and work for most Plaid customers. They should consider doing some A/B testing — putting Plaid head-to-head with their existing providers to see whether the benefits of an integrated solution materialize in their specific environment.

One of those benefits and Plaid's differentiators for identity verification is improved end-user experience. But user experience is sacrosanct and a key differentiator for most fintechs. Would they be prepared to "give it up" to a partner?

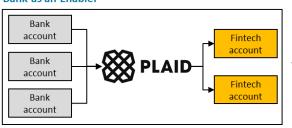
Plaid recognizes this and challenges itself to convert better than the average fintech: "The onus is on us to make sure that the user experience is so good that they can't get it themselves." This is particularly true for more complex scenarios, such as onboarding customers internationally. The company can automatically localize the actual form fields according to regional standards, such as the ordering of those fields, how they are referred to (e.g., postal codes vs. ZIP codes), date-of-birth ordering, how you collect someone's name (e.g., last name first?), which address fields to collect, etc. Plaid also believes another differentiator is how tightly it controls the data entry. According to them, few companies typically do a good job at controlling and normalizing data entered by users, which then reduces match rates, as it may not correspond to an official government ID or a third-party database. Finally, there are seamless and built-in fallback mechanisms for the end user — should they fail a particular check, they are usually presented with another option to demonstrate their credentials.

We believe this should be of interest to larger established banks as well. We know that many want to improve how they manage customer digital onboarding more broadly, and identity verification specifically. They also want to position themselves as a destination for their customers. In other words, banks don't have to be "on the receiving end" in their relationship with Plaid, i.e., simply enabling

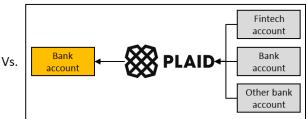
their customers to connect their bank account so they can use it elsewhere; they could "assume the destination role" themselves and allow their customers to link all other accounts.

Figure 5: Bank as an Enabler vs. Bank as a Destination

Bank as an Enabler



Bank as a Destination



Source: Celent

Banks should also add Plaid to the list of their potential partners for identity verification. When Cognito was a separate business, it made an explicit strategic choice to focus only on fintechs and digital banks. Now that those capabilities are part of a much larger company, they are becoming available to a much broader set of customers as well.



Selling an identity verification solution to banks is very much of active interest to us. We want to give back to the banking ecosystem, which has been so core to the company to date.

Alain Meier, Plaid, 2022

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