

CGAP BACKGROUND DOCUMENT

How to Engage Third Parties with Your Open APIs

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June 2020



Disclaimer

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Introduction

Why?

The digital financial services (DFS) industry continues to evolve. [DFS providers are opening up APIs](#) to third parties to stimulate innovation, create new revenue streams, lower costs, and support their broader digital transformation ambitions. The ability of third parties to engage with and leverage these APIs is a critical step for growing DFS ecosystems.

However, opening up APIs is only a first step. The experiences of several DFS providers suggest that systematic engagement with third parties is crucial to drive awareness and ensure active use. DFS providers also need to balance efforts to achieve long-term objectives to expand their ecosystems with short-term efforts to increase traction on their platforms.

What?

This deck aims to drive awareness and use of APIs. It seeks to help DFS providers understand the differing needs of third parties across different segments, identify engagement activities that can address those needs, and start to think about an engagement strategy that is aligned with internal priorities and capacity. It will help DFS providers balance their short-term and long-term goals. CGAP commissioned Dalberg to do this work.

Who?

This deck targets operational teams that are looking for guidance, examples and nuance. CEOs, API product managers and API sales and community engagement leads within DFS providers that are looking for key takeaways should refer to CGAP's abridged guide, "[How to Engage Third Parties with Your Open APIs](#)" (2020).

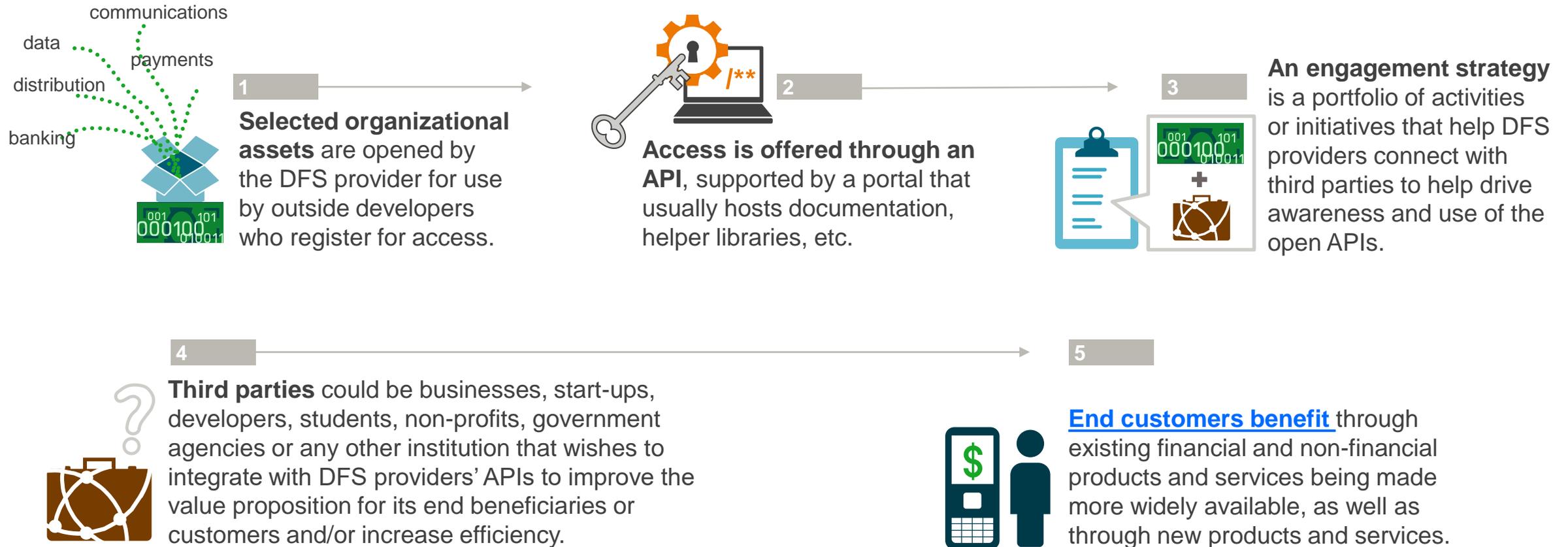
CGAP's work on open APIs

CGAP is working to understand how open APIs can benefit DFS providers while advancing financial inclusion. Drawing on best practices in other industries and support provided to several DFS providers actively working to open APIs, we are developing a suite of resources to assist providers with creating and implementing a successful open API strategy. Our resources include compact guides, case studies, blogs and [videos](#) that address the what, why and how of open APIs for DFS providers. See our dedicated [collection of API resources](#), and [sign up for our API newsletter](#).

The abridged guide “Engaging Open API Third Parties Effectively,” can be found at: www.cgap.org/api-engagement

An engagement strategy determines how a DFS provider draws in third parties to use its open API platform

Open APIs have the potential to generate revenue for the provider and accelerate innovation by third parties that benefits end customers.



Guide to this document

This deck is divided into four main sections. Readers new to this topic might choose to read the deck in its entirety, while those familiar with the range of engagement activities and initiatives available, might prefer to jump to the section on **‘Selecting and executing a portfolio of engagement activities’**, and the case studies that follow. The deck includes examples throughout.

Slide 5	Third-party segments and needs	<p>This section dives into the different types of third parties DFS providers might target, the reasons for doing so, and their respective needs.</p>
Slide 15	Engagement activities/initiatives that fulfil needs	<p>This section outlines a full range of activities and initiatives that can be used across the engagement journey of third parties, from awareness to use and growth. It includes a number of examples from open API providers.</p> <p>Some engagement activities and initiatives are covered lightly, while others include deep dives on subsequent slides.</p> <p> The symbol on the left indicates that additional material has been provided on subsequent slides.</p>
Slide 46	Selecting and executing a portfolio of engagement activities	<p>This section helps DFS providers formulate an engagement strategy, including what segments to focus on, what activities to prioritise, what capabilities might be required and what KPIs to monitor.</p>
Slide 59	Case studies	<p>This section delves into the open API approach taken by Axiata, Safaricom, Stripe and WeBank. It includes their respective strategies, target segments and third-party engagement models.</p>



Photo by: Arup Halder

Third-party segments and needs

“Third parties” can be defined as developers or businesses using open APIs for their products and services, and segmented into four types

Attractiveness of long-tail segments increases as the market matures and/or the DFS provider business increases.

Mature DFS providers typically have integrated the larger organizations—growth may need to come from elsewhere. Further, mature providers have the headspace and budget to promote innovation that often comes from the long tail.

Less mature DFS providers often focus on larger businesses to generate revenue and transactions in the short term. This typically has less impact on innovation and number of integrations.

Significance of open APIs: Value* and importance of the API to the organization’s core business/operational model

Collectively referred to as the *long tail*.



Standalone coders: Coders who are passionate about technology solutions and use APIs to build them.



Early-stage innovators: Early-stage start-ups typically are prerevenue and have business models that are still unproven.



Growth seekers: Established post-funding ventures that need to integrate with DFS providers for their core business.



Enterprises: Established businesses that can become more efficient or increase revenue by integrating with DFS providers.

Scale of operations: The size of the operation and revenue of the organization

Note: Aggregators—organizations that offer a single platform through which other third parties can access APIs of multiple DFS providers—are not considered to be a target segment. For the purpose of this deck, these are considered to be channels that third parties can use to integrate services from one or more DFS providers.

*The value could be high because the business model simply could not exist without APIs or because the APIs let the third party benefit from association with the DFS provider (e.g., wider reach, greater trust, etc.).

Individual coders who are passionate about technology solutions and use APIs to build them (1/2)

Who they are

- Usually 1 – 2 coders passionate about tech solutions but may not have experience working with APIs from DFS providers.
- Often operate out of innovation hubs where they can leverage resources like internet and office space while interacting with other coders.
- Aspire to build a business to deliver their solutions, but typically lack business skills needed to build a viable business and in some cases require hand holding for operational tasks like registration, recruitment, tax filing etc.

What's in it for them

- Low cost and faster time to market by leveraging open APIs.
- Opportunity to develop new products and services by leveraging APIs, and potentially grow and scale them.
- Build their social capital by sharing their expertise within their community.

Why target them

- Acts as an entry point for DFS providers into the technology start-up ecosystem to partake in the innovation ecosystem.
- Coders are likely to influence organizations that want to open APIs, whether as freelancers, employees or advocates.
- Significant increase in number of coders innovating to solve local problems, particularly in developing countries. In terms of numbers of third parties, this segment is likely to be the largest in most markets.

Example: Kamyra is a coder who was excited by the new open API developer portal that MTN released and used to experiment with the portal. He started developing training videos for his peers on the portal and as a hobby started to develop a product to manage finances for end customers.

Individual coders who are passionate about technology solutions and use APIs to build them (2/2)

What they need

- **Understanding of and familiarity with APIs.** Coders can often be unaware of the open API developer portal; or may not know the full range of functions that APIs offer.
- **Technical tools and support materials.** Typically do not have resources to develop the full range of functionality, thus, seek tools and support materials that ease the process.
- **Rewards for innovation.** Value monetary and non-monetary rewards for conceptualizing new ideas.
- **Robust sandbox.** Tend to iterate their ideas swiftly as they try to improve their product into a version that can be launched.
- **Affordability.** Typically lack funds to help develop their products; therefore, need the API integration process to be affordable.
- **Easy onboarding.** Are usually unregistered and therefore do not have most of the documentation required for KYC and onboarding. May require a bespoke process with necessary limitations (i.e. tiered access).
- **Support in business registration.** Frequently aren't aware of the process for registering the business or do not have the tools/resources to register. Registering as a business might be necessary for KYC, and is necessary for growing the business.
- **Process simplicity and transparency.** Are often on their own, meaning any misunderstanding around the process can disrupt any momentum gained. Transparency in the KYC process, pricing and other operational processes is key.
- **Other ancillary needs.** Beyond the core needs identified above, are also likely to benefit from access to performance data and analytics, effective support – and prefer standardized documentation.

Input from third parties

“I did not know anything about APIs until after I graduated, our curriculum does not cover APIs.”

“What has saved many developers is the tech support groups via Skype, Telegram and WhatsApp, where people even post video tutorials.”

“There are parts of the documentation that are so vague and unclear. And the funny thing is that even if you ask the provider about it, they also do not know what it means.”

“Coders just want to code. Some of the complications involved in running a business catch us off guard. It would be helpful to have some guidance from someone who has gone before us.”

Early-stage start ups have unproven business models (1/2)

Who are they

- Early-stage start-ups, typically with both some business and technical capabilities, that thrive on innovation; are creative and passionate but may not always be designing for scale.
- Business model shows promise, it is still being tweaked and refined.
- Can be pre-pilot, pre-revenue or even post-revenue but before starting to replicate/scale their business model.

What's in it for them

- Low cost and faster time to market by leveraging open APIs.
- Opportunity to:
 - Align with a reputable brand which could boost consumer confidence in their product offering; and
 - Hack growth by leveraging the existing DFS customer base.

Why target them

- Potential disruptors of tomorrow because they tend to have the pulse of customer behavior and the latent needs of customers. They try to create solutions for end customers thereby accelerating innovation and creating an innovation/digital ecosystem.
- A small fraction will eventually grow large and bring in a sizeable number of transactions, thereby increasing revenue and customer activity for the DFS provider.
- They may also have potential to become competitors in future and supporting them may offer DFS providers opportunities to learn and adapt.

Example: MamboPay is a payment gateway that allows parents to send money to their children on cards that can only be used at select outlets. It uses MTN Uganda's open APIs to accept payments from parents.

Early-stage start ups have unproven business models (2/2)

What they need

- **Understanding of and familiarity with APIs.** Many do not know the full range of functions that APIs offer that they can leverage as they try to develop, test, and iterate viable products.
- **Rewards for innovation.** Value monetary and non-monetary rewards for conceptualizing new ideas related to their core business proposition.
- **Technical tools and support materials.** Seek low turn-around time on integration of APIs in their core product offering and thus require technical tools and support materials.
- **Robust Sandbox.** Look for a tool to help iterate their ideas swiftly, as they try to improve their product into a version that can be profitable and scalable.
- **Affordability.** Typically are not well-funded and require a pricing model that meets their cash flow and business model requirements, and allows them to experiment and evolve without significant cost hurdles.
- **Easy onboarding.** Seek an onboarding process that is not onerous and one where requirements are proportional to the access and functionality that they seek.
- **Business support.** May need business acceleration support to create a viable business model around their product and to successfully grow e.g. marketing, leadership, accounting, and stakeholder management.
- **Process simplicity and transparency.** Often have very tight financial and personnel resources, meaning process roadblocks can disrupt any momentum gained. Transparency in the KYC process, pricing and other operational processes is key.
- **Other ancillary needs.** Beyond the core needs identified above, they also benefit from access to effective support, performance data and analytics, and standardized documentation and APIs.

Input from third parties

“Are all the things requested for KYC necessary ...even for a start-up?”

“Many of us developers just do not have the skills required to launch and grow a business into a successful commercial enterprise.”

“Physical engagement is helpful when learning about a provider and its open API program. Information on websites does not exhaust the questions you might have.”

“There are some costs which seem to come out of nowhere. I would like to know upfront which costs are associated with open APIs so I can make an informed decision.”

Established post-funding ventures that need to integrate with DFS providers for their core business (1/2)

Who they are

- Established businesses with a proven business model and are either generating profit or are well funded.
- Tend to solve market-wide or regional problems.
- Seek rapid growth through:
 - Geographic expansion; and/or
 - Addition of features to core product
- May also target improvement in unit economics in existing geographies.

What's in it for them

- Low cost and faster time to new markets by leveraging open APIs.
- Access to APIs is integral to their growth plans:
 - Business model is built on the mechanisms offered by the open API, and/or financial viability is greatly enhanced with those mechanisms;
 - Leveraging the open API gives access to DFS providers' customers, especially in new markets; and/or
 - The open API may offer features that allows broadening of their own product feature set.

Why target them

- Each growth seeker has a large volume of transactions likely to significantly increase the DFS provider's customer base and/or customer activity, thereby increasing market share, and/or revenue.
- Since APIs are core to their business, they might be willing to pay for premium services.

Example: M-Kopa is a pay-as-you-go solar provider. M-Kopa collects recurring payments from customers via mobile money on a regular basis and auto-deducts from their mobile wallets. M-Kopa developed its business model in Kenya and when it enters a new market, like Uganda, its needs and business model are clear but it requires mobile money APIs to integrate with.

Established post-funding ventures that need to integrate with DFS providers for their core business (2/2)

What they need

- **Understanding of and familiarity with APIs.** While likely to be aware of the APIs and able to invest in building familiarity, they often need tailored services (access, pricing, functionalities etc.) and thus, need information on the appropriate processes.
- **Standardized documentation and APIs.** Look for clear and simple documentation and API processes which meet modern global standards and approach.
- **Customized pricing.** As noted above, often require additional services or functionalities due to the unique nature of their needs and hence, often need pricing that is customized for them (in terms of the pricing level, potential volume discounts, and/or bundled pricing).
- **Business support.** Some wish to leverage the DFS provider's presence and network (such as customer base, brand, and channels) to build and execute a go-to-market strategy in their new geographies.
- **Performance data and analytics.** Need data on the APIs' technical performance and the third-party's business performance along with analytics to help make business decisions.
- **Other ancillary needs.** Beyond the core needs identified above, they also benefit from technical tools, access to effective support, a robust sandbox, an easy onboarding process, and process simplicity and transparency.

Input from third parties

"Aggregators make registration so easy, which is why I was hesitant to move to the open API program initially."

"As the business grows, we find new ways to serve our customers. It is important to have additional features that we can leverage."

"There is actually no customer support for tech teams - when you call the providers customer service line, the customer care reps do not even know what an API is."

Established businesses that can become more efficient or increase revenue by integrating with DFS providers (1/2)

Who are they

- Established businesses with a proven business model with considerable scale.
- APIs are ancillary to their existing business model.
- May not have the technical expertise to integrate with open API platforms.

What's in it for them

- Opportunity for enterprises to make their current processes more efficient.
- Quite often, enterprises will encounter challenges with their payment models/systems. Open payment APIs can help enterprises solve these challenges.

Why target them

- Large volume of transactions and thus potential steady stream of income for the DFS provider.
- Enterprises have often grown into blue chip brands which brings credibility and reputation to the open API platform.

Examples:

Uganda Electricity Distribution Company Limited is the national electricity distributor in Uganda. They accept payments across multiple channels and have integrated with MTN and Airtel to accept payments through each of their wallets.

Kenya Power is a limited liability company which transmits, distributes and retails electricity to customers throughout Kenya. It accepts payments across multiple channels and has integrated with Safaricom's M-PESA, Equity Bank's Equitel, and various banks.

Established businesses that can become more efficient or increase revenue by integrating with DFS providers (2/2)

What they need

- **Understanding of and familiarity with APIs.** Enterprises often aren't aware of the impact that integrating with DFS providers can have on their business. They also may not be fully aware of the cost or process of integration.
- **Assistance in building out the integration roadmap.** May require technical support and guidance in integrating APIs into their business and getting the most value from them. Some may also need assistance and compelling reasons to shift away from existing integrations, which may include lower transaction failures, lower costs, or increased control and ability to respond to end-customer issues by accessing real time data.
- **Customized pricing.** Have large scale operations which often necessitates a customized pricing model – volume discounts or even fixed fee-for-access for certain APIs.
- **Performance data and analytics.** Need data on the APIs technical performance and the third-party's business performance along with analytics to help make business decisions.
- **Other ancillary needs.** Beyond the core needs identified above, they also benefit from technical tools, standardized documentation and APIs, access to effective support, easy onboarding, a robust sandbox and process simplicity and transparency.



Photo by: Subrata Adhikary

Engagement activities/initiatives that fulfil needs

Four key steps constitute the engagement journey of a third party



1. Awareness

Third parties need to understand what APIs are being offered and the benefit they deliver.



2. Consideration

Once aware, third parties will want to explore and experiment with integrating APIs. This will help them compare the DFS provider's APIs with other options (including screen scraping and competitors' APIs) to determine which ones to use.



3. Onboarding

After choosing the DFS provider's APIs, third parties need to complete their KYC and onboarding process to go live. They will need guiding resources and support to troubleshoot.



4. Use and Growth

After going live, third parties need on-the-go support and scaling up support to grow and increase use of the DFS provider's APIs.

See "[Technology Building Blocks for an Open API Strategy](#)" (Vaughan, McKay, and Hanouch 2020), which aims to bridge the gulf between business leaders responsible for overall open API strategy and technology decisions they need to make. It focuses on the technology building blocks DFS providers should prioritize to ensure third parties progress swiftly through each phase.*

Needs vary across the four stages for each segment

		● MOST RELEVANT	● SOME RELEVANCE						
									
Steps	Need			Standalone coders	Early-stage innovators	Growth seekers	Enterprises		
1 Awareness	Understanding of and familiarity with APIs	●		●	●	●	●		
	Rewards for innovation	●		●	●				
2 Consideration	Technical tools and support materials	●		●	●	●	●		
	Standardized documentation and APIs			●	●	●	●		
	Assistance in building out the integration roadmap						●		
	Robust sandbox	●		●	●	●	●		
	Affordability	●		●	●				
	Customized pricing					●	●		
3 Onboarding	Easy onboarding	●		●	●	●	●		
	Support in business registration	●		●					
4 Use and Growth	Business support			●	●	●	●		
	Performance data and analytics			●	●	●	●		
All-through	Process simplicity and transparency	●		●	●	●	●		
	Support	●		●	●	●	●		

A range of initiatives can address the needs of third parties along their journey

AWARENESS

Advocates: Advocates let others know about the DFS provider's APIs, get comfortable with the APIs, and thus encourage them to use the APIs. Advocates can influence standalone coders and early-stage innovators in their communities and the enterprises that they work for.

Events: Events help the DFS provider engage with standalone coders and early-stage innovators and create a space for them to come together, learn from each other, and build products that leverage the DFS provider's APIs. Events also give the DFS provider an opportunity to get feedback on its APIs.

Media outreach: Mailing lists, press releases, and other types of push marketing can let everyone know about the open APIs.

One-on-one engagement: These usually are pitch meetings set up by the DFS provider's sales and business development team with growth seekers or enterprises, to understand their needs, pitch the value proposition of open APIs offered, and build an integration roadmap.

CONSIDERATION

Developer portal: Channel by which DFS providers can reach third parties so as to communicate the functionality provided by APIs and the business value that APIs bring. Enables third parties to discover, explore, test, register for access, and use the APIs.

D.I.Y. tools: Allow third parties to self-serve and onboard smoothly. Might include tutorials, a developer forum, SDK plug-ins, get-started guides, videos, and mini case studies.

Robust sandbox: Ensure developers are able to test their solutions before going live.

Integration assistance: Offered to businesses that do not have internal technical capabilities to leverage and integrate APIs, either directly or through certified developers.

Standardized documentation and APIs: Consistent API design that applies industry style guidelines to ensure ease and simplicity of using the API. Documentation following industry standards to help experienced developers rapidly understand the APIs and their features.

Suite of pricing options: This gives standalone coders and early-stage innovators the flexibility to choose a pricing option that aligns closely with their cash flows, while enterprises and some growth seekers might be willing to pay more for additional features.

Customized pricing: Pricing that accounts for the scale of volumes that the enterprise has to offer (e.g., through volume-based discounts or fixed payments for access).

ONBOARDING

Tiered access: A tiered KYC requirement that is proportional to the risk posed by a third party. Lowers burden of documentation leading to simpler and quicker onboarding.

Business registration: Help the long tail understand legal business structures and guide them through the processes involved to register their business.

USE AND GROWTH

Acceleration support: This typically includes support needed by the long tail to create a viable business model around their product and to successfully grow marketing, leadership, accounting, and stakeholder management, for example.

Business advisory: Growth seekers primarily need advisory-type support when they enter a new market or launch a new product. For example, support to leverage the DFS provider's presence and network in a new geography to build and execute a go-to-market strategy (e.g., customer base, brand, and channels).

Dashboard: To provide third parties with information about their business, API activity, and billing and settlement activity.

ALL THROUGH

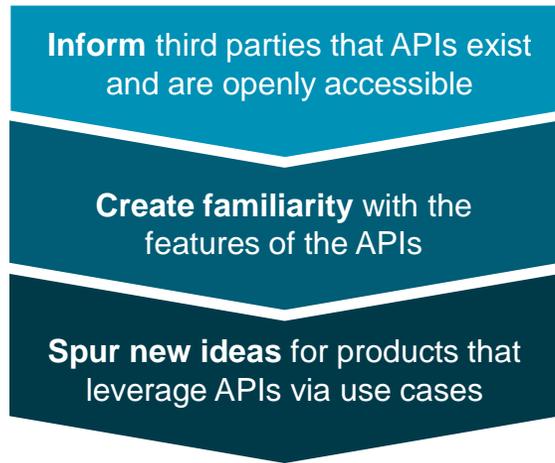
Transparency in process: Detailed process maps for each product, outlining the process of accessing and using the sandbox, completing KYC, onboarding, and going live.

Effective support: Support team should be well versed and adequately trained on the types of APIs available, their use cases, value-add to third parties, limits or challenges that may be faced during integration and how to solve for these challenges. Third parties also can support each other through well-managed and monitored community forums.



To begin with, potential third parties need to be aware of, familiar with, and interested in creating products and services using the open APIs

To encourage potential third parties to start using the APIs, the DFS provider should build awareness at three levels:



Note: A well designed and user friendly developer portal, as discussed later in the deck, is critical for this, and would typically be one of the earliest and most important investments made to attract and engage third parties—enabling them to discover, explore, understand, test, register for access, and use the APIs.

● MOST RELEVANT ● SOME RELEVANCE

Common methods of building awareness (across the three levels) include

Advocates – Advocates let others know about the DFS provider’s APIs, get comfortable with it, and thus encourage them to use the APIs. Advocates can influence standalone coders and early-stage innovators in their communities and the enterprises that they work for.	●	●	●	●
Events - Events help the DFS provider engage with standalone coders and early-stage innovators and create a space for them to come together, learn from each other, and build products that leverage the DFS provider’s APIs.	●	●	●	
Media outreach - Mailing lists, press releases and other types of push marketing can let everyone know about the open APIs.	●	●	●	●
One-on-one engagement – These are usually pitch meetings set up by the DFS provider’s sales and business development team with growth seekers or enterprises, with an objective of understanding their need, pitching the value proposition of APIs offered, and building an integration roadmap.			●	●



Advocates proactively identify and target early adopters of the DFS provider's APIs in the developer and start-up community

- **Advocates are external promoters** of the DFS provider's APIs and inform and influence third parties to use these APIs. They could be developers, consultants, or other influential members of the community.
- While they can potentially influence all third-party segments, they usually work well with stand-alone developers and early-stage innovators. These segments tend to rely on the support of their network.
- Advocates may spread the word through multiple channels including word-of-mouth, training videos, blogs, and social media.

Providing incentives

- Incentives can take multiple forms including monetary compensation, early access to new releases, free passes to conferences/workshops, and better support from the DFS provider's technical team.
- Another way to reward advocates is to connect them with large businesses that might use their services.
- Rewards/incentives are especially useful when the APIs are not well known and the DFS provider needs community members to spread the word.



Twilio runs a volume-based tiered platform for advocates and partners, and provides close handholding in identifying and converting leads



Twilio, an \$18 billion company, is one of the world's largest aggregators of telecom APIs including voice, SMS, and MMS and is known for its use of platform evangelism to acquire customers. Twilio runs a platform, Twilio Build, to effectively engage with advocates and other partners who offer products and services using or supported by Twilio.

Registration: Developers and businesses with expertise in using Twilio are required to register to use the platform in order to receive the services and benefits offered by Twilio to advocates and partners. To get registered, advocates need to meet Twilio's requirements on knowledge of using its APIs.

Assigning to tiers: These advocates and partners are assigned one of three tiers (gold, silver or bronze) based on the volume of leads they are able to convert.

Access to services: Based on their tier level, advocates and partners have access to a number of services including a list of leads they can pursue, business development funds to identify and work with potential third parties, and closer collaboration with the Twilio team to review any new products before launching them on Twilio's platform.

Incentives: As an incentive, these advocates and partners are provided credit towards Twilio products for every lead they convert. This platform also helps third parties identify and hire expert developers thus incentivizing advocates to join the platform, and easing the development process for third parties.



Interest in using APIs can be spurred by incentivizing innovation and collaboration for early-stage innovators and standalone coders

Early-stage innovators and stand alone developers are often agile, understand their target customer, and have the potential to create innovative products. DFS providers can capitalize on this by creating opportunities such as:

Hackathons

Hackathons are competitive sprint-events where programmers gather to collaborate, ideate and develop software products using the DFS provider's open APIs. The most popular form of a hackathon is an offline one. It usually lasts for 24 hours and is scheduled on weekends. Participants are encouraged to come up with creative solutions to solve problem statements for specific themes.

Innovation challenges

These are competitions where participants offer a solution for the problem statement and pre-determined criteria adjudge the winning team. These are ideal when there are clear, objective goals, with many participants who are willing to bear risks. Competitions provide prize money for the winners, provide validation for the business, generate public excitement and attract a wide group of innovators, and can open up new forms of collaborations. E.g. MTN Uganda OpenAPI App Challenge in 2018 to foster use of APIs by local developers in innovative business applications.

Developer conferences/workshops

Developer conferences/workshops are events in which ecosystem players including programmers, businesses and partners, learn about the APIs. These are effective channels to explain and promote the DFS provider's APIs to a wide variety of potential stakeholders. These channels also serve as a platform for different stakeholders to network with each other and to facilitate collaboration between them which can subsequently lead to innovative product development.



Hackathons drive short-term engagement with potential third parties but need to be conducted regularly for long term results

Hackathons are useful for:

- Building awareness and familiarity with the DFS provider's APIs
- Networking among developers leading to a community around the DFS provider's open APIs
- Creating collaboration between developers and incentivizing them to brainstorm new product ideas
- Seeking feedback on their APIs, such as whether the APIs are the right fit or easy to use, and on areas of improvement

To create long term engagement through hackathons:

- Winners should be engaged after the hackathon to build out the product (through a DFS provider facilitated event)
- The hackathons need to be conducted fairly regularly. This will create a strong community around the APIs and increase familiarity with the open API platform.

Best practices for running hackathons:

Define your goal and target audience: Determine your goal for the hackathon (e.g. market the API, create a collaborative environment, get feedback on your APIs, become part of the developer ecosystem) and determine your target audience based on that. When doing a series of hackathons, each hackathon should have different goals to keep third parties interested and excited.

Follow a tried and tested set of processes:

1. Set rules for the hackathon: Provide guidelines on what you expect to see at the end of the hackathons and set rules to ensure competition fairness
2. Provide open access to the APIs: To make the event more attractive, open up access to APIs for all hackathon participants
3. Facilitate connections and collaboration: Facilitating connections and collaboration will not only increase innovation but create interest among attendees
4. Award the best project: Have an open and transparent process to award prize money to the best project
5. Follow-on engagement: Have a clear rewards linked pathway to implementation



T-Mobile US runs frequent hackathons, each with different objectives, to engage with programmers and develop innovative solutions



T-Mobile US is the third largest wireless carrier in the United States and is a subsidiary of T-Mobile, the largest telecommunications provider in Europe by revenue.

T-Mobile US runs hackathons frequently and each hackathon has a different objective.

Some of the objectives of past T-Mobile hackathons include:

- Creating innovative products using T-Mobile's narrow-band internet of things
- Using T-Mobile's e-commerce APIs and creating products for the future of digital commerce
- Creating solutions to improve T-Mobile's customer experience
- Developing innovative products using blockchain technology
- Creating solutions to improve T-Mobile's employee experience

	T-Mobile NBIOT 2019 Bellevue, WA, USA We invite fresh and seasoned developers alike to join us to invent the future of NB-IoT, while mingling with our technologists, product teams and talent scouts.	\$14,000 IN PRIZES Mar 8 – 9, 2019 64 PARTICIPANTS
	T-Mobile Hacksgiving Bellevue, WA, USA Use your smarts, creativity and innovation to come up with a demo or app to demonstrate your vision for what these technologies can do for Digital Commerce.	\$11,000 IN PRIZES Nov 17 – 18, 2018 48 PARTICIPANTS
	T-Mobile Hacktober 2018 Richardson, TX, USA Use your smarts, creativity and innovation to help us use technology to get closer to our customers and to give our experts superpowers.	\$11,000 IN PRIZES Oct 27 – 28, 2018 59 PARTICIPANTS
	IOT & Security Blockchain Hackathon #T-LabsHACK Seattle, WA, USA An IOT & Blockchain Hackathon using Telekom Innovation Laboratories hashtaX solution	\$5,499 IN PRIZES Oct 27 – 30, 2018 16 PARTICIPANTS
	T-Mobile IoTHack Bellevue, WA, USA T-Mobile IoT Hackathon	\$14,000 IN PRIZES Apr 20 – 22, 2018 42 PARTICIPANTS



Usability, ability to test and cost of the product are key factors that influence the decision to integrate

The following three factors are often used by third parties to assess different API options:

Usability

- Technical tools and support
- Standardized documentation and APIs
- Assistance in building out the integration roadmap

Ability to test

- Robust sandbox

Cost

- Affordability
- Customized pricing

Other features that API providers will consider include:

Feature completeness: full alignment of API features to third-party needs e.g. transaction status feature, capturing each stage of the payment process.

Language support: ready support for programming language, in the form of an SDK or an example script, depending on the complexity of the API.



Standalone coders and early-stage innovators seek D.I.Y. tools; growth seekers seek standardization; and enterprises require handholding

Usability is a critical factor for each third-party segment, regardless of their reasons for integration or their API needs. However, segments require different activities/initiatives to address their needs.

Technical tools and support

● MOST RELEVANT ● SOME RELEVANCE



Developer portal*

- Channel by which DFS providers can reach third parties so as to communicate the functionality provided by APIs and the business value that APIs bring.
- Enables third parties to discover, explore, test, register for access, and use the APIs.
- ‘Do It Yourself’ (D.I.Y.) tools allow third parties to self-service and onboard smoothly. Might include tutorials, developer forum, SDK plugins, get-started guides, videos, mini case-studies, graphics, and quotes showcasing the possibilities enabled by the APIs.



Assistance in building out the integration roadmap

- **Integration assistance**:* offered to larger businesses which do not have internal technical capabilities to leverage and integrate APIs, either directly or through certified developers. Smaller businesses can be referred to developers that have previously successfully integrated the APIs.



Standardized documentation and APIs

- Consistent API design, using industry style guidelines ensuring ease and simplicity of the API; and documentation following industry standards to assist experienced developers to rapidly understand the APIs and their features.

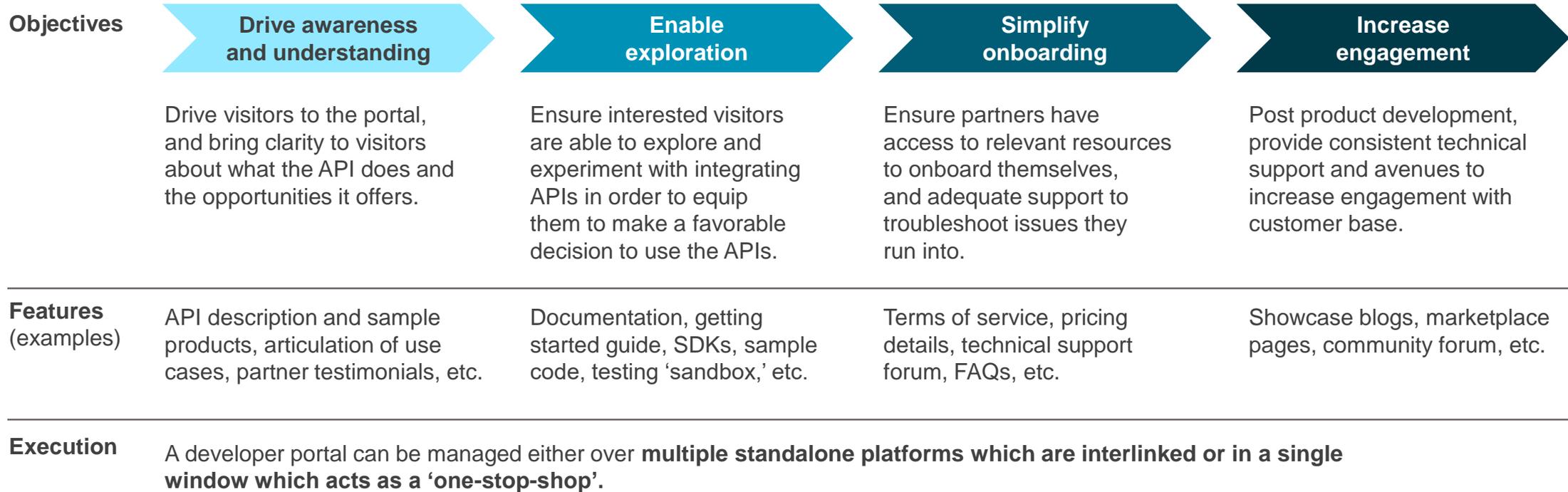


*A number of engagement activities/initiatives have a role to play across multiple steps of the third-party journey. For example, the developer portal has been placed under consideration but also has important roles to play during awareness and onboarding. Similarly, integration assistance is also important during onboarding.



Developer portals go beyond being a platform for information dissemination and D.I.Y tools and help create an online support community

Overview of developer portal: DFS providers typically provide a website to support access to the APIs. Usually this website hosts the documentation for the APIs, and instructions for how to use them (and how to access the sandbox, if available). A developer portal goes beyond and should be seen as a **channel by which DFS providers can reach and engage with third parties**. This is key to attract and engage third parties, enabling them to discover, explore, understand, test, register for access, and use the APIs. Developer portals have a role to play across multiple stages of the third-party journey.

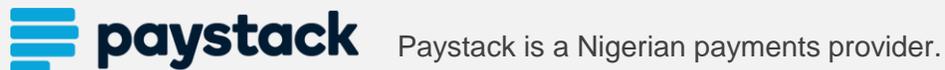




Engagement activities/initiatives that fulfil needs > Consideration > Usability > Developer portal > **Case-in-Point**

Paystack's developer portal attracts visitors, and provides clarity about what the API does and the opportunities it offers

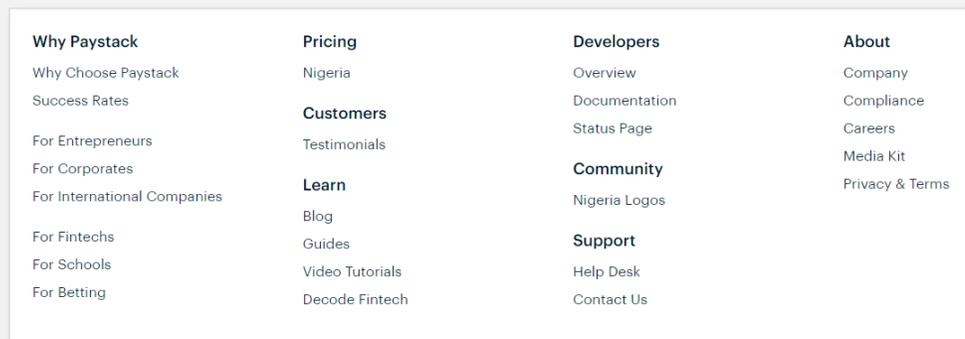
Objective 1: Drive awareness and understanding



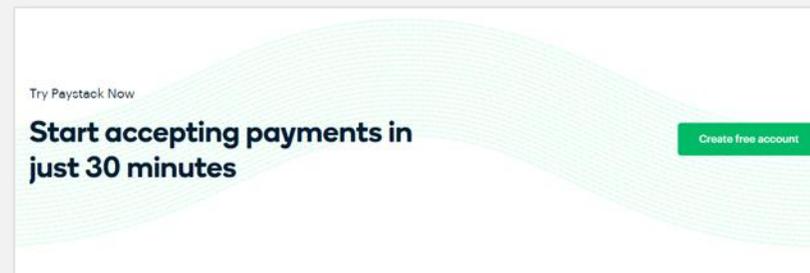
Description of Paystack APIs and detailed partner testimonials to support the opportunities



Clear and simple explanation of products and use cases for different types of segments



Easy navigation for visitors with clear layout of what the portal offers



Link to quick account creation with clearly defined 'call to action' to nudge visitors



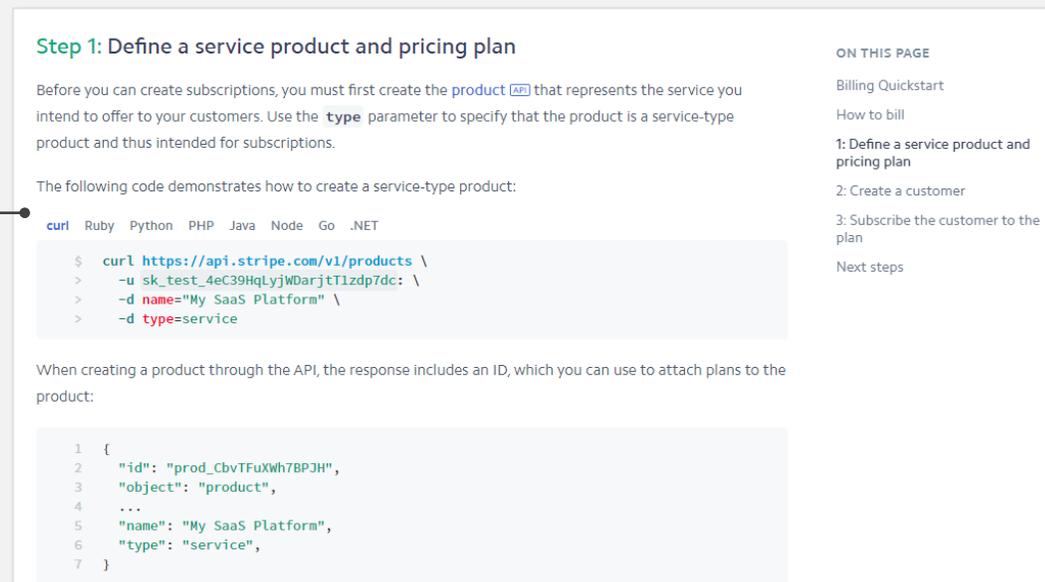
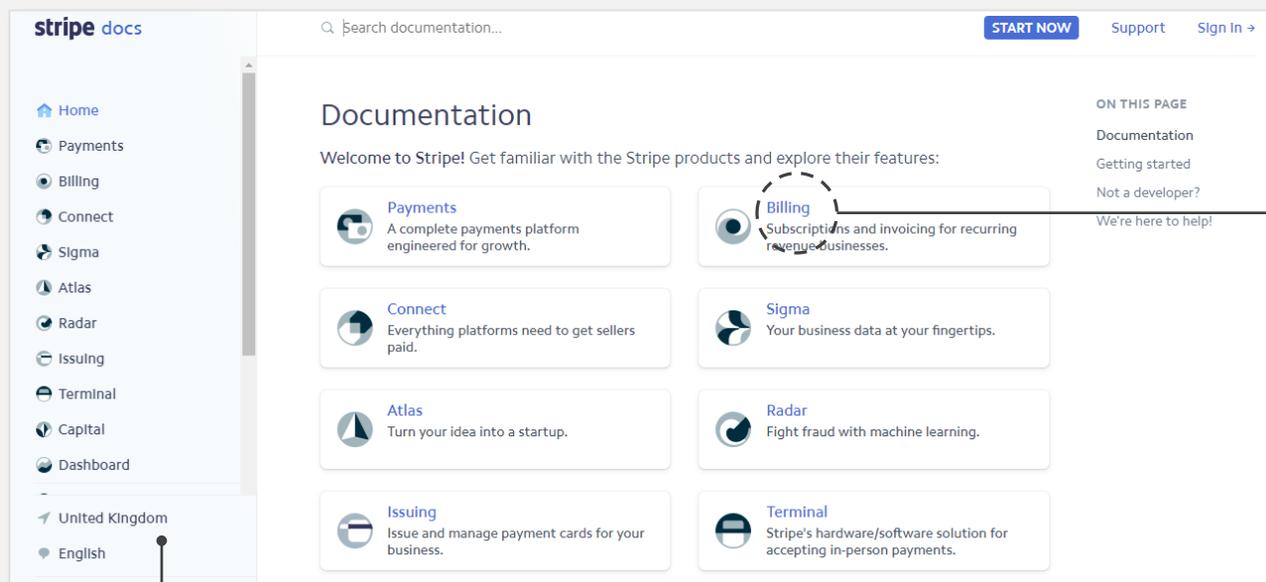
Stripe's developer portal ensures interested visitors are able to explore and experiment with integrating APIs and are equipped to make a favorable decision to use them

Objective 2: Enable exploration



Stripe is one of the world's largest online payment processors for third parties.

Single source of all relevant documentation and clearly laid out 'getting started' guide



API offerings for exploration with each product having detailed features and step-by-step guides and tools to drive use

Step by step guide, sample code is given, interactive area to test, etc. ("Billing" screen selection)





Engagement activities/initiatives that fulfil needs > Consideration > Usability > Developer portal > **Case-in-Point**

Both Paystack's and Stripe's developer portals ensure that partners have access to relevant resources to build their products, and adequate support to troubleshoot

Objective 3: Simplify onboarding



IF YOUR CUSTOMER PAYS

NGN 2000

WE'LL SETTLE YOU **NGN 1,970.00** PAYSTACK FEES (1.5%) **NGN 30.00**

- Free, automatic settlement within 24 hours ✓
- Local fees capped at NGN 2,000 ✓
- Volume discounts available ✓
- No hidden fees or charges ✓
- Zero integration fee ✓

Pricing page to describe cost of each API before developers go 'live'.

- Blog**
Original lessons about making the internet work for your business
- Guides**
Big ideas in payments, explained in simple English
- Video Tutorials**
Quick video tutorials on how to use Paystack
- Decode Fintech**
The trade email newsletter and podcast for leaders in African fintech

Blogs, tutorials, guides, etc. available on Paystack to make the entire process easier to undertake and bring back visitors to refer to this material

How to activate your registered business on Paystack

25 videos • 9,313 views • Last updated on 29 Aug 2019

- How to activate your Registered Business on Paystack (10:13)
- How to activate your Starter Business on Paystack (7:13)
- How to invite a user to your Paystack Dashboard (3:15)
- How to find your Paystack API Test Keys and Live Keys (1:51)
- How to set up Paystack on Shopify (7:03)
- How to create a Paystack Payment Page (6:50)

Paystack tutorials hosted on external portal (YouTube) with multiple videos across topics ("Video Tutorials" screen selection).



Detailed support, including technical, across topics and provision of 24x7 support through chat options and more tailored premium support for larger organizations.

stripe support

Q | What can we help you with? Search for a topic or question...

- My Account
- Charges & Refunds
- Payouts
- Connect
- Billing & Subscriptions
- International
- Disputes & Fraud
- Accounting & Taxes

Introducing Premium Support designed for fast-growing businesses and additional services for enterprises operating at scale. [Explore services](#)

24x7 support over email, phone, or chat
Can't find your answer? Get in touch with our team—we're here to help. [Contact us](#)

Technical questions on IRC
Got any technical questions? Our developers hang out in [#stripe](#) on [freenode](#).



Source: [Paystack developer portal website](#); [Stripe developer portal website](#)



A tiered pricing structure that aligns with the value that each segment expects to get from APIs is crucial to drive engagement

Suite of pricing models (relevant to all segments)

DFS providers can base pricing on:

- Fee per API call
- Revenue share
- Free access (where revenue comes from the tariffs charged on the account/wallet transactions)

Providers can use one or more of these to create a menu of pricing options.

This gives standalone coders and early-stage innovators the flexibility to choose a pricing option that aligns closely with their cash flows, while enterprises and some growth seekers might be willing to pay more for additional features.

Case-by-case basis (relevant to enterprises and some growth seekers)

Usually have a fair amount of financial *muscle* and are willing to pay for their specific unique needs.

Some value pricing on a case-by-case basis based on overall volume and value of business that they are bringing, growth projections, profitability, target audience or value proposition.

A key determinant of pricing is the competition in the market, and the alternatives that third parties have (e.g. credit card processing cost vs mobile money acceptance cost). However, the importance of cost will vary to the different target segments e.g. early-stage innovators will typically have a higher weightage to pricing in their choice of APIs than growth seekers.



Pricing models of different APIs



- Safaricom's M-PESA is one of the largest and most successful mobile money wallets in the world.
- Safaricom's M-PESA handles about 70% of mobile commerce transactions in Kenya.
- Safaricom offers its M-PESA Daraja API to third parties at no cost, for both integration and use.
- It generates revenue from the tariffs imposed on normal M-PESA transactions.
- A general merchant third party can decide how to manage the tariff cost, usually 1% of the transaction value i.e. bearing the cost, passing the cost to consumer, or splitting the cost with the consumer.



- PayPal is a third-party processor which enables third parties and customers to pay, send money, and accept payments.
- PayPal charges a monthly/annual fee for using its platform of up to \$30 pm.
- Its service fee is based on the volume of transactions, charging '2.9% + \$0.30' for US-based transactions and '4.4% + fixed fee'* for international payments.
- In some markets (e.g. India), the percentage fee is reduced for higher volumes of monthly sales (to '3.4% + fixed fee' for monthly sales \$100,000.01 and over).



Twilio is a cloud communications platform as a service company.

It has simple, flexible pricing options:

- Free for fewer than 100 authentications per month
- \$0.09 for any successful authentication above 100

Third parties can manage their API pricing plan as follows:

- Pay-as-you-go: simple usage-based pricing
- Volume discounts: discounts triggered as use grows
- Committed-use discounts: executed on a case-by-case basis



Tiered access, which lowers lead time and burden of documentation to go-live, eases onboarding for the long tail

There are risks associated with open APIs since the DFS provider is exposing its core systems and customers to unknown third parties:

- **Security:** Activities that compromise systems or data
- **Regulatory:** Illegal activities that use the DFS provider's APIs
- **Reputational:** Activities that affect the DFS provider's reputation and brand

The onboarding and KYC process is meant to mitigate against these risks. However, the accompanying requirements and process can feel cumbersome, especially for standalone coders and early-stage innovators. Therefore the risks need to be balanced with easing and speeding up the onboarding process for third parties – such as by automating or even eliminating processes where possible.

A tiered KYC requirement that is proportional to the risk posed by a third party makes the onboarding process simpler and quicker.

- Plugins and applications with limited functionality reduce security and reputational risk and third parties that rely only on these plugins should have access to a simplified KYC.
- Certain use cases (e.g. B2B payment) require less regulatory compliance and pose a lower security and reputational risk. DFS providers should allow third parties to pass a simpler KYC process if only requesting access to these types of APIs.
- The KYC process can be made simpler based on regulatory requirements that change for different scenarios. For example, in many countries regulations require additional elements in the KYC process if the individual/business is transacting above a certain amount – meaning for some third parties, steps in the KYC process can be eliminated completely.



Paytm lets third parties instantly onboard if they use a plug-and-play product and transact less than INR 20,000 (~\$280) a month



Paytm is one of India's largest ecommerce payment systems and digital wallet companies.

The screenshot shows a Paytm website page with the following content:

- Header: Business with Paytm, PRODUCTS
- Question: **I haven't registered my company yet. Can I get a payment gateway?**
- Link: [Dashboard](#)
- Answer: Yes! You can sign up for the Starter Plan with your personal PAN. You can upgrade your account later once you have your business registered.

For individuals/small businesses that only accept payments, use Paytm's plug-and-play service, and transact less than INR 20,000 (the regulatory limit beyond which KYC is needed), Paytm allows instant activation by filling a simple online form and submitting a taxpayer ID number (PAN).

The screenshot shows a Paytm onboarding form with the following details:

- Plan: Enterprise
- Business Type dropdown menu is open, showing options: Proprietorship, Partnership/LLP, Trust/Society, Private/Public Ltd. (highlighted), HUF.
- List of documents: 1. Company Proof: Use any one of the following documents
 - Registration Proof
 - Shop establishment Act Certificate
 - Regional State Registration certificate
 - Municipal Corporation Department Certificate/License

For other third parties, onboarding/KYC requirements depend on the type of business and their total monthly transaction amount. For all other cases, Paytm reviews the product integration before going live to mitigate security and reputational risk. It requires KYC depending on the total monthly payment accepted and the type of business registration to mitigate regulatory risks/requirements.



🔄 Standalone coders value assistance in understanding legal structures and in the processes involved to register their business

Business registration is a stumbling block for stand-alone developers in going live with their product.

Number of programmers in the sandbox vs number of programmers that have initiated KYC at a CGAP partner DFS provider.



DFS providers can take the following steps to make registration easier:

- Provide documentation on the different business types (e.g. Limited Liability Company, Sole Proprietorship etc.) along with the advantages and disadvantages of each option, as well as timelines and cost to register
- For each business type, provide a check-list with documents that the third party needs, actions it needs to take, and list of forms to be filled out
- Provide all the forms that are needed for registration and pre-fill where possible
- Provide a mailbox/address for the business to use for registration
- Where necessary for settlement, partner with a bank to open a bank account for the business within a predetermined turnaround time

These steps help give standalone developers the information they need and simplifies the process of business registration. They also demystify the business registration process. Therefore these steps would lead to an increase in standalone developers registering their businesses.



Stripe has a dedicated service offering to help developers with their end to end business registration process



Stripe Atlas is a platform to assist developers and foreign start-ups register their businesses in the US.

It provides a host of services and helps these start-ups with end to end business registration.

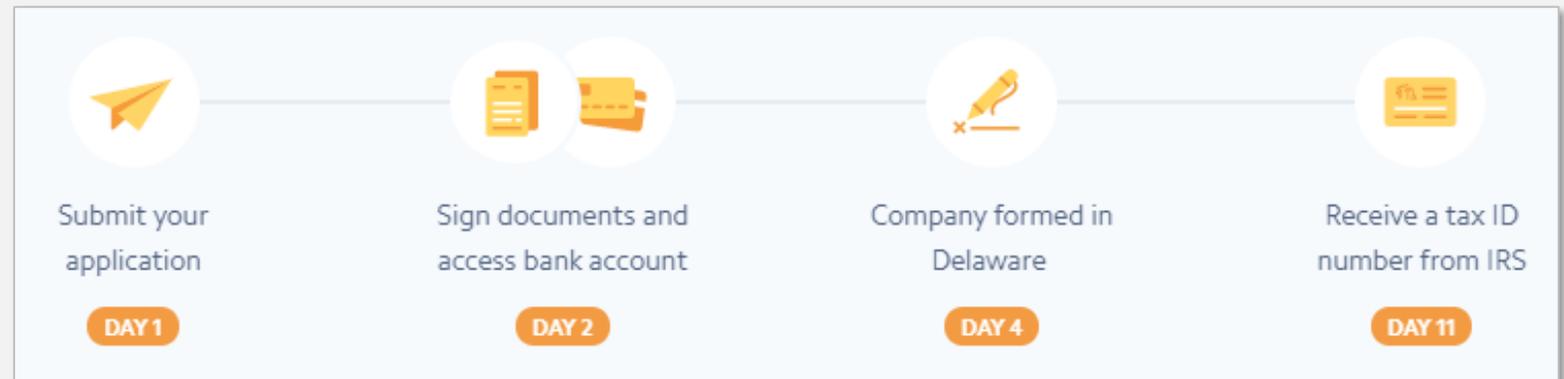
Get started with Stripe Atlas

Stripe Atlas helps you take key steps to start an internet business—all for one simple fee.

Includes

- ✓ Formation of a Stripe Atlas C Corporation in Delaware
- ✓ Delaware state filing fees (\$189 fee included)
- ✓ Signed documents to establish company rules and protect IP
- ✓ Tool to issue stock to founders (for C Corporation)
- ✓ First year of registered agent fees

In order to demystify the process, Stripe provides a process flow to third parties along with expected timelines.





To increase and sustain use, support third-party business operations and provide data and related insights

Business support

Successful third parties lead to increased API use and therefore a successful API program. It is in the DFS provider's best interest to support growth of its third parties.

The DFS provider is in a unique position to support third parties due to two factors:

- Existing knowledge, skills, and relationships either from working with other third parties in the past or from its own business experience; and
- Repute, network, and convening power within the ecosystem.

Performance data and analytics

All third parties need to monitor the APIs' technical performance. Growth seekers and enterprises, in particular, operate at a large scale and require business performance data and trends to be presented in an easy to absorb manner. These trends, along with analytics to provide insights, can help third parties make important business decisions that lead to their growth.

The DFS provider is in a unique position to support third parties due to two factors:

- The data analytics engine can learn from data across the DFS provider's third parties and not just a single third party; and
- It can leverage economies of scale by building a single data and analytics platform that all third parties can leverage, instead of each third party building its own platform.



Business support needs to be customized to segments – early-stage innovators need acceleration support while growth seekers require advisory support

Business acceleration support

Early-stage innovators primarily need acceleration-type support to grow their business.

This typically includes support needed to create a viable business model around their product and to successfully grow e.g. marketing, leadership, accounting, and stakeholder management. This support is typically provided on a one-to-many basis, directly or through partners. Some API providers also focus on areas more directly linked to API use, like training on how to sell online:

- **Business training and services:** Accounting, business plan formulation, marketing strategy, soft skills training, etc.
- **Networks:** Mentoring, coaching, peer networks, customer/supplier access, etc.
- **Funding:** Facilitating access to venture funding.

Business advisory support

Growth seekers primarily need advisory-type support when they enter a new market or launch a new product.

This typically includes support to leverage the DFS provider's presence in a geography (such as customer base, brand, or channels) and network to build and execute a go-to-market strategy in their new geographies:

- **Market entry:** Support in understanding the market (from regulatory requirements to customer needs – e.g. for language or channels) where the DFS provider already has a presence.
- **Networks:** Networks to identify local partners, suppliers, and customers.



Based on the DFS provider's market conditions and objectives, support to early-stage innovators can be structured as high touch or high volume

	HIGH VOLUME	HIGH TOUCH	This should be subject to a cost-benefit analysis, and be aligned to the providers broader investment and incubation strategy. More relevant for larger DFS providers.
Features of the approach	<ul style="list-style-type: none"> • Light-touch business skills support • Large reach 	<ul style="list-style-type: none"> • One-on-one business support • Target few selected businesses 	
Actioning the approach	<ul style="list-style-type: none"> • Partner with an online platform to provide common business trainings and services • Provide subsidized access for businesses that have completed their KYC • Maintain a roster of common service providers (e.g. accountants, digital marketing professionals, lawyers) that businesses can connect with for a fee • Conduct regular training and networking events for entrepreneurs • Send a list of live enterprises along with brief descriptions of their businesses to investors and mentors 	<ul style="list-style-type: none"> • Partner with an existing incubator or accelerator to deliver on these services • Determine the amount of funding and the type of funding (debt/equity/grant) you want to allocate to selected businesses and the criteria to select enterprises for support • Provide one-on-one training for critical skills and virtual/classroom training for less critical skills • Consider providing a co-working space. This will not only reduce costs but help start-ups form peer networks that they can rely on • Connect each enterprise to a paid mentor/advisor • Connect mature start-ups with the next round of funders 	
Case-in-point	INV Fintech is a virtual accelerator program focused on fintech start-ups. It offers access to Fiserv* and Financial Institutions; support from mentors; access to its alumni network; and media exposure.	PayPal runs an innovation lab in Singapore through which it runs an incubator to launch and grow start-ups. It is a five month program. It includes business training and services, infrastructure, and provides access to networks and funding.	

*Fiserv, Inc. is a global provider of financial services technology. The company's clients include banks, thrifts, credit unions, securities broker dealers, leasing and finance companies, and retailers.

Source: [INV Fintech website](#); [PayPal Innovation Lab website](#)



Growth seekers and enterprises seek performance data and analytics at five levels – overview, technical, transaction, payout and customer

Overview

1. Overview: High level data for the dashboard user to visualize the status and progress of the business. Example fields

- Gross sales volume
- Net sales volume
- # of new customers
- Average revenue per user
- Fees charged by the DFS provider
- Amount released by the DFS provider
- % of disputed payments
- % of fraudulent activities
- System downtime

Third Party/Customer

2. Transaction level: Transaction/API-call history listed in reverse chronological order with information such as:

- Transaction type
- Transaction amount
- Transaction status (succeeded/declined)
- Reason for decline
- Fraud risk level

3. Customer level: Information at the customer level. Examples include:

- # of transactions by the customer
- Net sales value for the customer
- Frequency of transactions by the customer

Third Party/DFS Provider

4. Payout level: Transaction amounts to be sent or received from the DFS provider to the third party. Examples include:

- Total amount paid
- Total amount received
- Outstanding payment
- Pending receipt
- Time till next payment

5. Technical level: Technical use of the APIs. Examples include:

- # of total API calls
- # of failed API calls
- Reason for call failure
- Next expected downtime
- Next expected system upgrade



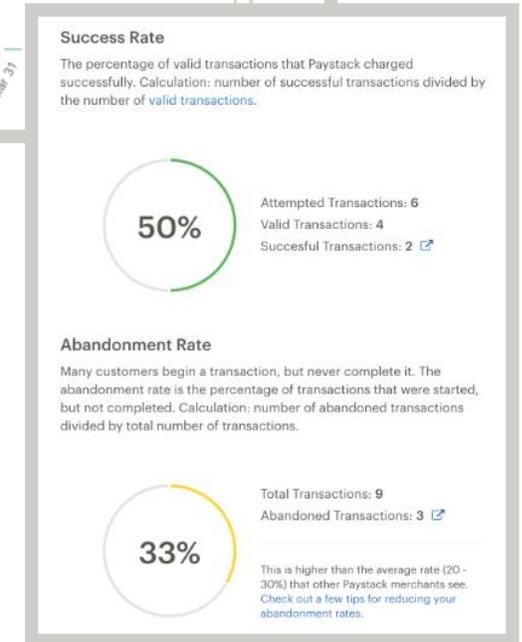
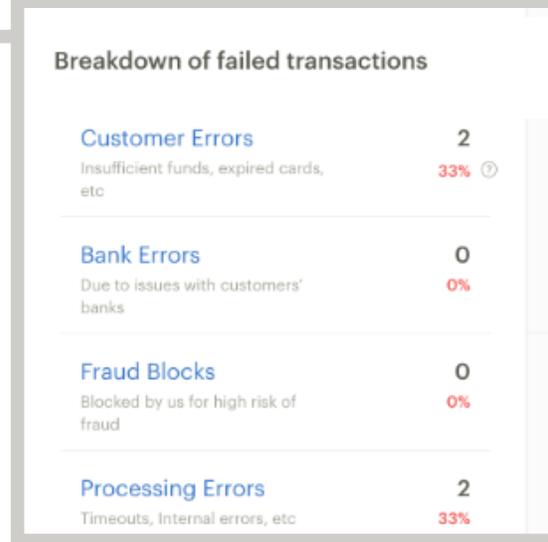
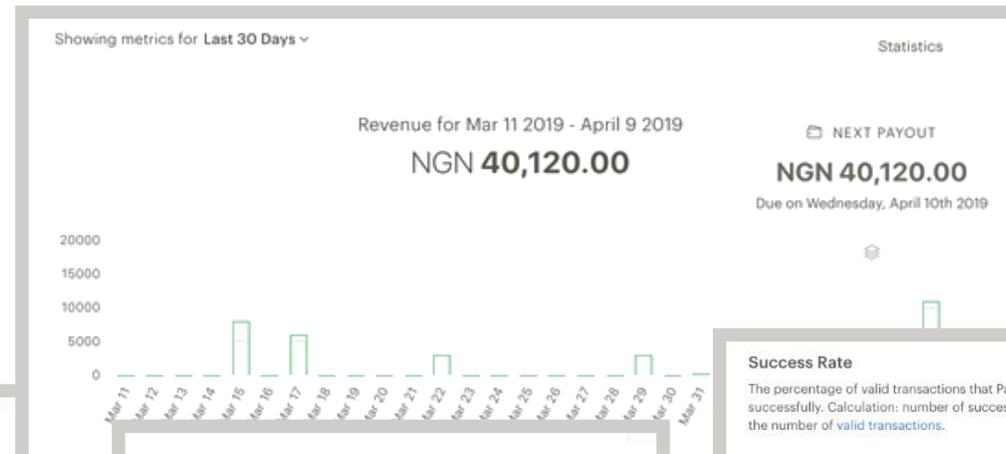
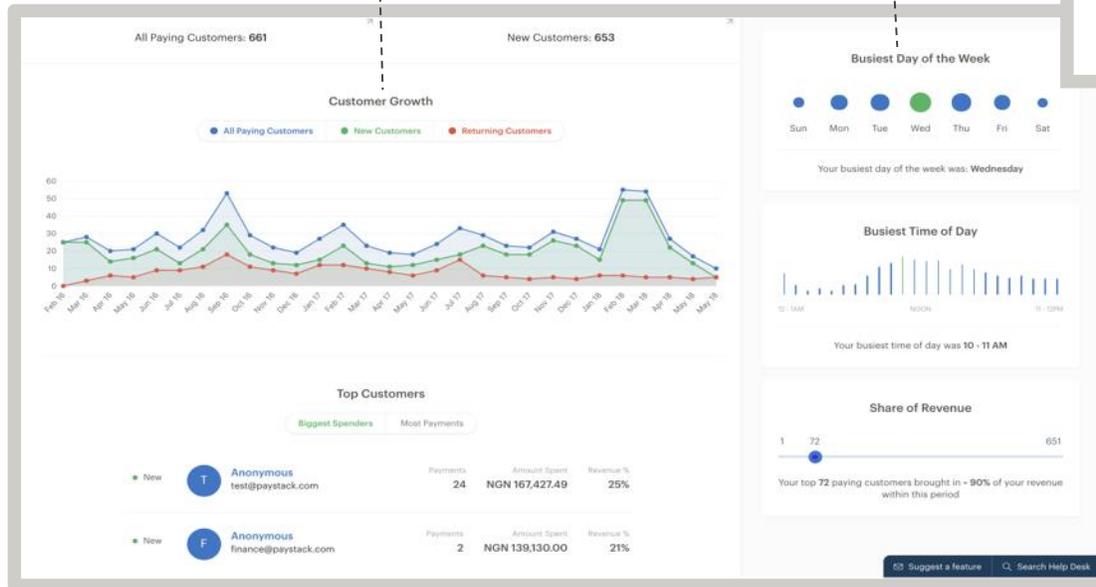
Paystack gives its third parties access to information on use, revenue, settlement, failures, and reasons for failure



Paystack provides dashboards with access to deeper analytics to help third parties understand API use patterns.

Information on customer growth and top customers

Data on busiest times for business



Source: "New: Customer Insights and revamped Customer Directory on the Paystack Dashboard," Paystack, <https://paystack.com/blog/product/customer-insights-and-customer-directory>

Overall, most third parties deem transparency and simplicity around processes and access to technical support as critical across the engagement journey

Business processes

Detailed process maps for each product, outlining the process for accessing and using the sandbox, completing KYC, onboarding, and going live.

Processes should also give clarity around:

- Types of use cases/products
- Pricing
- Available services
- Technical documentation

Technical support

Includes clarifying information and contact support for third parties during the integration journey.

Support team should be well-versed and adequately trained on the types of APIs available, their use cases, value-add to third parties, limitations or challenges that may be faced during integration and how to solve for these challenges.



iPay shares a comprehensive step-by-step process showcasing a third-party's journey from set-up to launch of an API solution



iPay is a payments processing solution and payment gateway for Africa.

Outlines a simple process flow on its website highlighting how to integrate; how to resolve challenges that may come up; different parameters required for different functions; expected responses from callbacks; how to verify the status, etc.

1. Introduction

- 1.1 What to POST/GET to iPay
- 1.2 How to Structure a Gateway Call
- 1.3 difficulty in implementing HMAC?

REST API integration

- 1.1 HOW and WHAT To POST/GET to the IPay gateway
- 1.2 REST API initiator Request
- 1.3 Initiator Request Responses
- 1.4.1 Mobile Money Transact Call and Response
- 1.4.2 Credit Card Transact Call and Reponses
- 1.4.3 Trigger SIM Toolkit (STK PUSH)
- 1.4.4 Recurring Billing
- 1.5 Refund

Offline POS Integration

- 1.1 Initiate Transaction
- 1.2 POS Callback

iPay Developers API introduction

This is the C2B API

The IPay Integration is simple and seamless. There are two types of intergrations:-

Integration	Process Flow(English)	API Calls(Geeklish)
1.1 Web Based Integrations	<ul style="list-style-type: none">Customer checks out from merchant website/App/Desktop App and selects the iPay as the preferred payment method.Customer is redirected to the iPay payment gateway where they will be presented with an interface containing the various payment channels.The customer selects mode of payment, follows the instructions and pays.If the transaction has successfully been processed and they press the [Confirm Payment] button, IPay will redirect to the merchant provided Callback URL with the respective statuses for the Processed Transactions	<ul style="list-style-type: none">Section 1.1 Parameters required for successful payment integrationSection 1.2 Making Payment Request and How to generate the hash parameter(defined in section 1.1) which signs

The documentation describes the process in layman terms along with the relevant technical information,

Stripe provides support along the entire integration process with third parties knowing who to contact in case they run into challenges



24x7 phone and chat support

A third party can get support at any time via phone and/or chat, including a well-staffed community forum.



Email support

A dedicated email address to respond to any third-party requests/queries.



Support staff across time zones

A team spread across Stripe's nine offices available 24x7.



Infrastructure to turn support metrics into insights

Internal systems that turn standard support metrics into detailed insights that help with everything from routing and categorizing questions more efficiently to providing the right contextual information.

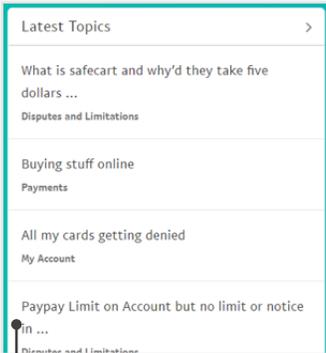


Support in different languages

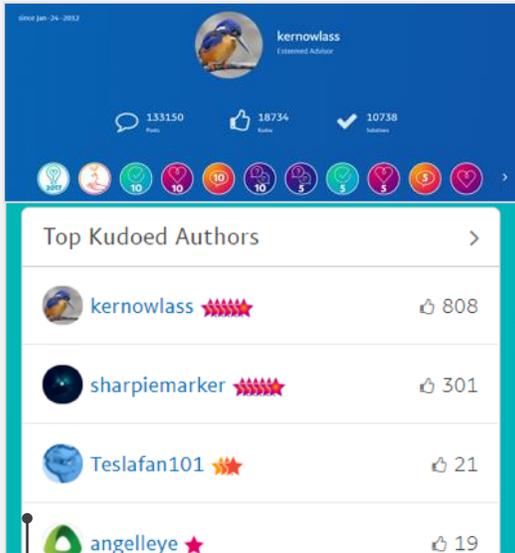
Phone and chat support available in English. Email support available in English, German, French, Italian, Japanese, and Spanish.

Engagement activities/initiatives that fulfil needs > All-through > Support > **Case-in-Point**

PayPal, MTN Uganda, and Stripe provide consistent technical support and avenues to increase engagement with customers



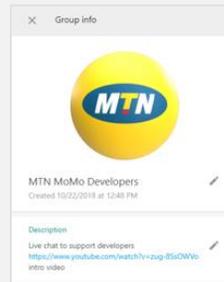
Forums through which developers can post questions about technical topics, such as APIs or integration, with members contributing to conversations and PayPal acting as a moderator.



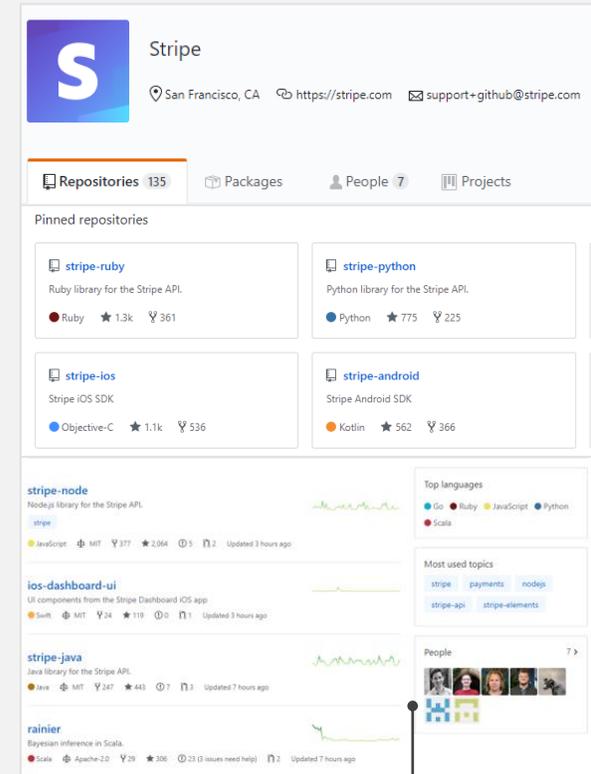
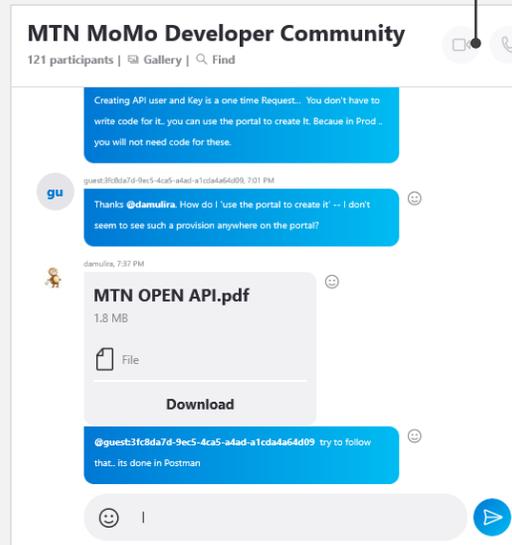
Incentivizes community to participate through leaderboards and badges.



MTN is the largest telecom company in Uganda.



MTN Uganda's portal links to WhatsApp and Skype groups which act as forums for developers.



Stripe has actively moderated forums hosted on GitHub, with multiple contributions across repositories.



Source: [PayPal community website](#); [MTN Uganda developer portal website](#); [Stripe developer portal website](#)



Photo by: Ramon Castillo

Selecting and executing a portfolio of engagement activities

Engagement activities across the third-party journey – A recap

In the previous section, we mapped a range of engagement activities and initiatives that can help meet the needs of the different third-party segments.

These are mapped across the engagement journey in the adjoining exhibit.

Steps	Activities/Initiatives*			
① Awareness	Advocates	Media outreach	Events	One-on-one engagement
② Consideration	Developer portal	Robust sandbox	Suite of pricing options	Customized pricing
	Standardized documentation and APIs		Integration assistance	
③ Onboarding	Tiered access	Business registration		
④ Use and Growth	Acceleration support	Business advisory	Dashboard	
○ All-through	Transparency in processes	Effective support		

* A number of engagement activities/initiatives have a role to play across multiple steps of the third-party journey.

DFS providers need to answer five key questions to formulate a third-party engagement strategy

- I What is the business rationale for opening APIs?
- II Who is the target third-party segment?
- III What are the core needs of the targeted third parties at each step of the engagement journey? And what activities or initiatives are needed to meet those needs?
- IV What kinds of resource strategy and capabilities are needed to execute?
- V How should success be measured?

Selecting and executing a portfolio of engagement activities > **What is the business rationale for opening APIs?**

The engagement strategy should be anchored in the overall business goals of the open API program

CGAP's "[Digital Rails](#)" report identified five possible business goals of opening up APIs for a DFS provider:



Revenue: grow revenue through customer acquisition, more revenue per customer, and monetization of assets previously unavailable to third parties.



Reach: Connect with more customers directly and indirectly.



Engagement: Create a more engaged third-party community to help build the DFS ecosystem, improve customer satisfaction, and reduce churn.



Innovation: Accelerate delivery of new innovations, products, and services.



Number of integrations: Expand the number of integrations by increasing the speed and lowering the cost.

Three common factors that influence the choice of business goals:

Market position of the DFS provider: Market share of the DFS provider for its traditional (telecom or financial) services, which could range from dominant to emerging, determining the attractiveness of third parties and the degree of leverage the DFS provider has over them. Smaller players may need to differentiate themselves whereas dominant players may be searching for new opportunities for growth.

Competing open API platforms: Prevalence of competing open API platforms and need for differentiation to encourage third parties to switch and choose the provider's platform.

Maturity of the innovation ecosystem: Presence of businesses (early-stage/growth stage start-ups or large enterprises) that create new products and services, and other actors who support such businesses (funders, accelerators, innovation hubs etc.), affecting the requirements of different third parties and the level of effort required to successfully reach the long tail.

Selecting and executing a portfolio of engagement activities > **Who is the target third-party segment?**

The business goals chosen for the open API program will be one of the main determinants of the priority third-party segments

	 Revenue	 Reach	 Engagement	 Innovation	 Integrations	
 Standalone coders			✓	✓	✓	Embeds the DFS provider in the innovation ecosystem; provides early access to potential disruptors of tomorrow. Builds advocates who are likely to influence future employers to integrate with open APIs.
 Early-stage innovators		✓	✓	✓	✓	
 Growth seekers	✓	✓		✓	✓	Likely increases the DFS provider's customer base, market share, and revenue by serving companies who drive a large volume of transactions as they solve marketwide/regional problems.
 Enterprises	✓	✓			✓	Translates to additional revenue stream for the DFS provider by driving large volumes of transactions and seeking efficiency through API integration.

Opening up removes the need to cherry pick upfront.

Selecting and executing a portfolio of engagement activities > **What are the core needs and which activities or initiatives best support them?**

An engagement strategy targeting the long tail should enable self-service, make access and use affordable, and support business success

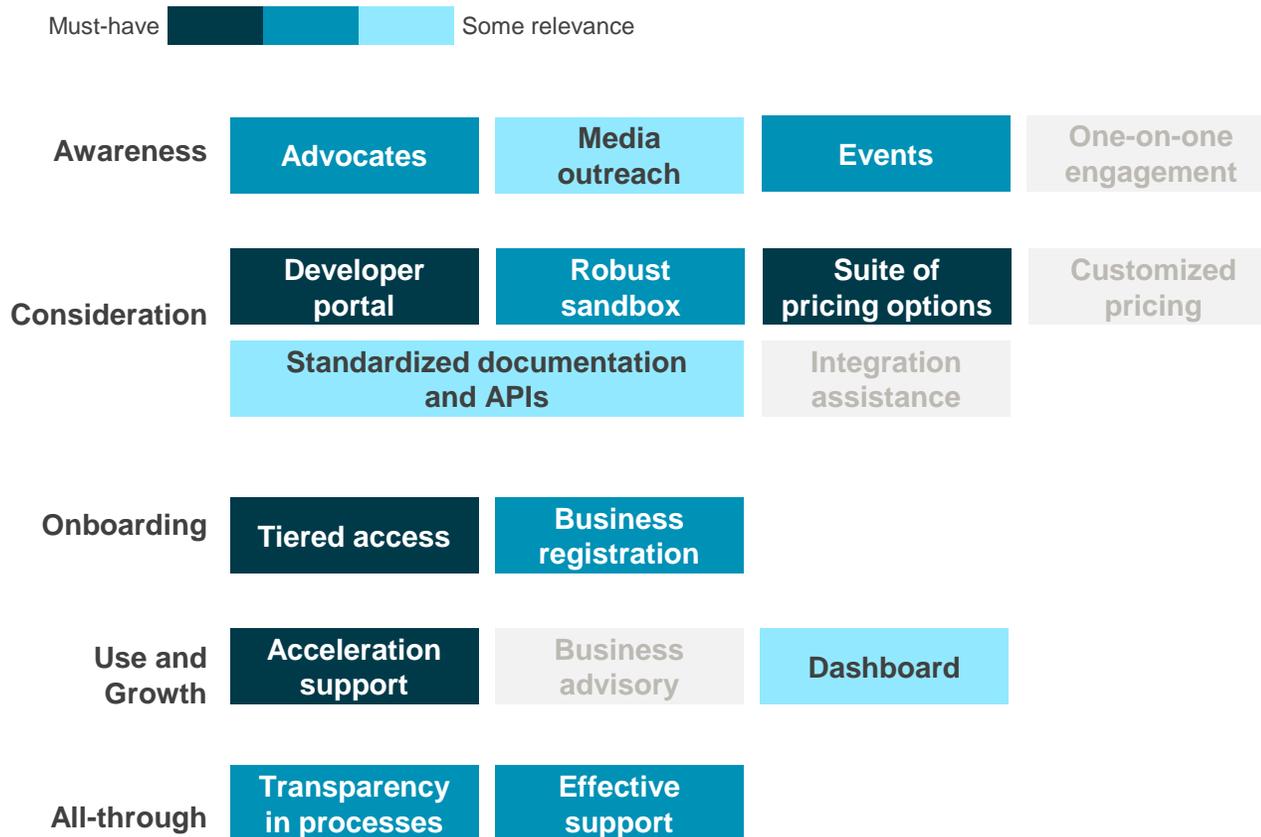


Given the many third parties in these segments, a DFS provider is unlikely to engage with them one on one. It is important to enable self-service and equip these segments to fully understand, evaluate, test, troubleshoot, and integrate with the APIs without direct engagement with the provider. Events with a large reach can be an effective awareness strategy.

These third parties have nascent business models, and affordability is key given that this segment does not yet have a proven business model (or even a revenue stream in many cases). It is imperative to make access and use affordable through a suite of pricing options that helps them get started.

These segments are worth supporting and tracking because a select few will become the future disrupters in the long run. Thus, there is a need to provide broad (rather than deep) acceleration support that goes beyond API integration support—potentially through partners. To aid onboarding, DFS providers may need to offer tiered access and business registration support because many developers in this segment may not have the necessary documentation or a legal business structure.

Easy access to documentation, do-it-yourself tools, a robust sandbox, and effective support is required—though the support will need to be limited and strictly defined, given the need to limit one-on-one engagement. They also rely on advocates and a peer support group (delivered through a community forum) to “problem solve” any challenges they might face during the integration.



To target growth seekers, DFS providers should offer a smooth integration experience and create a tailored value proposition

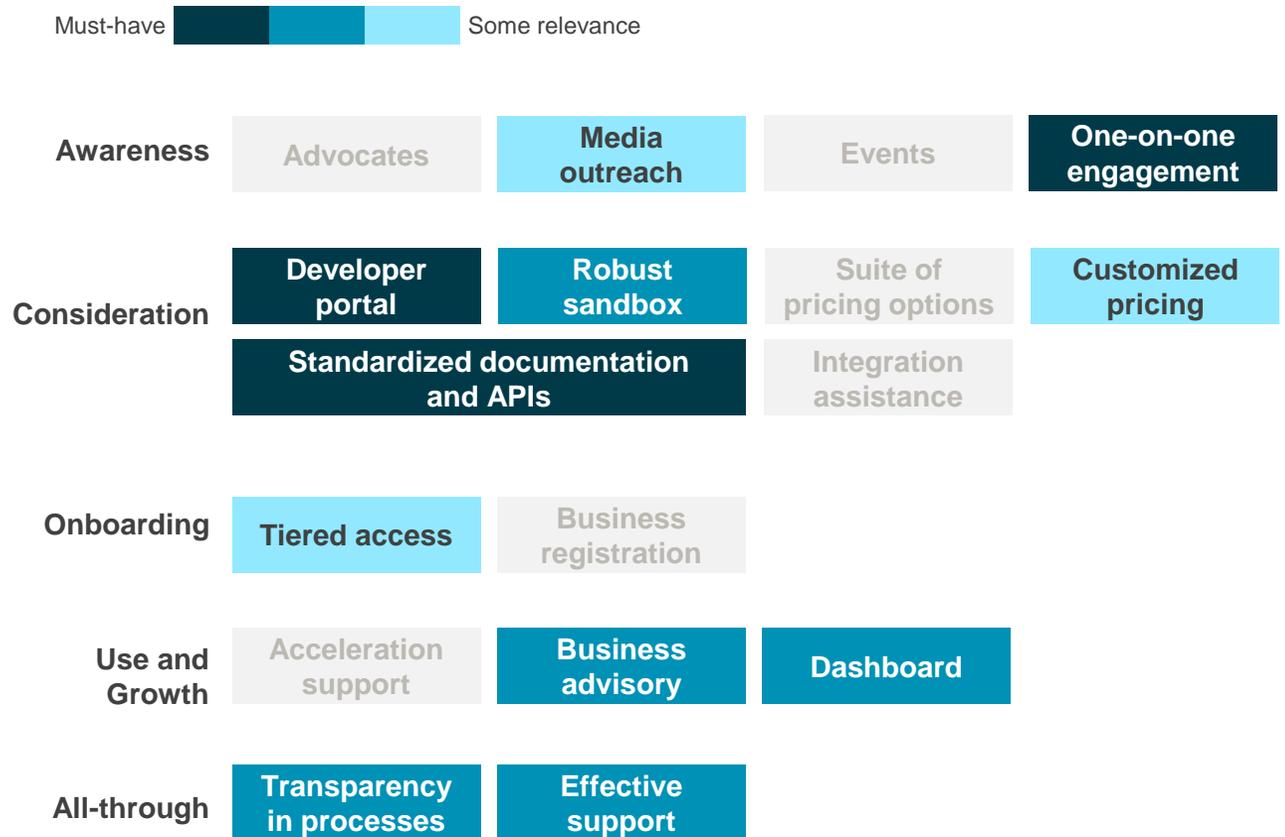


Growth seekers

In line with their ambition to “hack” growth, growth seekers want sharp turnaround times on API integrations and more broadly on product development and iterations. Thus, the strategy should focus on easing and hastening integration through a developer portal and providing standardized documentation and APIs.

The maturity of their product/service combined with their high customer acquisition rate gives them strong market power. They also often consider open APIs to be interchangeable components and thus evaluate and possibly switch to the offerings of other DFS providers. The strategy should create a tailored value proposition by enabling one-on-one engagement, relationship management, specialized content (standardized APIs, functionalities, dashboards, etc.), and sometimes customized pricing. The volume of their resulting transactions should justify the increased expense of this type of engagement.

In addition, business advisory support is valued when growth seekers strive for growth in areas in which the DFS provider has experience or a presence (e.g., geographic expansion). Third parties that are expanding geographically also value tiered access and standardization of APIs across countries. They also require transparency in processes, access to effective support, and performance analytics on a dashboard to help accelerate the use of APIs.



Enterprises need a compelling reason to shift to open APIs



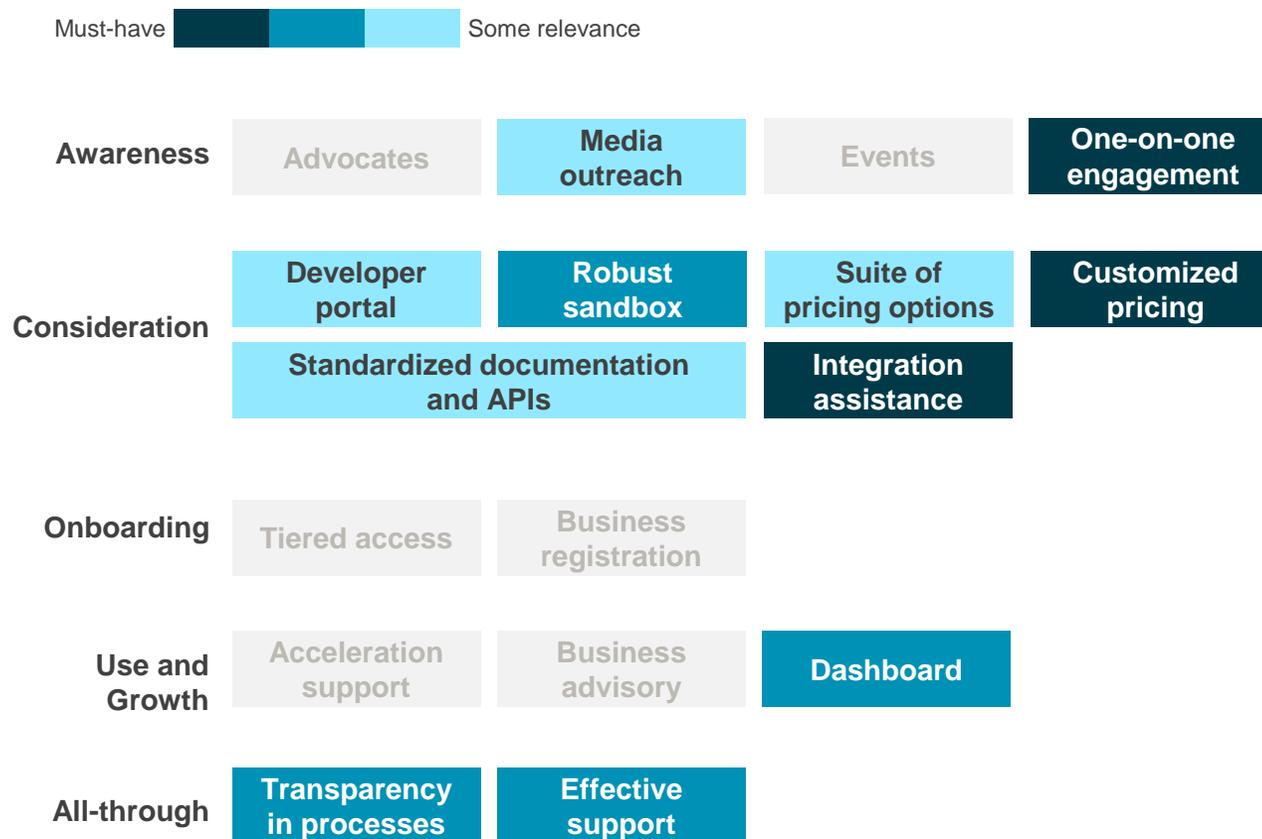
Enterprises

Given the established nature of enterprise business operations, targeting them requires a proactive business development approach that helps create long-term value for them. APIs often are ancillary to their business model, and enterprises may feel little pressure to move away from a business-as-usual approach. Thus, the engagement strategy should offer a compelling reason to shift from existing means, which can be done through one-on-one engagement. Specifically, providing customized pricing helps generate efficiency gains as enterprises operate at scale and would likely seek financial pay-off if they shift to a new system.

Customized integration assistance would help to overcome the barriers to shifting. The DFS provider will need to work closely with the enterprise to pitch, create an offering (including APIs, pricing, technology support, etc.), and closely oversee execution.

Transparency in processes also will reduce barriers to shifting.

To maintain the relationship and ensure a large share of their transactions flow through the APIs, the DFS provider will need to have periodic performance updates, likely through a dashboard, and ensure consistent engagement through effective support. Enterprises also may value additional control (e.g., to understand and resolve errors), which a dashboard can help provide.

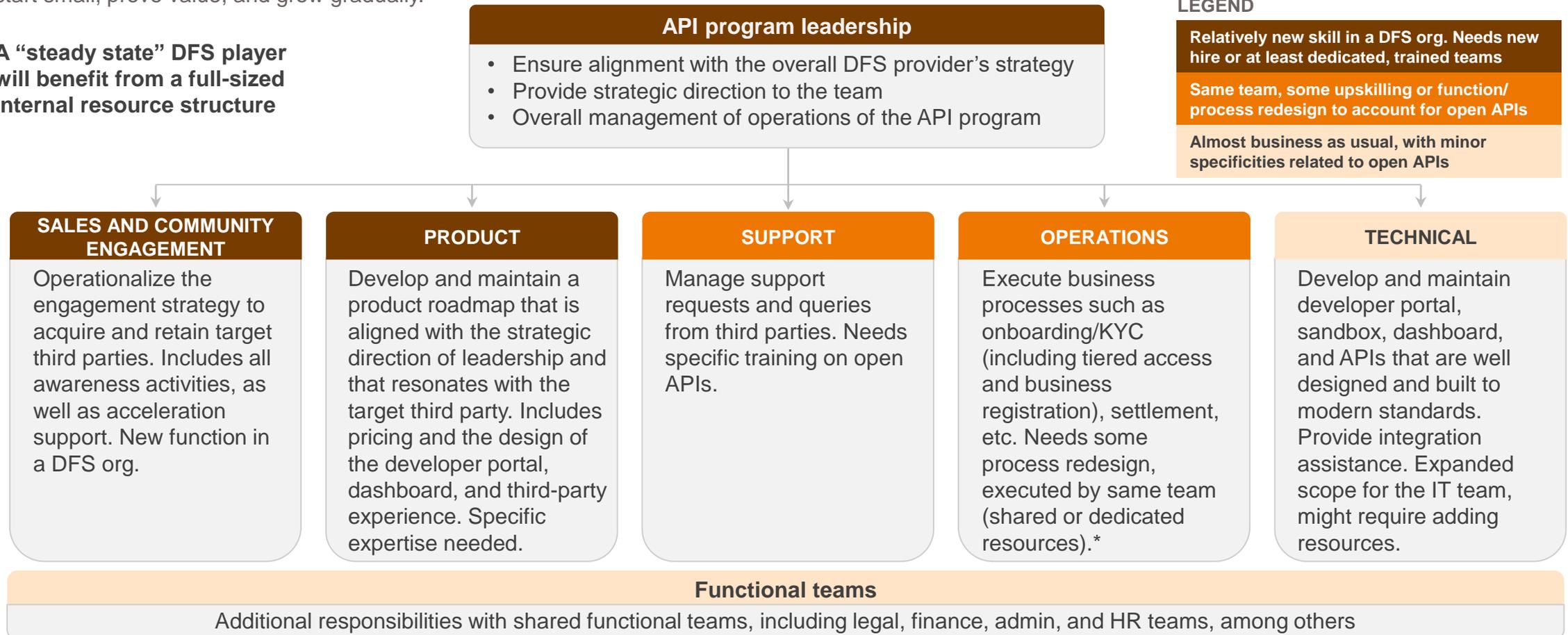


Selecting and executing a portfolio of engagement activities > **What kinds of resource strategy and capabilities are needed to execute?**

What kinds of resource strategy and capabilities are needed to execute?

Executing an engagement strategy needs dedicated leadership, supported by product, technical, sales and community engagement, operations, and support teams. Some of these already are in place in a typical DFS team structure and may need only upskilling or focus on open APIs. However, since APIs are a different kind of product to those DFS providers are used to, and they require specific skills, some new resources may need to be hired. API teams may need to start small, prove value, and grow gradually.

A “steady state” DFS player will benefit from a full-sized internal resource structure



Organizations can opt for different team structures and hierarchies. However, it is imperative to be clear how activities across these functions will be delivered and who will be responsible for each of them. Activities performed within these functions can vary based on the target third-party segments.

*It is important to manage the risks that come with opening APIs. One way to do this is through the use of fair, standardized legal contracts with partners and third-party providers. See CGAP’s Guidance Note “[Key Considerations When Developing Legal Terms and Conditions for Financial Services APIs](#)”, and the associated [API contract template](#).

Selecting and executing a portfolio of engagement activities > **What kinds of resource strategy and capabilities are needed to execute?**

A dedicated sales and community engagement function should lead the execution of the engagement strategy

While all the teams need to work closely to successfully execute the overall open API business strategy as well as the third-party engagement strategy, the business may wish to sequence the building of this team.

When the organization is ready to implement an engagement strategy, an important first step is to build the sales and community engagement team to keep a pulse on the needs of the target third parties. The roles and responsibilities of this team differ significantly from the traditional sales teams.

Sales and community engagement: Operationalize the engagement strategy to acquire and retain target third parties.

Roles and responsibilities

- Provide easy to understand and detailed documentation in coordination with the technical team.
- Oversee the customer care operations.
- Manage outreach strategy: including external branding, channels, collaterals, type and frequency of events among others:
 - This is critical when working with Standalone coders and Early-stage innovators. Given the sheer number of third parties within these segments, it is imperative that the team is thoughtful in how it engages with them through events, and proactively moderates through forums and portals;
 - Similarly when working with growth seekers, the team needs to have an understanding of the challenges and pain points that the third party might face in its growth, for example when expanding to new geographies.
- Work closely with the product team and feed learnings to other teams.
- Maintain relationships with other partners: e.g. those offering business registration support, acceleration, funding etc; which are needed to effectively execute the engagement strategy.*

It is important to have dedicated team members for this function; teams will benefit from having personnel with relevant prior experiences, e.g. of using the DFS provider's APIs or scaling a digital/technology business.

Selecting and executing a portfolio of engagement activities > **What kinds of resource strategy and capabilities are needed to execute?**

The product and technical teams need to work closely together to keep pace with the needs of the target segment

Product teams need to work closely across functions but especially so with the technical team. This brings in much needed agility to the open API developer portal. For example, the portal can continuously be updated with D.I.Y. tools, documentation and APIs as the needs of the target segment evolve.

Product team

- Maintain overall responsibility of the product value proposition.
- Discover issues and opportunities with the APIs and analyzes data sets, support tickets, market trends, customer patterns and more.

Technical team

- Develop and maintain APIs which are well designed, secure, and built on modern standards.
- Build, maintain, and update toolsets and libraries.
- Run an efficient sandbox.

Setting up product and technical teams

- Teams benefit from close integration (for example, the technical team can be embedded in the product team) and from relevant prior experience (e.g. of using the DFS provider's APIs). Further, such integrated teams could be set up to meet needs of different third-party sub-segments.
- In instances when the technical function is outsourced, it is imperative that the contracts align the SLAs and financial incentives with the needs of the open API platform (for example, per project based outsourcing incentivizes one-off integrations, thus causing mis-alignment in incentives).

Selecting and executing a portfolio of engagement activities > **How should success be measured?**

How should success be measured? (1/2)

Depending on your business rationale for opening APIs, you may focus on different KPIs.

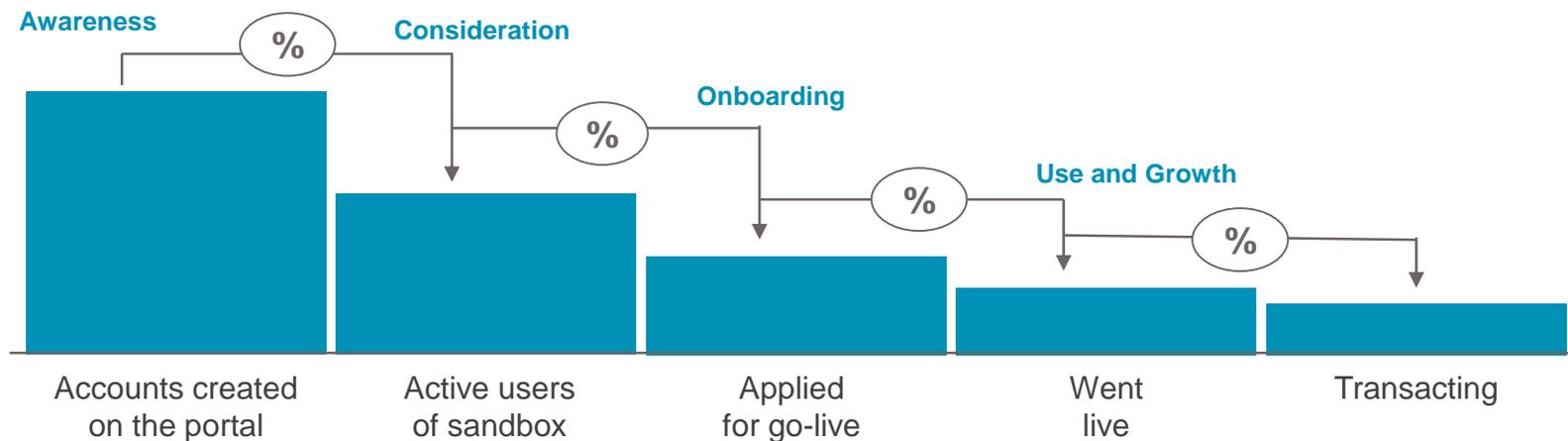
	 Revenue	 Reach	 Engagement	 Innovation	 Integrations
KEY KPIs	Total revenue per API	Number of API calls (sandbox and production) Most active third parties	Effective support – time to resolve queries	Number of verticals covered	Number of third parties at each stage of the engagement journey (see next slide) Average time to integrate with the APIs (measured through third-party feedback and portal statistics)
OTHER KPIs	Revenue per product category	Number of end customers	Uptime percentage and/or percentage of failed transactions (sandbox and production) NPS of end customers	Number of products available	

Selecting and executing a portfolio of engagement activities > **How should success be measured?**

How should success be measured? (2/2)

At the operational level, all providers will want to track the flow of third parties through the different stages of the engagement journey.

Number of third parties



Tracking the flow of third parties through the engagement journey allows DFS providers to identify the biggest drop-offs (and related obstacles) and focus resources on alleviating those.



Photo by: Chinmoy Biswas

Case studies

Stripe demonstrates how an API provider tailors engagement activities, including innovative solutions, for different third-party segments based on their core requirements



Overview

- Stripe is a US\$22 billion technology business that handles payment processing for third parties through its APIs and is today one of the world's largest online payment processors.
- Stripe targets all segments of third parties. To target the long tail, Stripe created a platform that focused on the programmer's needs, such as clear and detailed documentation, easy to use SDKs, and superior customer support. Further, it created innovative solutions such as a 2-minute onboarding option and a portal for third parties to register their businesses. For growth seekers and enterprises, it offers business support, marketing and technical services to help scale as part of its B2B partners' programs.
- Internally, Stripe created an organization which understands developer needs and is geared to serve those. Many senior hires are ex-developers; it is structured as many integrated product teams; and technical teams are embedded within product teams.
- This engagement approach helps Stripe differentiate itself - it started with a specific focus on developers and start-ups as opposed to business owners and large businesses that its competitors chose to focus on (Stripe entered the market later than some of its peers). Over time, it diversified to focus on B2B partners that help acquire new third parties.

Stripe

API Business Strategy

Stripe was launched to provide multiple payment options to coders and early-stage start-ups through a single API platform. Stripe was started after its founders' experiences in starting other businesses led them to see a need in the market for a payment processor targeted at start-ups, particularly the coders driving those start-ups. It partners with credit/debit card networks (Visa, MasterCard, etc.), Wallets (Alipay, Google Pay etc.), and many other local payment methods (ACH Credit Transfer, Giropay etc.) to access their open or closed APIs and offer a single open API to its third parties.

Open APIs

Stripe classifies its API offerings as:

- **Payments:** Full platform for online payments
- **Billing:** Smart invoicing and subscription management
- **Connect:** Multi-party payments for platforms and marketplaces

Stripe has now evolved to a full stack payments services platform.

As Stripe grew, it saw the need in the market for tailored payment products. This led it to launch Stripe Connect which was a suite of customizable APIs, plug-ins and white label products targeted at online marketplaces. Stripe Relay was then launched as one of the first mobile e-commerce payment processors. Stripe subsequently launched Atlas to help coders onboard quickly by helping them register and setup a business. Stripe now carries a number of other products including business analytics, offline payment processing and fraud protection.

Its strategy anchors on creating a best-in-class product value proposition around payment services.

It offers a suite of products tailored to a use-case (E-commerce and Retail, B2B platforms, Software as a Service, B2C Marketplaces, and Nonprofits and Fundraising) that help reduce inefficiencies, speed-up internal processes, and increase sales.

Third-Party Target Segment

Stripe has programs targeted at two types of third parties:

- **Tech start-ups.** Stripe was founded to solve payment processing challenges for tech start-ups, which remain its key segment. Even within start-ups, it considers coders over business owners as its target audience. This results in strong support and word of mouth marketing amongst the coder community who use its APIs and become advocates, convincing business owners to adopt Stripe over competitors.
- **Partners.** Primarily two types – marketplaces and platforms. Marketplaces (such as Shopify, Kickstarter, Lyft etc.) bring other third parties onboard. Platforms (for e-commerce, invoicing or fundraising) offer an opportunity to scale.

Tech start-ups and partners map across all four segments: Standalone coders, Early-stage innovators, Growth seekers, Enterprises.

Key Statistics

US\$ 1.5B

Revenue (2017)

979,000

Avg # of API calls per third party, per year (2018)

1,700+

Size of the team (2019)

Stripe

Engagement Model

Its engagement model aims to offer a seamless integration experience to the coders/technical teams of its target third parties.

- **Easy to understand and detailed documentation.** Its documentation avoids jargon and is easy to read. It follows information hierarchy principles, uses examples and screenshots, and uses images to explain concepts and processes.
- **Express 2-minute onboarding.** In addition to providing clear and detailed onboarding process documentation, Stripe introduced an express launch offering – that means a third party can go live in less than 2 minutes (as long as they only need certain commonly used functions).
- **Business registration support.** Through an online platform, in partnership with a bank, it allows coders from around the world to quickly and easily register as a business in the U.S. and open a bank account entirely online.
- **24x7 technical support.** It provides 24x7 technical and functional support over email, phone and chat. It also provides support via social media and online forums.

Further, it offers business support, marketing and technical services to help scale its partners' programs.

Dedicated partner program. Stripe prioritizes third parties like Lyft, Squarespace, Shopify and Kickstarter, that bring their customers to Stripe's platform. Stripe provides these partners with plug and play applications, co-branding and co-marketing with Stripe, and business support services among others.

Internal Team Structure

- **Stripe has a coder-first culture.** As coders themselves, the founders have cultivated a strong coder focused culture at the firm. Furthermore many of Stripe's initial hires and senior hires were coders.
- **Regional teams engage with and manage local third parties.** Stripe sets up regional teams to understand the local context in each region it is looking to enter. As part of their KPIs, regional teams are required to prioritize local businesses as opposed to foreign business.
- **Stripe's engineers are integrated into and organized as product teams** (as opposed to a standalone engineering team which services technical change requests). These integrated teams are responsible for building product offerings.
- **Stripe's business development team builds relationships with B2B partners.** The business development team supports partners in their go-to-market strategy by identifying products that the Stripe team can build on the partner's behalf. For example, it supported Lyft in differentiating in the market with a new product by implementing a customized payment system for its drivers.

Stripe



Third-Party Lens

Stripe serves as more than just a payment processor for Lyft. It implemented a customized system for Lyft so that drivers can cash out whenever they want instantly via the Lyft app.

Additionally, these drivers can also track earnings with Stripe, which automatically reports transactions to the tax authority on behalf of Lyft as required by regulations. Lyft drivers can keep track of their transactions on the dashboard provided by Stripe.

As a result of the integration with Stripe, Lyft was able to differentiate its offering to its drivers.

“Stripe is a game changer. I've been using it for a few months and honestly it's the best API I've ever used. The documentation is clear and concise. It's customized to your account so you can literally copy and paste and see the result. Just like it says, it gets out of your way. I was up and running and accepting recurring payments in less than an hour or so. I actually began to think of larger 'swing for the fence' type of ideas that I would have never considered if I were stuck to using PayPal because it was so painless. Looking forward to them eating every other payment processor's lunch.” — Anonymous Developer

“Do love coding with Stripe. From first glance at documentation for subscription charging to a working demo in about an hour :)”

— CEO MN Digital Media

WeBank shows how an API provider can utilize its strong technological capabilities to develop end-to-end integration solutions for third parties that it has proactively identified



Overview

- WeBank was launched in late 2014 and is China's first digital-only bank. It is 30% owned by the US\$400 billion Tencent group which also owns WeChat, China's largest messaging app.
- Enterprises are WeBank's target third-party segment. To engage prospective enterprises, it proactively scouts for such partnership opportunities. Internal teams conceptualize, shortlist and build products, which are pitched to potential third parties. Once the partnership is formalized, WeBank acts as an extended product team for third parties and handles the development and integration of products on their behalf. As with many of its partners, WeBank enters in to a revenue sharing deal.
- Internally, WeBank has built a strong technology team (more than 50% of its staff are engineers) and fosters an entrepreneurial culture. Engineers are organized into product teams that rapidly and regularly conceptualize and release new products.
- This engagement approach is in line with its open banking business strategy. It focuses on embedding banking/FinTech services through the use of open APIs in businesses that have a large customer base. Through such partnerships, these businesses are able to offer a wide suite of financial services (including loans) to their customers. Such third-party integrations serve as a B2B2C strategy to acquire new end customers for WeBank and generate revenue. Such a strategy differentiates it from incumbent players in the financial services industry in China.

WeBank

API Business Strategy

WeBank is China's first digital-only bank and follows an open banking strategy. WeBank has developed this strategy around the concepts of an open platform (connecting to third-party platforms to embed WeBank's banking products); open innovation (developing APIs and opensource projects for partners to develop their own solutions); and open collaboration (developing technologies to facilitate ecosystem building and new business models amongst partners).

WeBank's strategy is to acquire underserved customers through these third-party integrations. WeBank is a recent entrant to the banking industry in China. It targets customer segments that are thus far underserved by incumbent banks. To do so, it uses APIs to connect with third parties whose customers can use its banking services (i.e. WeBank is pursuing a B2B2C strategy). Thus, it sees these third-party integrations as a strategy to acquire end customers.

Open APIs

WeBank's core banking system was designed to be modular; APIs form the interface between the modules. This allows WeBank to quickly build and embed banking services in the operations of their partner third parties. This is different from opening APIs for third parties to access their direct banking customers.

Thus, WeBank offers banking solutions that leverage thousands of open APIs depending upon the third-party context and need. For example, its auto-loan product uses over 40 APIs.

Key Statistics

6 Industries with partners using WeBank's services through the open banking platform*

56% Proportion of staff from engineering (IT) background

Third-Party Target Segment†

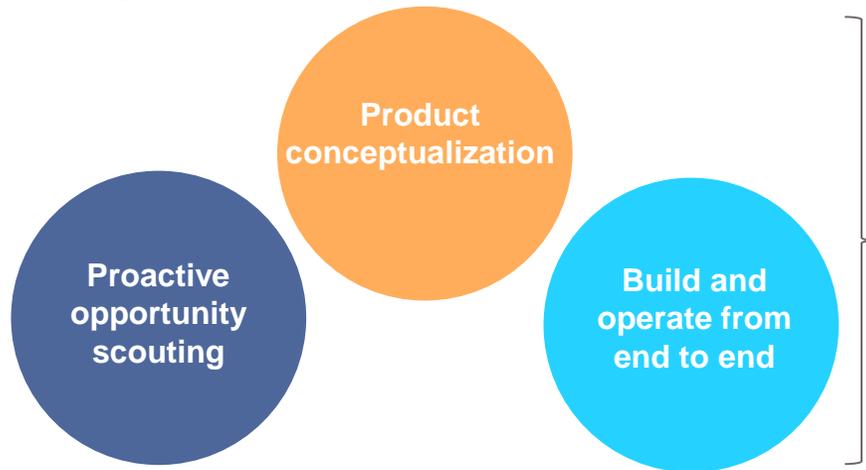
Large businesses. WeBank targets businesses with a large number of consumers across industries – social media, retail, healthcare, gaming etc. For example, it started by partnering with WeChat and offering small scale loans to SMEs and individuals on the messaging platform. Then, it replicated this strategy with other large businesses which have a sizeable end customer base such as large offline retailers.

Developers and Start-ups. While large businesses continue to remain their main focus, WeBank has recently started targeting standalone coders and start-ups to create innovative fintech products as part of its open innovation strategy.

WeBank

Engagement Model

For large businesses, WeBank builds, owns and operates the banking solution. Large businesses benefit from the partnership because of the complementary products they can offer through WeBank or through cost reduction.



Proactive opportunity scouting. WeBank proactively reaches out to potential large businesses to pitch the value proposition of new products that are conceptualized in-house.

Product conceptualization. Third parties are offered a financial services integration idea that is internally conceptualized, developed and tested.

Build and operate from end to end. WeBank takes complete responsibility for building and operating the solution, while sharing responsibility for integration with the partner. It also covers the setup and operational cost of running the API product. WeBank's business model anchors on offering financial services (through these APIs) and not on each API call.

Its engagement activities for coders and start-ups are primarily aimed at generating demand and easing integration.

- **Events to generate demand:** It started an accelerator program targeting early-stage FinTech start-ups and launched FinTechathon, a hackathon targeted at university students and coders.
- **Technical tools that accelerate integration:** It recently launched open source applications to ease the integration process for coders and early-stage start-ups.

Internal Team Structure

- **Large engineering team.** WeBank maintains a large engineering team. While the engineering team helps with third-party integration, it also develops innovative products for the market.
- **Distributed organizational structure with coordinated controls.** WeBank does not have a single team in charge of developing APIs. Rather many product teams develop APIs and simply abide by the internally-set standards and policies. Individual application teams have both the business and technology expertise to develop a product from start to finish with support from inter-departmental teams. Data and API governance teams ensure all development across the bank meet certain security requirements and abide by an internal development standard.
- **An entrepreneurial, fail-fast culture that encourages innovation.** Engineers are encouraged to come up with potential product ideas and the FinTech Innovation Committee can approve or deny development of the idea. Approved ideas are quickly launched (the average time from product conceptualization to going live is 45 days) and tested in the market to see if they have market potential. The goal is to try a variety of different products, fail fast, and grow those that are promising.

WeBank

Third-Party Lens: A large second-hand car dealership platform

WeBank reached out to the third party with a proposition to embed both technology capabilities (e.g. big data analytics) and financial capabilities (e.g. loan services) that leverage the large volume of data traffic on the platform.

As a result, the customers of the third party now had improved access to the auto-loan product (compared to traditional auto-loan application). This is because WeBank's loan offering required no prerequisites of property or income statement. Customers could apply with their ID, driver's license and bank account fully online. Further, approval results come up within 60 mins after a customer submits the application.

WeBank built the entire solution for the third party. Further, WeBank has open source technologies to empower second-hand car platforms to build up their own innovative context-based businesses.

WeBank entered in to a revenue sharing arrangement with the third party as a means to share in the risks and rewards of these large partners.

Safaricom demonstrates how an API provider can position its engagement strategy around the penetration of a core product offering, in this case M-PESA, to drive robust demand



Overview

- Safaricom's M-PESA is one of the largest and most successful mobile money wallets in the world. It commands 78% market share in Kenya.
- Safaricom primarily targets standalone coders and early-stage innovators through its open API platform. Safaricom offers an easy-to-use open API developer portal, Daraja. It provides APIs that followed commonly used programming standards, clear and detailed documentation on using the APIs, quick onboarding and plug-and-play products for third parties.
- This engagement approach builds on the deep penetration of M-PESA in the market which creates a robust demand from third parties to use M-PESA's APIs. While large businesses were already integrated, Safaricom focuses on engaging the long tail through its open API platform to foster innovation and further use of M-PESA in the long run. Therefore Safaricom's engagement strategy focuses on making the API easy to use as opposed to creating awareness.

Safaricom

API Business Strategy

M-PESA is an integral part of Safaricom's growth strategy. Safaricom's mobile wallet, M-PESA, is already ubiquitous across Kenya and handles about 70% of mobile commerce transactions in the country. It contributes a third of Safaricom's revenue (2019) and is also the most rapidly growing revenue line item.

Safaricom's focus is on increasing the use of M-PESA. To do so, it develops products with partners (like M-Shwari and KCB M-PESA). In 2015, it opened its APIs to better collaborate with the market by encouraging third parties to create innovative products.

Daraja, a refreshed open API platform, was released in 2017 to simplify the API integration for third parties. Integrating with the first open API platform was challenging as it required case-by-case approval for the product concept and revenue sharing arrangements. Further, it was built on the SOAP protocol and required VPN access, which was reportedly harder for developers to integrate with. To alleviate these concerns, it released Daraja, a refreshed version of its open API program. Daraja focuses on making the APIs much easier for third parties to use.

Open APIs

Safaricom classifies its API offerings as follows:

- B2C (e.g. wage payments)
- C2B (e.g. bill payments)
- M-PESA Express (or Lipa Na M-PESA)
- Reversal
- Transaction status
- Account balance

Third-Party Target Segment

Given M-PESA's ubiquity, all types of third parties leverage its APIs for their products and services. The logos of some of these third parties are displayed below:



With the recent push to ease integration, it appears that its focus is shifting towards Standalone coders and Early-stage innovators.

Key Statistics

27 million Active M-PESA end users

Safaricom

Engagement Model

Due to M-PESA's pervasiveness in Kenya and presence of a robust start-up community, Safaricom's engagement model is centered on making its APIs easy to use. It has a limited focus on creating awareness or encouraging developers to use its APIs.

Express 24-hour going-live process. Safaricom has focused on reducing its time to go live. From 60 days, it has now made it possible to go live in 24 hours.

Comprehensive and detailed documentation. Daraja provides users with transparent [documentation](#) on the process of registration, onboarding and going live. It also provides detailed technical documentation on using the APIs.

Standardized API protocol. Daraja uses REST protocol for its API architecture. REST is the most popular protocol for web APIs, which makes it easier for third parties to consume the APIs.

Third-Party Lens: Malipo Popote Solutions

Malipo Popote Solutions (MPS) is a Kenyan payment solutions provider.

It's latest product is a revenue collection system that targets County Governments.

While it has been using the M-PESA APIs since the very beginning, it recently integrated with the Daraja APIs. It uses the newly released STK Push feature to avoid asking the customer to initiate the payment process, which can be error-prone.

MPS has seen the number of mistakes by customers reduce ever since they started using Daraja API and specifically STK Push. The number of customers who call to confirm if their payment has been processed has also decreased.

Apigate showcases how an API provider is able to target larger third parties as well as maintain a light focus on the long tail, and have separate internal teams running these engagements



Overview

- Apigate is a global API Gateway business. It is a wholly owned subsidiary of Axiata Digital Services (ADS). ADS is a group company of Axiata, which is a Malaysian mobile network operator with mobile operations in six countries - Malaysia, Sri Lanka, Bangladesh, Cambodia, Nepal and Indonesia.
- Apigate primarily targets growth seekers and enterprises. It goes beyond providing access to its API and engages deeply with third parties on their business strategy. To do so, it provides a number of business support services to third parties. For larger third parties, it offers plug and play technical products and business support in service of the third parties' strategic objectives. It also engages with the long tail in a light touch manner through university and developer outreach.
- Axiata's strategy of spinning off Apigate as a separate entity has helped it scale as an independent business while still reporting to the parent company. For large businesses, the regional business development teams initially engage with Chief Marketing or Chief Digital Officers to make the business case for using Apigate. For the long tail, the regional teams run outreach events, while a central team flags and onboards promising start-ups.
- This engagement strategy is in line with Axiata's vision to establish a global API business ecosystem. Its initial API customers were large businesses (typically growth seekers). Over time, it diversified its target segment to include the long tail in line with its overall vision. It also became a global market aggregator for mobile API businesses across the world and built a successful platform that connects third parties (including digital merchants, OTT players, developers etc.) to 110 Mobile Network Operators.

APIGATE/AXIATA

API Business Strategy

Apigate aims to establish a global API business ecosystem by integrating Mobile Network Operators (MNOs) worldwide onto a single open API platform. 10 years ago, Axiata realized that a comprehensive digital transformation strategy was critical to its growth. One component of this transformation strategy was to connect the 6 Axiata businesses on a single open API platform under Axiata Digital Services so that third parties can easily and seamlessly access services across Axiata's global businesses.

Axiata's initial API customers were large businesses that had successfully worked with Axiata in its existing markets and wanted to expand coverage to markets beyond Axiata's then footprint in its six markets (Malaysia, Sri Lanka, Bangladesh, Cambodia, Nepal, and Indonesia). To respond to their customers, Axiata partnered with other MNOs to bring their APIs onto its platform. The program saw a positive response from MNOs as well as third parties which led Axiata to its next phase.

As part of its next phase, a wholly owned subsidiary (Apigate) was spun off to aggregate APIs of various MNOs onto a single platform. As of 2019, Apigate hosts APIs from 110+ MNOs. Its vision is to be a trusted enabler of reach and monetization of the digital merchant ecosystem in South/SE Asia. The platform approach has allowed Apigate to scale, as it allows MNOs globally to monetize their APIs and allows third parties to access services across different geographies.

Open APIs

Through its Open Source API Platform, Apigate offers APIs for the following:

- Direct Carrier Billing
- Information (e.g. balance query)
- SMS
- Payments Wallet
- Provisioning (e.g. Instant data top-up)
- Location Based Services
- Voice

Third-Party Target Segment

Apigate started its open API program by targeting enterprises and large businesses. This remains the core focus of its engagement strategy.

Over time, it started engaging with the longtail in select geographies. However, due to a change in internal strategic priorities, Apigate maintains a light touch engagement for these smaller third parties.

Key Statistics

4 Continents of operation

80+ Size of team

200+ Number of digital merchants on the platform

10,000+ Number of developers engaged

APIGATE/AXIATA

Engagement Model

Apigate Mint targets larger third parties and goes beyond API access to plug and play technical products and business support in service of the third parties' strategic objectives.

Proactive opportunity scouting. Regional sales teams identify promising businesses and proactively reach out to them.

Plug and play offerings. For example, AnyPay is a monetization suite that provides services like fraud protection, quick-payments, linkage with carrier billing and micro-credit

- Multiple Payment Options
- Single-Click purchasing
- Fraud targeting
- Real-Time Credit

Business support for third-party growth.

It offers advisory services to help high potential third parties. One type of advisory service offered is to help formulate a go-to-market strategy for geographical expansion. It could offer the Apigate brand to select third parties as well.

Bundling. It offers bundling of merchant's content with the data pack, in order to improve user acquisition, monetisation and retention results.

Its approach to targeting the long tail aims to make it as easy as possible for large numbers of organizations/developers to use their APIs without direct support, while offering tailored advisory services to a few high potential organizations/developers. To do so, it runs hackathons and workshops for start-up communities, universities and schools. It offers snippets, plug-ins, and even applications, beyond documentation. Lastly, it helps build business skills, access to networks and external funding among other things. Tailored advisory is offered to those flagged as high-potential.

Internal Team Structure

- Apigate is structured as a subsidiary of Axiata Digital Services (ADS). While it is a separate entity with its own organizational structure, the Apigate team reports to ADS's leadership, which tracks overall business performance and maintains strategic integration.
- Given the scale of operations, it is organized into 3 regions, which lead efforts around MNO acquisition and third-party engagement (growth seekers and enterprises). Apigate runs three regional offices with local teams to cover APAC, EMEA, and the Americas. Regional teams are responsible for acquiring and engaging third parties and local mobile network operators. For large businesses, the regional business development teams initially engage with Chief Marketing or Chief Digital Officers to make the business case for using Apigate. For the long tail, the regional teams run outreach events, while a central team flags and onboards promising start-ups.
- Regional teams work closely with innovation teams at the MNOs to ensure better performance of their platform.

APIGATE/AXIATA

Third-Party Lens: *A video on demand platform run by a mass media production company.*

The third party decided to work with Apigate to launch and monetize mobile content across multiple countries by integrating with Apigate's carrier billing, wallet and messaging APIs.

Considering the third-party's market size and API transaction potential, Apigate classified it as high priority internally, implying that it would provide business support.

Apigate worked with the third-party's team to help design the go to market strategy for each of the new markets based on Apigate's familiarity with these markets. For example, it helped prioritize markets, and determine the degree of localization of content needed (subtitles, dubbing or new localized content) for each market.

Furthermore, Apigate lent its brand to the third party in these new geographies since the third party was unknown in these markets.

As with many of its high priority partners, Apigate signed a revenue sharing deal in order to share in the risks and rewards of these large partners.

Third-Party Lens: *A start-up in Sri Lanka that helps paddy farmers automate their irrigation system by using SMS commands and notifications to control the irrigation system.*

Apigate runs hackathons and outreach events (like workshops) for universities, schools and start-up communities to identify promising start-ups.

This third party was flagged as a promising start-up by the Apigate team and this entitled the third party to business support services. Apigate helped the third party understand how it should keep track of its finances and connected it to the government.

Further, as such third parties scale, Apigate also helps them raise funds by linking them to other start-up funders.