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Powering Business Value and Seamless Experiences

GSMA Mobile Connect Accelerator and API Exchange by Apigee

Apigee Digital Value Chain for Network Operators and Service Providers

BUSINESS Wants to drive new revenue streams, create innovative business models and stay ahead of competition

API TEAM Wants better business outcomes; Wider reach; Quick results. In addition, they also want monetization and better subscriber insights

APP DEVELOPER Wants to deliver better app experiences via features like Single click. They want to leverage Subscriber Profiles, Subscriber journey intelligence and build in Security

SUBSCRIBER Apigee enables digital businesses to build and operate the systems at the speed necessary to engage and transact with customers on a myriad devices 24/7.

BACKEND Mobile Network Operators need to easily and securely expose services and data, unlocking the value from their back-end systems.

API MNOs need to quickly and securely publish intuitive APIs to share data and services, and onboard developers and partners with self-service provisioning.

APP Modern mobile apps, smart devices, connected experiences and digital ecosystems are connected to the data and services that power them via APIs.

MNO BUSINESS STAKEHOLDER

MNO API TEAM

SERVICE PROVIDER APP DEVELOPER

SUBSCRIBER

BACKEND

API

APP

DIGITAL VALUE CHAIN

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Apigee: Driving Value Across the Digital Value Chain

MNO Business Stakeholders

- Enable Innovation Thru Apps
- Launch new Revenue Streams
- Monetize Digital Assets
- More Reach using Exchange

MNO API Team

- Open ID Connect
- On-net and Off-net Auth
- Create Auth or User Store
- Extend Existing User Store
- Consent Mgmt
- Provide SSO Solution

Service Provider App Developer

- Mobile and HTML5 Friendly
- 2nd Factor Authentication
- Access Provider's User Data
- Standard Exposure
- Better User Experience
- Consume SSO

Subscriber

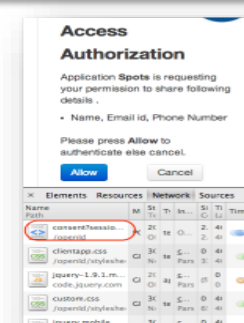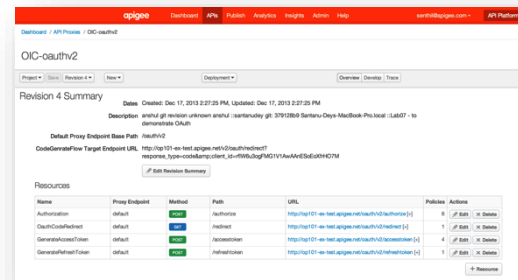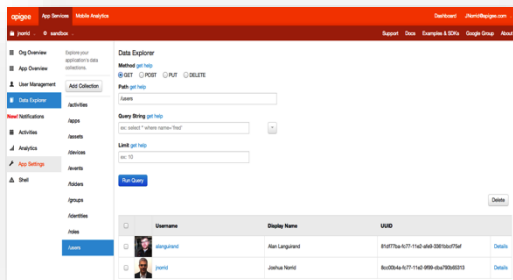- User Registration
- Ease of Use
- Forget Password
- Self-Service of Profile
- Self- Service of Consent
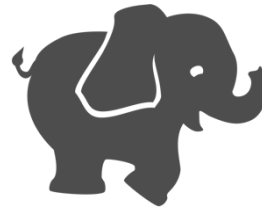- Experience SSO

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Apigee Intelligent API Platform

Apigee Enables Companies to Become Digital Businesses

Everything = Interconnected

Interactions = Data

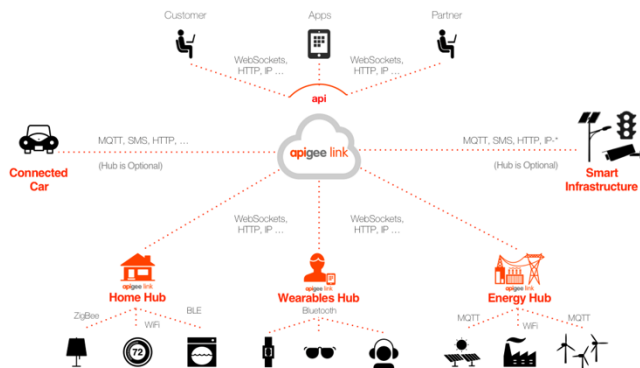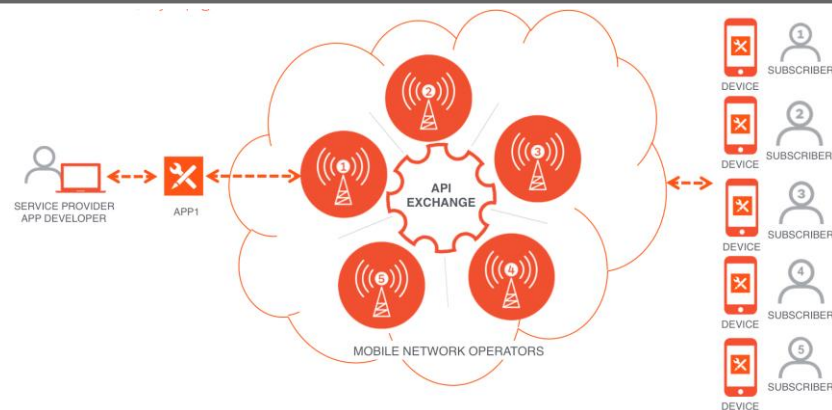Developers = Growth

Modern software is built and operated differently
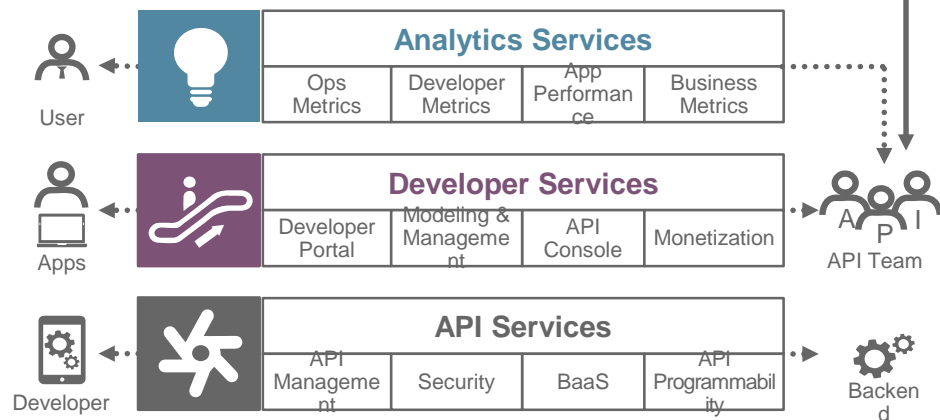
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The Intelligent API Platform

Apigee Link

Apigee API Exchange

Apigee Edge

Analytics Services			
Ops Metrics	Developer Metrics	App Performance	Business Metrics

Developer Services			
Developer Portal	Modeling & Management	API Console	Monetization

API Services			
API Management	Security	BaaS	API Programmability

User

Apps

Developer

API Team

Backend

Apigee Insights

Adaptive Interactions		
Segmentation & Profiling	Real Time Scores	RESTful APIs

Predictive Customer Journey Analytics		
Customer Journey Analytics	Unstructured Data Processor	Predictive Modeling

API Services		
Time-sequenced Graph Database	Data Management	Data Loaders

User

Apps

Developer

API Team

Data Scientist

Hadoop

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Mobile Connect Accelerator (MCX) with Apigee

## Out-of-the-box Integration with API Exchange

- End-user subscriber self-service registration portal
- Security, privacy and authentication
- Subscriber consent
- Identification and application of preferred Authenticator
- Interface for subscriber lifecycle events
- Compliance with the Mobile Connect Service Mark Communication Guidelines
- Service Provider self-service portal for Service Provider registration, lifecycle management, SDK with Mobile Connect API and the relevant API Exchange APIs
- Robust logging capability of any transactions occurring through the MCX platform
- MCX Identity Gateway as an abstraction layer between Service Provider and MNO with policy-based, configurable authenticator selection

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Today: Fragmented Experiences, Siloed Subscribers, Unengaged Partners
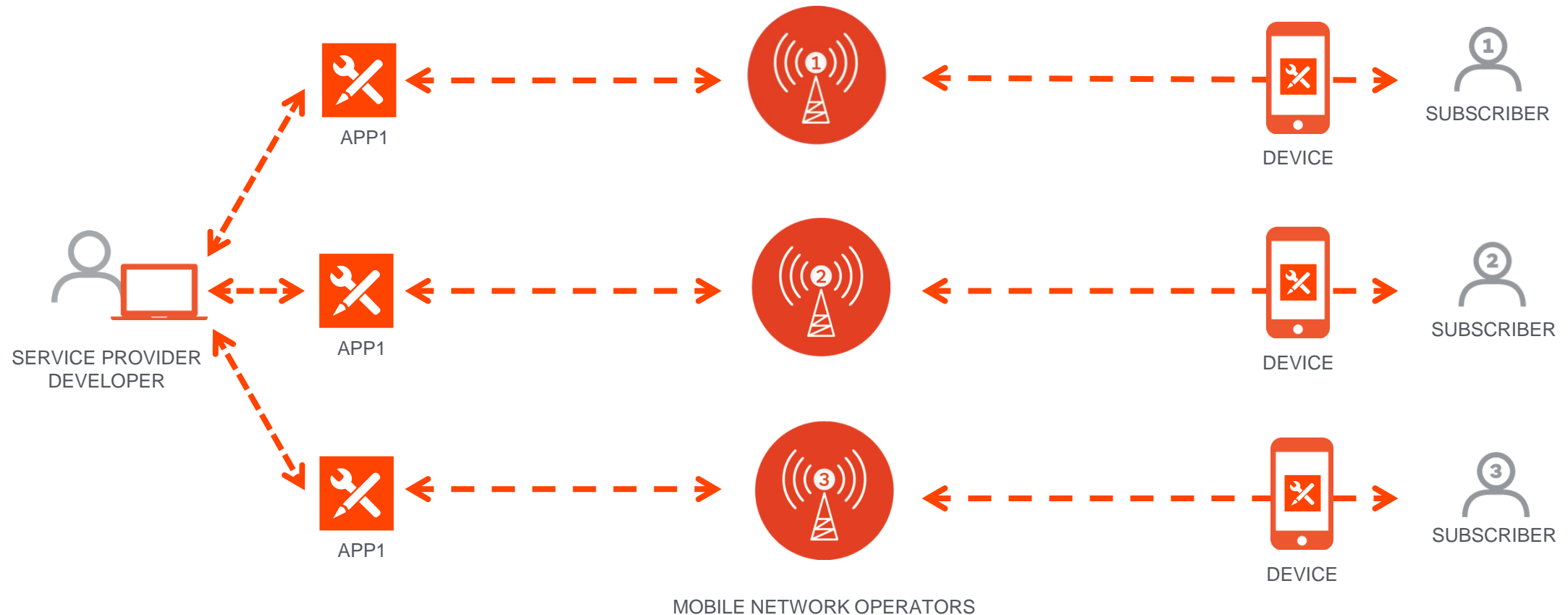
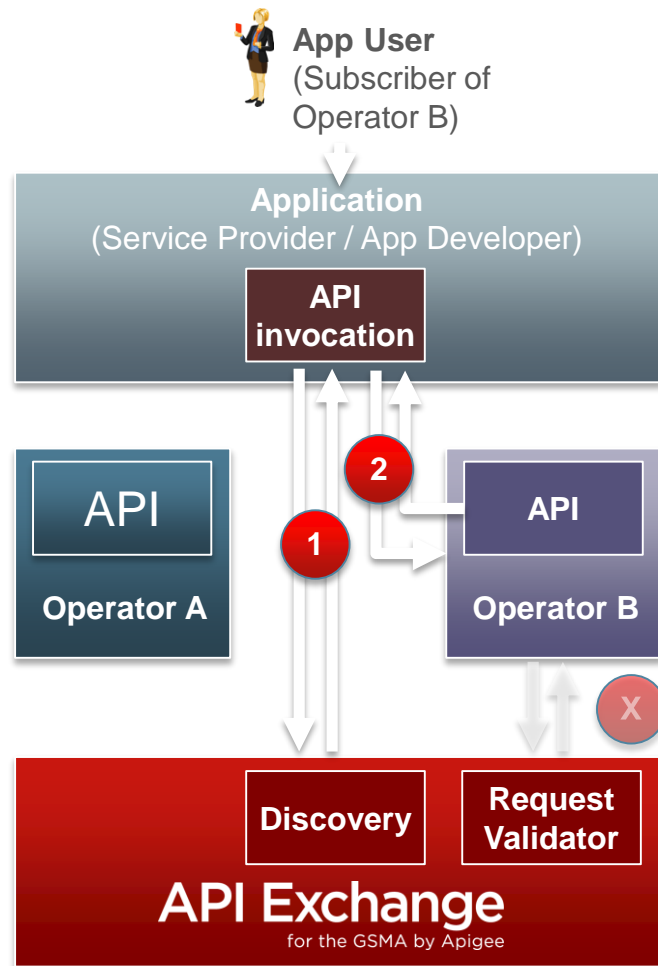# With API Exchange: The API Interoperability Platform

For the GSMA, by Apigee
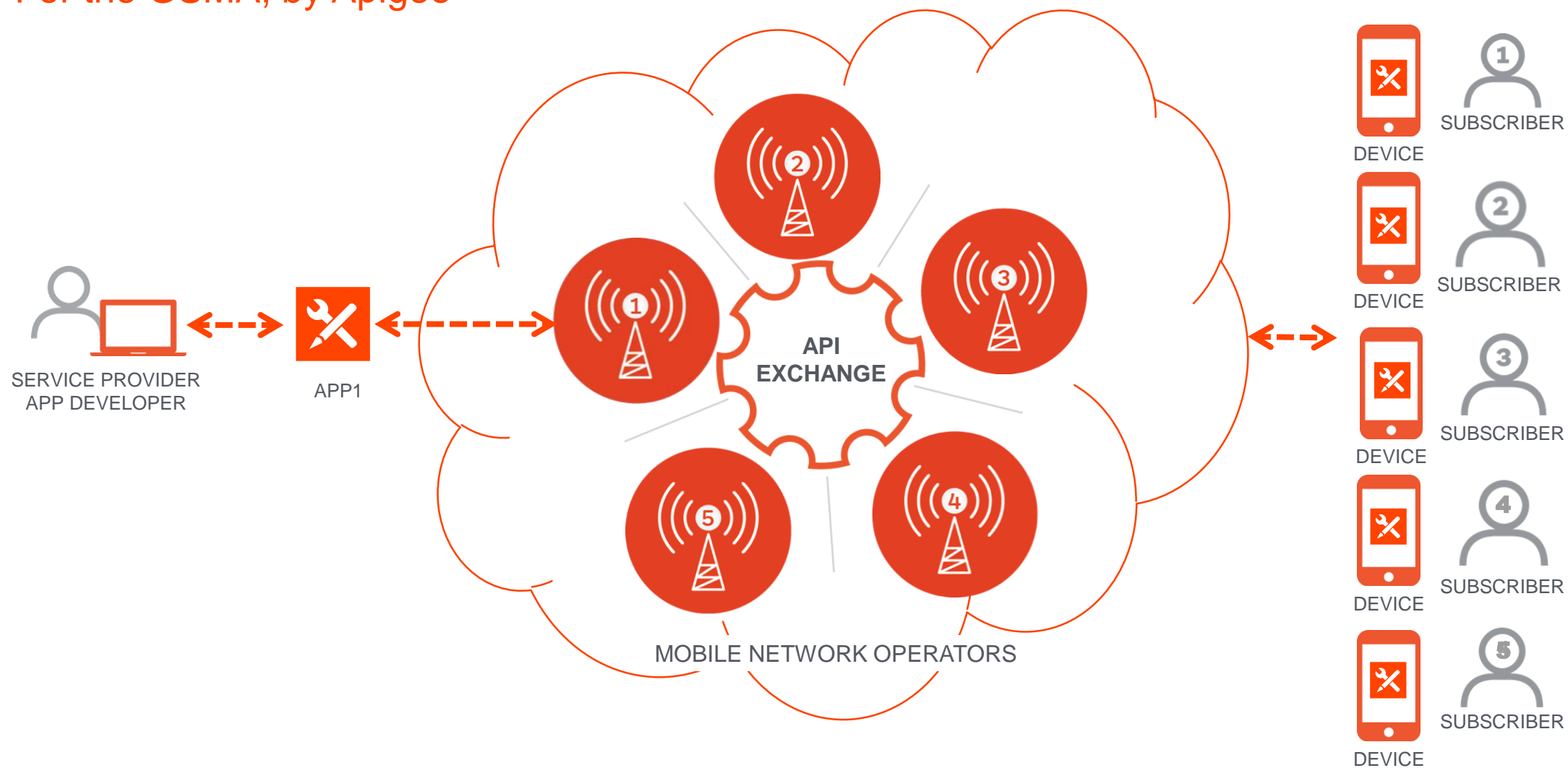
API Exchange: Automating Subscriber Discovery and Reach

Flow

1 Application calls central **"Discovery"** capability to
determine to which mobile network operator a subscriber / user of the application belongs to, leveraging IP address, MSISDN, …

2 Return: Operator B details, API exposure endpoint address and access credentials

X Application calls **"API"** of discovered, Operator B

(optional): Operator calls **"Request Validator"** to validate API access credentials

Differentiate their Digital Assets, Expand App Ecosystem

- **Enables** MNO **APIs to interoperate**, while allowing them to differentiate

- **Empowers** MNOs **to sell each other's capacity** and **cross bill** for settlement

- **Provides** MNOs **control** over app developer experience and subscriber experience

- Delivering subscriber-base discoverability to app developers

- **Does not interfere** with MNO to App Developer and MNO to Subscriber Relationships

MNO BUSINESS STAKEHOLDER

MNO API TEAM

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Direct relationship with one MNO to scale target market

SERVICE PROVIDER
APP DEVELOPER

- App Developers interact with **multiple API providers that offer similar services**.

- With API Exchange, they **partner with one MNO** on the the API Exchange and **gain access to all interoperating MNOs**.

- App Developers **optimize subscriber reach** and **reduce the cost** of developing against the APIs of different providers

- Accelerate the development, adoption and reach of their apps

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Seamless and Secure Experiences, Innovative Apps

SUBSCRIBER

- **Access to multiple apps** that utilize Mobile Network Operator capabilities
- Across **any network, any device and any location**
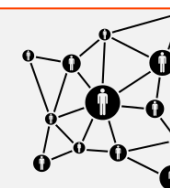
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Why Apigee

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Only Apigee: Grow with Scalable, Secure APIs and Interoperability
with API Exchange and Mobile Connect Accelerator

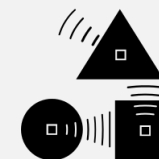- Easily extend your API catalog beyond Identity with Apigee Edge

- Out-of the-box integration with Apigee API Exchange

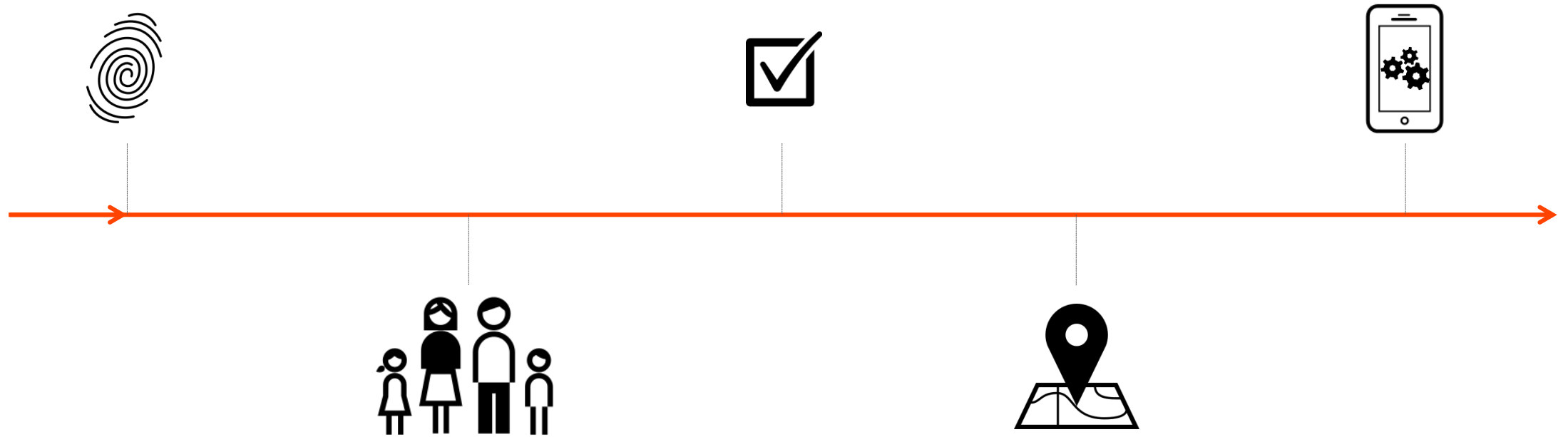- Personalize with predictive analytics through Apigee Insights

- Future-ready for the Internet of Things with Apigee Link

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Only Apigee:
Easily extend your API catalog beyond Identity with Apigee Edge

- Start with the Mobile Connect API as the identity API

- Extend with other APIs: Profile, Consent, Location, Device APIs etc. with Apigee Edge

Only Apigee: Out-of the-box integration with Apigee API Exchange

- Engage Service Providers with subscriber opportunity thru interoperability with other MNOs
- API Exchange: Out-of-the-box Mobile Connect Accelerator capability
- Easily scale and innovate by extending your Service Provider ecosystem
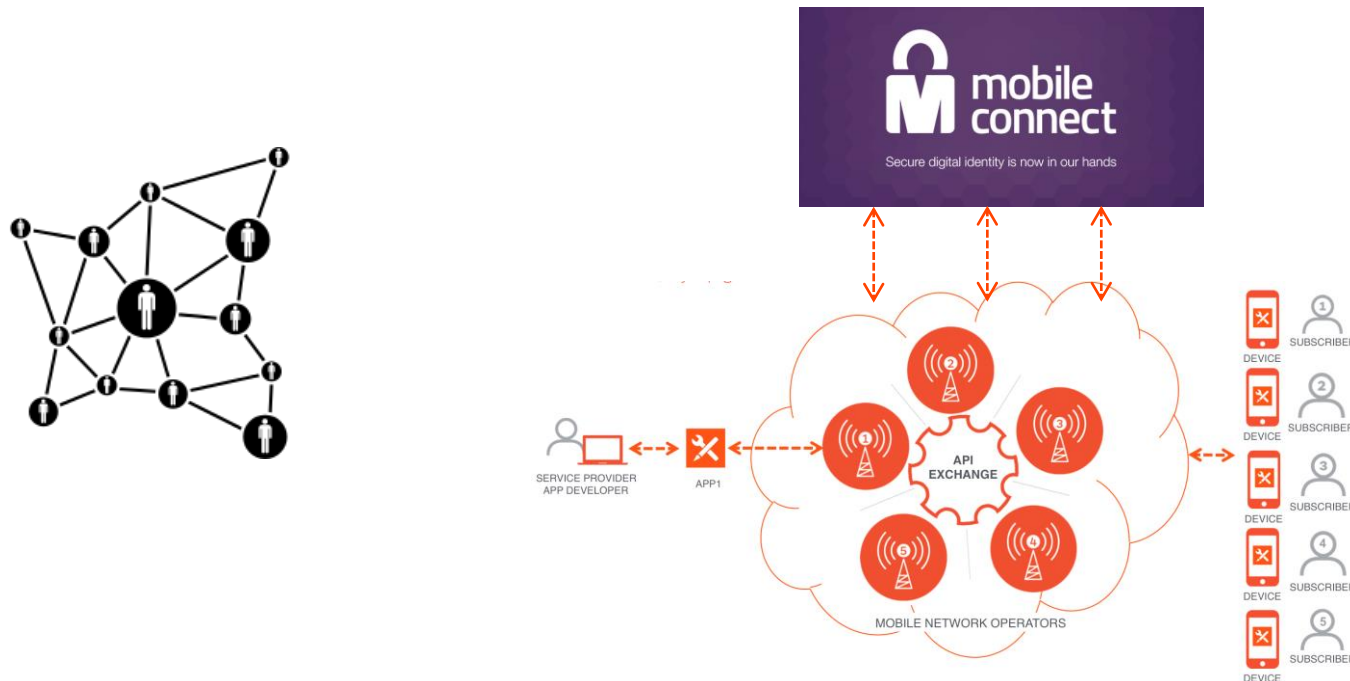
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Only Apigee: Personalize with predictive analytics through Apigee Insights

- Leverage Apigee Insights for Predictive Analytics to Build Adaptive Apps and APIs
- Maximize customer satisfaction & retention, targeting & recommendations with individualization
- Use predictive models to meet the operational needs of apps and APIs in the digital ecosystem
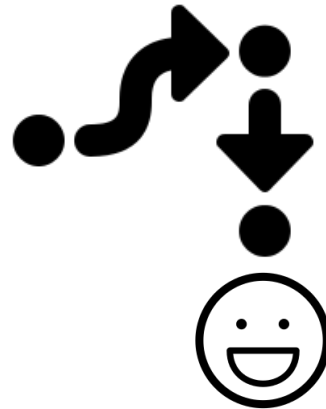
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Only Apigee: Future-ready for the Internet of Things with Apigee Link

- Easily capture the IoT opportunity with device APIs using Apigee Link
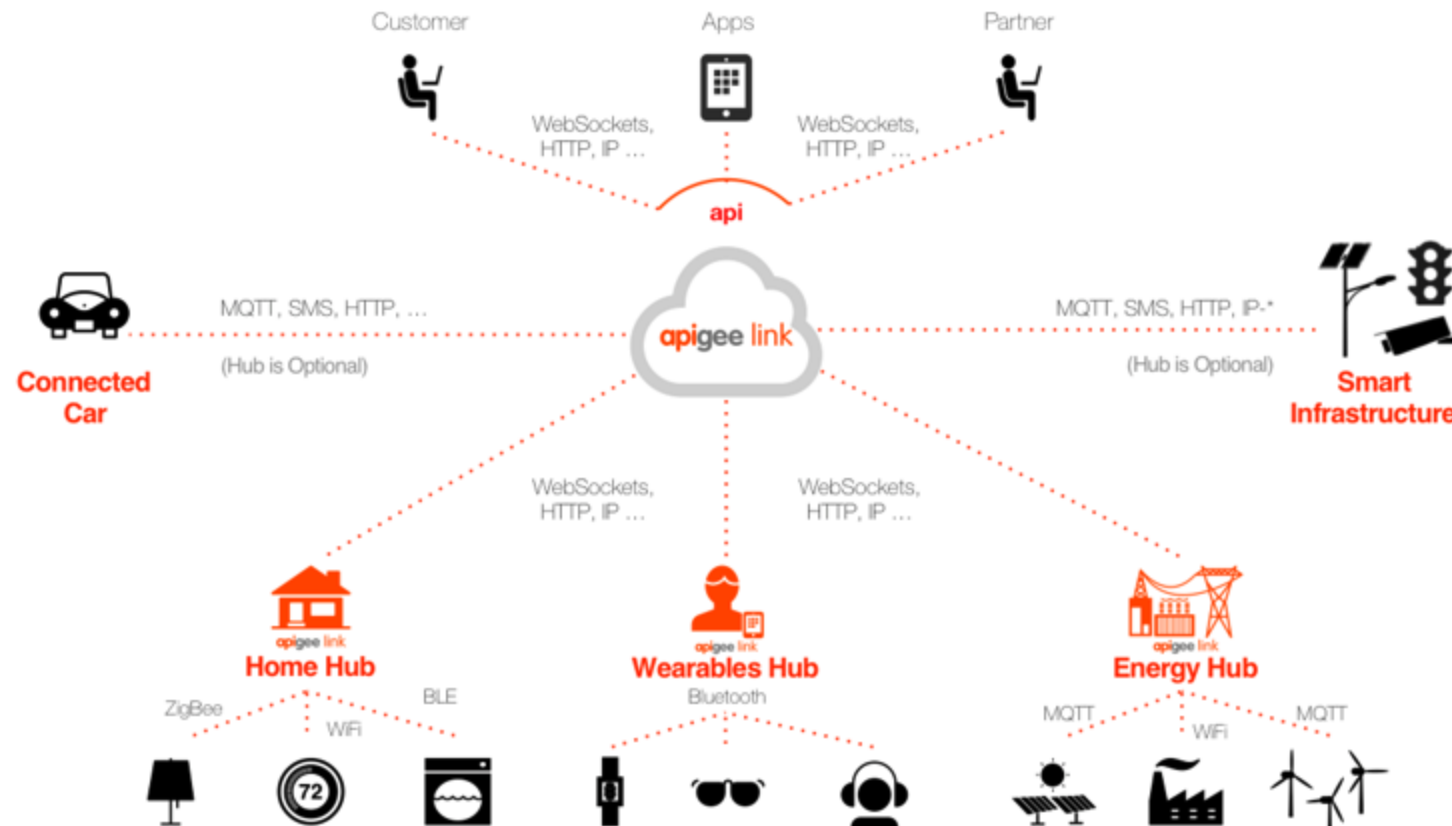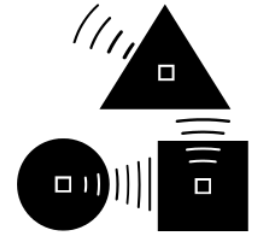
Apigee: the choice of the world's top telcos

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Apigee API Exchange customers with GSMA

More API Platform deployments than any other vendor

Connected experiences
change everything
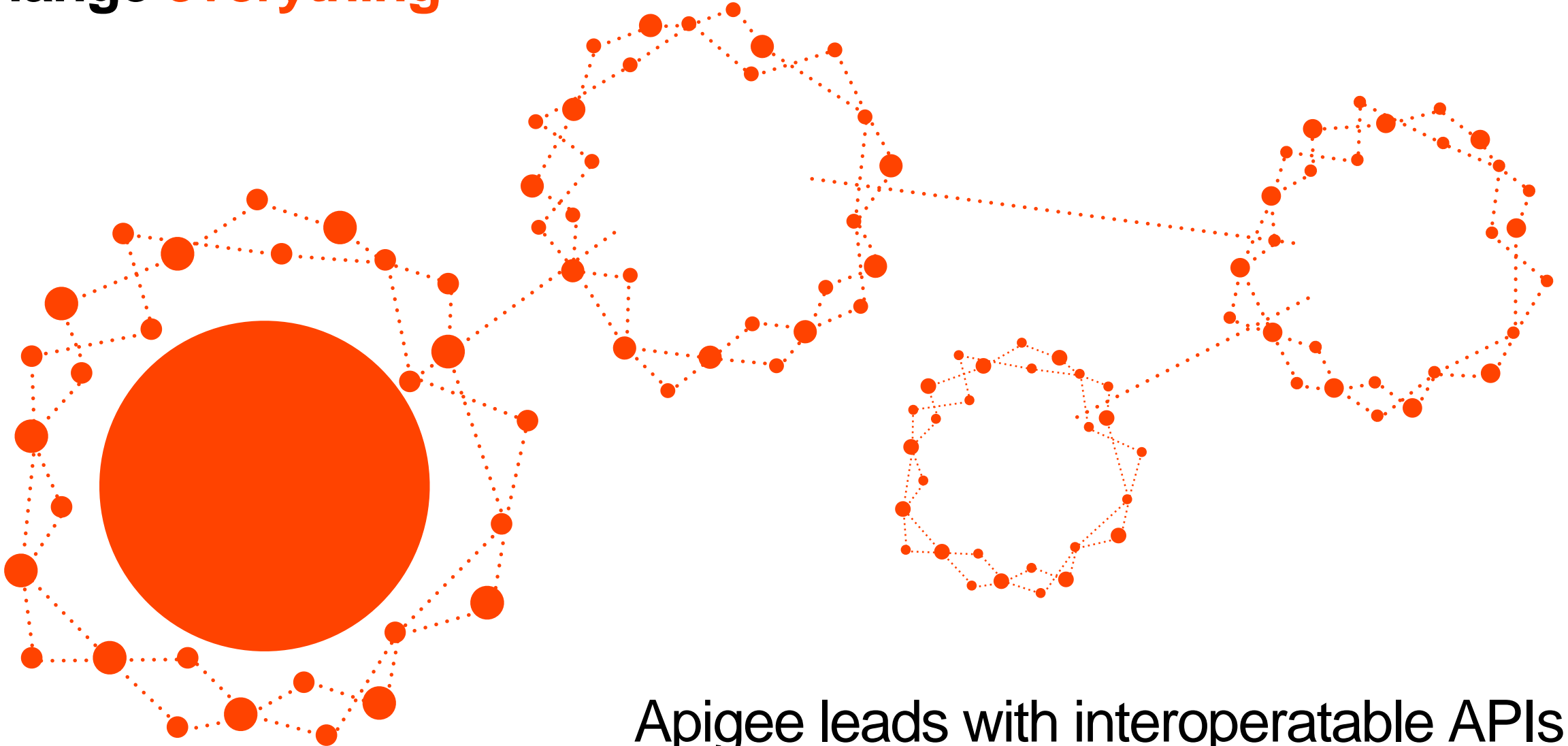
Apigee leads with interoperatable APIs

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Only Apigee offers you multiple options

Let's get started

Base* ** Free*	• Mobile Connect Accelerator (Public Cloud)	• API Exchange (Public Cloud)	• **Quick On-boarding** • **Seamless Experience**
Premium (Public Cloud)	• Mobile Connect (Public Cloud)	• API Exchange (Public Cloud)	• **Industry-leading Hosted Solution** • **Managed, Secure and Scalable**
Premium (Hybrid Cloud)	• Mobile Connect (Private Cloud)	• API Exchange (Public Cloud)	• **On-Prem Option to Meet Your Needs** • **Managed, Secure and Scalable**

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About Apigee

Apigee Company Overview

Public, NASDAQ listed Company (APIC)

- Founded in 2004
- 400+ employees, 50% growth

Intelligent API Platform Provider

- Apigee's single secure platform for APIs and predictive analytics helps customers to accelerate the pace at which their businesses share, innovat and adapt.
- Products = Edge; Insights; API Exchange and Link

Enterprise and Telco Customers

- 500+ customers
- Five of the top 10 Global 2000 retail brands
- 70% of the world's 10 most valuable telecoms brands
- 25% of the world's most admired companies
- 20% of the Fortune 100
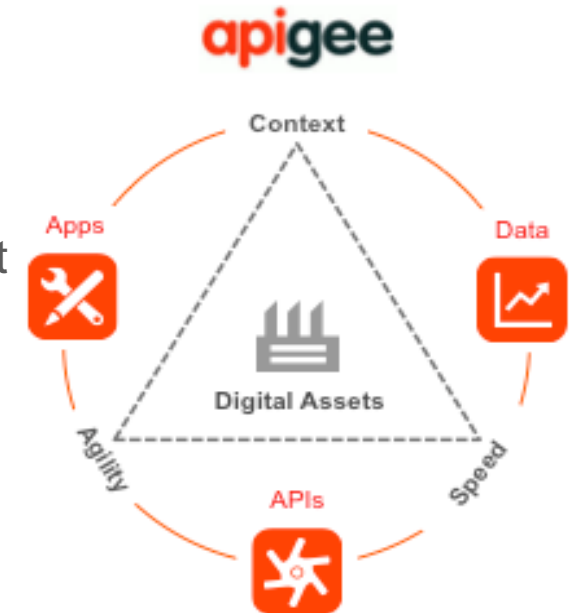
Thank you

Apigee Mobile Connect Products

Features	Apigee Mobile Connect Accelerator Base (Public Cloud)- Free	Apigee Mobile Connect Premium (Public Cloud)	Apigee Mobile Connect Premium (Private Cloud)
Open ID Connect/Mobile Connect Profile Support	Yes	Yes	Yes
User Self Service : Registration and Profile Management	Yes	Yes	Yes
User Self Service: Consent Management	Yes	Yes	Yes
Authenticator: SMS PIN based authentication	Yes	Yes	Yes
Authenticator: On-Network/Header Enrichment	Yes	Yes	Yes
Authenticator: USSD Gateway Integration	No	Standard API Integration only.	Standard API Integration only.
Authenticator: SIM Applet through MSSP Integration	No	Standard API Integration only.	Standard API Integration only.
Developer/Service Provider Portal	No	Yes	Yes
Can be used for hosting other APIs	Yes	No	Yes
Custom Integration/ Branding Implementation Services	Self-Service	Yes. Additional Charges will apply	Yes. Additional Charges will apply
SLA	**99%. Goodwill basis. No Liability**	**99.50%**	**N/A**
Support	Community Support only.	Apigee Standard Support (Level 2)	Apigee Standard Support (Level 2)
Traffic Restriction	Apigee Developer Edition Limits	10 Million Per Month. Additional API units can be bought.	N/A
Price	**Free**	**$80,000 per Year**	**$190,000 per Year**
Additional Packs to purchase	N/A	Data Retention Pack, PCI and HIPPA Compliance Pack; Monetization; Insights	Monetization, Insights
Contract Requirement	No Contract Required. Sign-up and self-service themselves. Apigee will provide necessary documents for self-service	Contract Required - no Redlines.	Contract Required.

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