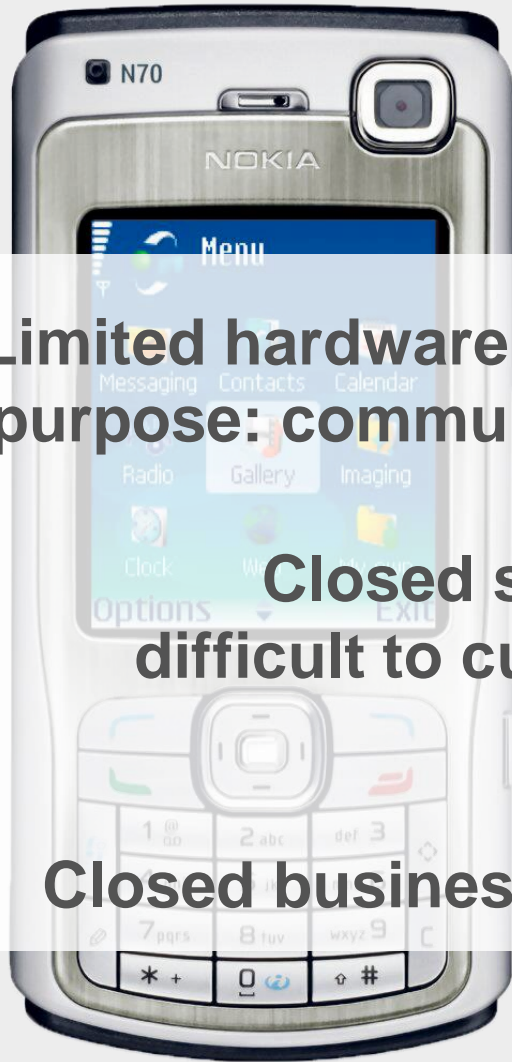


Open Gateway: Unlocking the value of telco infrastructure with software

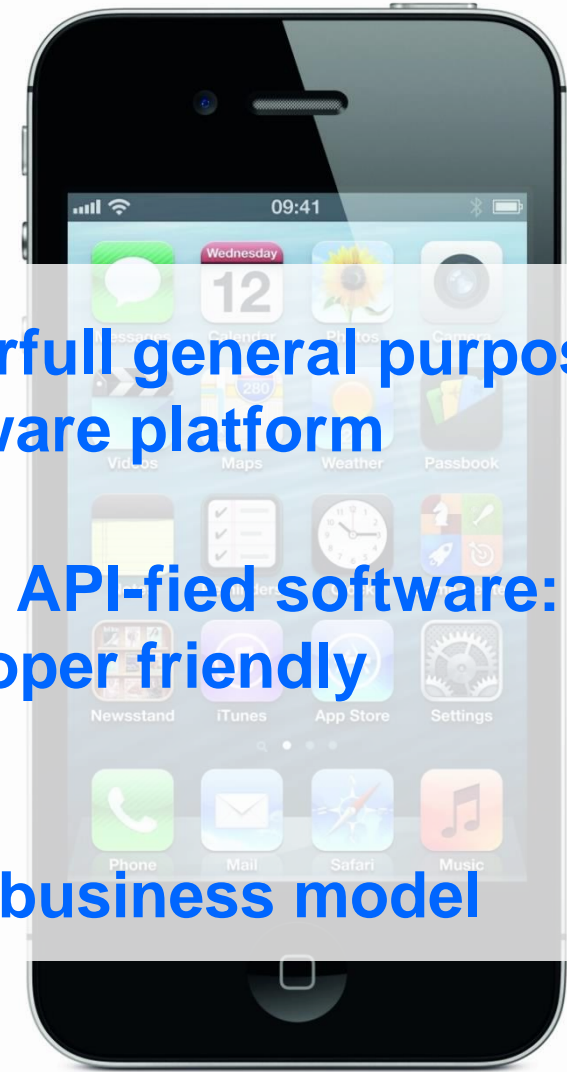
David del Val – Telefónica Open Gateway



Limited hardware platform
Specific purpose: communications

Closed software
difficult to customize

Closed business model

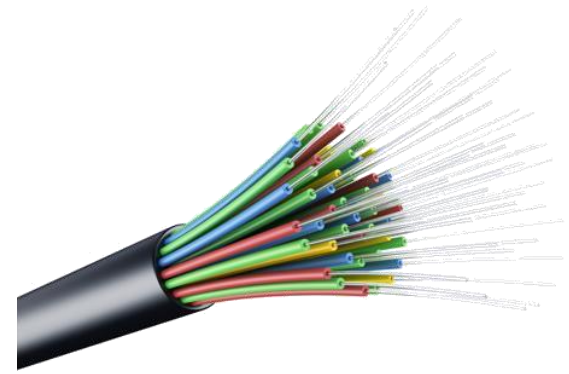


Powerful general purpose
hardware platform

Open, API-fied software:
developer friendly

Open business model

3G - 4G 



Limited platform
Specific purpose: communications



Powerful general purpose platform
(Edge, NEF)

Closed software
difficult to customize



Open, API-fied software:
developer friendly

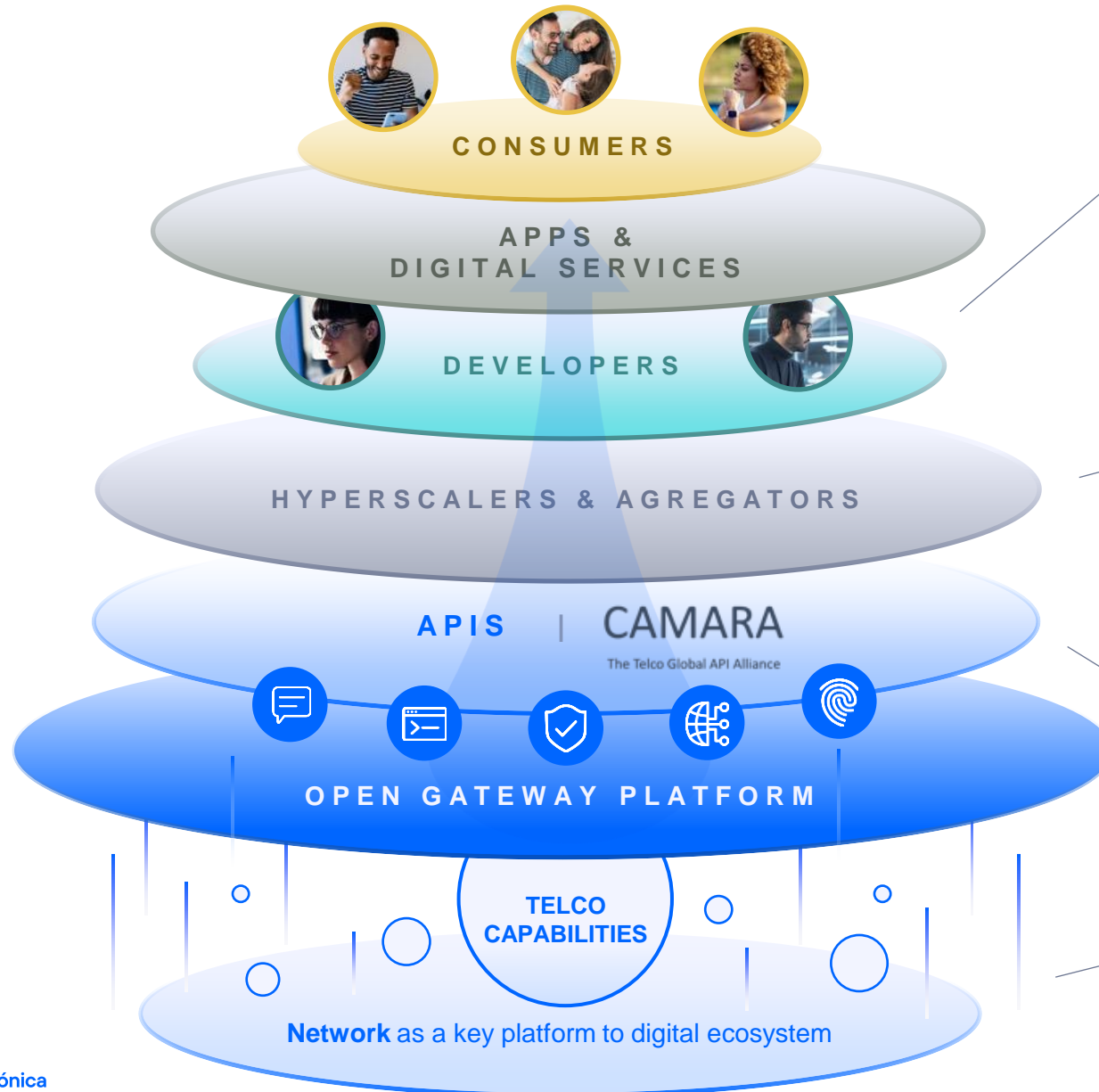
One-sided business model



Open business model

Open Gateway

Open Gateway in a nutshell



Developers want capabilities that work in all countries, all telcos, at a reduced cost and that are available in their familiar developer environments



Hyperscalers and aggregators want to provide a great portfolio of aggregated APIs to attract developers to their ecosystems



APIs need to be standard so that it is easy for hyperscalers and aggregators to integrate with all telcos in all countries

Individual Telcos want to expose their APIs to as many channels as possible, in standard format, to obtain new revenues and boost the market for advanced network capabilities

New solutions for relevant customers across all industrial sectors

FINANCIAL SERVICES

Antifraud solutions for secure and efficient transactions

The SIM Swap API is an **anti-fraud tool** to check if a request is coming from a phone number that has had its SIM changed recently. By verifying a **customer's identity**, the bank can offer a more **efficient and secure** experience.



API SIM Swap

TRANSPORT & LOGISTICS

More secure employee onboarding for freight transport

The Know Your Customer - Match API enables the **validation** of the identities of drivers **during registration**, verifying data such as the CPF (Brazilian ID card) and mobile phone number. It thus secures safer transport routes without undermining the quality of the user experience.



API Know Your Customer

SOCIAL MEDIA & COMMUNITIES










Easier log-in by using the phone number

The **Number Verification API** verifies a user with silent authentication processes. By employing the network to **verify the user**, the user can onboard, repeatedly login and recover passwords **securely and quickly**.

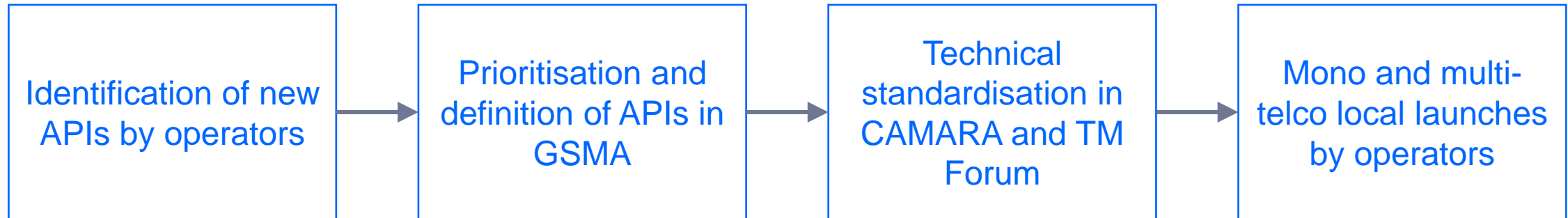


API Number Verification

An ever-expanding portfolio of APIs

-  **SIM Swap**
 - Monitors and identifies recent SIM swap activities using data from the carrier's network, shielding against identity takeover and fraud related activities.
-  **Number Verification**
 - Automatically verifies whether a user is interacting via a device that has a SIM associated with a certain phone number, simplifying validation and authentication protocols.
-  **Know Your Customer - Match**
 - Validates a user's contact information against reliable mobile carrier data, improving the quality of onboarding processes, fraud prevention and customer databases.
-  **Device Location Verification**
 - Verifies the geographical location of a given SIM-based device and validates whether the device is within a specified geographical area.
-  **Device Status (Roaming Status)**
 - Verifies the roaming status of a specific SIM-based device by using events from the operators' network.
-  **Carrier Billing**
 - Provides access to telco capabilities such as payment processing, authentication and billing, giving users the option to pay for services or products through their phone bill.
-  **QoD Mobile**
 - Enables applications and services to access advanced network capabilities, and modify the mobile connectivity of end users, in terms of availability, security or performance.
-  **Home Devices QoD**
 - Enables third-party clients to configure and manage downstream traffic from residential access points to WiFi connected devices, optimizing connectivity.
-  **One time password SMS**
 - Sends short-lived OTPs (one-time passwords) to a phone number via SMS and validate it afterwards, in order to provide a proof of possession of the phone number.

Open Gateway is an industry initiative



Gaining traction worldwide

Great support

49

Operator groups supporting the Open Gateway MoU

8

Channel Partners supporting the Open Gateway MoU

240

Operator networks represented

66%

Worldwide mobile connections represented

Already commercial

22

Markets with Open Gateway launches



44

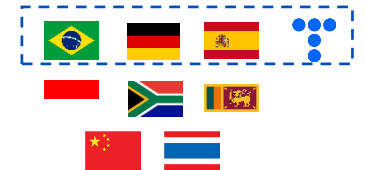
Operator networks involved

11

APIs available

8

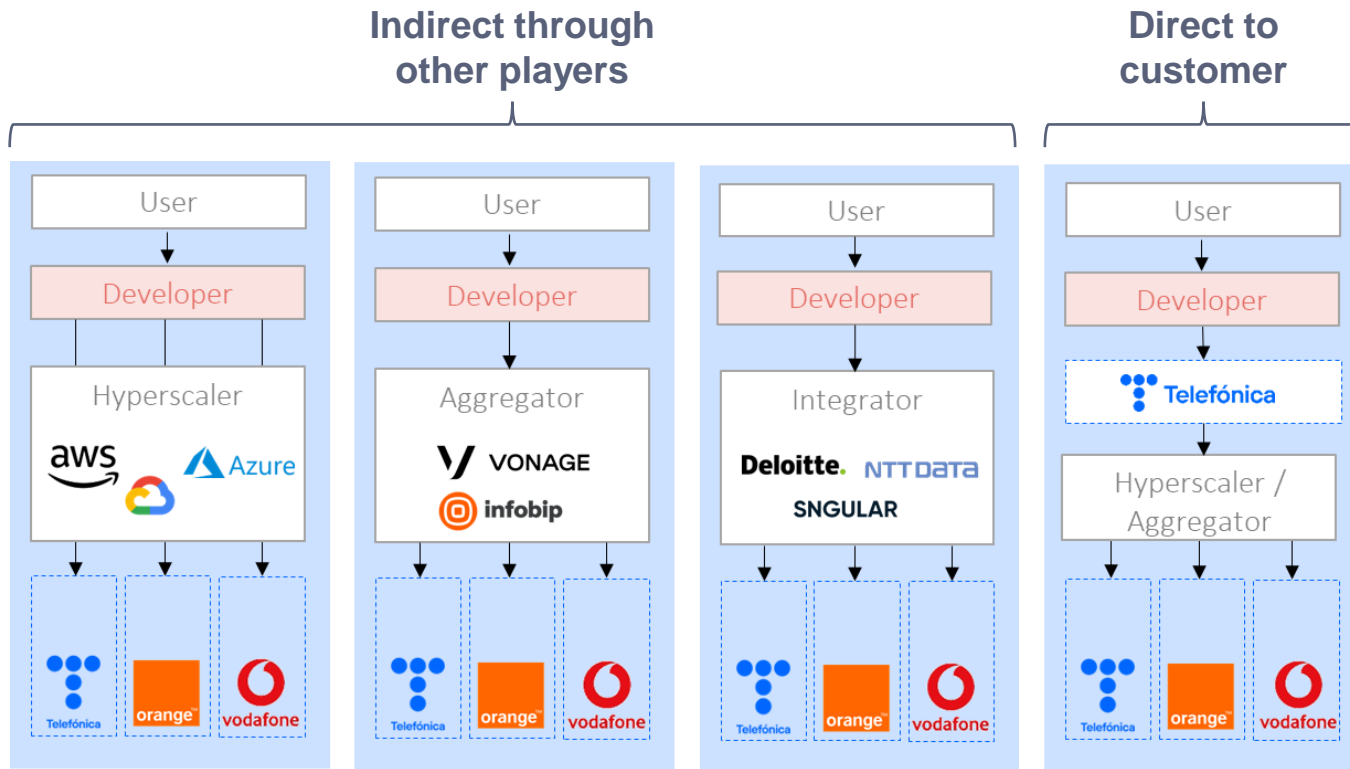
Multi-telco launches completed



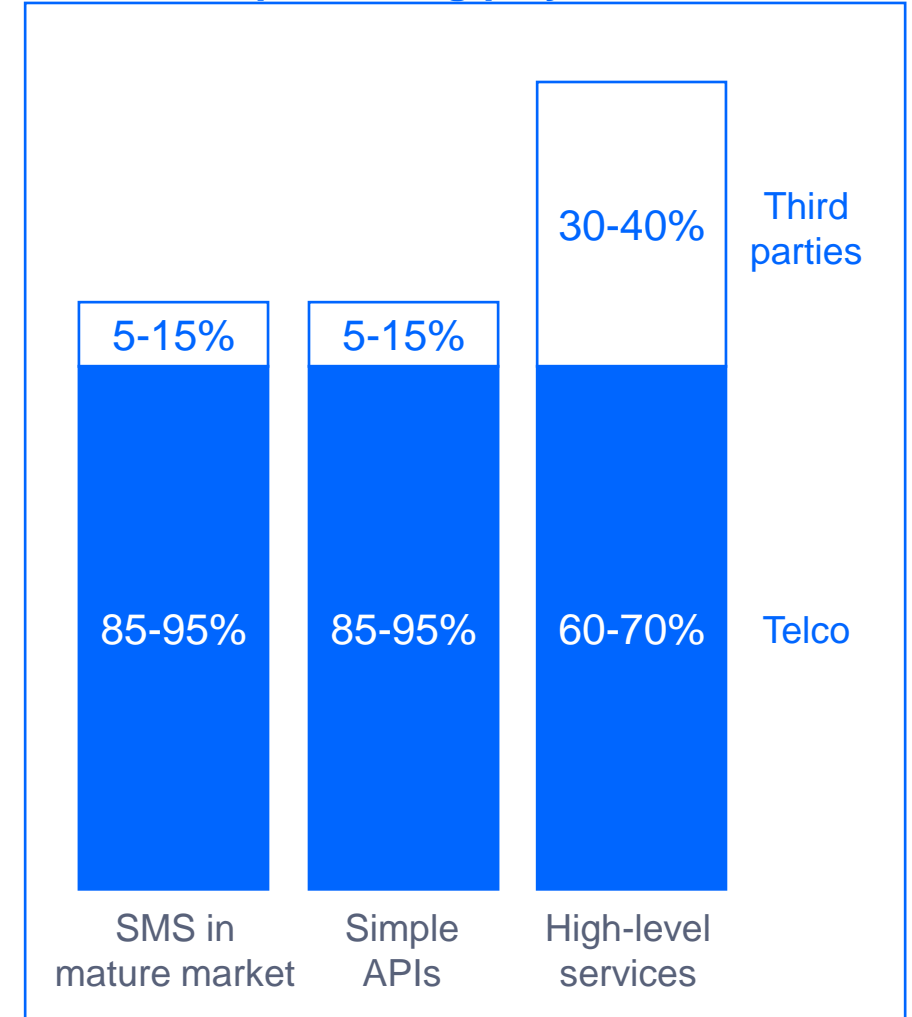
Benefit for telcos

Incremental revenues

Telcos open new revenue streams from terminating API calls in their networks



Revenue split among players



Benefit for telcos

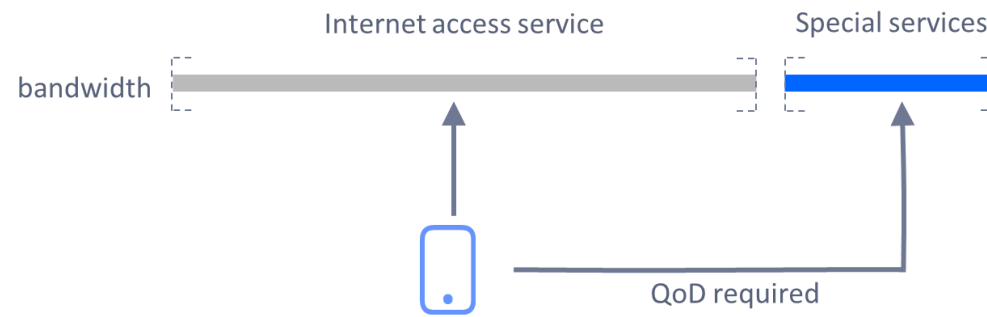
Agile development of new services

APIs can also be used to develop internal services

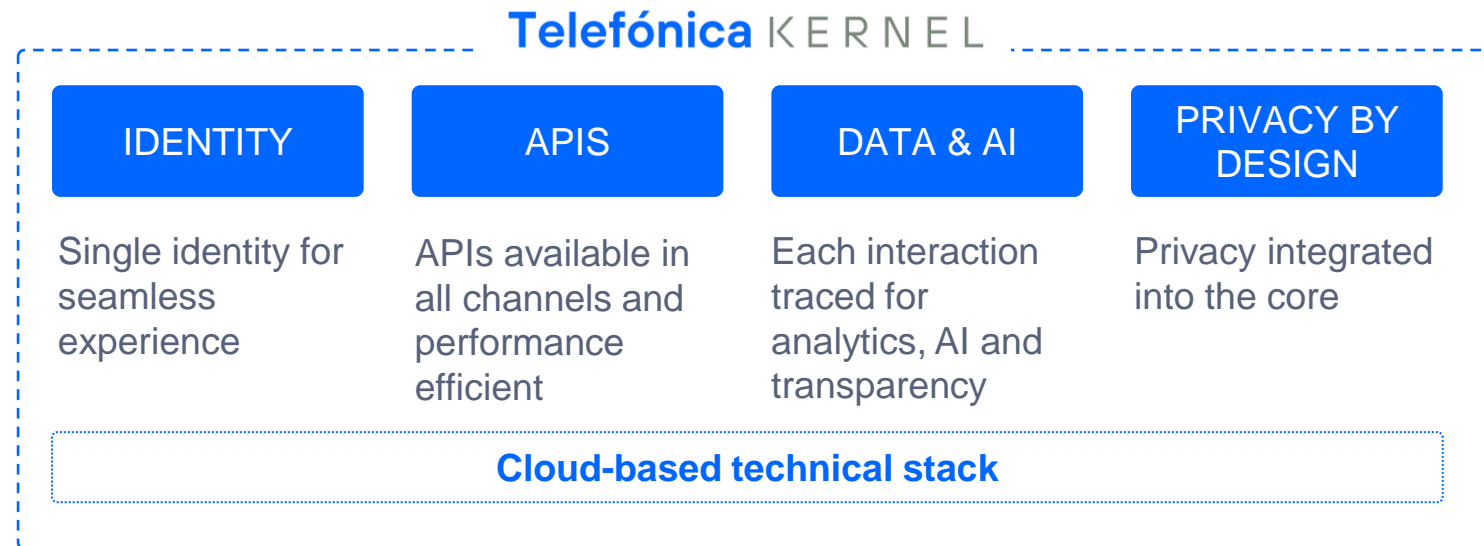


New ways to design and deploy networks

Software may be the next level of infrastructure



Software infrastructure as Telefónica's differential capability



- ✓ **Software-based**
- ✓ **Lower complexity**
- ✓ **Faster time-to-market**
- ✓ **One-stop-shop**

2nd Platform – OSS, BSS, Billing & Provisioning Systems, ...

1st Platform – Access, Transport and Switching Networks, CPEs, ...

Telefónica leading multi-telco launches






	API SIM Swap			API Number Verification			API Device Location
	Vivo TIM Claro	Telefónica Orange Vodafone	DT O2 Vodafone	Vivo TIM Claro	Telefónica Orange Vodafone	DT O2 Vodafone	Vivo TIM Claro
infobip	✓			✓			✓
VONAGE		✓ (1)	✓ (1)		✓	✓	
Azure	✓ (1)	✓ (1,2)		✓ (1)	✓ (1,2)		


(1) Public preview (2) Telefonica + Orange






Complete API portfolio in Telefónica



 Home Devices QoD


 



 Device Location Verification

 Device Status (Roaming Status)

 QoD Mobile


 SIM Swap


  



 Number Verification


  


 Carrier Billing



 Know Your Customer - Match

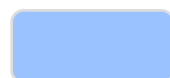
 

 One time password SMS

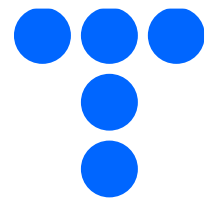




Multi-TelCo Brazil



Multi-TelCo Brazil, Germany, Spain



Telefónica