

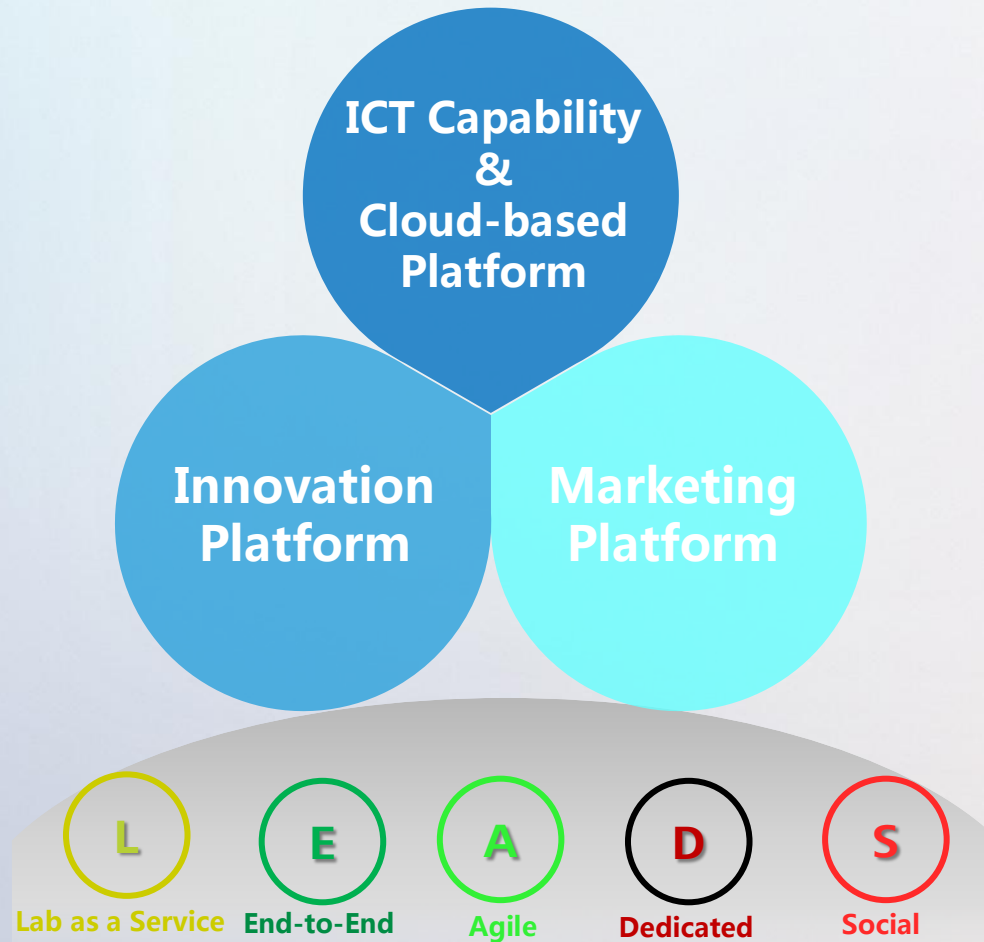


Huawei APIs For Open Hack Nice

Huawei Open Hack Nice Team



Build and Integrate worldwide resource to enable fast and dynamic innovation, accelerate the commercial implementation



Progress in 2016:

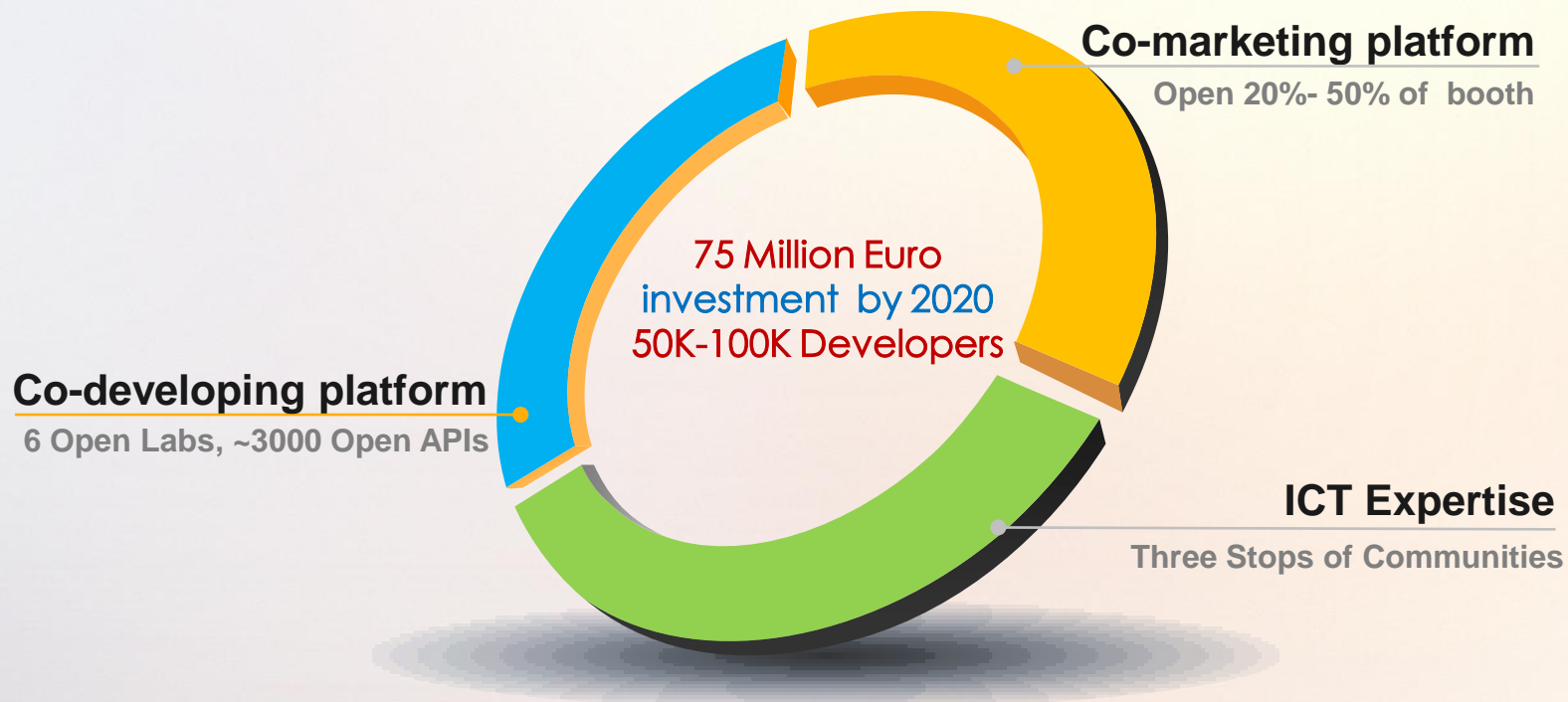
- Open Lab Reservation Times **7300+**
- Online Use of API Explorer **15000+**
- Online Study of Code Lab **5000+**
- Open Hacks, **2500+** Teams , Share **millions bonus**



Enabling more rapid innovation and large-scale commercial deployments

Worldwide : Invest 1bn USD in developing the ecosystem

Europe : European Developer Enablement Plan



Open Hack in Lisbon on Feb 6-7, 2017

{open}:data + {open}:apis + {open}:platform

Lisbon City Open Data

Temas de Informação

■ Currently, 193 datasets are available, organized in 20 thematic areas



Digital CRM

- Offering Details Query
- Customer InforQuery
- Account Info Query
- Blacklist Query
- SMS Sending
- Querying Balance
- Deducting Balance
- Performing Payment
- Querying Payment Logs

Digital RM



- Billing Management API
- Customer Management API
- Party Management API
- Product Catalog Mgmt API
- Product Inventory API
- Product Ordering API
- SLA Management API
- Usage Management API
- Trouble Ticket API



- Challenges
- IoE/Smart City
 - Digital Payments

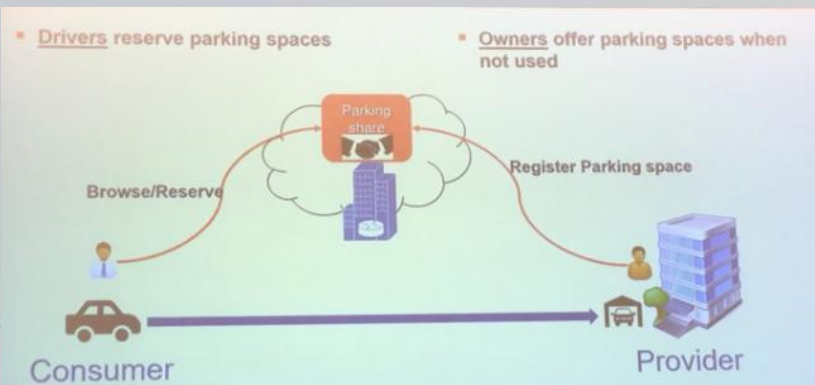
FIWARE Platform for Smart Cities

- Weather
- Air Quality



8 teams output 8 innovative ideas

One Example: Share Parking



Painpoint: Parking is frustrating, time-wasting and creates pollution

an Airbnb approach to parking

To provide a way for people to hire out their personal parking spaces to drivers.

TMF APIs

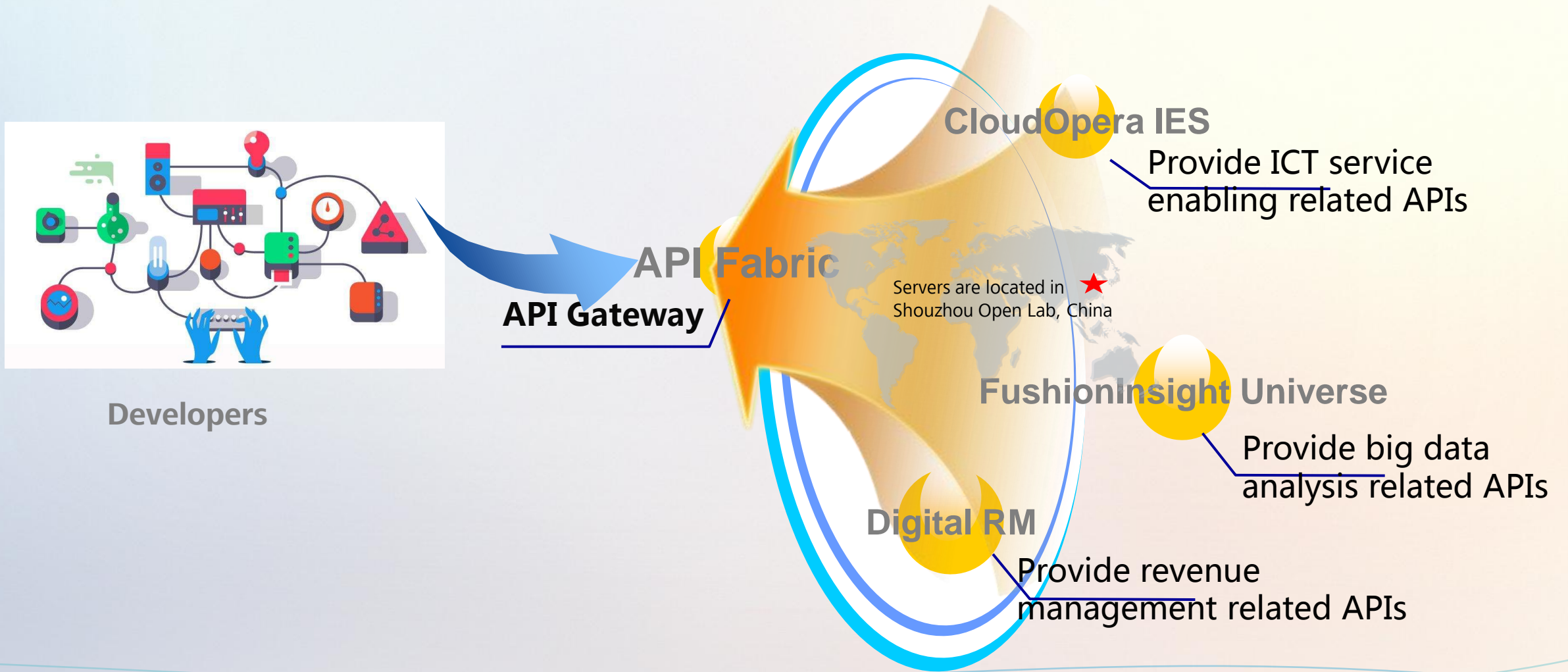
Huawei APIs

- SMS sending
- Querying Balance
- Deducting Balance
- Performing Payment

Fiware APIs

Lisbon Data

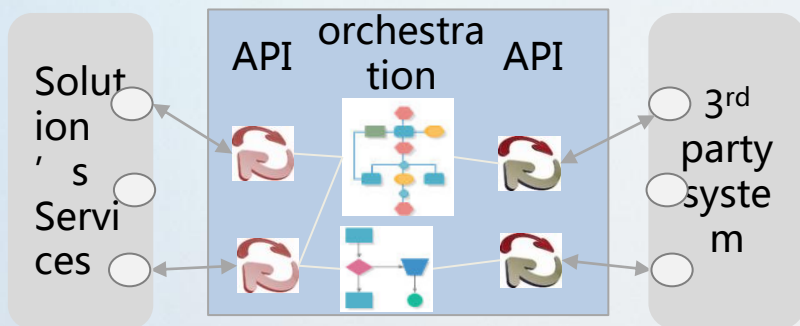
Huawei APIs Exposed Architecture



Huawei API Fabric

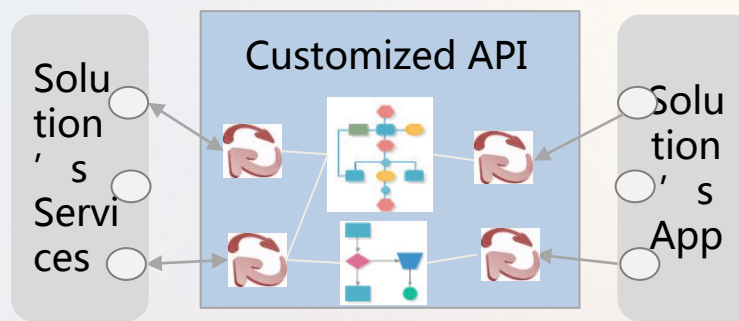
Integrate with 3rd party system

Improve efficiency of solution integrate with 3rd party system



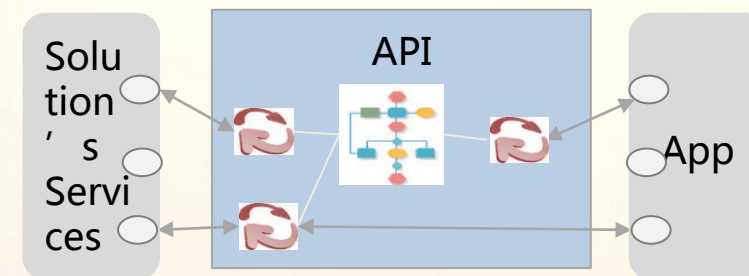
Customized API

SI customizes API base on solution baseline API



Open API

Support solution's Open API



API Fabric

API Tools

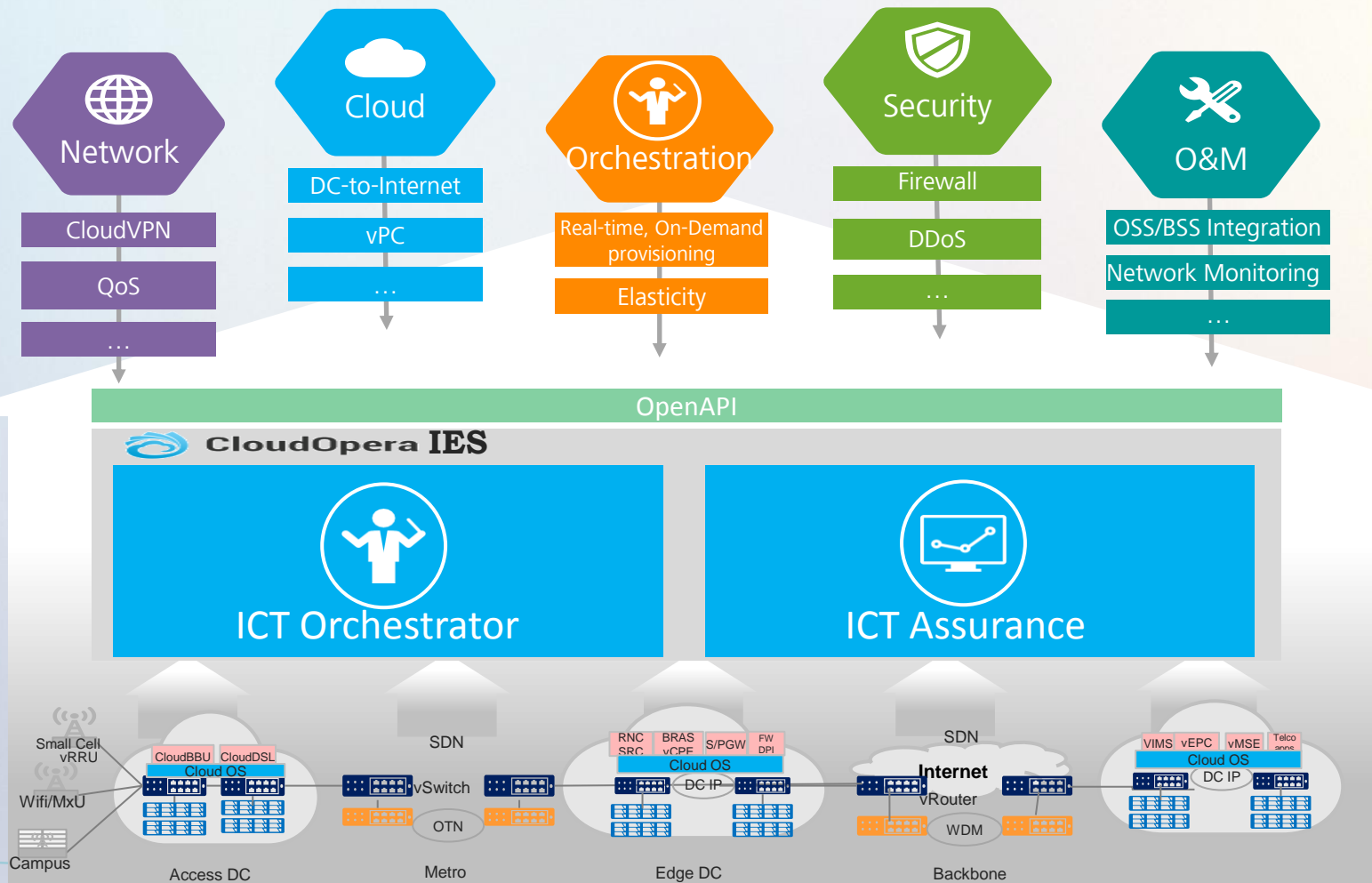
API Gateway

API Orchestration

API Management

API Catalog

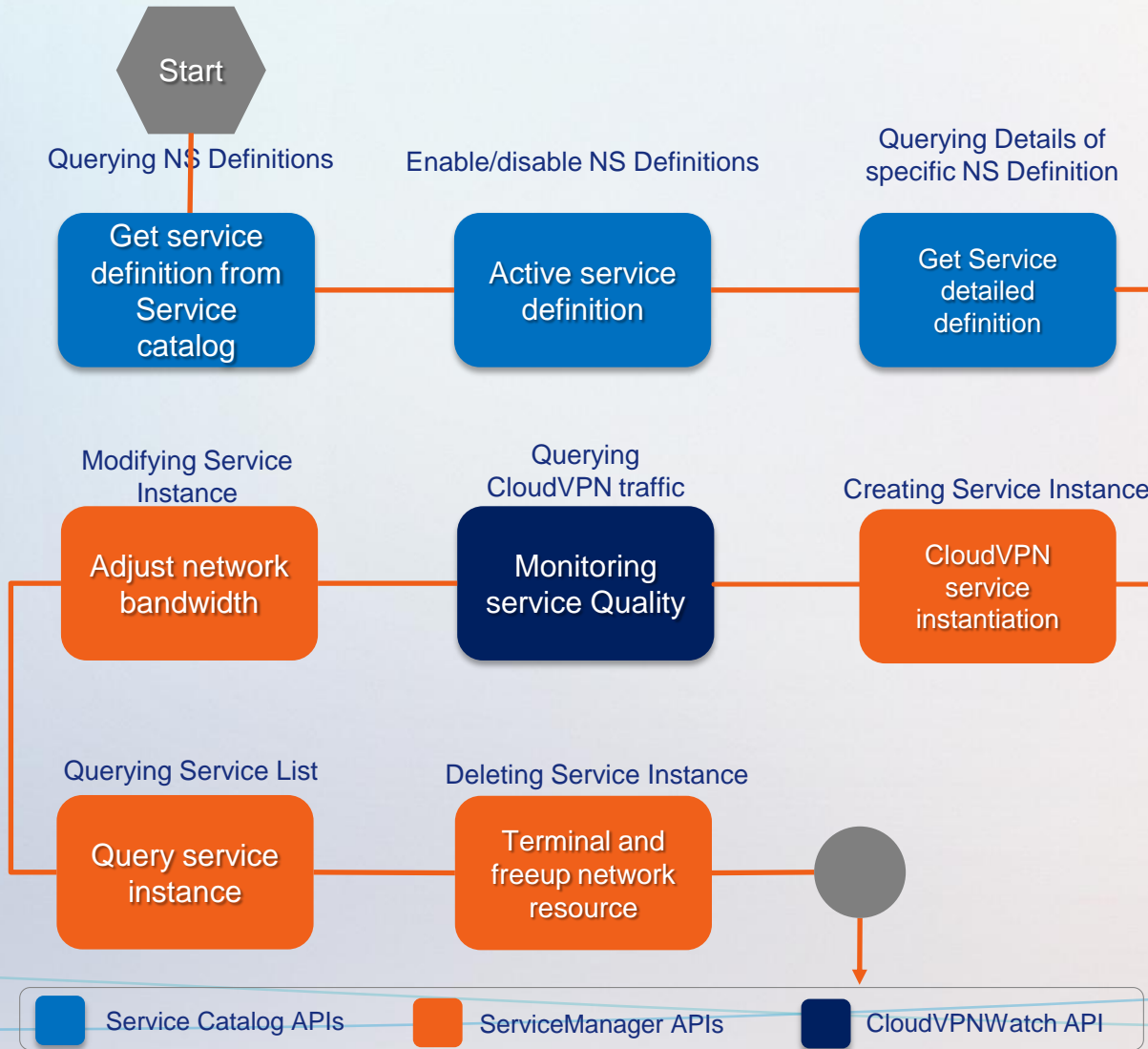
CloudOpera IES –ICT Service Enabling Platform



Benefits for Developers

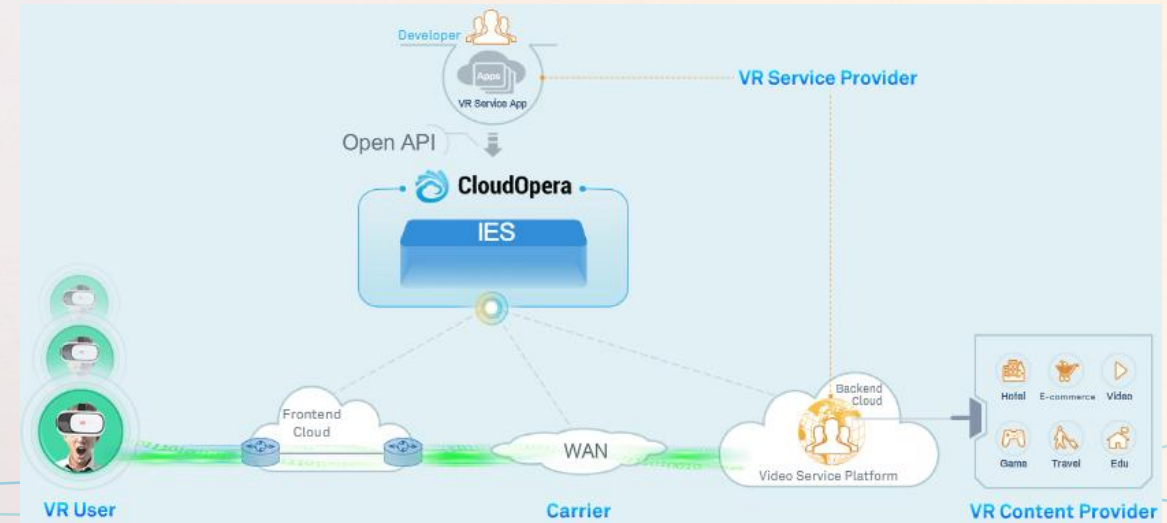
- 1 **Cloudify network infrastructure capability openness to provide richer ICT service availability for industry innovation and insight.**
- 2 **On-demand use, real-time provisioning and elastics adjustment to satisfy user experience.**
- 3 **Open Southbound plugin and northbound service design to support new service fast on-boarding and partner innovation.**

IES APIs for Nice Open Hack

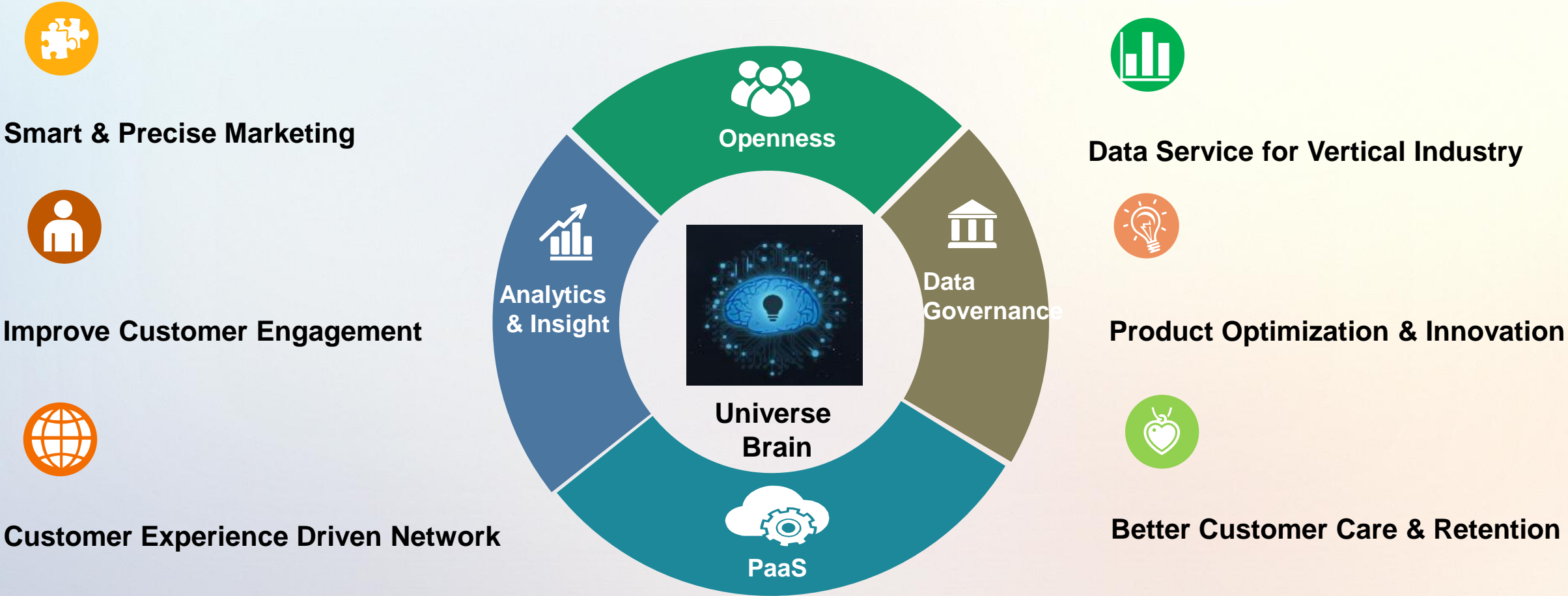


Network acceleration to satisfy VR experience:

1. VR User connects VR application to use.
2. VR application builds network connectivity with 50Mbps between user and server (ServiceManager APIs)
3. VR application will monitor and predict network quality (CloudVPNWatch API) and real-time adjust network bandwidth (ServiceManager APIs)
4. After finished, VR application will free up the network resource. (ServiceManager APIs)



FI-Universe Analytics: Big Data Analytics Platform For Telcos



FI-Universe Analytics Open Hack APIs & Use Case

ID	Category	API Name	Description
1	Location Insight	Get City ID	Obtaining the City ID
2		Get City Center Coordinate	Obtaining the City Center Coordinate
3		Get City Bound Coordinate	Obtaining the City Boundary Coordinate
4		Get City Precision	Obtaining the City Grid Precision
5		Get City Grid	Obtaining the City Grid Count
6		Create Area By Grid	Create Area By Grid
7		Get Area Crowd Sum	Obtaining the Person Count in an Area
8		Get Area Crowd Sum By Grid	Obtaining the Person Count in an Area by Grid
9		Get Area Crowd Sum By Slice	Obtaining the Person Count in an Area by Time Slice
10		Get Area Composition Analysis	Obtaining the People Composition Analysis by Area
11		Get Residence By Grid	Obtaining the Residence by grid
12		Get Area Migration Crowd Sum By Source Area	Obtaining the Person Count in an Area by Destination Grid
13		Get Area Crowd IDs	Obtaining Customer Group Phone Numbers
14	Customer Insight	Query User Profile	Querying Customer Profiles
15		Query All Tag Customer Profile	Querying Full Customer Tag Profile
16	Digital Marketing	Offer Recommend	Post Recommendation to user

Advertise for yacht club, when target people in Nice port area

- 1、Get City Information
- 2、Create Target Area
- 3、Obtaining Customer Group Phone Numbers
- 4、Select Campaign Target
- 5、Campaign



Reach channel



Huawei Digital Revenue Management



Cloud Native Digital Monetization Engine

Enable Telcos capturing new opportunities through meeting revenue management challenges in digital economy



Telco



IoT



OTT



Cloud



MVNO



Vertical



Rating & Charging



Billing & Finance



B2B Settlement

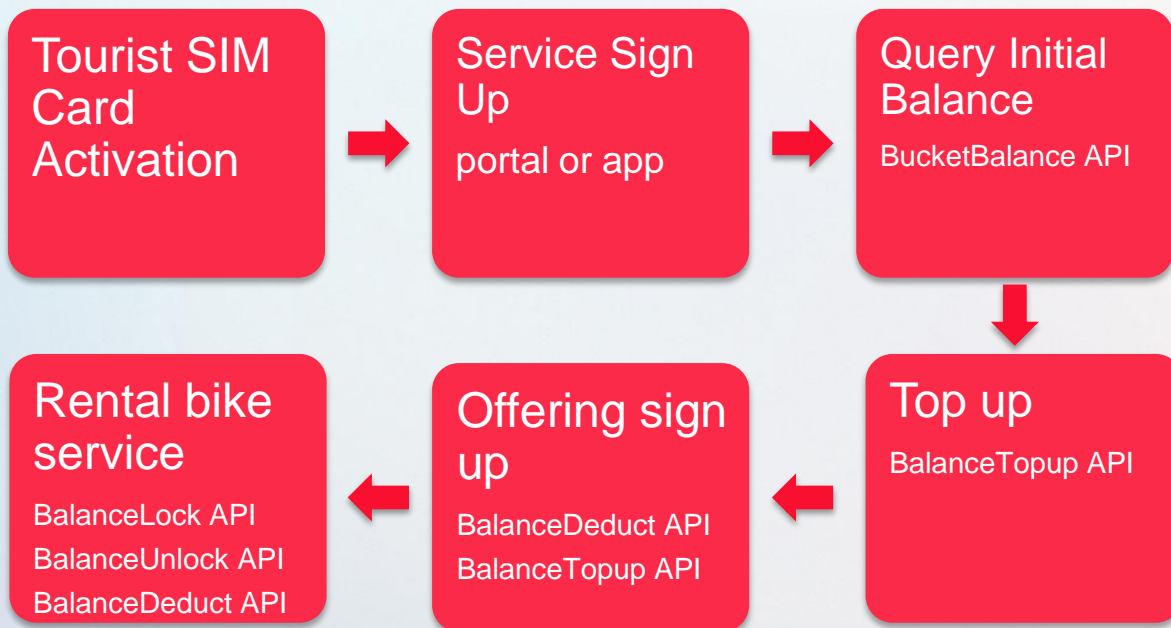


Cloud Native Architecture

Huawei Digital Revenue Management as **Tie 1 CSPs favorite choice** is serving **1.9 billion** subscribers from more than **200** CSPs across **111** countries and regions in the world.



Digital RM Open Hack Scenario



Prepay Tourist Service:

1. Customer buy and active Tourist SIM card at airport retail store.
2. Customer sign up tourist service with mobile number through web portal or tourist service app.
3. Customer query initial balance in web portal or service app.
4. Customer top-up 30€ and get 3 € rental bike voucher.
5. Customer order a 7days safari offering (cost 10 €) and get 100 item free SMS as a bonus.
6. Customer enter rental bike menu, base on LBS (Location-Based Services) he/she chooses a rental bike and start rating, system will block 15€ balance, after customer release the rental bike, system will calculate rental fee base on time and distance.

API List

Huawei APIs	TMF Conformance
BucketBalance	TMF654 Prepay Balance Mgmt API\bucketBalance
BalanceTopup	TMF654 Prepay Balance Mgmt API\balanceTopup
BalanceDeduct	New API was contributed. It is conformant with Crowdsourcing Rules. http://projects.tmforum.org/jira/browse/AP-861
BalanceLock	New API was contributed. It is conformant with Crowdsourcing Rules. http://projects.tmforum.org/jira/browse/AP-861
BalanceUnlock	New API was contributed. It is conformant with Crowdsourcing Rules. http://projects.tmforum.org/jira/browse/AP-861

Especially for You in Nice!



Special prize for you! 😊

- API specifications
- Postman Testing Samples
- Preset Data

Enjoy your trip with Huawei APIs. See you in Nice!

THANK YOU

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Any question? Please contact with yuguozhu.yu@huawei.com.

