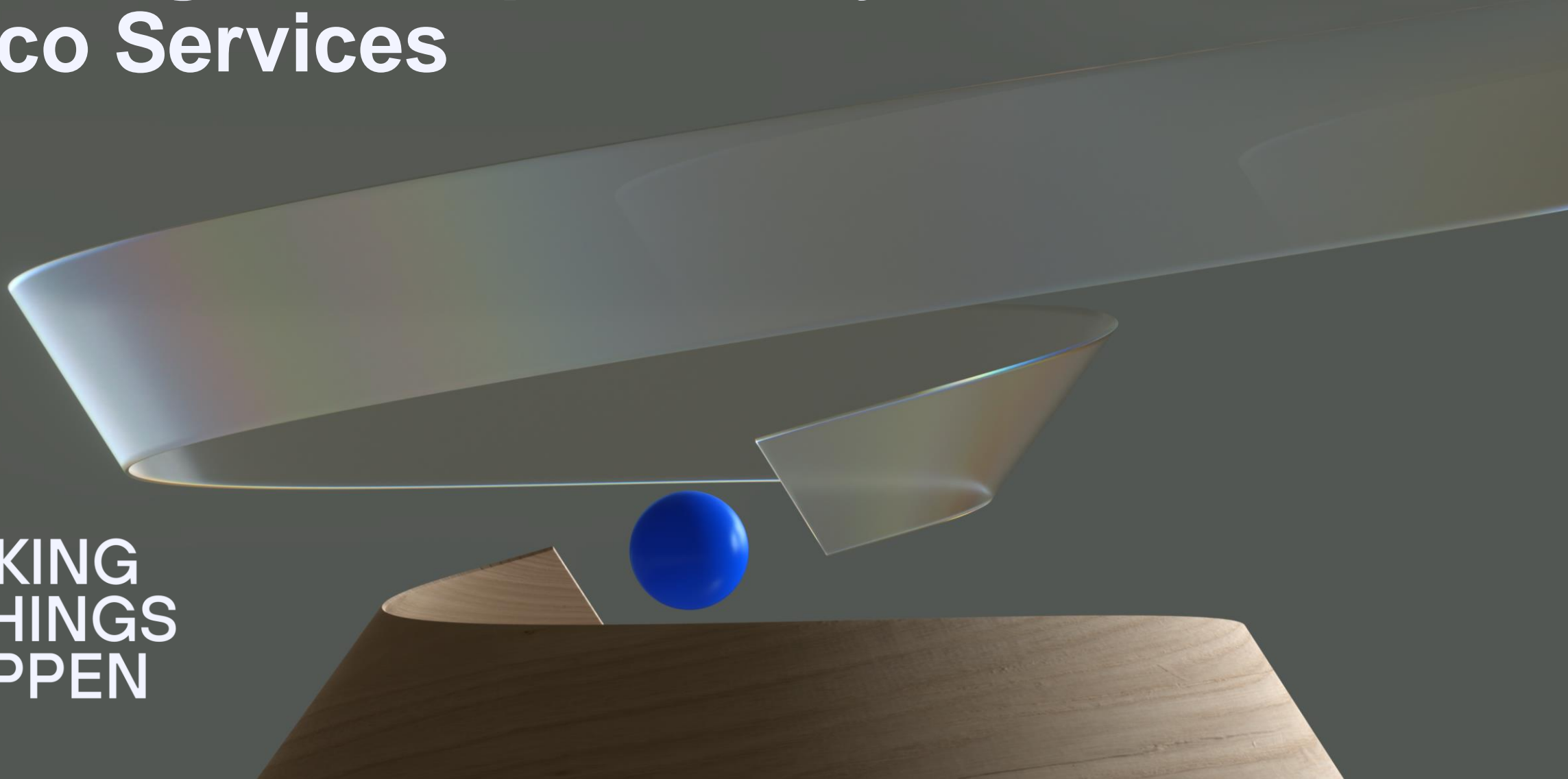


# Creating Developer-Ready Telco Services

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MAKING  
THINGS  
HAPPEN



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# Industry transformation

Mark Evans

CHIEF STRATEGY & DEVELOPMENT OFFICER,  
TELEFÓNICA



# A new wave of digital use cases are coming



## IoT & Edge Computing



**Cloud** compute of PayTV algorithms



Edge Compute based **smart grids**



**Autonomous** drone last mile delivery



**Quantum** compute for cyber risk modelling



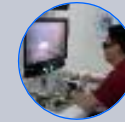
## Applied AI & ML



**Smart factories** IoT based maintenance



**Smart cities** with IoT based traffic mgmt.



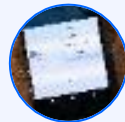
**Remote** high precision **surgery**



**General AI** based digital lawyers



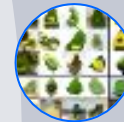
## Metaverse & XR



**Virtual assistants** for customer support



**Digital twins** for offshore windfarm



**AI/ML** design of public infrastructure



**AI/ML** medical **prescription**



**XR indistinguishable** from reality in multiplayer game



## Trust arch., Digital ID & Web3



**VR** based training for construction workers



**Non peripheral VR** visits in real estate



**AR** display for cyclists



**Metaverse** based online shopping



**Web 3.0. supermarket** with transparency on food supply chain




**NFTs** tickets for an exclusive in-person event




**Smart contracts** for digital bank mortgages

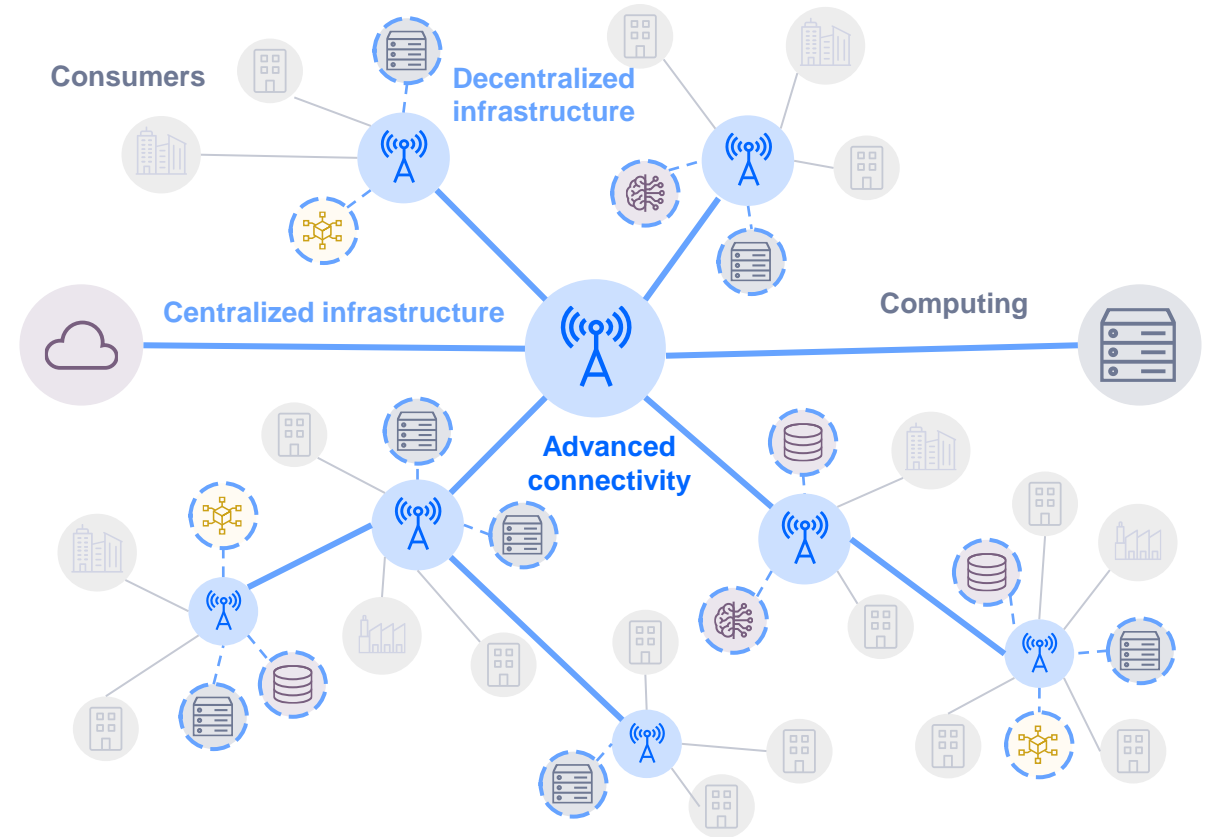
# Collaboration: Cloud Computing & Communications coming together

 **Advanced connectivity networks**

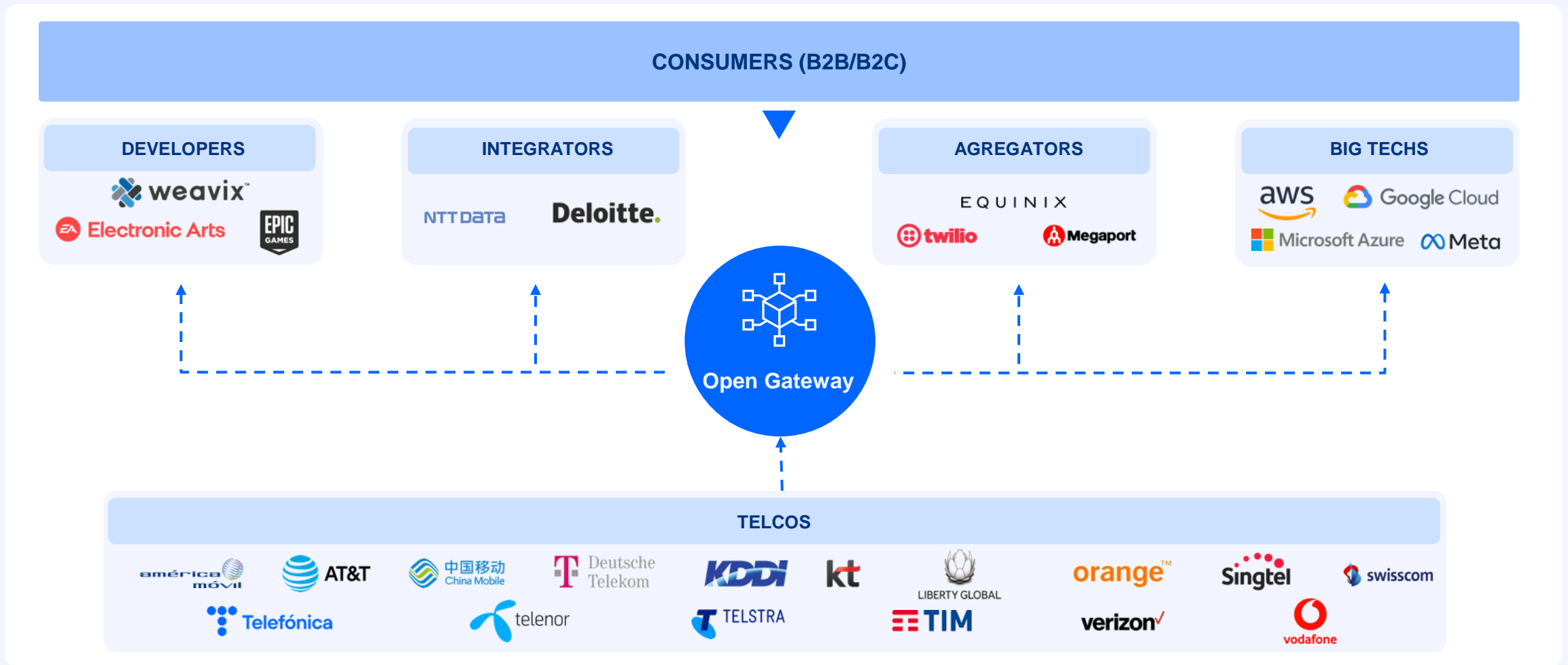
 **Edge compute & storage**

  
  
 **Data assets and AI capabilities**

 **Further decentralization**



# Open Gateway to transform network into a platform available to All



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# MSFT our preferential partner on this journey

Jason Zander

EVP, STRATEGIC MISSIONS AND TECHNOLOGIES, MICROSOFT



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# Building the future together

 Microsoft |  Telefónica

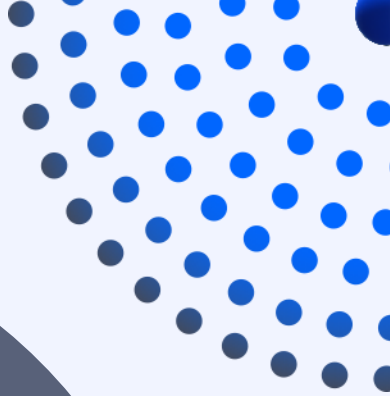
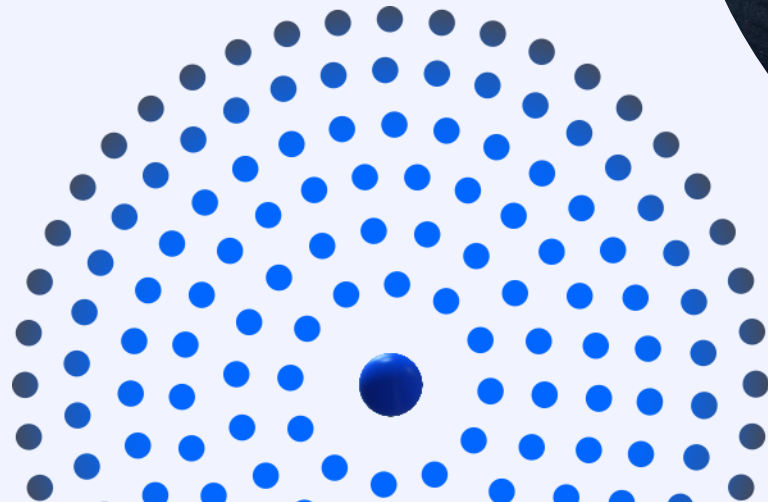


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# Bringing telco capabilities to the cloud for service developers

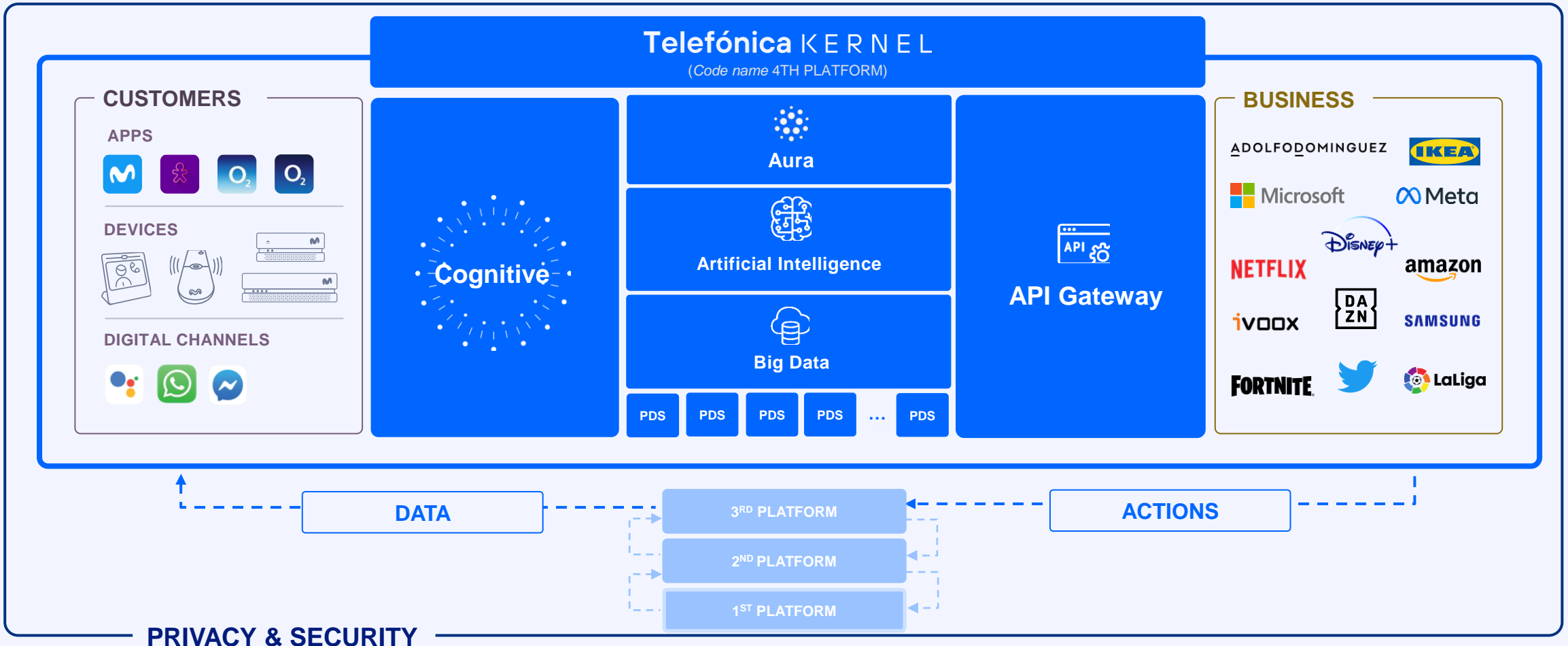
Chema Alonso

CHIEF DIGITAL OFFICER, TELEFÓNICA





# Telefónica's technological ecosystem





# Open Gateway

Transforming networks into future-ready platforms to open telco capabilities in an:

- Intuitive
- Interoperable
- Programmable way

Through global and standardised APIs

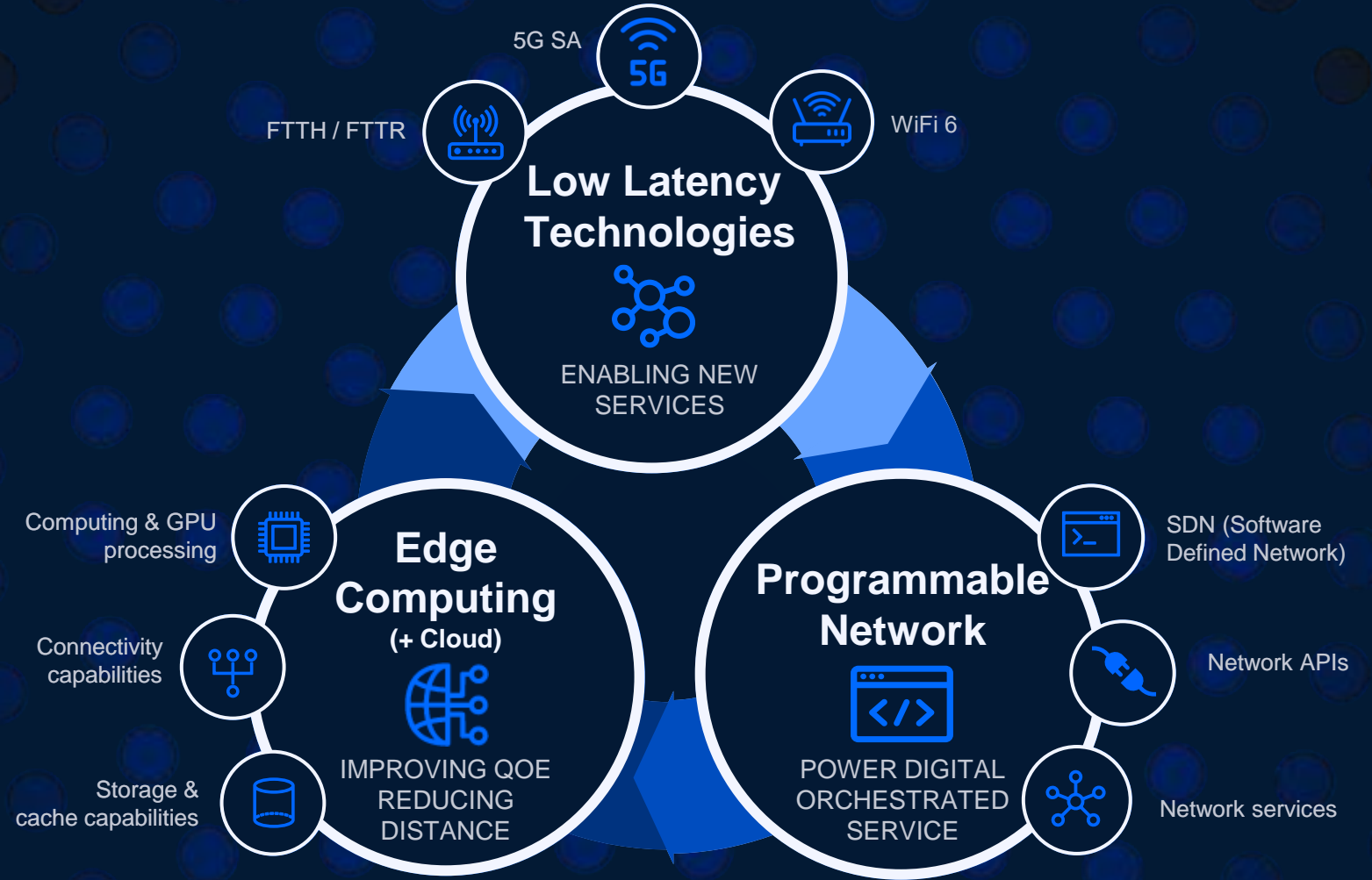
**A GSMA global industry initiative**

GSMA™

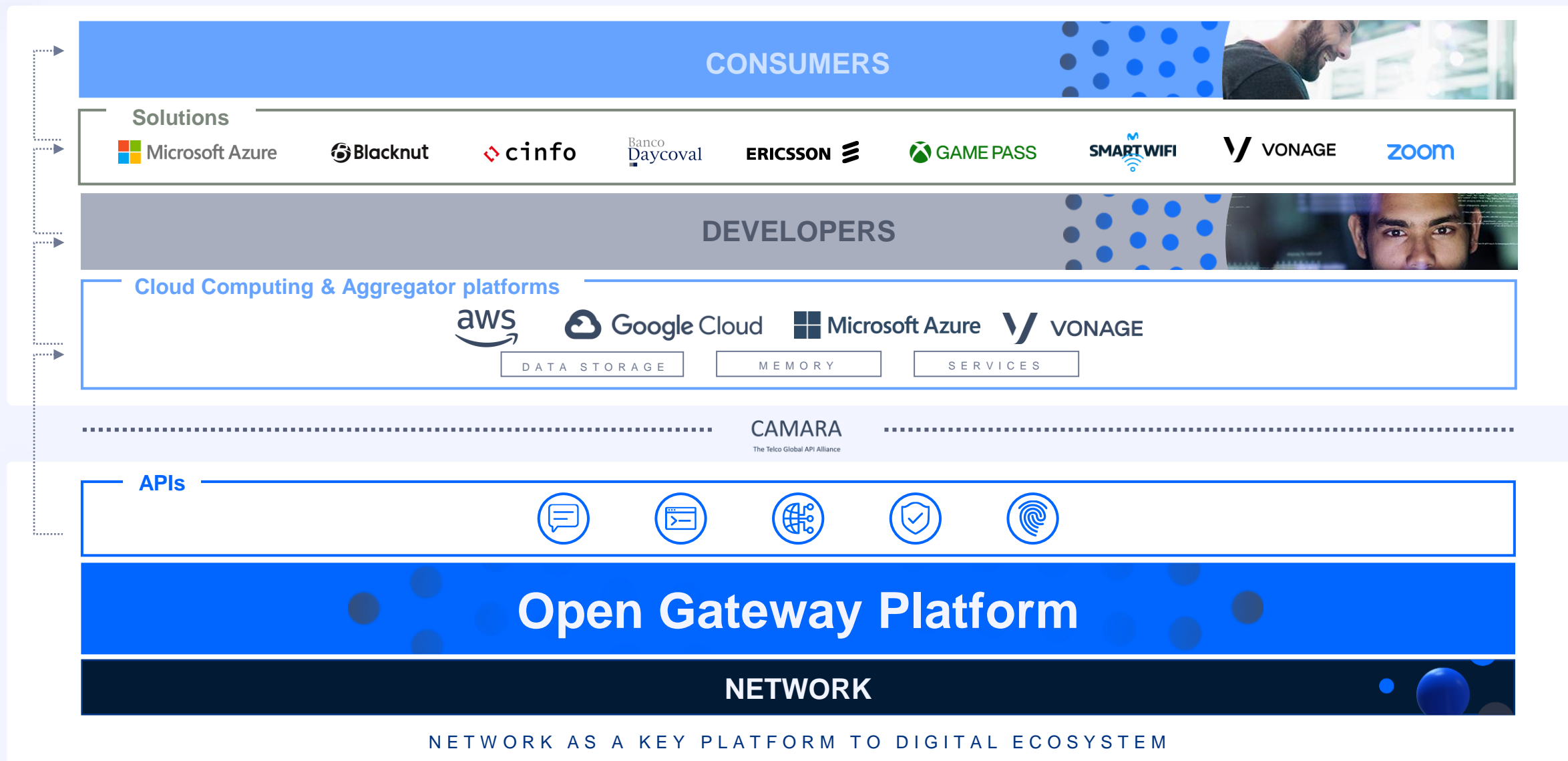
THE  
LINUX  
FOUNDATION

CAMARA  
The Telco Global API Alliance

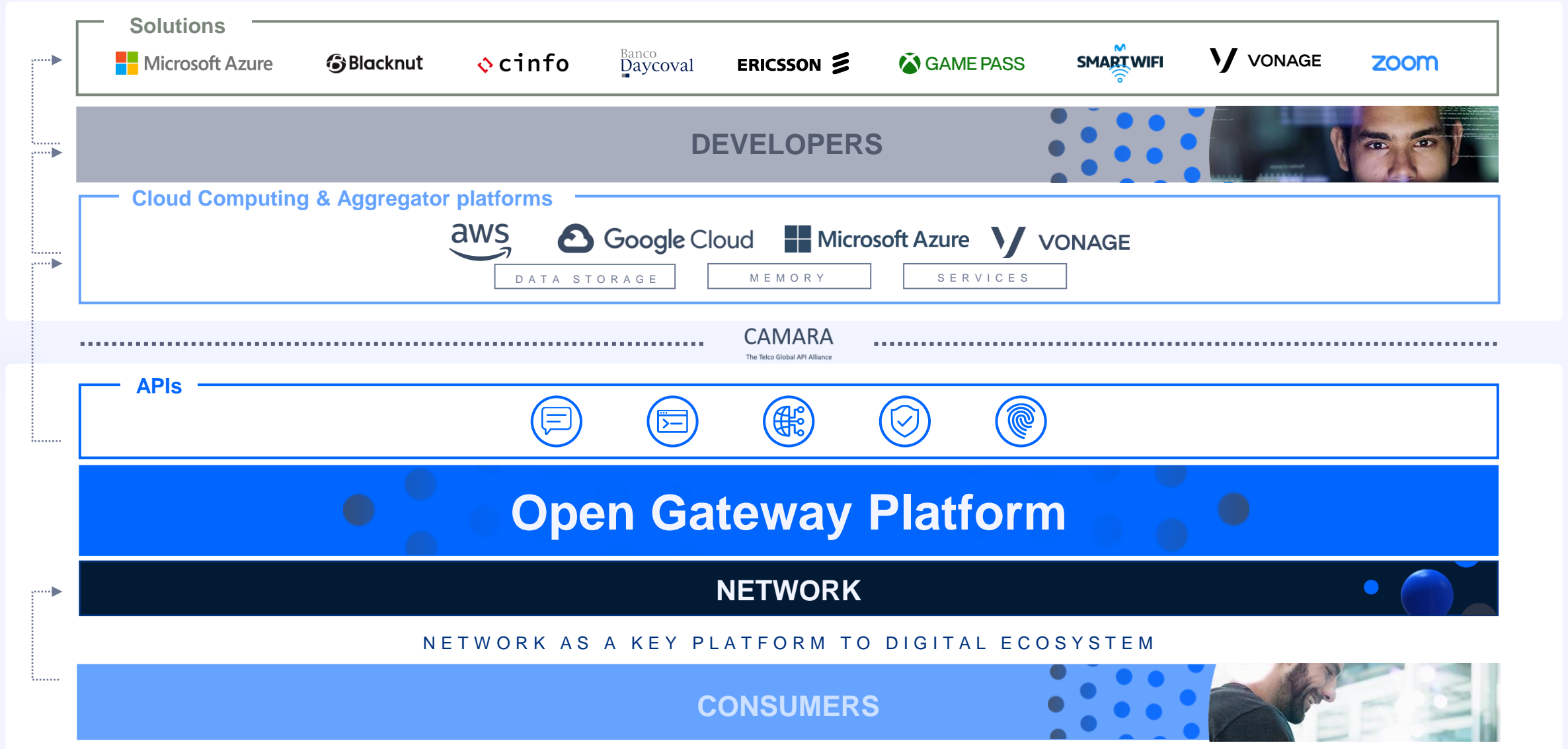
# Future-ready networks



# Telefónica Open Gateway



# Telefónica Open Gateway



# Our APIs are developer-ready



STANDARDISED



AUTOMATED



REAL TIME



ON DEMAND



ONE SINGLE LINE OF CODE

# Boosting future experiences

Accelerate the development of digital services



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# Raising the level of communications





# Gaming ON

## The best connectivity for cloud gaming



Under CAMARA project



## Mobile Boosting

# Enhanced quality connectivity using tokens

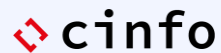


Under CAMARA project

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# Streaming services

## New ways of live production



Under CAMARA project



## E-health

# Opening up new opportunities for medical practitioners with XR



Microsoft Azure



Under CAMARA project



# Fintech

## Safer and more agile operations

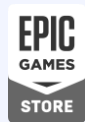


Under CAMARA project



# Payments

## Democratisation access to monetisation through carrier billing



Google Play



Under-review CAMARA project

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# Early Adopter Program Telefónica Open Gateway

Defining, creating and developing  
new use cases



Google Cloud



Microsoft Azure



VONAGE



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# Azure Programmable Connectivity

David Carmona

GENERAL MANAGER STRATEGIC MISSIONS  
& TECHNOLOGIES MICROSOFT





# Azure Programmable Connectivity

Use low  
latency



```
// create properties to set
```

```
Properties properties = new Properties {  
    networkProperties = new NetworkProperties {  
        avgLatencyMs = 10  
    }  
};
```

Set  
Network  
Properties



```
// try to set properties
```

```
try {  
    var model = new { Operator = network, ConsentUrl = "", ImagePath = "images/azure.png" };  
    PubSubChannel? channel = gateway.SetProperties(uePath, asPath, properties, 100);
```

```
    if (channel != null) {  
        Console.WriteLine(channel.channel);  
        return View("Success", model);  
    } else {  
        Console.WriteLine("Received null channel from SetProperties.");  
    }  
}
```

Show  
consent if  
needed

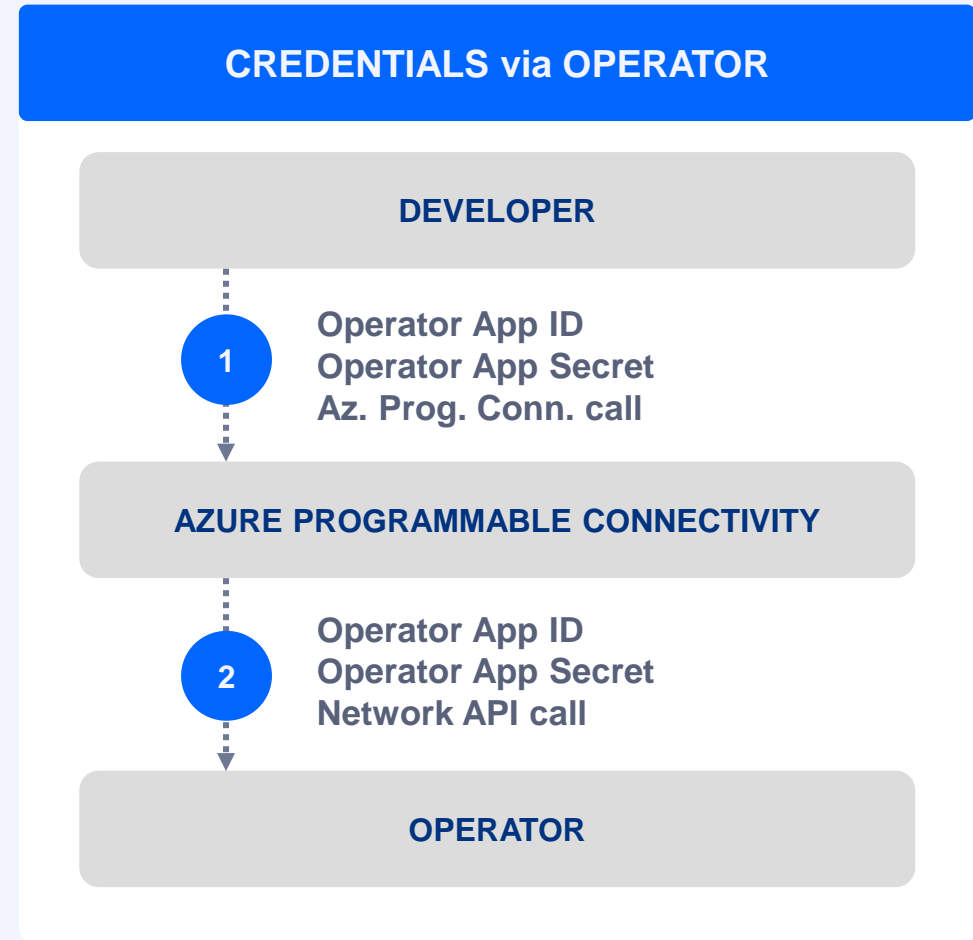
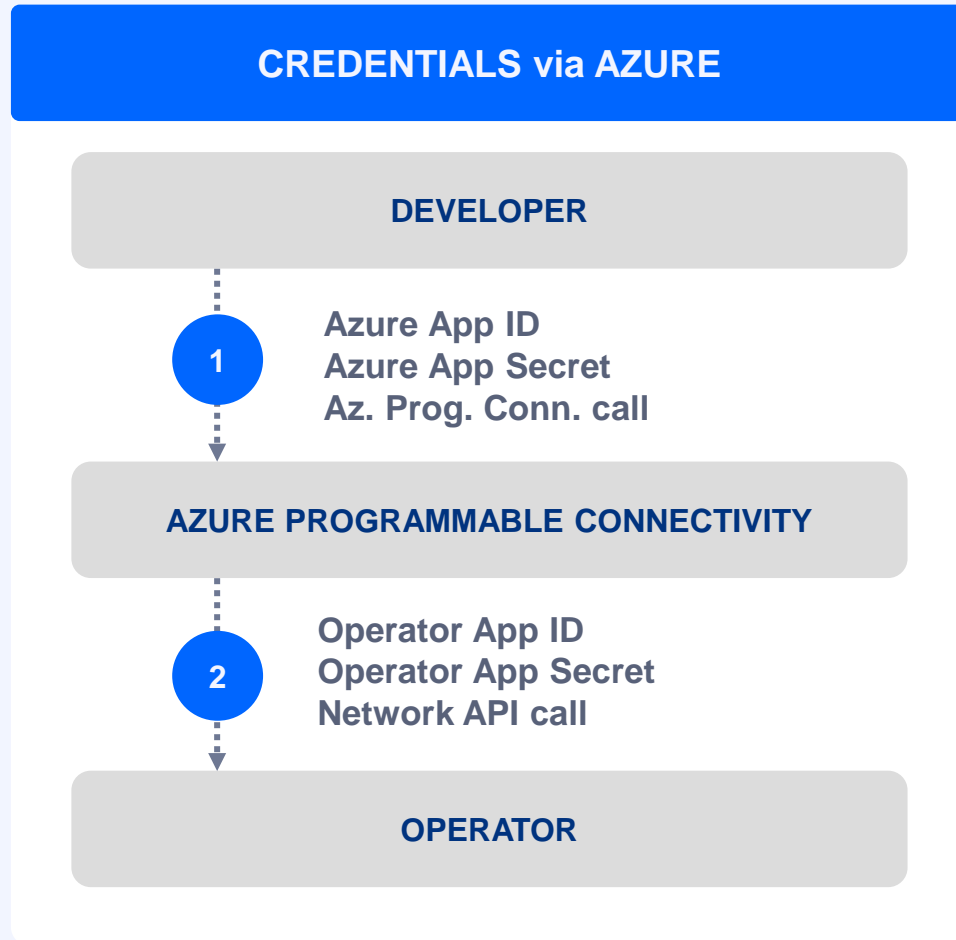


```
} catch (ConsentException e) {  
    if (e.consentUrl != "") {  
        var model = new { Operator = network, ConsentUrl = e.consentUrl, ImagePath = "images/azure.png" };  
        return View("~/Home/Views/Terms.cshtml", model);
```

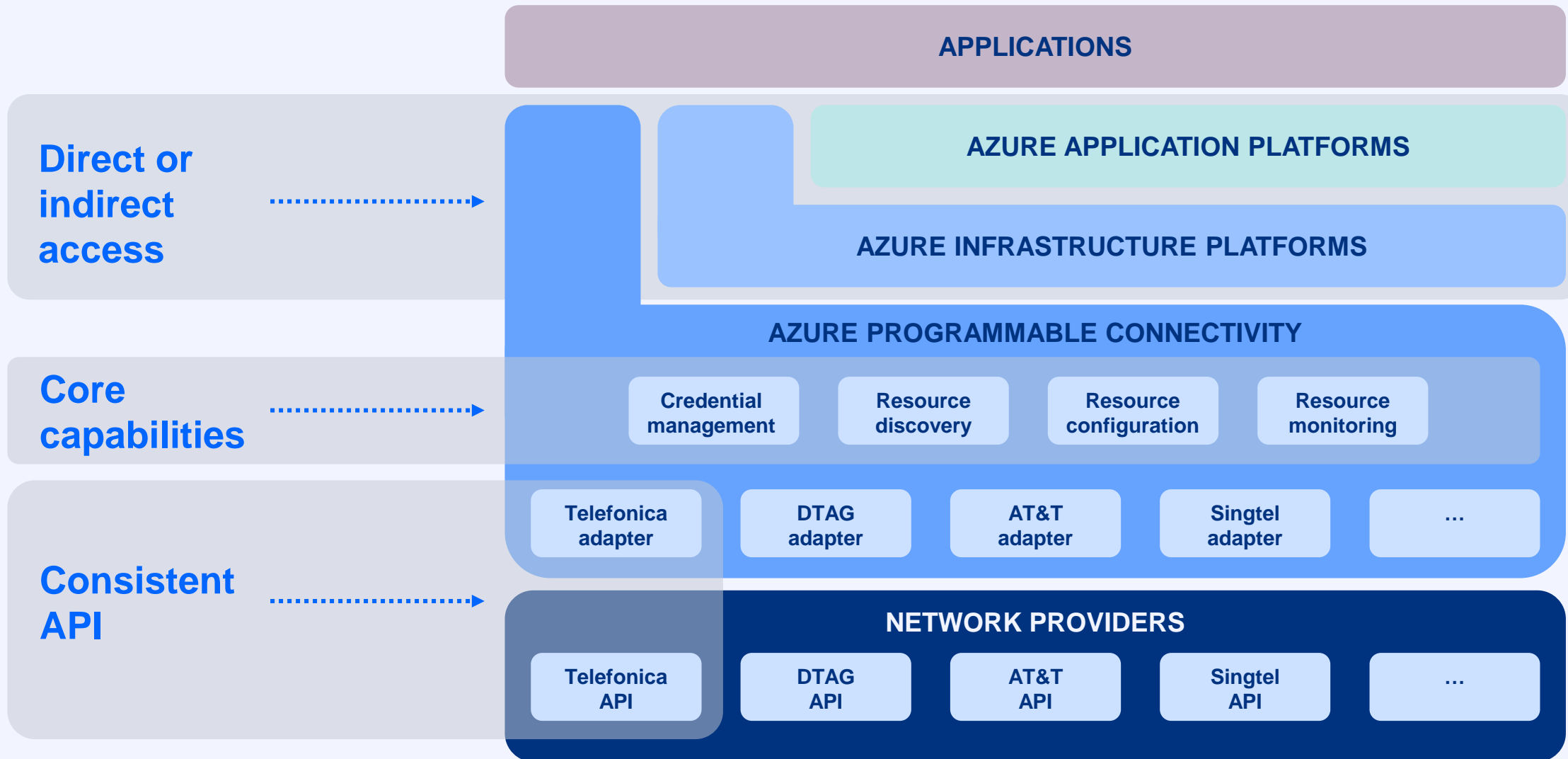
```
    } else {  
        return Content(e.errorMessage);  
    }  
}
```

```
}
```

# Azure Programmable Connectivity



# Azure Programmable Connectivity





Elysian living

9th

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# Azure Programmable Connectivity

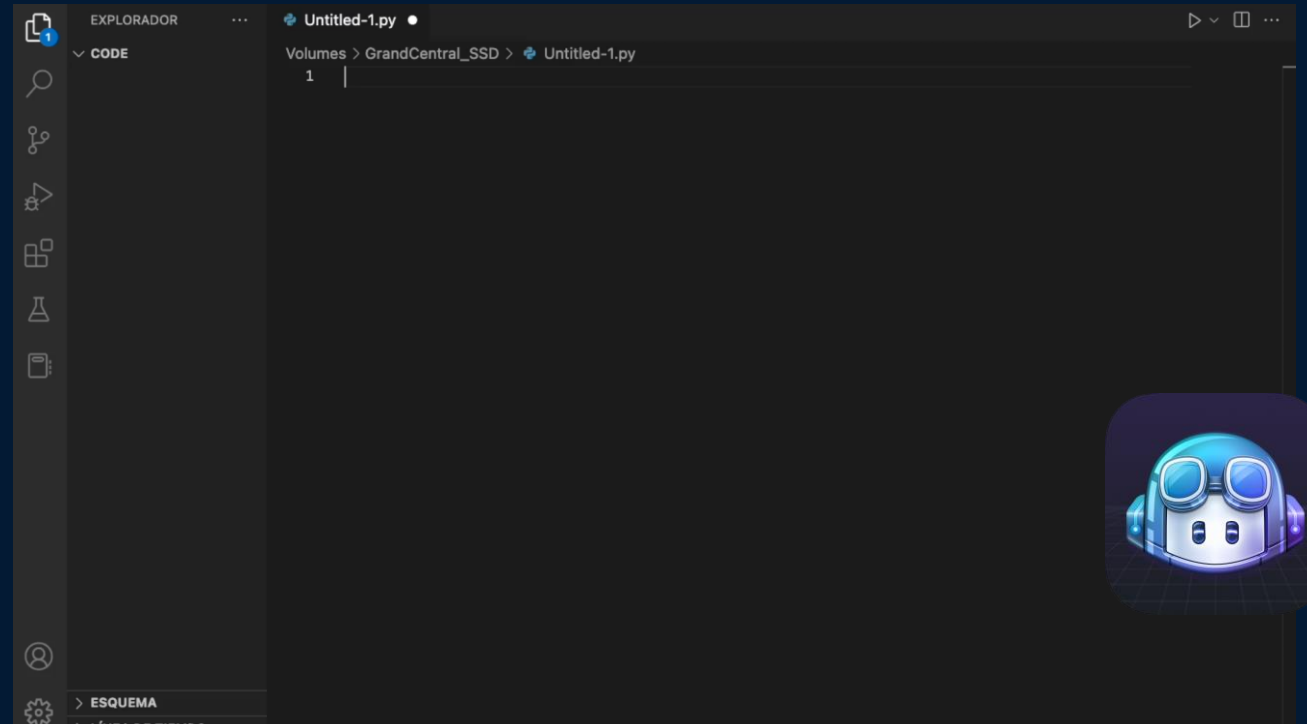
Early Adoption Program

<https://aka.ms/apcpreview>



# Strategic Collaboration with Github Copilot

This partnership will involve using various technologies such as cloud services, artificial intelligence, and software engineering methodologies, including the **Azure Cloud platform**, **Azure Security Center**, **Azure OpenAI (Codex)**, and the **GitHub Enterprise platform**, including **GitHub Copilot**.



46%

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55%

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# Boosting digital transformation

Pablo Benito

CLOUD TRANSFORMATION PARTNER DELOITTE

**Deloitte.**



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# Open Gateway Collaboration

A partnership to deliver innovative technology solutions to clients globally

**Deloitte.**

 Telefónica







**Discover more  
in our demo zone**

“ Being capable of serving  
**the creators of the future**  
is the natural path for  
our sector ”



Telefónica