

LIVE WEBINAR

# 5G New Calling:

Revolutionising communication services

A GSMA Foundry webinar

# Welcome

Wednesday 20 September 2023





# Agenda

## Keynote presentations

- GSMA
- CMCC | 3GPP
- Huawei

## Panel discussion

- CMCC
- Huawei
- Itau Unibanco
- Zain Kuwait



**Session moderator**

**David Pringle**

Freelance analysts, writer and editor



# Our speakers



**Wayne Cutler**  
IMS Technical Director  
**GSMA**



**Song Yue**  
Department of Network and IT  
Technology Research  
**CMCC | 3GPP**



**Huey Hu**  
Vice President of CS&IMS Domain,  
Cloud Core Network Product Line,  
**Huawei**



# Our panel members



**Song Yue**

Department of Network and IT  
Technology Research  
**CMCC | 3GPP**



**Huey Hu**

Vice President of CS&IMS Domain,  
Cloud Core Network Product Line,  
**Huawei**



**Sérgio Nobrega**

IT Engineering  
Specialist  
**Itaú Unibanco**



**Javvad Abdulrahem**

Mobile Networks Senior  
Specialist  
**Zain Kuwait**



# GSMA Foundry & 5GNC whitepaper



**Wayne Cutler**  
IMS Technical Director  
GSMA

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in



# GSMA Foundry whitepaper – coming soon!

## 5G New Calling: Revolutionising the communication services landscape

### GSMA Foundry whitepaper first look

#### Key insights:

- Use cases & examples
- Standardisation progress
- Product readiness
- POCs & trials

#### Key editors & contributors:



Pre-order now!





# GSMA Foundry 5GNC case studies

Download the GSMA Foundry 5GNC case studies today.

## Visualised voice-calling



## Remote damage assessment



## Delivering real-time translation

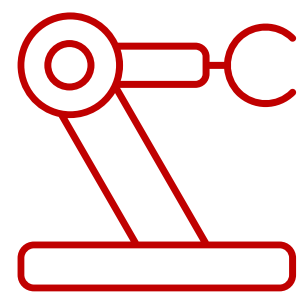




# GSMA Foundry

## The home of mobile innovation

**Submit your ideas and candidate projects!**



- Accelerate the exposure of key projects
- Collaborate across industries
- Turn ideas into impactful solutions in months, not years
- Bridge the gap between operators, ecosystem partners and innovators.

**Learn more about the GSMA Foundry** 🖱️





# Developing new calling and heralding a new era for real-time communications



**Song Yue**  
Department of Network and IT  
Technology Research  
CMCC | 3GPP

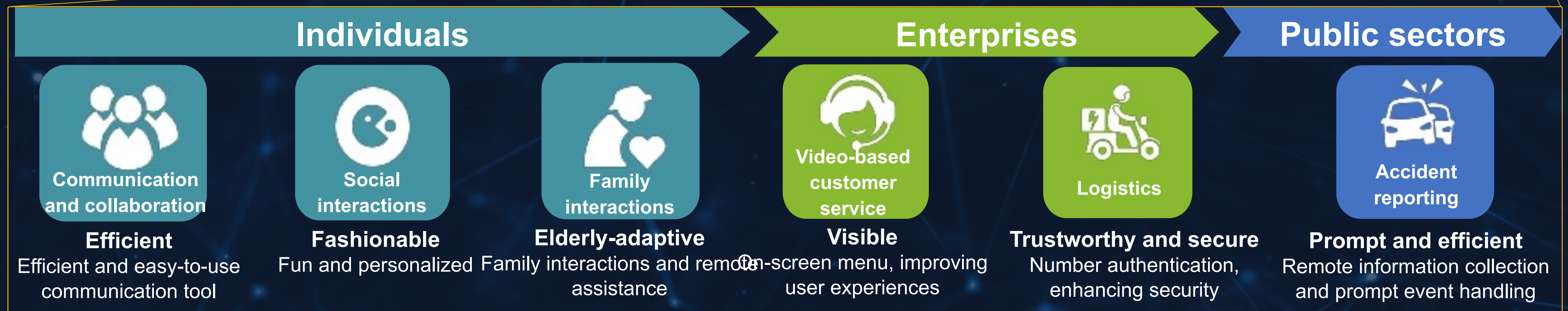


# Scenario-based Calling Drives the Development of Real-Time Mobile Communications Networks

Communications networks



Calling needs





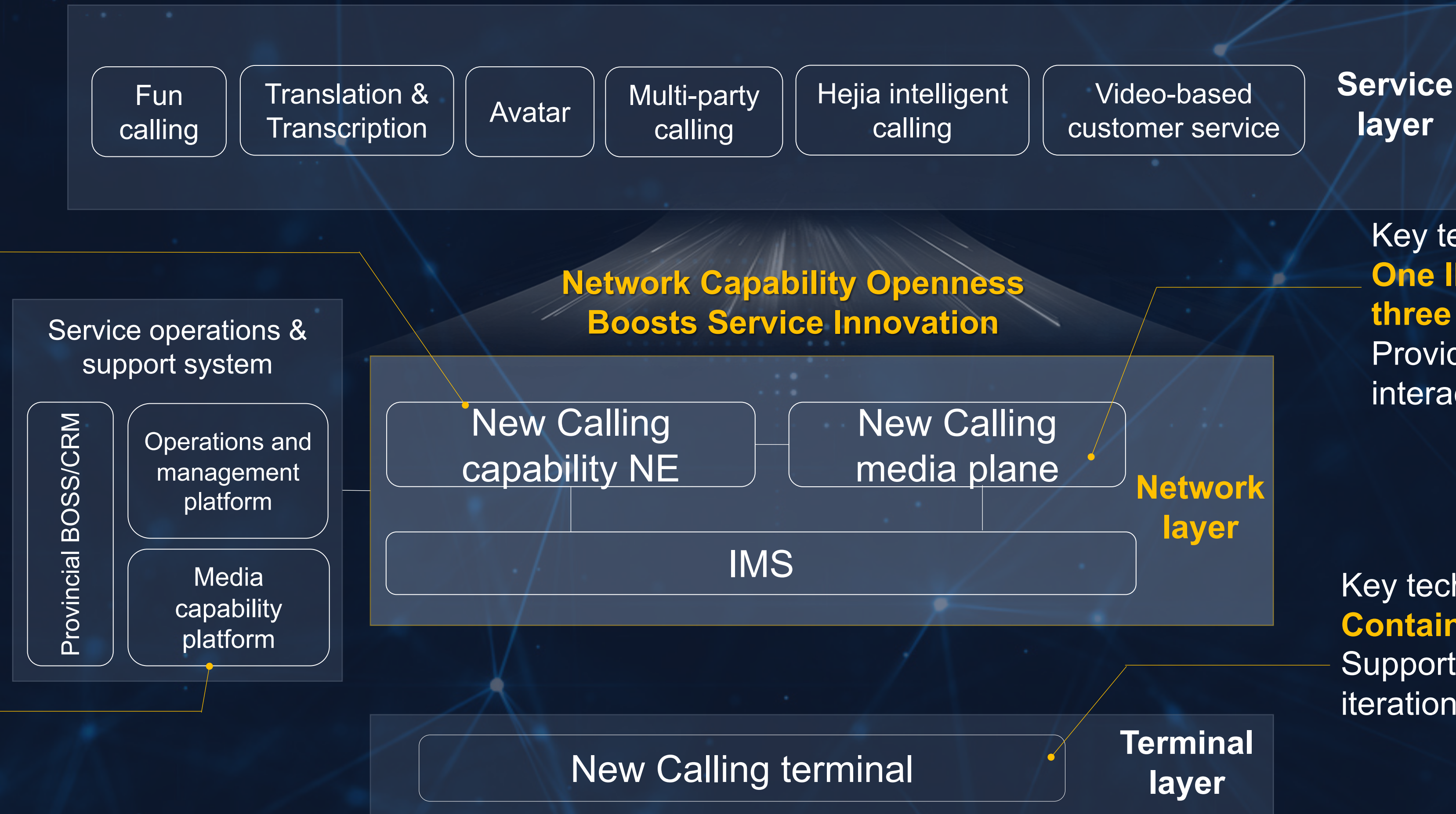
# Four Key Technologies Empower the Open New Calling Network

## Key technology 1: **VoNR+ capability platform**

Builds a base for communication services

## Key technology 3: **AI capability platform**

Provides rich media processing capabilities



## Key technology 2: **One IMS network with three channels**

Provides real-time interaction capabilities

## Key technology 4: **Container for applet**

Supports flexible service iteration

**New Calling uses the IMS as the underlying network and integrates four key technologies to form the VoNR+ technical system.**



# China Mobile Promotes the Commercial Use of New Calling from Standards, Networks, and Terminals



## **Standards:** Initiated 10+ standardization projects

- ✓ 3GPP NG\_RTC
- ✓ CCSA interactive technology and terminal standards
- ✓ GSMA IMS data channel technology and terminal standards
- ✓ ITU-T IMS data channel standards

## **Networks:** Completed technical verification, and deployments are in progress for commercial use

- ✓ Defined the VoNR+ target network architecture
- ✓ Completed technical verification
- ✓ Started commercial trials in Zhejiang, Jiangsu, and Guangdong provinces

## **Terminals:** Connected the first call on the live network and will be released for commercial use this year

- ✓ Services have been tested on 200+ types of existing video calling-capable terminals.
- ✓ Interactive terminals have connected the first call.



# Develop 5G New Calling and Promote Its Large-scale Commercial Use in 2023



## Strategic positioning

Develop Calling-based **Platform Products** and New **5G Applications**



### Yang Jie: Accelerating the Development of 5G New Calling

In 2023, China Mobile will accelerate the development of 5G New Calling and provide users with more fun during video calling.

*Exclusive interview at China's 2023 Two Sessions*



### Gao Tongqing: Making Concerted Efforts to Create a New Future for Calling

- New experiences: Ultra-HD, intelligent, and interactive
- New capabilities: Media and data convergence
- New ecosystem: Building an open 5G New Calling ecosystem

*MWC23*

## Commercial plan

**Jun. 2023**

Beta-test in Jiangsu, Zhejiang, and Guangdong provinces

**Q4 2023**

Large-scale commercial use in China

**Future**

More applications will emerge

## Service development

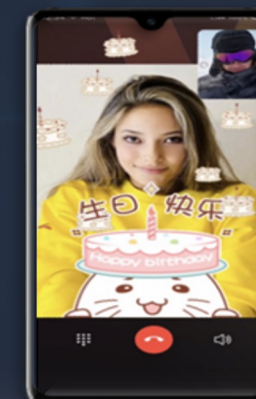
### Fun calling

Interesting and enjoyable communication



### Background replacement

Replacement of the real background



### Voice-controlled emoji

Sending emojis by issuing voice commands

### Speech-to-text conversion

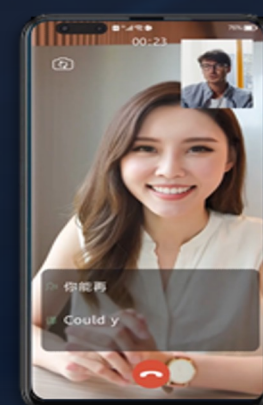
Boundless communication



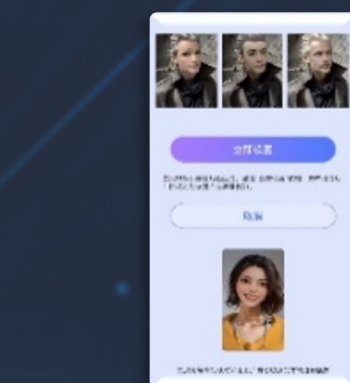
Converts speech into text and displays the text in subtitles in real time.

### Chinese-English translation

Cross-culture communication



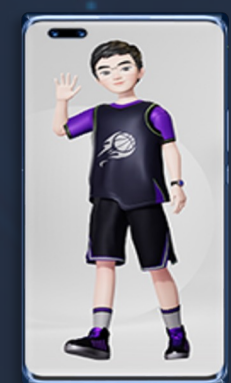
Translates what the other side is saying and displays the translated content in subtitles.



Visualized voice calling



Rapid recording



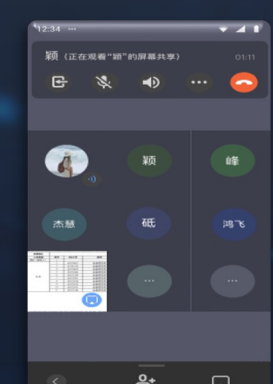
Avatar-based calling



Content sharing (images, files, and locations)



Screen sharing /AR annotation



Multi-party video calling





# Jointly Promote the Development and Prosperity of New Calling

**With bold dreams and aspirations,  
we are ready to embark on a new journey.**



**New Calling**

**New Calling, New Opportunities, New Future**

**China Mobile hopes to work with industry partners to create a brighter future for the voice industry!**





**From voice to video, then to  
content; New Calling opens up a  
new horizon for communication**



**Huey Hu**

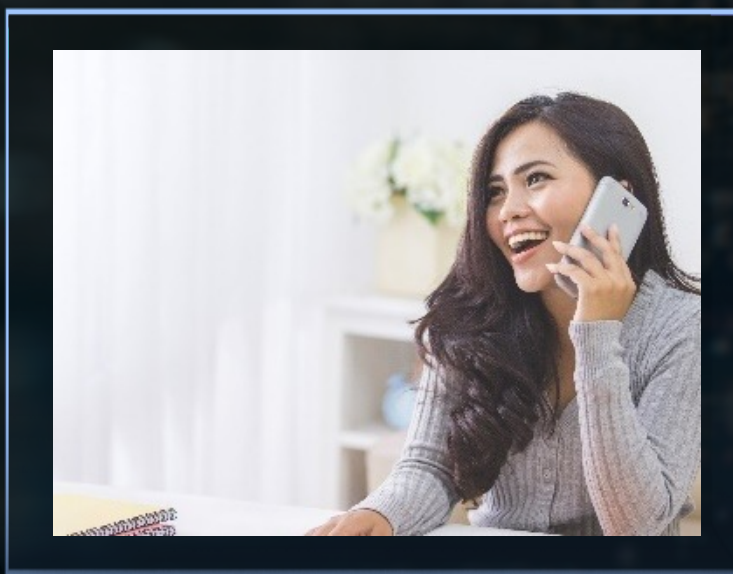
Vice President of CS&IMS Domain,  
Cloud Core Network Product Line  
**Huawei**



# Voice Industry Moves from Satisfying Needs to Differentiation and Personalization

## Voice call

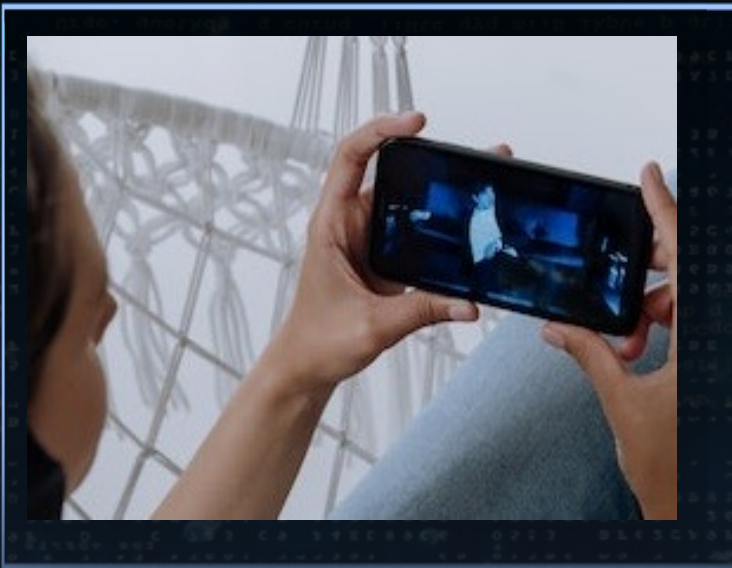
- Voice
- Message



Bandwidth 56kbps  
Delay 1s

## Video call

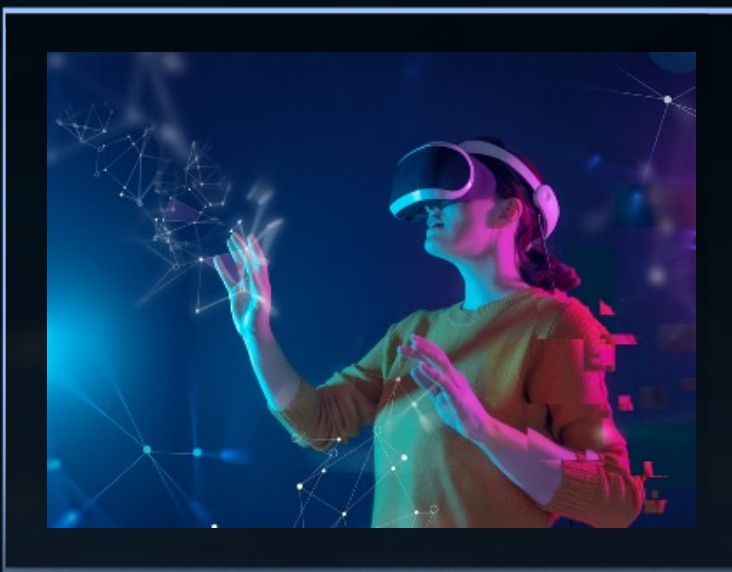
- Video call
- Video RBT



Bandwidth 4Mbps  
Delay 500 ms

## Intelligent and interactive calls

- Ultra-HD call
- Intelligent call
- Interactive call



Bandwidth 100Mbps  
Delay 30 ms

1<sup>st</sup> Wave  
Build a solid network and user base

2<sup>nd</sup> Wave  
Explore content operations and greater value

3<sup>rd</sup> Wave  
AI + Computility + XR,  
From minute operation to content operation



# Call + Ultra-HD Video Channel, Redefine Phone Screen

## From minute operation to content operation



Voice Call



Visualized Voice Call

During voice calling, screen is on.

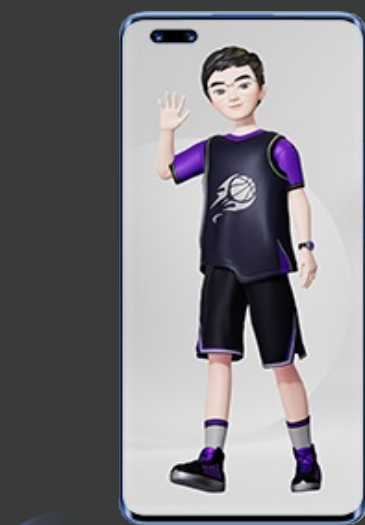
Video Channel



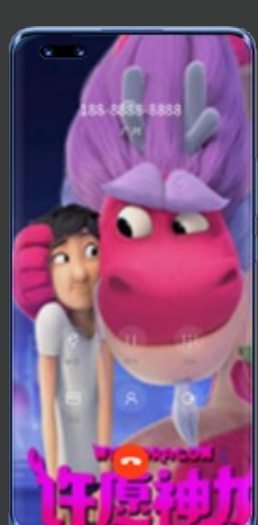
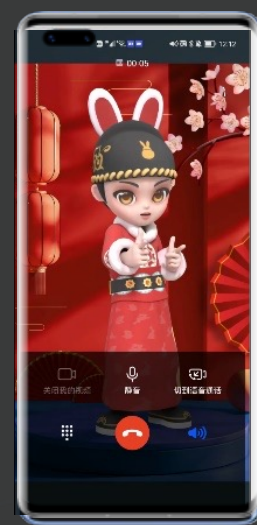
Voice Channel

VoLTE/VoNR Voice and Video Fundamental Network

## Content Transfer and Personality Showcase



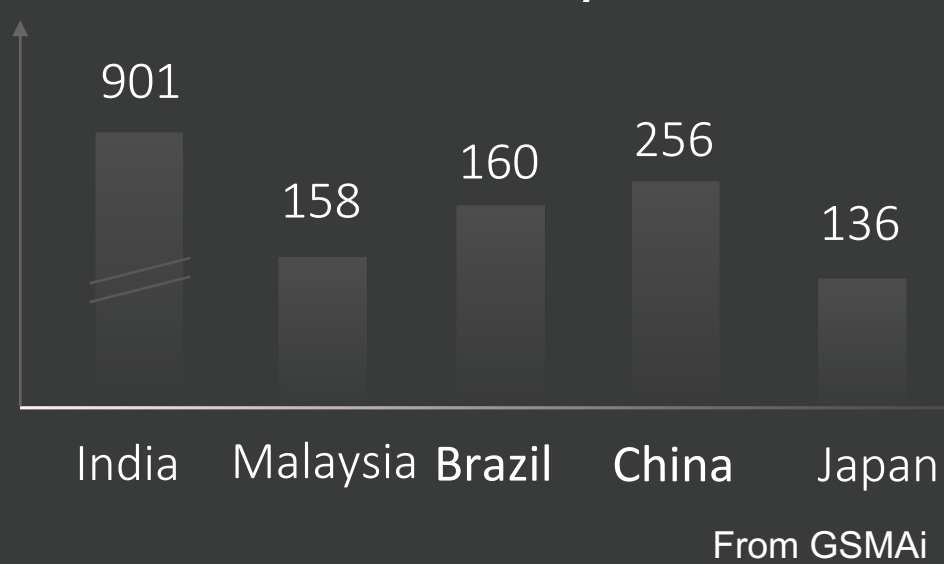
Showcasing personal style through self-defined avatar



Media Publicity Platform

## Broad market for content monetization

MOU of some Operators



Enriching the Content Ecosystem

UGC

PGC

- Content is the key to service success
- Multi source content supported

Jiangsu Mobile: Light up the screen with content, upgrade the voice calling experience, and develop visualized voice calling into a basic service



# Call + Intelligent, Improve user experience and enrich services

## AI Enables Differentiated Call Experience



Cross-Language Translation



Big font Display

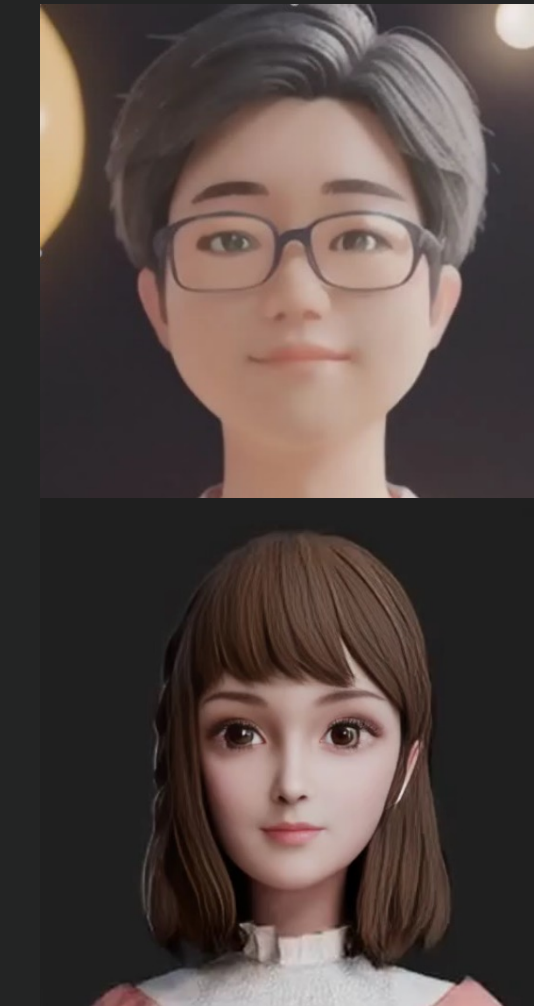


Virtual background Replacement

## AI driven digital human for everyone



AIGC Avatar



Voice Drive Digital Human



Video Channel

Voice Channel



Intelligent

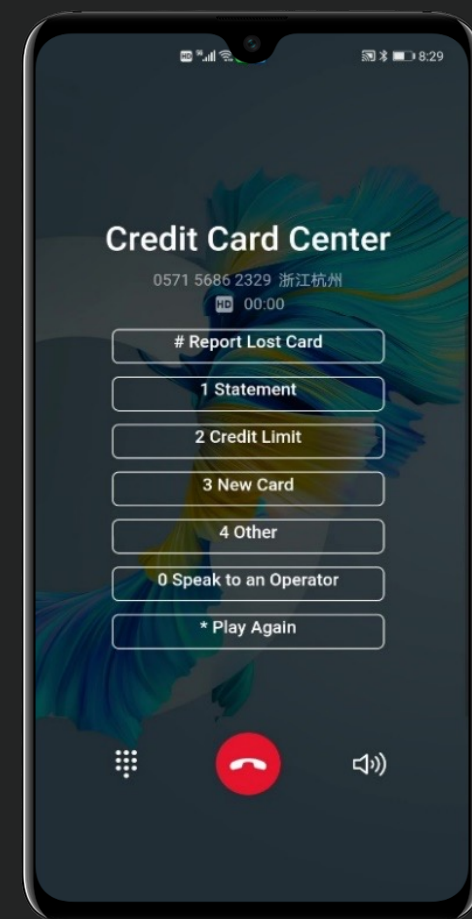
Terminal-independent services



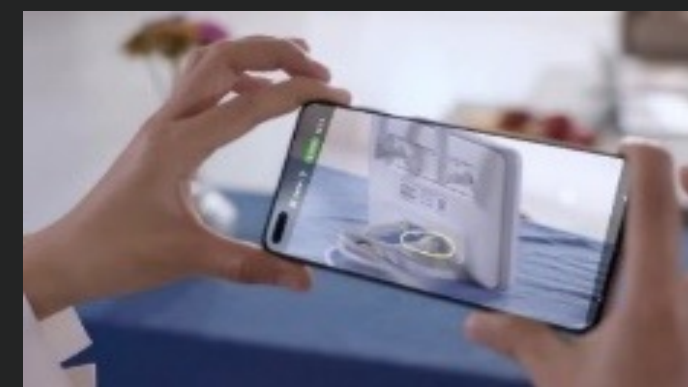
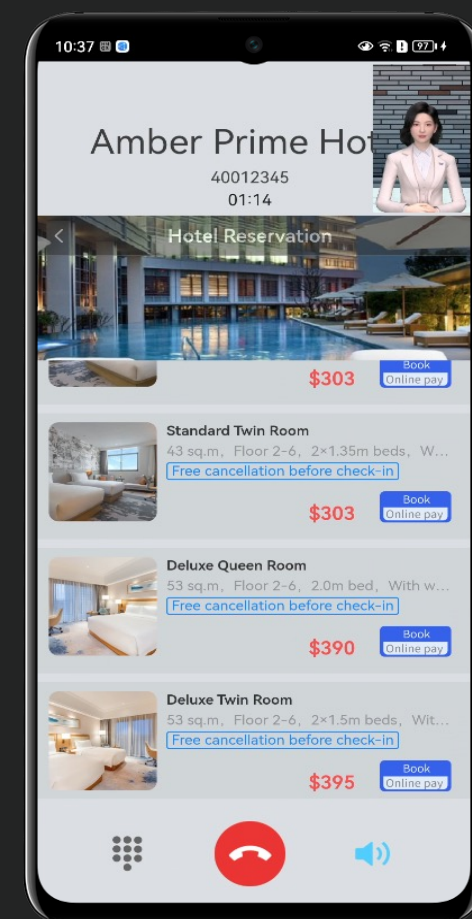
# Call + **Interactive**, Enriches Industry Ecos. and Unleash the Market Potential



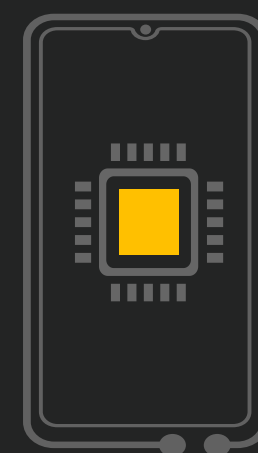
## Closed-loop services during calls



Enterprise Hotline Menu



Remote assistance



**Data Channel**



**Video Channel**

**Voice Channel**

## Remote damage assessment achieve win-win goal

Vehicle insurance reporting orders **70M** orders/year in China

### Traditional method (On-site)

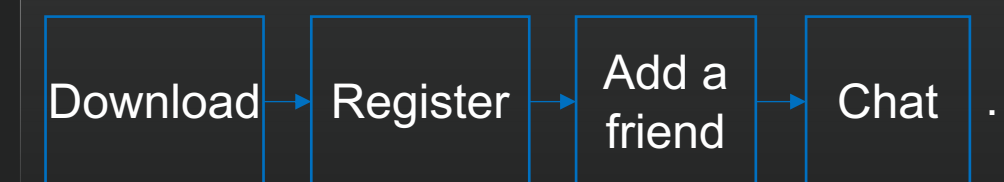


#### pain points

Cost **\$50** / order

more than **2 hours**

### APP/Applet method



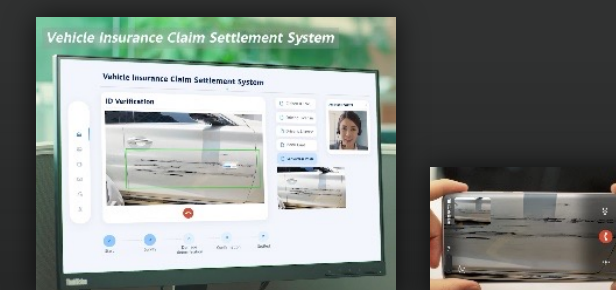
#### pain points

**< 10%**  
Online rate

Complicated procedure

Privacy concerns

### New Calling method



Assessor guide shooting and screenshots through AR markings by video calling

### Customers Value

car owner

**5 -10 minutes**

Time of assessment

insurance company

**60%+**

Online rate

**50%+**

Reducing costs

Carrier

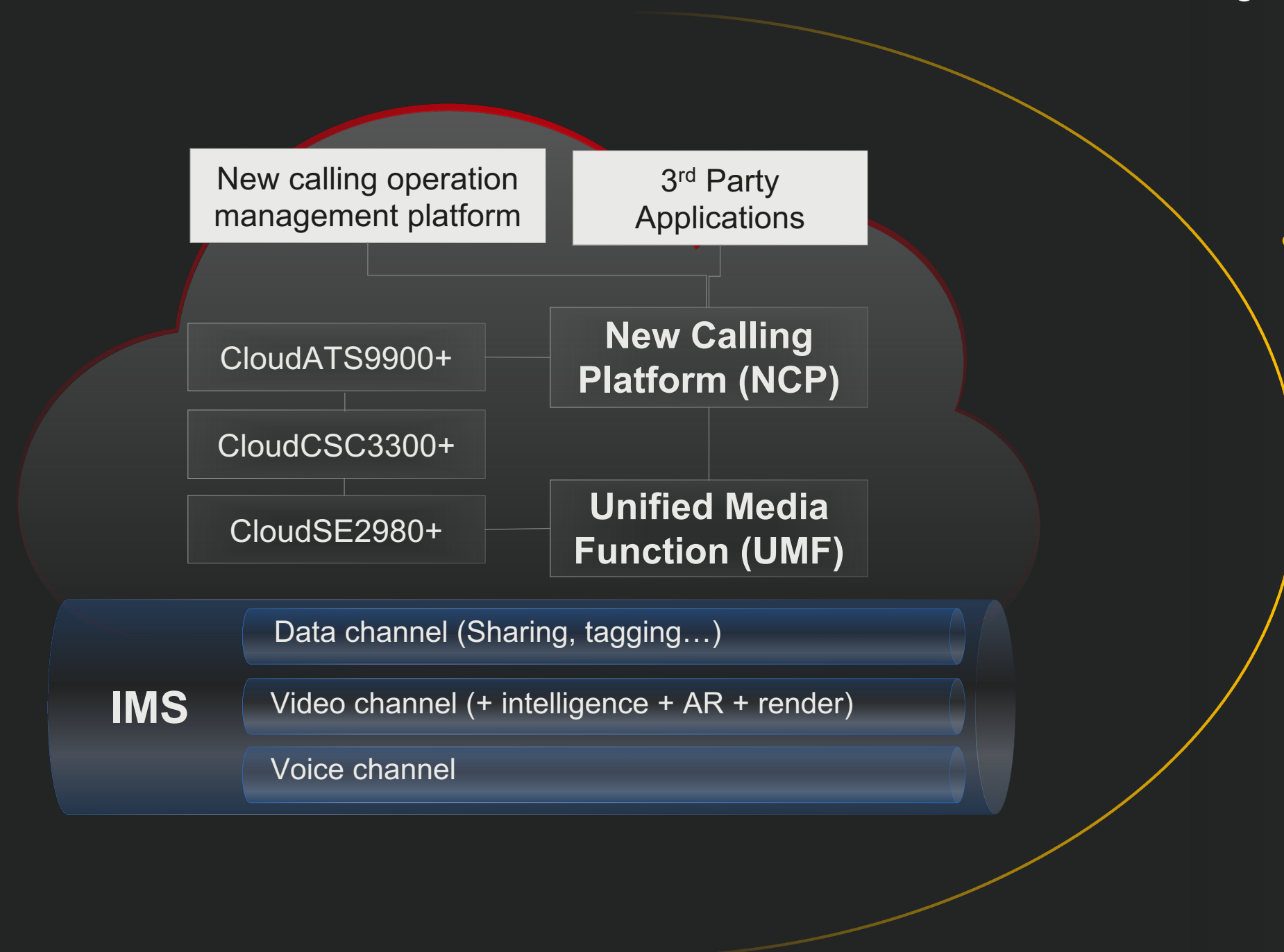
**\$ 0.01 -> 1 / order**



# 1+3+N Redefines Calling Services

## 1 network

Delivering extraordinary communication experience with a solid audio and video network






Phase 1

VoLTE/VoNR Voice and Video  
Fundamental Network

## 3 capabilities

Empowering calling services with UHD, intelligent, and interactive calling capabilities


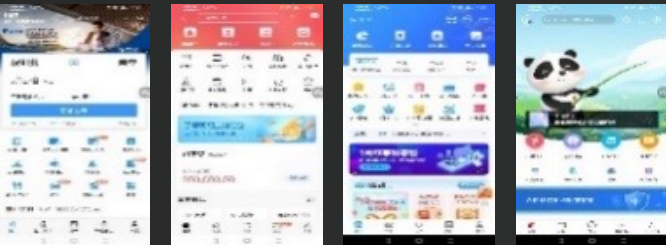
-  **Ultra HD**
  - 1080p, 4k/8K
  - Virtual image and business card
  - Video synthesis and rendering
-  **Intelligent**
  - Face cutout and video processing
  - Face/gesture recognition
  - Real-time translation
  - AIGC Digital human
-  **Interactive**
  - Forms, signatures, payments
  - Sharing screens, documents, locations
  - AR tagging

Phase 2

5.5G Intelligence Core

## N innovative services

Enabling new services and increasing user base

- 2C**
  - 139X 189X 186X 192X
  - 
  - One Number, One Personality**
- 2B**
  - 12306 95555 10086 95583
  - Train Bank Carrier Airlines
  - 
  - One Number, One Application**

Phase 3

Multimodal Communication



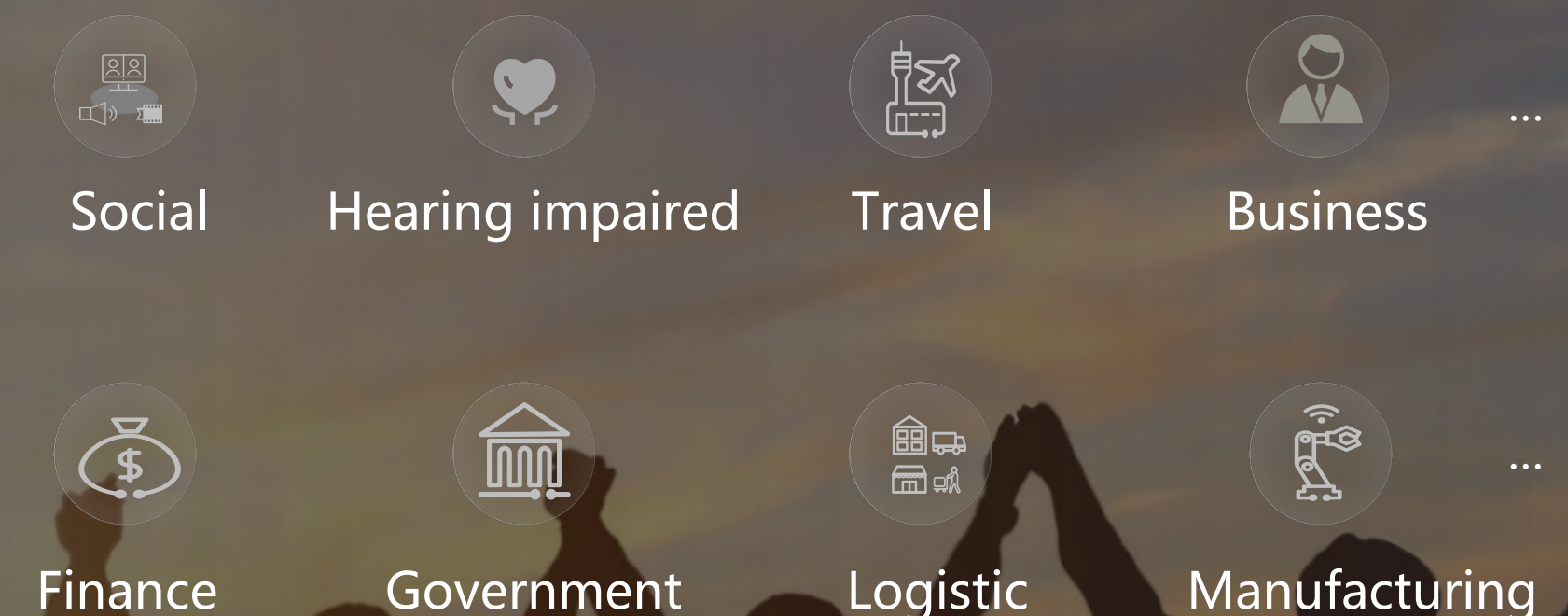
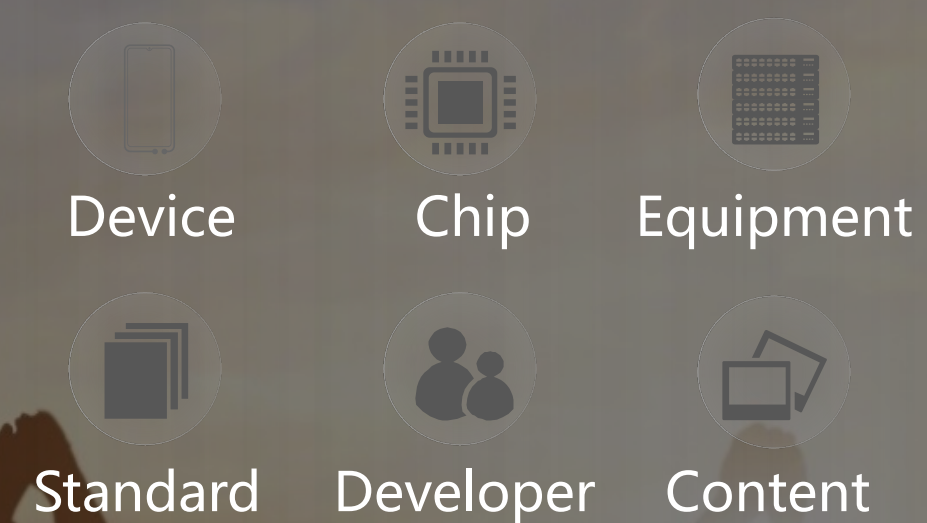
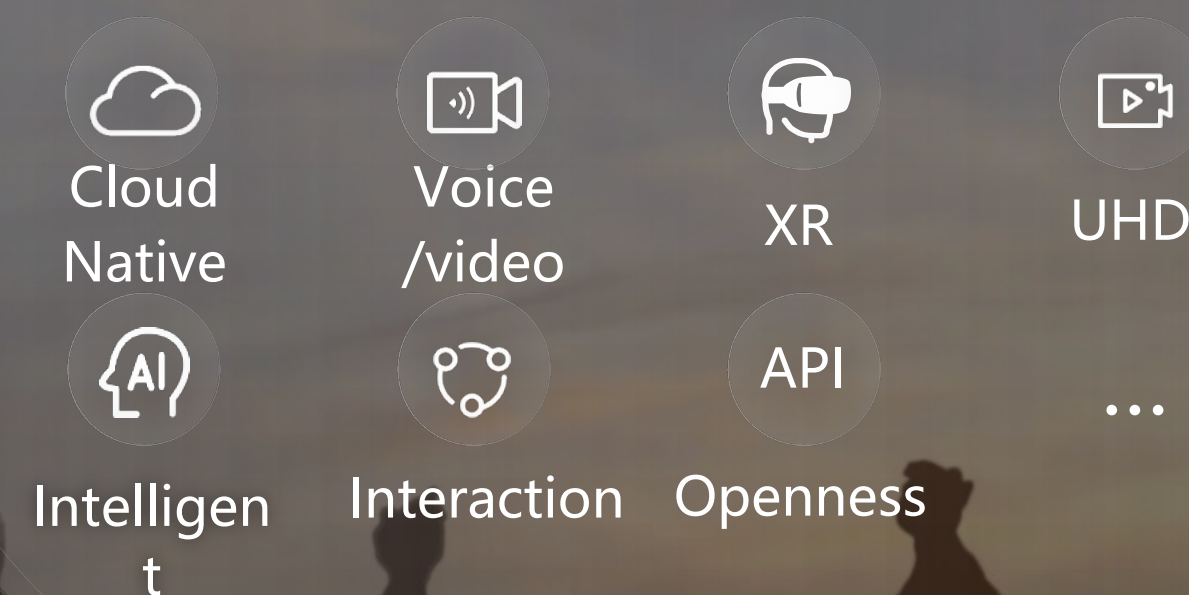
# Industry Partners Work Together for a Better Future of New Calling

## New Calling, New Future

Upgrade experience and enable industries

Enrich E2E ecosystem

Enhance network capability



Though the road ahead is long and winding,  
we will reach our destination with perseverance and dedication



# Our panel members



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Mobile Networks Senior  
Specialist  
**Zain Kuwait**



# Upcoming GSMA webinars & in-person events

## MWC23 Las Vegas 5G Futures Summit



 Tuesday 26 September 2023

 14:00 – 17:30 PDT

 Las Vegas Convention Center

 [Register here](#)



## MWC23 Las Vegas GSMA Foundry Networking



 Wednesday 27 September 2023

 08:30 – 10:00 PDT

 Las Vegas Convention Center

 [Register here](#)



## MWL Unwrapped Webinar The 5G Evolution



 14 – 16 November 2023

 All Online webinar

 [Register here](#)





# Thank you

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