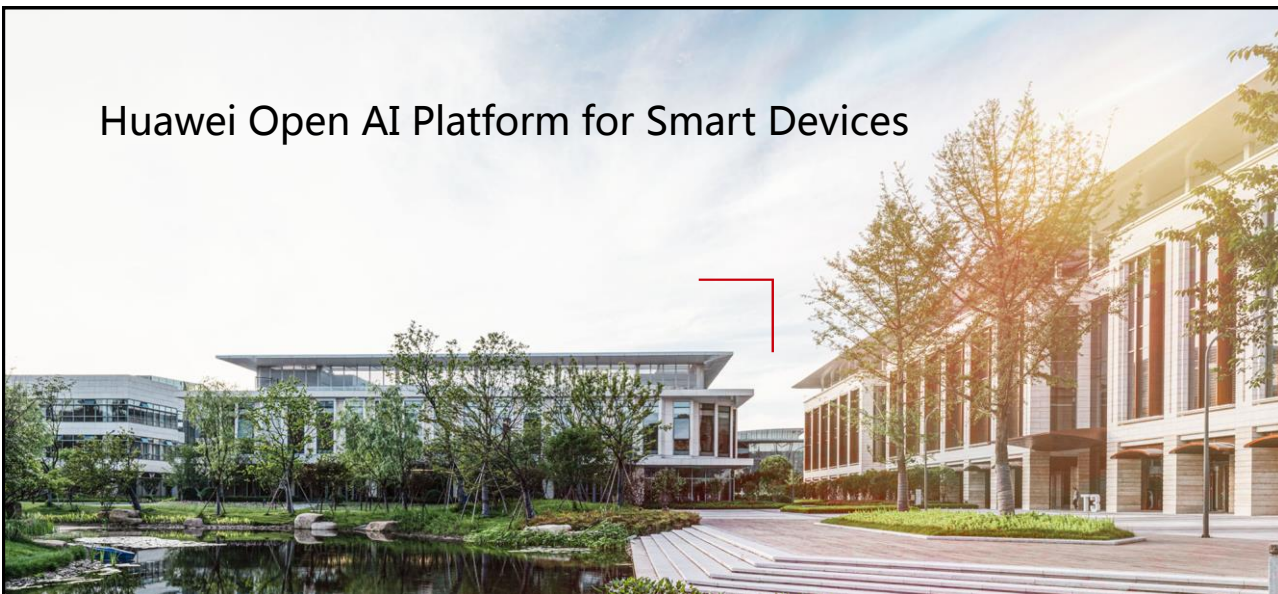


## Huawei Open AI Platform for Smart Devices



## Foreword

- Huawei HiAI is an open artificial intelligence (AI) capability platform for smart devices, which adopts a "chip-device-cloud" architecture, opening up chip, app, and service capabilities for a fully intelligent ecosystem. This assists developers in delivering a better smart app experience for users by fully leveraging Huawei's powerful AI processing capabilities.

# Objectives

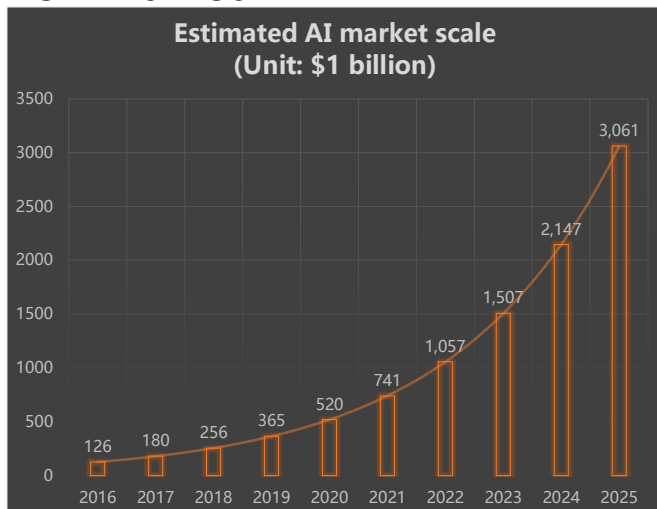
After this chapter, you will be able to:

- Master the usage of Huawei HiAI platform.
- Understand the powerful functions of Huawei HiAI platform.

# Contents

- 1. AI Industry Ecosystem**
2. Huawei HiAI Platform
3. Developing Apps Based on Huawei HiAI Platform

# Huge Opportunities: Foreseeable AI Ubiquity in a \$3 Trillion Market

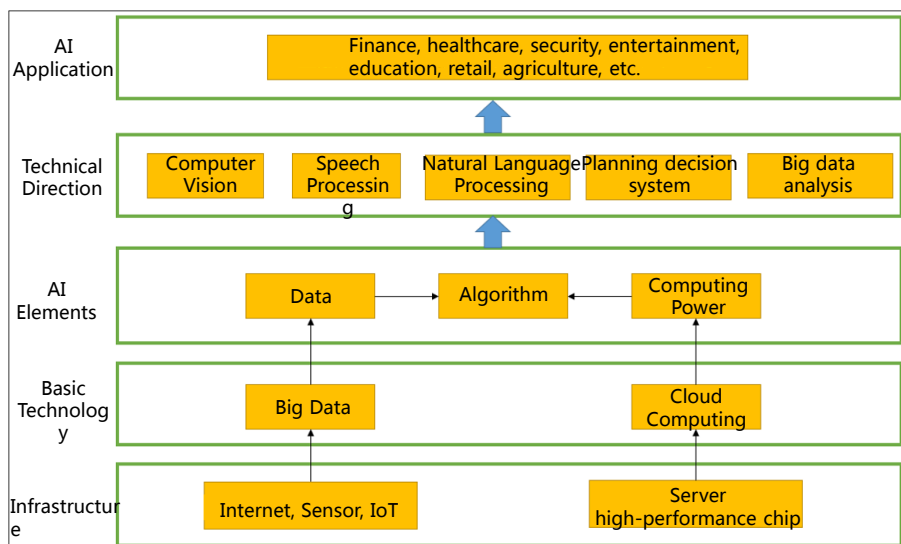


Involved industries: automobile, finance, consumer goods and retail, medical care, education, manufacturing, communications, energy, tourism, culture and entertainment, transportation, logistics, real estate, and environmental protection

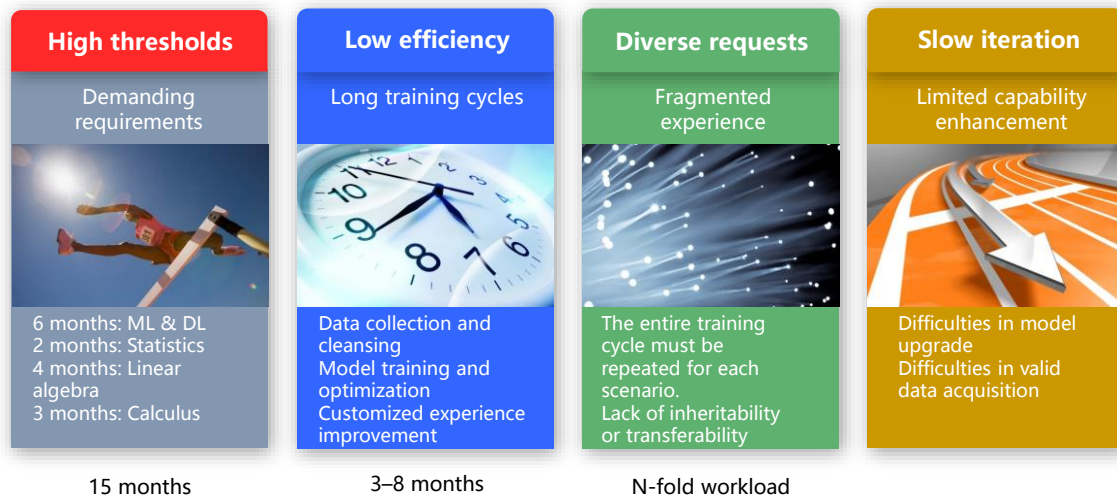
- Computing power breakthrough 
- Algorithm breakthrough 
- Data breakthrough 

Data source: Forrester, Transparency Market Research, Chinese Association for Artificial Intelligence, and Roland Berger

## Architecture of the AI Application Platform



## Challenges in AI Capability Development and Application



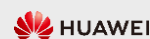
7 Huawei Confidential



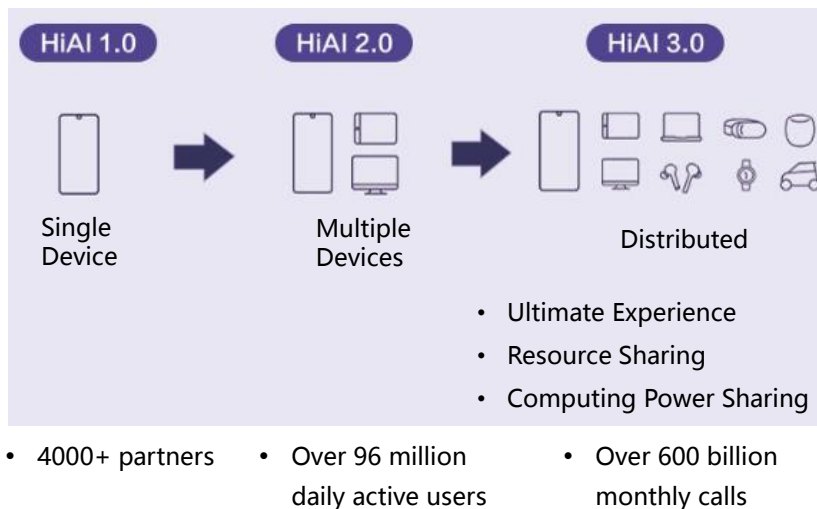
## Contents

1. AI Industry Ecosystem
- 2. Huawei HiAI Platform**
3. Developing Apps Based on Huawei HiAI Platform

8 Huawei Confidential



## HiAI 3.0 - Enabling Ultimate Experience in All-Scenario Smart Life



## Huawei HiAI 3.0: Enabling Distributed All Scenarios by AI



Cloud 1000+ atomized services

### Huawei HiAI Service

Service capability openness for mutual benefits  
Push services based on user requirements in an active manner.



Device 40+ application programming interfaces (APIs)

### Huawei HiAI Engine

AI capability openness for simplicity  
Integrate multiple AI capabilities into apps simply, making apps smarter and more powerful.



Chip 300+ operators

### Huawei HiAI Foundation

Chip capability openness for high efficiency  
Quickly convert and migrate existing models to obtain optimal performance based on heterogeneous scheduling and network process unit (NPU) acceleration.

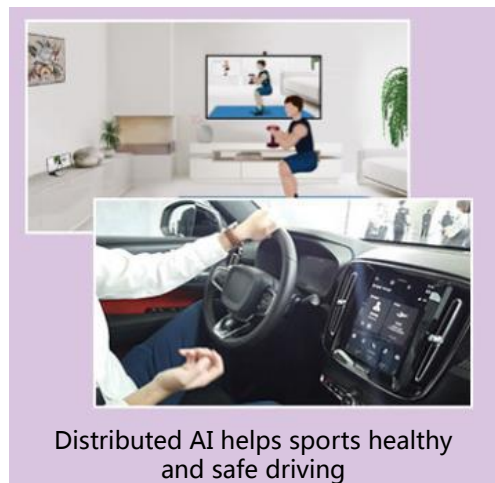
## HiAI Foundation

- HiAI Foundation APIs constitute an AI computing library of a mobile computing platform, enabling developers to efficiently compile AI apps that can run on mobile devices.
  - Leveraging high performance and high precision of Kirin chips, better device-end AI performance will be delivered by more powerful computing power.
  - Support the largest number of operators (300+) in the industry and more frameworks, greatly improving flexibility and compatibility.
  - The Honghu, Kirin, and AI camera chips enable AI capabilities for more devices.



## HiAI Engine

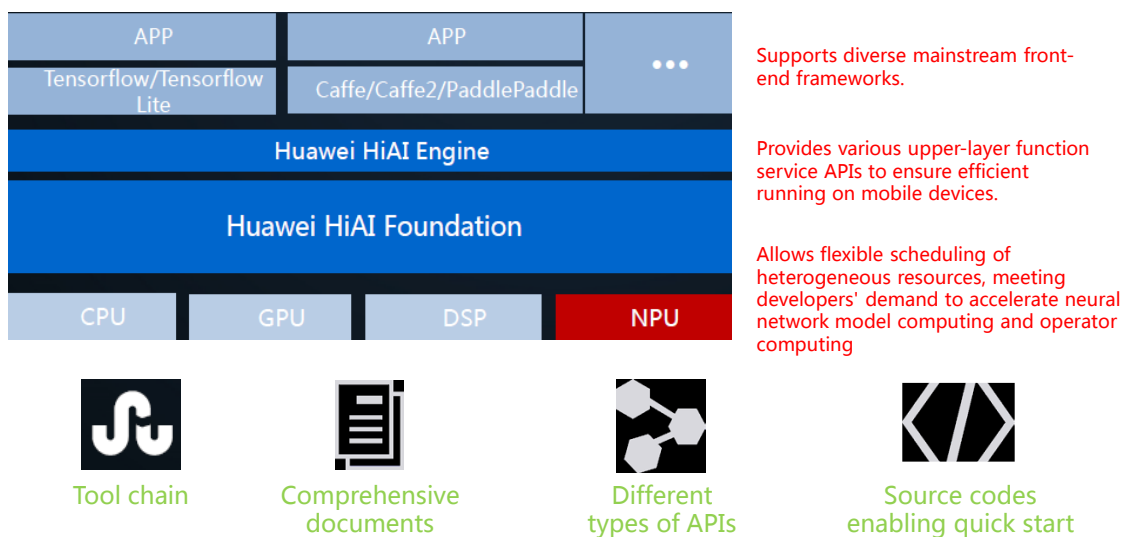
- HiAI Engine opens app capabilities and integrates multiple AI capabilities into apps, making apps smarter and more powerful.
  - Provide handwriting recognition and dynamic gesture recognition capabilities, with 40+ underlying APIs.
  - Computer vision and speech recognition will develop toward a distributed mode, assisting developers in delivering more all-scenario smart life experience.



## HiAI Service

- HiAI Service enables developers to reuse services on multiple devices, such as mobile phones, tablets, and large screens, with only one service access, efficiently implementing distribution.

## Architecture of the HiAI Mobile Computing Platform



## What can apps benefit from Huawei HiAI?



**Real time**



**Ready-to-use**



**Stability**



**Security**



**Lower cost**

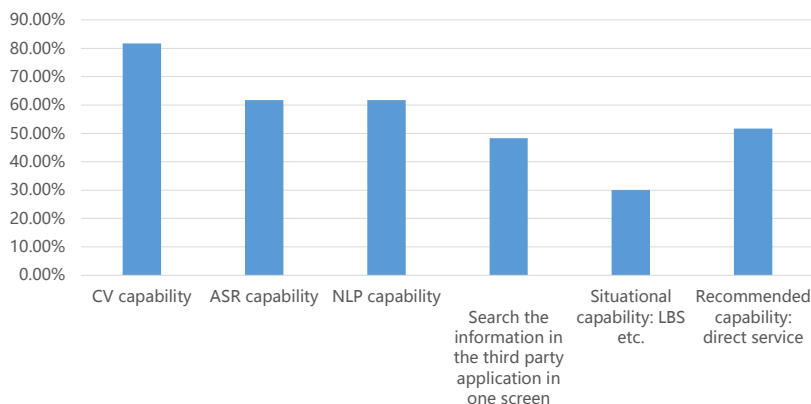
## Huawei HiAI + Ctrip Help You Take Poetic Photos





## AI Capability Provider, Accelerating Application Development

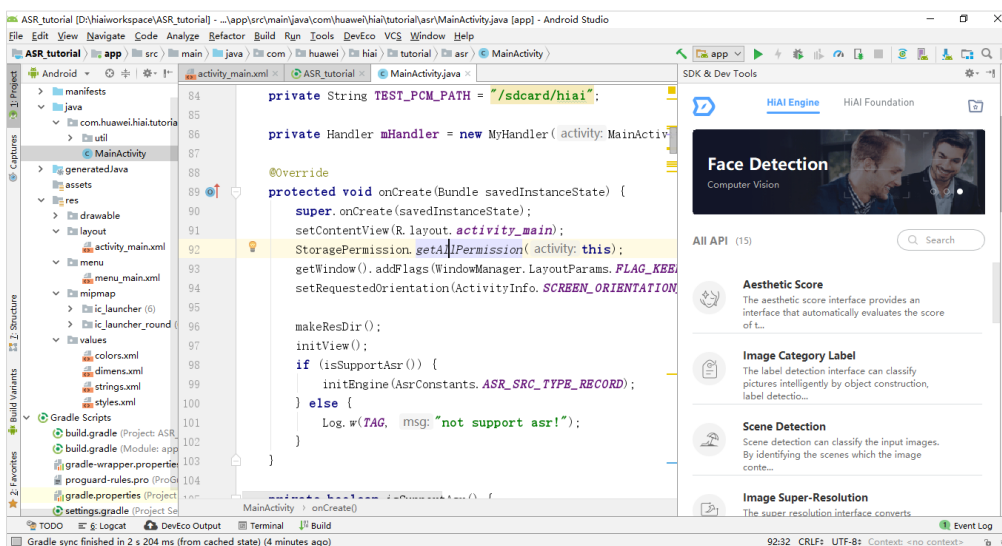
Research results of developers' demands for HiAI capabilities: more than 60% pay attention to CV, ASR, NLU



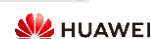
17 Huawei Confidential



## Comprehensive Tools for Developers



18 Huawei Confidential



# Contents

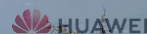
1. AI Industry Ecosystem
2. Huawei HiAI Platform
- 3. Developing Apps Based on Huawei HiAI Platform**

## Huawei HiAI Helps Deaf and Mute People





21 Huawei Confidential



## Connecting Developers and Stimulating Innovation to Achieve Win-Win ecosystem

### Offline connection for in-depth communication

- Salons in cities
- HiAI open courses
- Technical symposiums

### USD1 billion investment, stimulating innovations in all scenarios

- Openness and innovation of device capabilities
- All-scenario digital service innovation
- Cloud service ecosystem co-construction

### Innovation competition for continuous development

- AI application innovation contest
- Creativity contest for future application
- AR application innovation contest

22 Huawei Confidential



## Summary

- We believe that AI can make life better by bringing unprecedented convenience for both back end and devices. However, this requires actual application scenarios that allow more enterprises and developers to play a part in improving user experience substantially. Huawei is willing to work with partners to jointly promote intelligent transformation of industries with more developers and enterprises based on the HiAI3.0 platform.

# Thank you.

把数字世界带入每个人、每个家庭、  
每个组织，构建万物互联的智能世界。

Bring digital to every person, home, and  
organization for a fully connected,  
intelligent world.

Copyright©2020 Huawei Technologies Co., Ltd.  
All Rights Reserved.

The information in this document may contain predictive statements including, without limitation, statements regarding the future financial and operating results, future product portfolio, new technology, etc. There are a number of factors that could cause actual results and developments to differ materially from those expressed or implied in the predictive statements. Therefore, such information is provided for reference purpose only and constitutes neither an offer nor an acceptance. Huawei may change the information at any time without notice.