

Joint ITU SG3/SG2 Regional Workshop

On topics of mutual interests

Digital Financial Services session

Kuwait, 4 March 2024

Ahmed Riad



Huawei: Leading provider of ICT infrastructure and smart devices



Vision & mission

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

170+
countries and regions

207,000
employees

55.4%
of employees work in R&D

No. 4
in global R&D investment

120,000+
active patents held globally
(*Huawei has one of the world's largest patent portfolios.)

Trends, Insights, and solutions

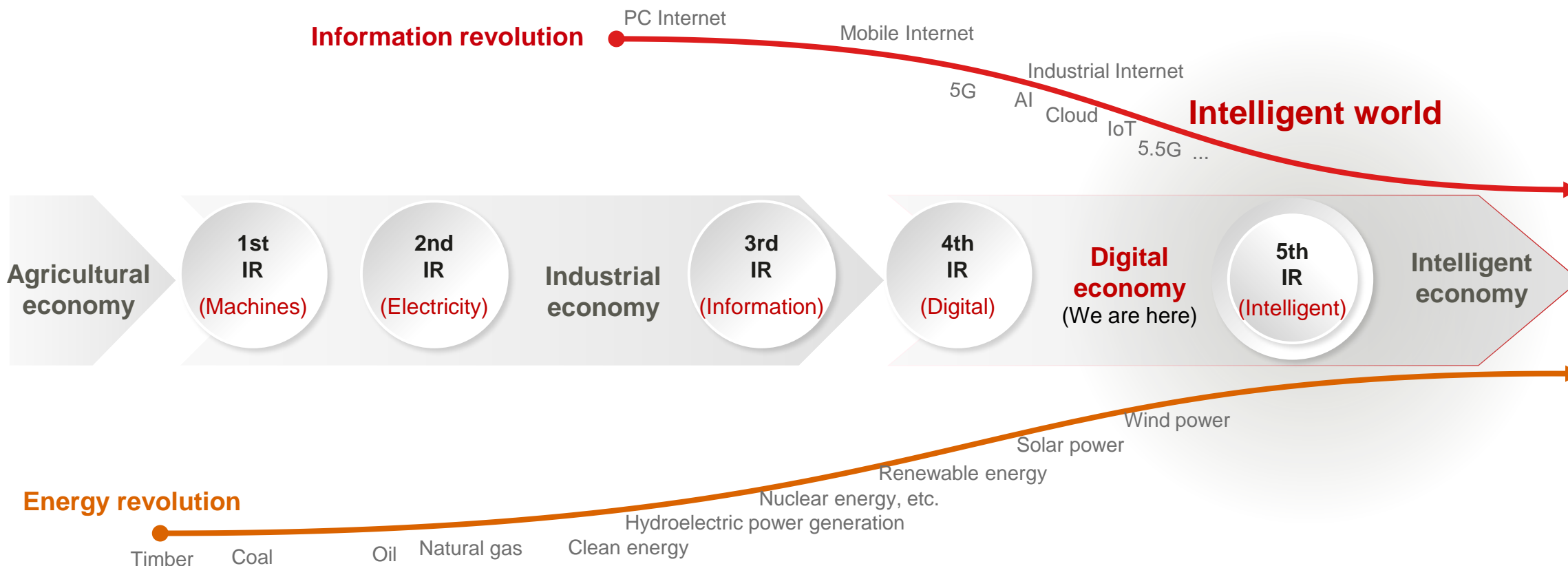
General Digital Trends

Digital Financial Services

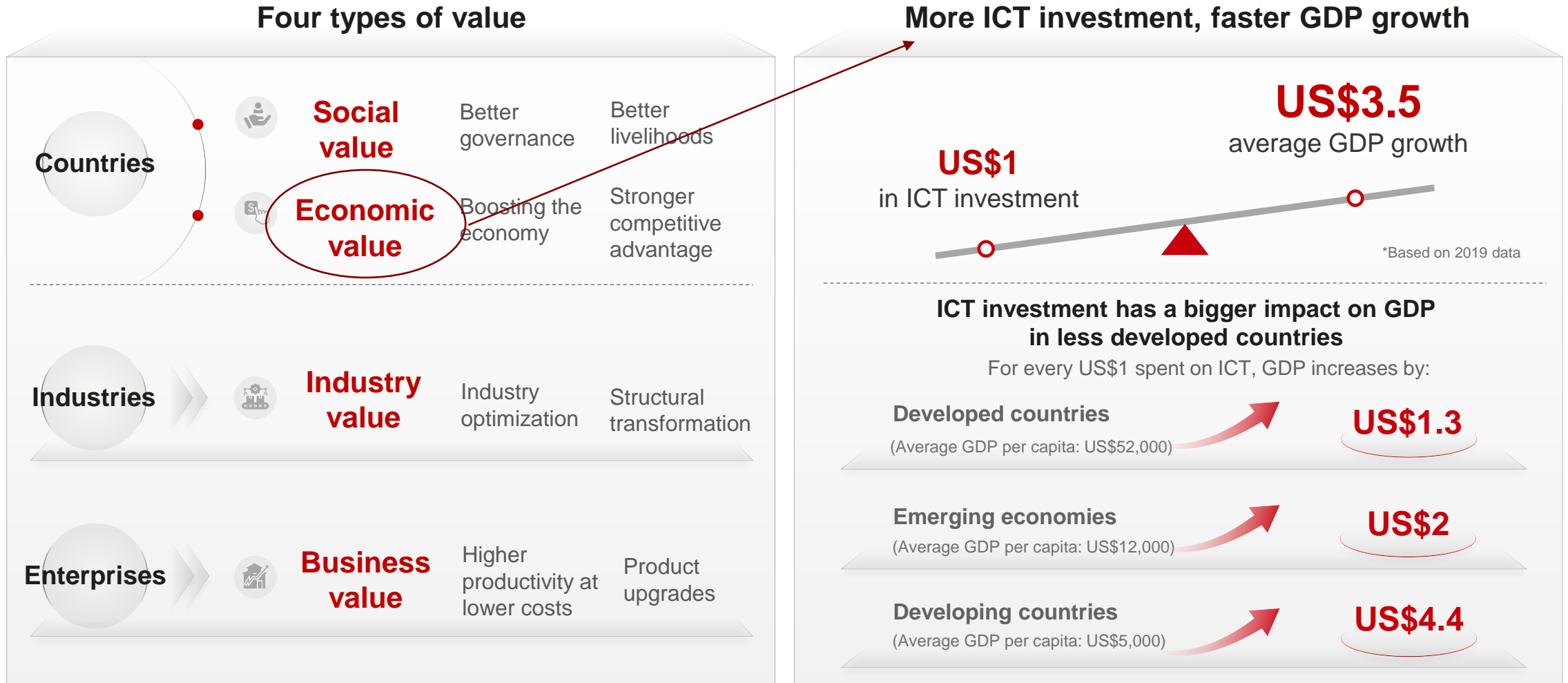
Solution framework and case(s)



Digital and intelligent transformation: Pathways to the intelligent world



Digitalization creates four types of value to boost national GDP



Source: Roland Berger

More than 170 countries have announced digital nation strategies

Germany

- Digital Strategy 2025
- Industry 4.0, innovation and SMEs, and informational autonomy

France

- International Digital Strategy
- Open governance; making France a center of digital excellence; digital autonomy

UAE

- The UAE Centennial 2071: Best country in the world (economy, government, society)
- Strategy for Artificial Intelligence 2031: World leader in AI

Saudi Arabia

- Vision 2030, Smart Government Strategy 2020–2024, etc.
- ICT industry, well developed digital infrastructure, and digital transformation of public services

China

- 14th 5-Year Plan and 2035 Long-Range Objectives
- New Infrastructure

Japan

- Society 5.0: Solutions to Better Lives

Thailand

- Thailand 4.0
- ASEAN hub for connectivity and data exchanges

Indonesia

- ICT Ministry's Strategic Plan for 2020–2024
- Inclusive infrastructure and digital literacy

Singapore

- Smart Nation: The Way Forward
- Digital transformation of public services and industries, and digital inclusion

Malaysia

- MyDIGITAL
- ASEAN Digital Hub
- Access to the Internet for every household

Chile

- National Strategic Program for Smart Industries
- Higher productivity and efficiency; digital language

Brazil

- Digital Transformation Strategy (E-Digital)
- Production digitalization; digital education and training

Morocco

- Morocco Digital 2025
- Digital administration, digital ecosystem and innovation, and inclusive social and human development

South Africa

- National Development Plan 2030
- National Digital and Future Skills Strategy

Egypt

- Digital Egypt
- Digital transformation of public services, talent and employment, ICT innovation and entrepreneurship

Kenya

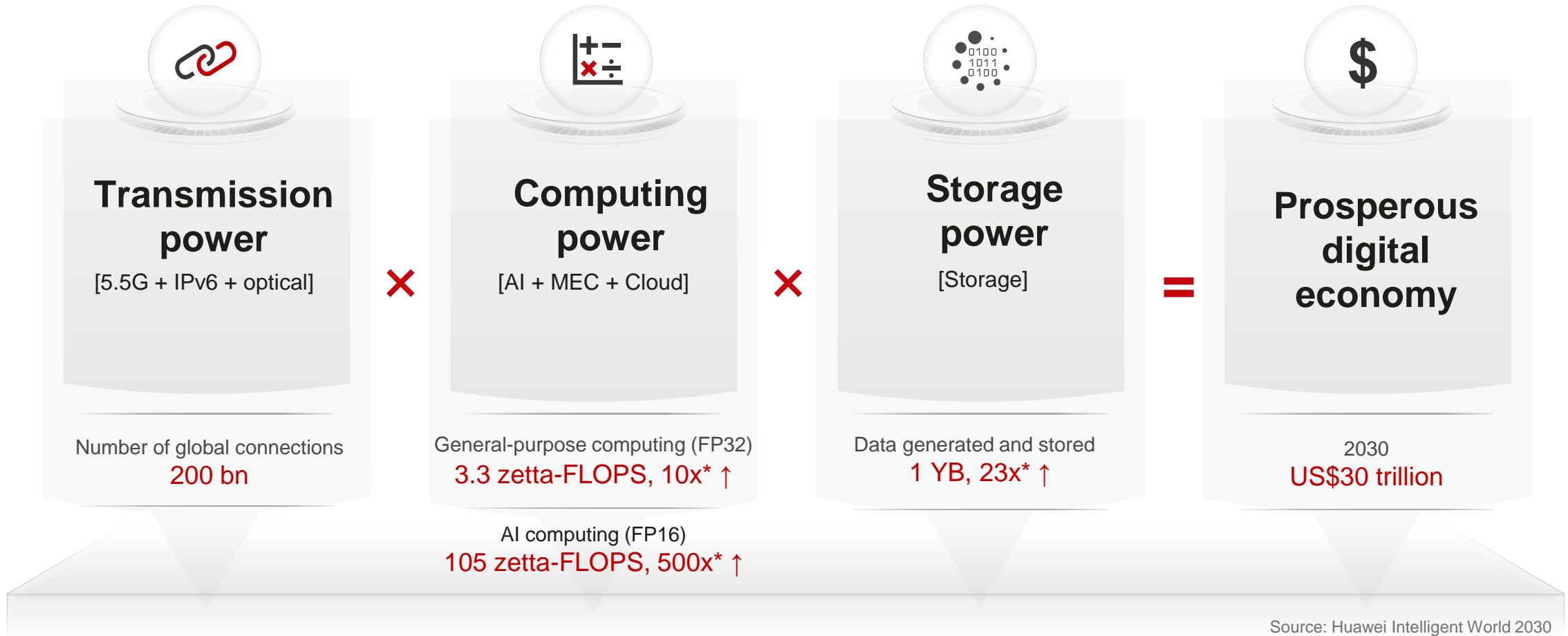
- Ministry of ICT Strategic Plan (2020–2024)
- Digital business environment, digital capabilities, and application innovation



Successful implementation
relies on 3 key factors



Transmission, computing, and storage power: The cornerstone of digital economy



Source: Huawei Intelligent World 2030

* Time range from 2020 to 2030.

Trends, Insights, and solutions

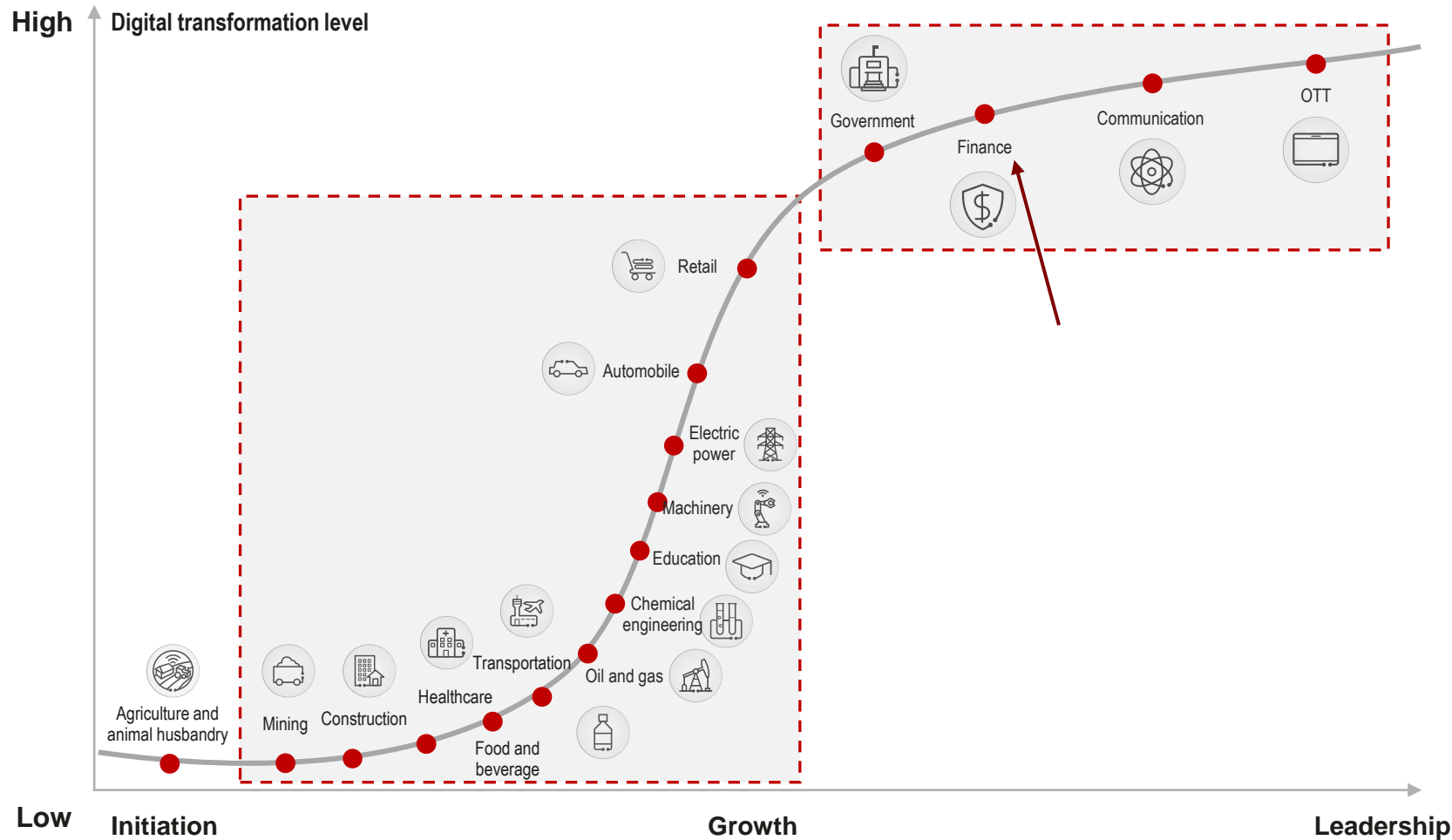
General Digital
Trends

**Digital Financial
Services**

Solution framework
and Use case(s)



Industries at different stages of digital transformation face different challenges



Initiation

Improving digital skills

Growth

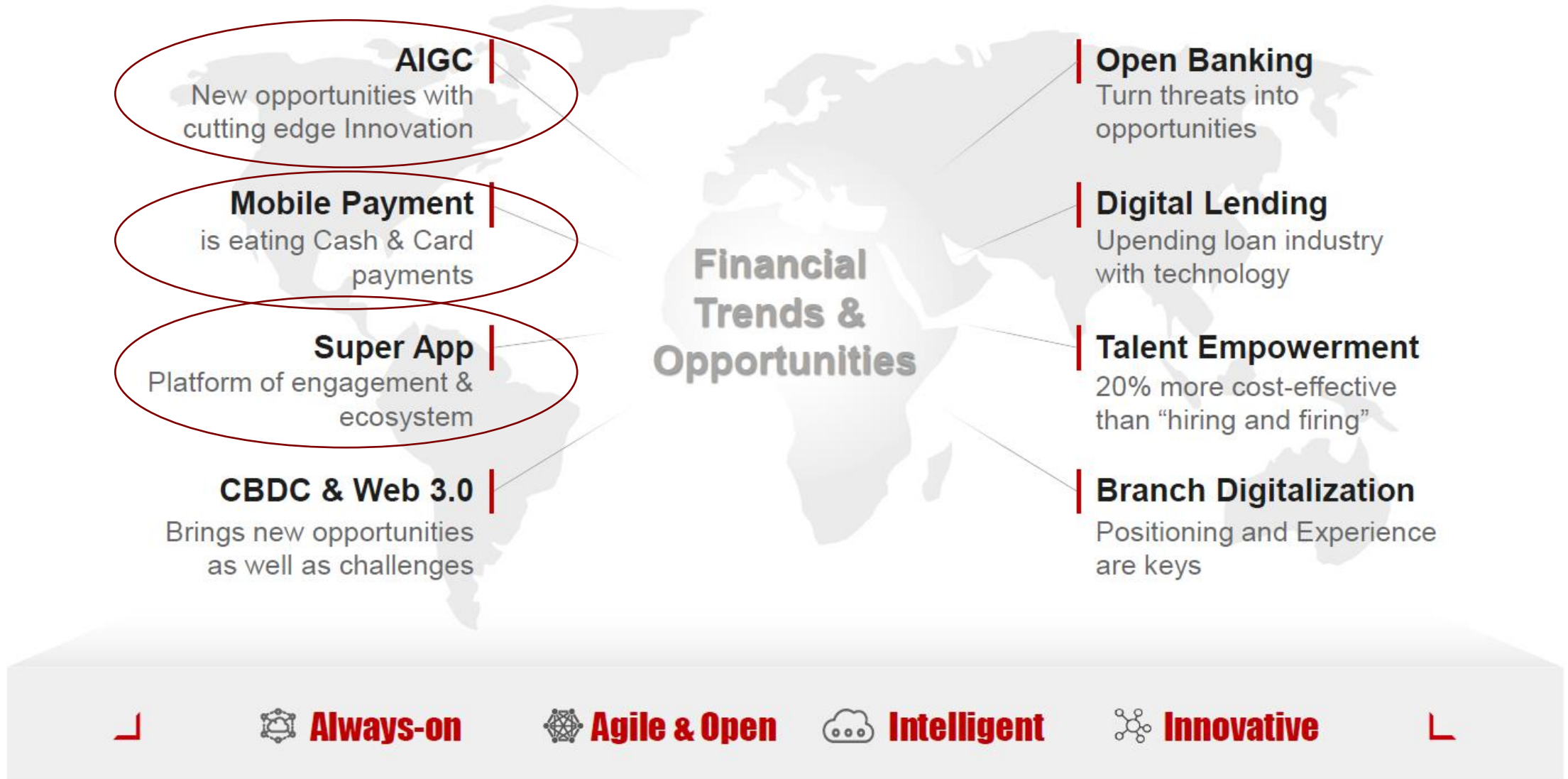
Focusing on better products, services, and customer experience

Leadership

In-depth integration of technologies and business scenarios

Source: Huawei Enterprise MI, Goldman Sachs, IDC, etc.

Digitalization Trends in the Financial Industry



Mobile Payment and Super Apps are Reshaping Financial Ecosystem

Mobile Payment

is eating the Card and Cash Payments

27.4%

CAGR from
2022 to 2030

74%

Growth from
2020 to 2025

58.6%

Of global
population

"I think it's possible to become the biggest financial institutions in the world, just by providing people with convenient payment options."

— *Elon Musk*



80%
in 2Y

of Brazilians
in 2 years

\$2.1 tn

Transaction Volume in 2022
(Brazil's GDP is 1.9 trillion)

Disrupted Brazil payment industry in just 2 years, which **accelerates top 4 banks IT modernization** to cope with surged transactions.

Super App

User centric platform of engagement & ecosystem

\$722.4 bn

Market size
by 2032

12X

Market share
growth 2022-2032

28.9%

CAGR
2023 - 2032

"By 2027, more than 50% of the global population will be daily active users of multiple super apps."

— *Garner*



5X ↑
in 3Y

2M → 12M users
in 3 years

100 mn
\$2.8 bn

Monthly transaction
number and volume

Rapidly dominated Myanmar market within 3 years, which **significantly enhance the digitalization process of the Myanmar market ecosystem.**

AIGC, New Opportunities with Cutting Edge Innovation

More than a tool, generative AI is becoming the **Next-generation Portal**



1 bn
users
worldwide

1.6+ bn
visits per
month

Leading financial institutes are actively to be the **Golden Diggers**

Scenario Practices

Document
Assistants

Coding &
Review

Fraud
Detection

Morgan Stanley

OpenAI is perhaps the best example to date of empowering Morgan Stanley with the marriage of human advice and technology

— Jeff McMillan,
Chief Analytics and Data Officer,
Morgan Stanley

**Intelligent
Assistant**

16K
Wealth
Management
Agents

100K
Internal
Document
Interpretation



Please help me generate a **risk analysis report** for XX Enterprise.



Okay, just a moment, please.



The report has been generated. Click the [link](#) to download.

Coding

Intelligence Co-pilot

Code Review

Digital Employee

AI assistants

AI services



Multimodal LLM



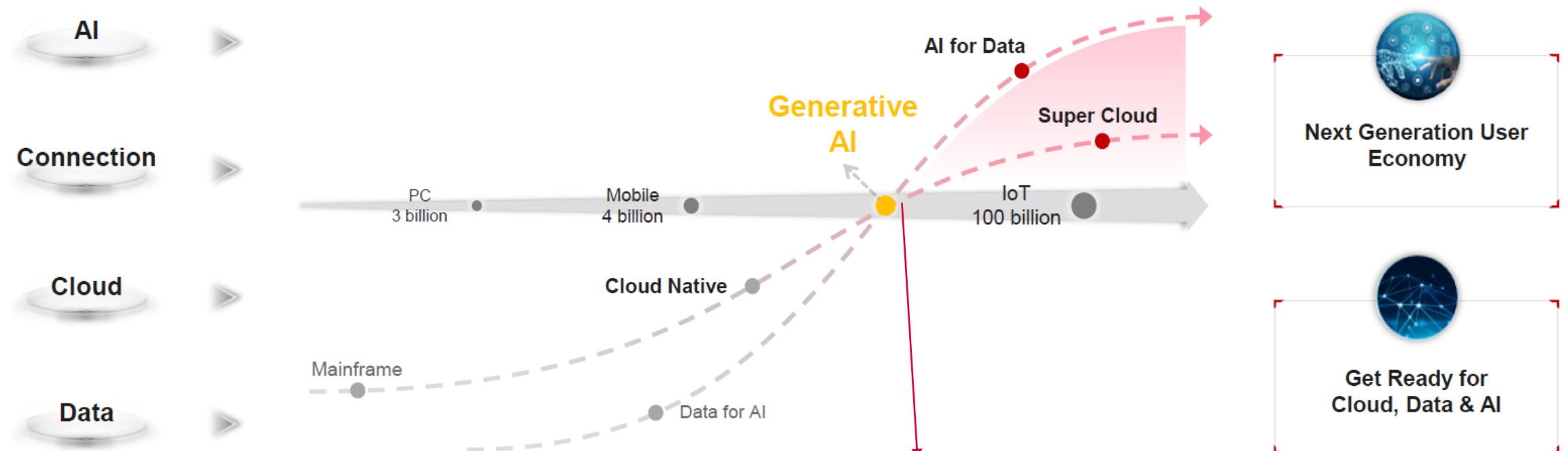
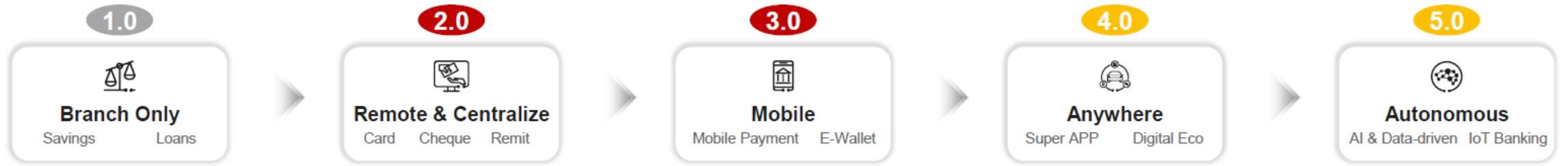
As a **Client**, Stripe is using **ChatGPT-4** for:

- Understanding users' businesses
- Answering technical support questions
- Fraud detection



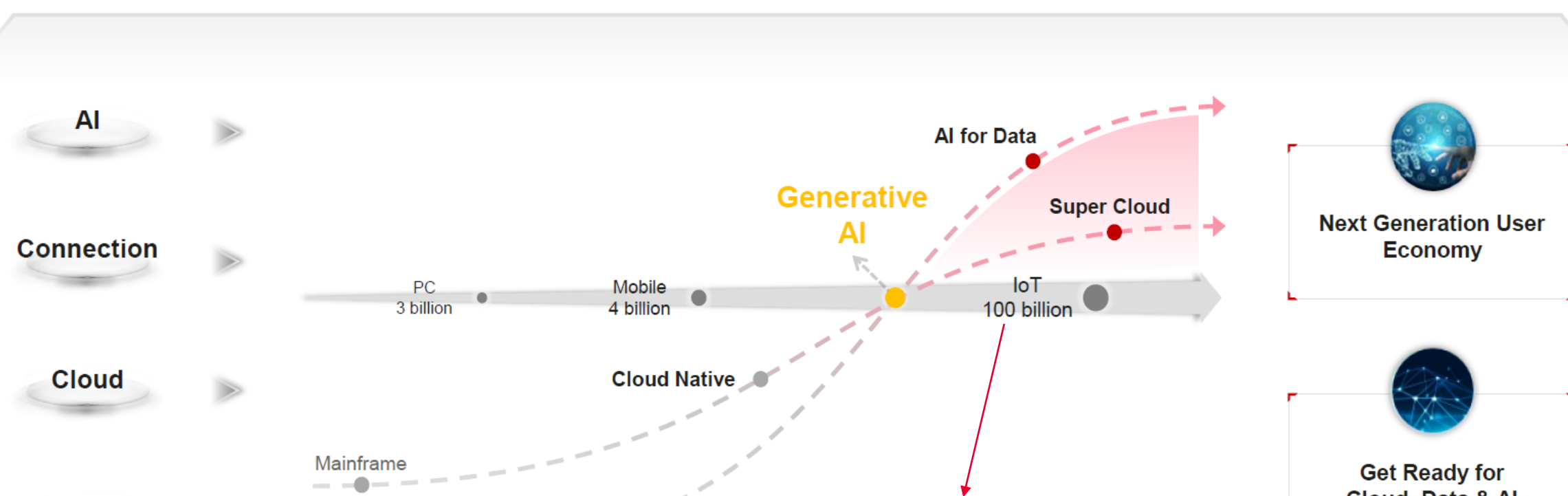
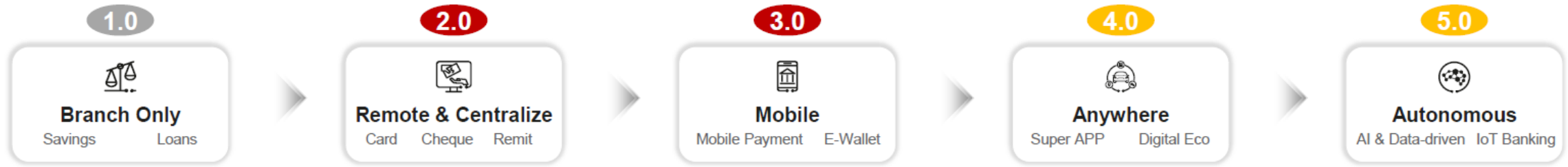
As a **Financial Institute**, Stripe provides payment, bill, tax services for OpenAI to monetize products.

Technology Beyond Singularity, New Models are Emerging



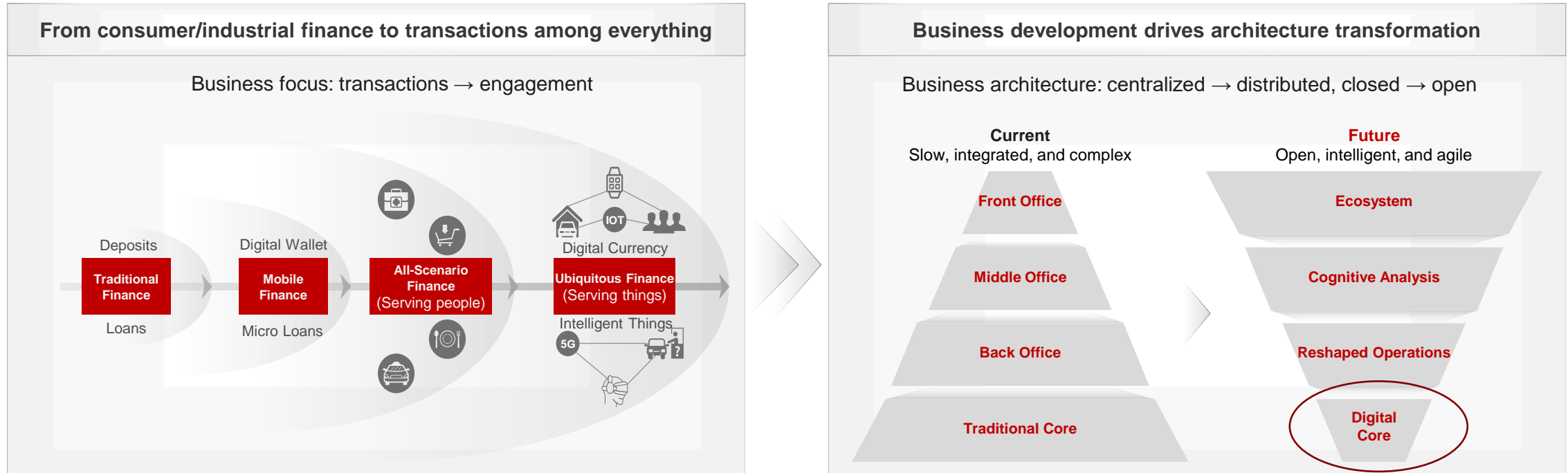
AI has surpassed the inflection point and is now leading the transformation of fintech and services

Technology Beyond Singularity, New Models are Emerging



The world is rapidly approaching a milestone of **100 billion connections**, with an explosion of data at the ZB level. We have officially entered the **era of ZFLOPS**, where the power of AI has surpassed the inflection point and is now driving transformation across various industries and services.

Finance: New business models require digital services, platforms, and infrastructure



<p>High performance</p> <p>Improves performance for surging online transactions</p> <p>100 TPS → 10,000 TPS</p>	<p>High availability</p> <p>Ensures service continuity with active-active/Two-site three-center DR</p> <p>RTO: 2 hours → 10 minutes</p>	<p>High security</p> <p>Shifts the focus from pre-event to in-event and post-event, and recovers services faster.</p> <p>2 – 16 days → 2 hours</p>	<p>High O&M efficiency</p> <p>Locates and fixes faults across the service, application, network, and device layers.</p> <p>1 – 8 hours → 5 minutes</p>	<p>Green and low-carbon</p> <p>Drives green technology upgrades and increases the energy efficiency per transaction.</p> <p>10 → 1 W/TPS</p>
---	---	--	--	--

Trends, Insights, and solutions

General Digital
Trends

Digital Financial
Services

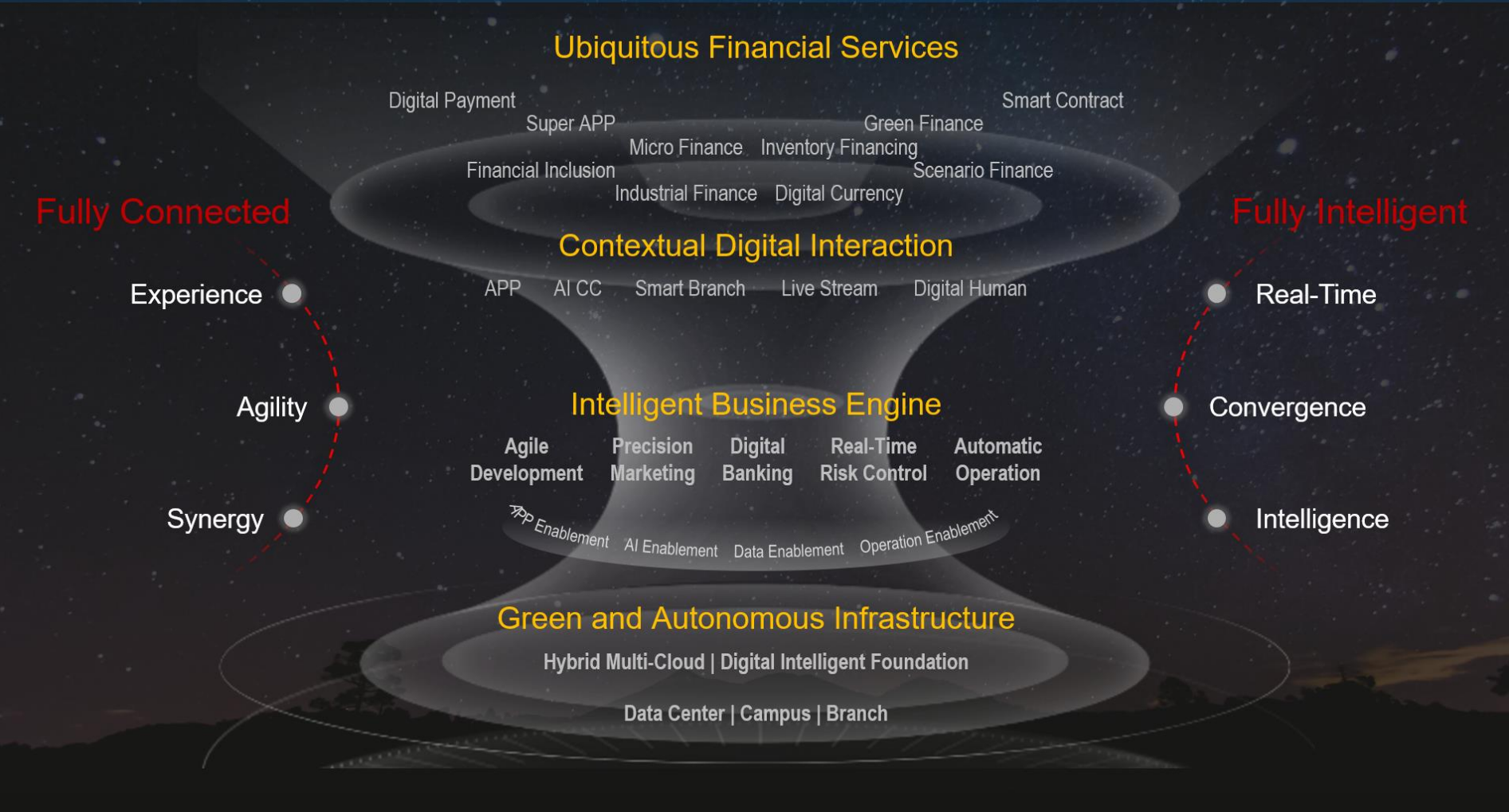
**Solution framework
and Use case(s)**



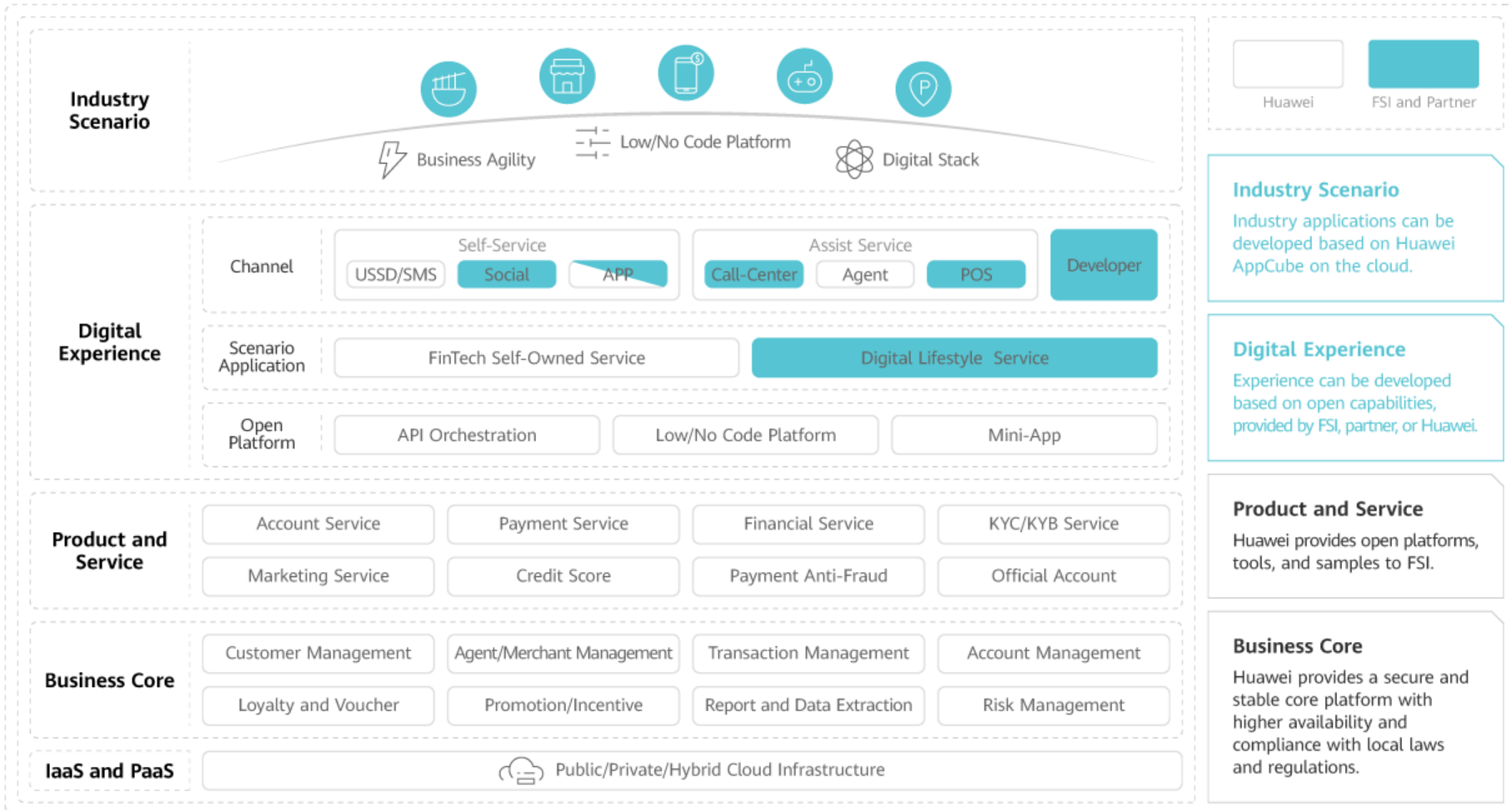
Fully Connected, Fully Intelligent and All-Scenario Digital Finance

To date, **Huawei** have served over **3,300** financial customers.

In more than **60** countries and regions, including **50** of the world's top 100 banks



Architecture of Mobile Financial Solution



Bank AlJazira: Enhanced SD-WAN Network to Deliver Secured, Efficient and Consistent Banking Services Across **Saudi Arabia**

- **Intelligent ultra-broadband and on-demand interconnection** that enables reliable and scalable interconnection between branches, headquarters, and clouds.
- **Zero-touch** Provision configuration that provides simple and reliable service roll-out and maintenance without the need for on-site staff.
- **Intelligent traffic steering** intelligent link selection based on SLA, dynamic selection of link transmission for applications
- **Smart O&M with unified management**, allowing cloud-based management of Local Area Networks (LANs) and WANs, simplifying system deployment, and reducing O&M costs.
- **Excellent full-service experience** that supports emerging technologies such as 5G, Artificial Intelligence (AI), the Internet of Things (IoT), and the cloud, driving Bank AlJazira's branches toward digital transformation, while paving the way for flexible yet secure business and network expansion.
- **Secured and reliable cloud connectivity:** enhanced security features, and Resilience and redundancy features



The Tokyo Branch is committed to delivering comprehensive, high-quality, and efficient financial services to businesses in China and Japan.

An effective data storage solution is essential for managing the data, as well as ensuring its accuracy, accessibility, and security.

Storage Solution: NAS for Banking Services The Network-Attached Storage (NAS)

Huawei OceanStor is a storage system designed to provide high-performance and reliable storage. This system features dual-controller architecture that delivers high availability and allows for online upgrades and maintenance, with no interruption to live services.

The Tokyo branch of the ABC deployed one set of OceanStor in its headquarters and another in a remote data center. Remote asynchronous data replication, set up between these two sites, is periodically performed, building up security.

The OceanStor series uses Non-Volatile Memory express (NVMe)-based Solid-State Drives (SSDs) and supports a wide range of storage protocols, including Fibre Channel (FC), Internet Small Computer Systems Interface (iSCSI), and FC over Ethernet (FCoE)



Agricultural Bank of China -- Tokyo Branch

Thank you.