

The background of the slide features a large, light blue watermark of the Fudan University logo. It consists of a circular emblem with a stylized globe and a compass rose, with the university's name in Chinese and English around the perimeter.

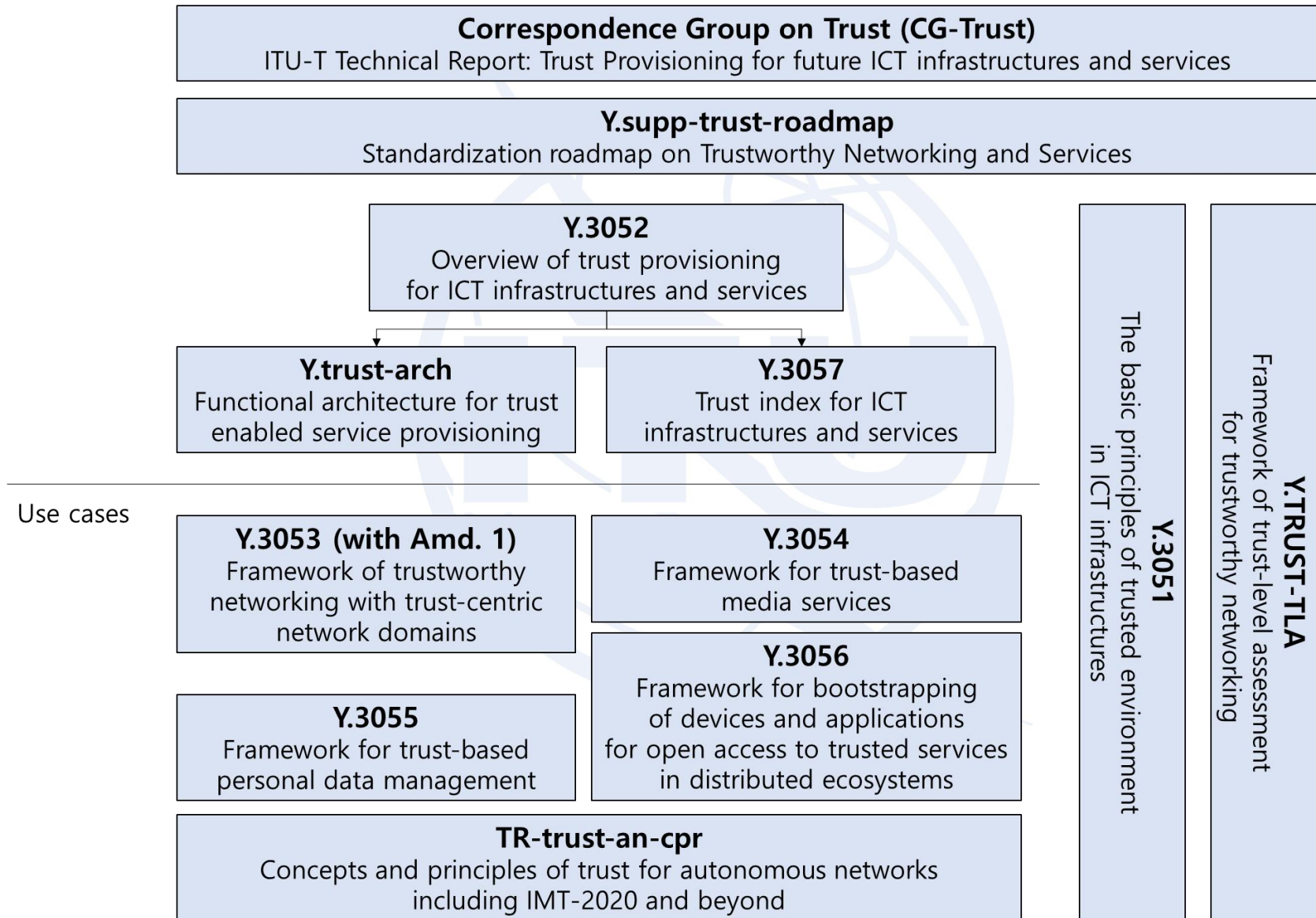
Trust in AN and Trust in AI for Networks

Xiaojia SONG, CMRI, China Mobile

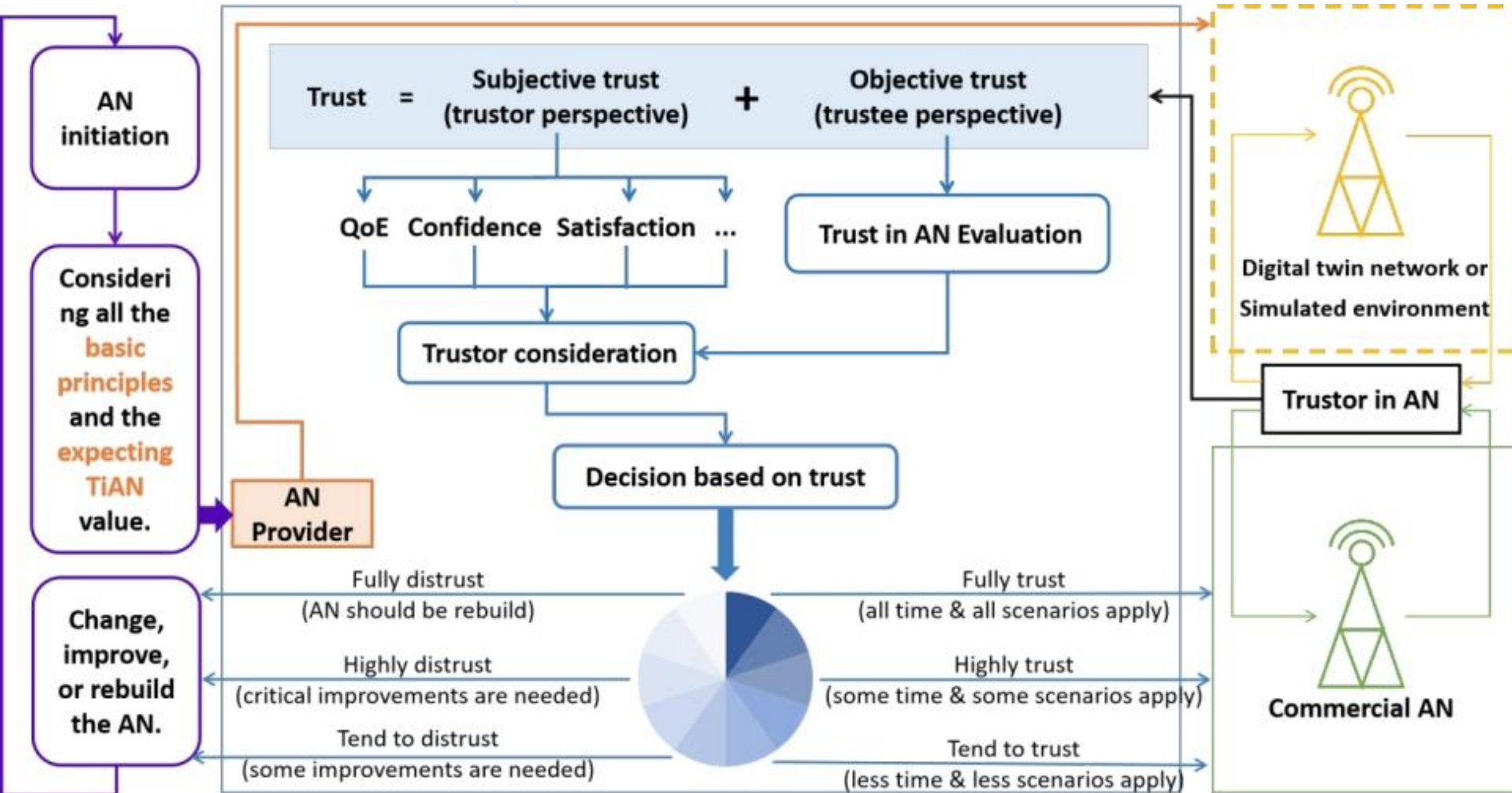
2023.09

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- **Introduction of trust standardization of SG13**
 - **Trust in autonomous networks**
 - **Trust in AI for future networks**
 - **Standardization advice**

Introduction of trust standardization of SG13

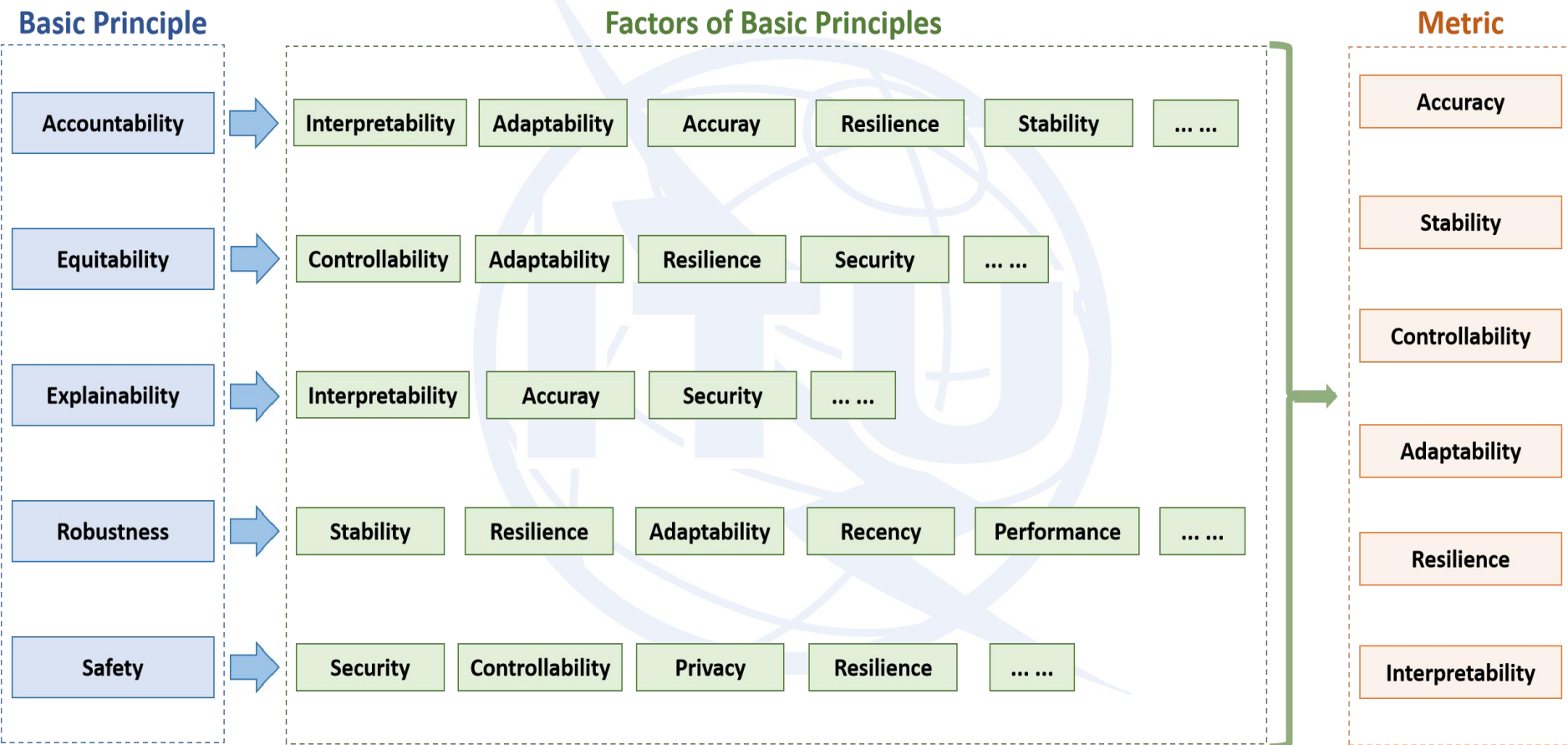


Trust in Autonomous Networks



ITU-T Y.3060 (formerly Y.trust-an), “Autonomous networks – overview on trust”.
 ITU-T Y.TiAN-eval, “Trustworthiness Evaluation for Autonomous Networks including IMT-2020 and beyond”.

Trust in Autonomous Networks

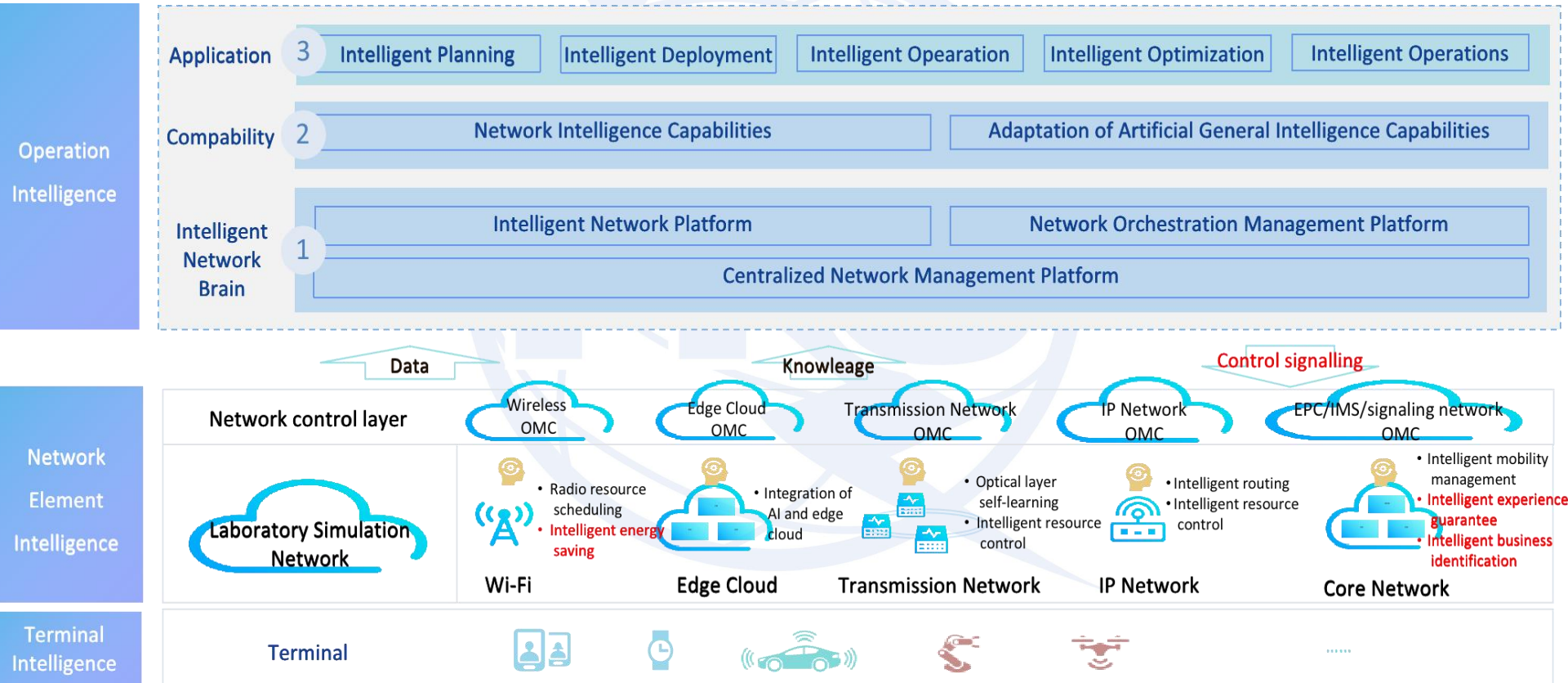


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AI for Future Networks

-- AI Technologies Enabled Network OAM



AI for Future Networks

-- 'Brain' for Computing Force Network

Computing-Network Brain: Business-oriented
Networks, Computing force and Capabilities Orchestrated and Scheduled

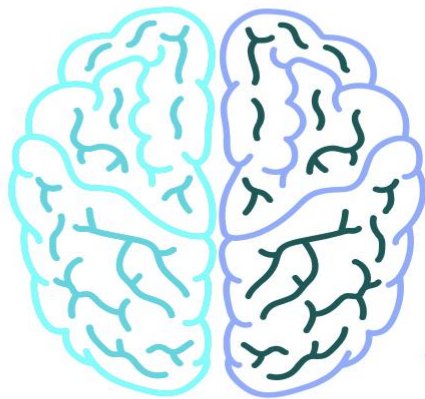
Networks

Computing Force

Capabilities

Orchestration
Intelligence

OAM
Intelligence



Perception Intelligence

Perception Intelligence

Quickly obtain and analyze the real-time computing, storage, network, and data resources of the whole domain, as well as the distribution and operation status of cloud, edge, and terminal, to achieve the Intelligent Situational Awareness.

Static
Information
Acquisition

real-time
automatic
perception

...

Single-domain
Information
Searching

Cross-domain
Information
Integration & Analysis

Data Graph
Automatic Construction

Visibale Analytic Results
End-to-end Data Link

...

Orchestration Intelligence

Business innovation and on-demand requirements require the computing network orchestration layer to gradually achieve intelligent orchestration

Manual

Intent

...

Model Design

Automatic Design as Demand

Orchestration mModel
Self-optimization

Orchestration Accuracy
Improvement

...

OAM Intelligence

Strick requirements for operation and maintenance intelligence: highly complex and dynamic computing and network environment, High precision SLA requirements for multiple management objects and services in network.

Effective
OAM

Resources and Business Dynamic
Adjustment Flexibly and On-demand

High Real-time SLA
Requirements

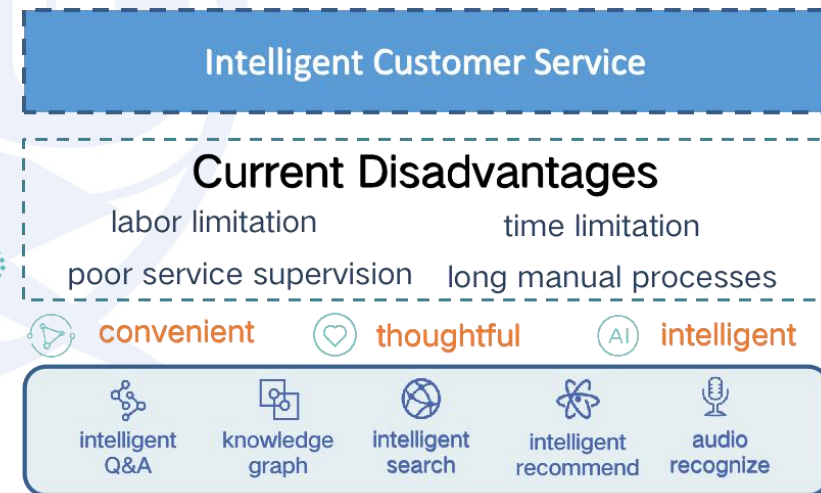
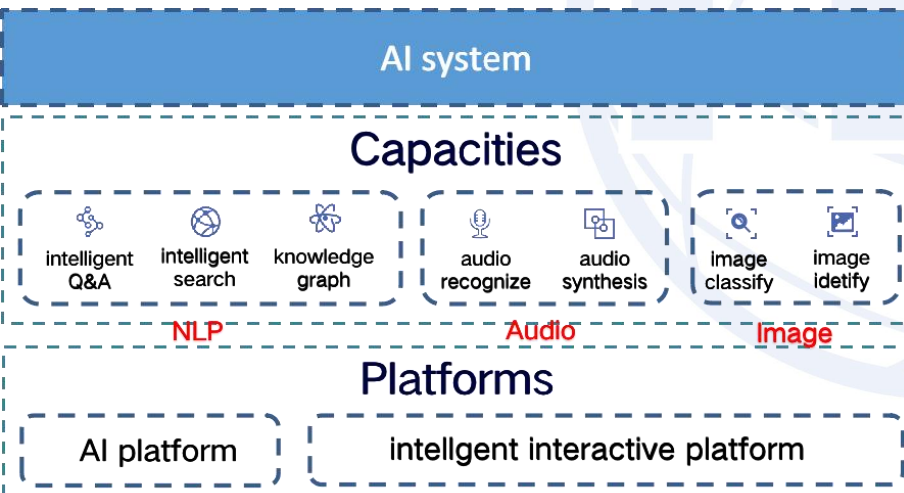
Network Orchestrator



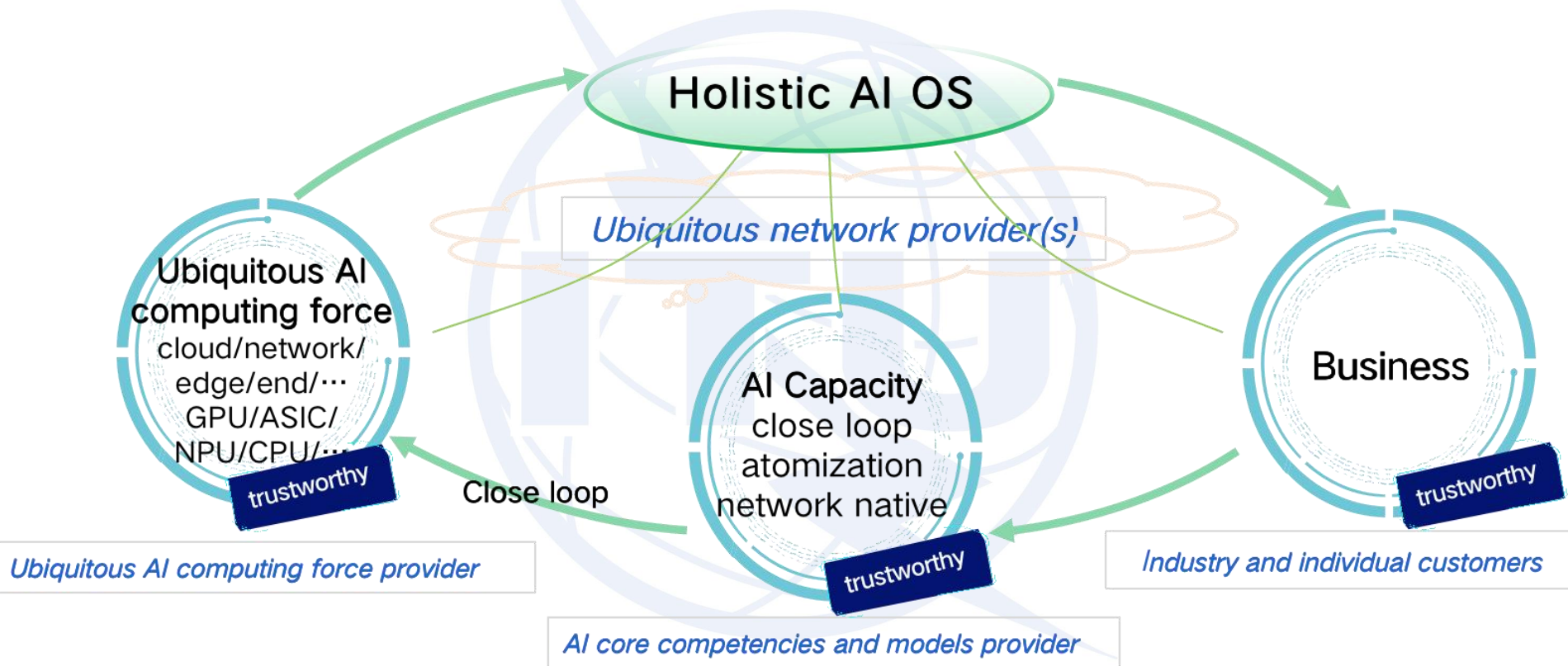
AI for Future Networks

-- AI Technologies Enabled Intelligent Customer Service

- AI technology enabled customer service: **24-hours, Timely, Effective, Warm, Personalized**
- Unified AI capability center, unified management center, and unified deployment center

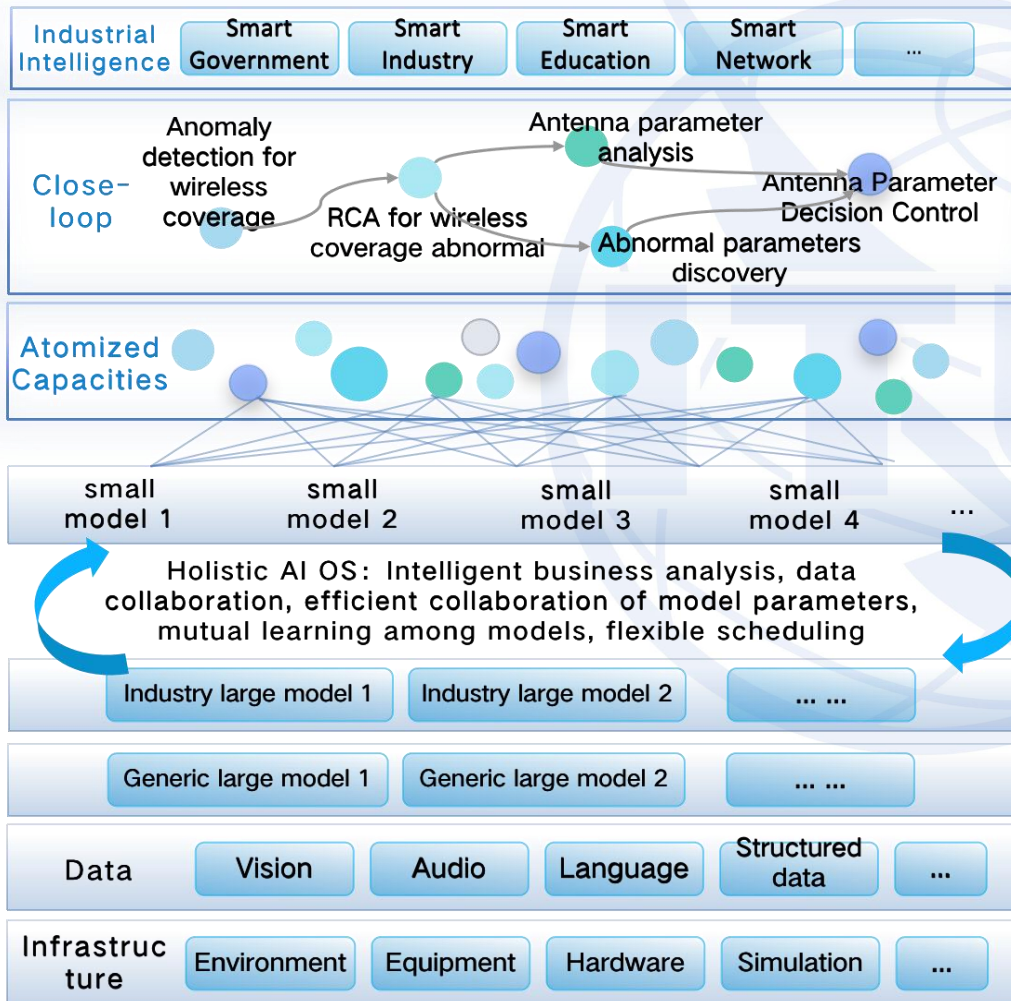


AI for Future Networks -- Holistic AI



AI for Future Networks

-- Collaborative Mechanism for Large and Small Models



**Network
Native**



**Safety and
Trust**



**Flexibility and
Efficiency**



**Open
Ecosystem**



Trust in AI for future networks

- How can it **be trusted** for AI in the future networks?
- How to **evalate and assess trust/trustworthiness** of AI itself/thmselves?
- What the **benchmark of trustworthiess** for network and sevice with AI?
- The **continuous trust for AI** is very important in the future networks.
- All the **basic principles, i.e. accountability, equitability, explainability, robustness, safety**, are suggested to be satisfied for future networks with AI.

Standardization Advice for “trust in AI”

- Kick off relevant studies and discussions of trust topics for AI and relevant technologies
- Make trust more objective and quantifiable in the future
- Cooperate with more groups and SDOs
- Call for more attentions to this important topic/direction
- More advice and cooperations are welcome

