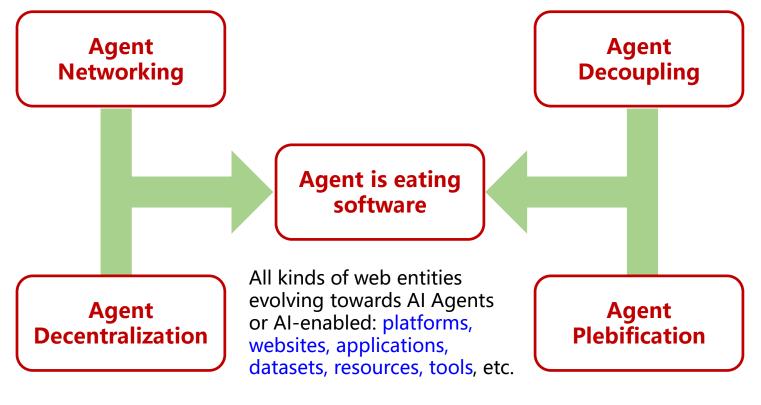
Agentic web evolution in Al era

Li Li (aka. Thomas), Huawei Technologies Düsseldorf GmbH Web Evolution, W3C 2025 Annual conference, Hangzhou, China September 5-6 2025

Technical trends within Agentic Web

Agents will network with each other for collaboration power.
Number of web agents will be much more than global population.
Traffic among agents will be much more than human created and consumed.

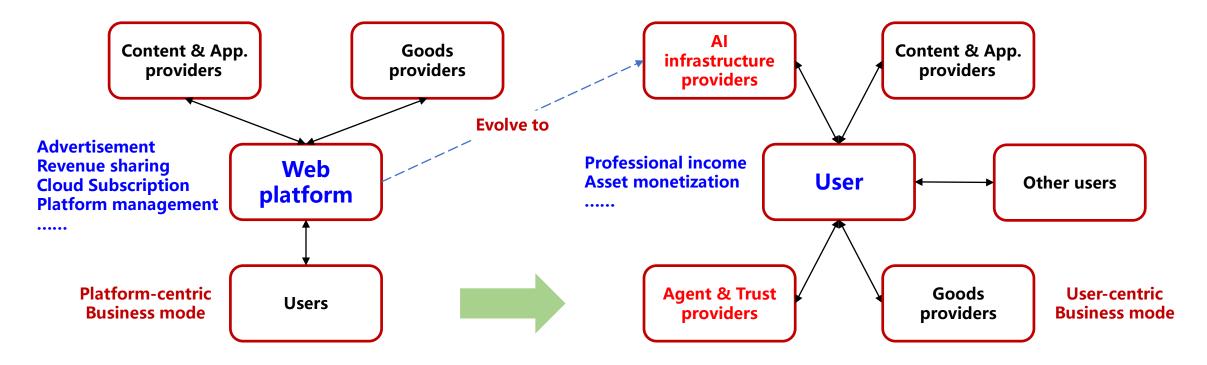
Agents or Agent groups will deal with each other equally. It will be supported by decentralization technologies, e.g. DID/VC, DPKI, distributed ledger, Digital currency, FHE.



Agent protocols will be Intent-based, e.g. MCP, A2A. There is no strong coupling or bundling between different kinds of Agents. Web app. ecosystem will be dramatically reshaped.

Everyone can afford Al large model as Personal Al Agents. Agents can be trained or customized for a specified user or even become human's Digital Avatar.

Web business mode: Platform to User-centric



- ◆ Agent decoupling and decentralization will de-assemble Web platform's advantages.
- ◆ Agent plebification and networking will enhance user's competence.
- ◆ Advertisement bias-based outcome is **Not compatible with** Al's neutral & professional requirement.
- ◆ Al infrastructure will be strategic competitive competence for web companies by providing general computing power, intelligent computing power, quantum computing power and advanced storage services.
- ◆ Users need strong technical support from Personal AI Agent providers and Trust service providers.
- ◆ Standards, open source and open-weight AI large model will play key roles in this transition.

4 economic trends behind User-centric mode

Trend-1 Material economy

Enabled by AI, material production (industry and agriculture) will need very less manpower, e.g. <0.5% of population, to fulfill all human requirements. All repetitive work will be done by machine.

Trend-3 Innovation economy

As all repetitive work being done by machine, human will be enhanced and free for innovative activities: STEM, artistic creation, design, psycho exploration, trust building, emotion fulfilling, etc.

Trend-2 Mental economy

For material products become no longer scarce and mental requirements explode for diversity, Al-enabled Mental economy GDP will be much larger than Material economy GDP in the long-term view.

Trend-4 Trust economy

Fighting against AI crime and avoiding unstable & uncontrolled AI super power, building human-to-human trust and AI trustworthiness will become rigid demand of the society.

Al will enhance human on innovation & decision-making, and free human from repetitive work and material production. This will give human opportunity to chase much better life. These 4 trends are economy logics supporting User-centric business mode in Al era.

4 categories Al Agent enhancing users

Category-1 Society aspect

- ◆ Browser & search engine agent
- ◆ Social network agent
- ◆ Self media agent
- ◆ Digital wallet & digital market agent
- ◆ Metaverse & group gaming agent
- **♦**

Category-3 Work aspect

- ◆ Education & self learning agent
- ◆ Corporate operation agent
- ◆ R&D agent
- ◆ Marketing & sales agent
- ◆ Strategy & planning agent
- **♦**

Category-2 Life aspect

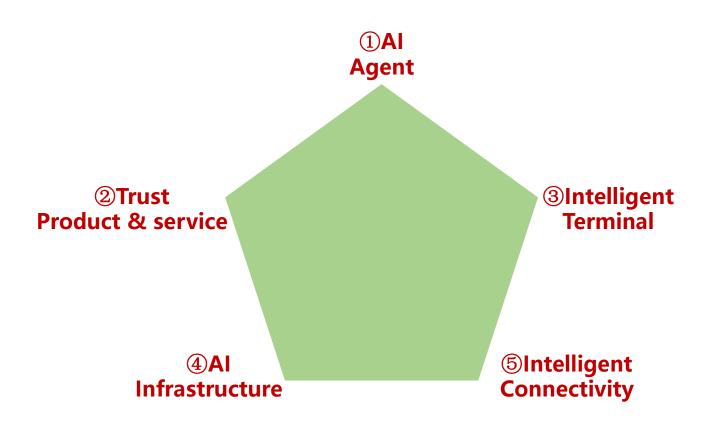
- ◆ Digital avatar & robotics agent
- ◆ Travel & event arranging agent
- ◆ Household & family agent
- ◆ Healthcare & hospital agent
- ◆ Emotion & psychology agent
- **♦**

Category-4 Trust aspect

- ◆ Smart contract agent
- ◆ MPC platform agent
- ◆ Content authenticity agent
- ◆ Truth filter agent
- ◆ Social Zero Knowledge proof agent
- **♦**

Al agents will be much more intelligent than traditional applications. They can deeply understand the intent and motivation of the users, proactively provide strategy and planning choices, and take actions towards final result after user's decision. **Huge business opportunities are implied here.**

5 key factors of Agentic Web Evolution



- **1** Source of direct value creation
- ② Indispensable component for safe operation
- **3 Hardware entrance towards Agentic web**
- **4** Strategic control point of competition in Al era
- **5** Fundament of Al Internet world

Summary

- **♦** Web technology: Evolving from software to Agent
- **♦** Web business: Evolving from platform-centric to user-centric
- **♦** Web company: Evolving from Web platform provider to AI infrastructure provider
- ◆ Economy of AI era supports Web's user-centric evolution
- **◆** All agents imply huge business opportunities for all kinds of companies
- ◆ Agentic web evolution needs 5 key factors: Al agents, Trust products and services, Intelligent terminals, Al infrastructure, Intelligent connectivity infrastructure

Thank you!