

AI Enabled OPCs in China: Current Situation, Real world Challenges and Policy Responses

Danting Ding¹, Yue Xia¹, *

¹School of Economics and Management, Zhejiang Shuren University, China

* Corresponding author: Yue Xia

Abstract—The rapid iteration of artificial intelligence is profoundly reshaping traditional entrepreneurial paradigms. As a typical form of the personal economy, OPC (One Person Company) relies on AI agents, computing power and digital resources to enable a single individual to close the full loop business covering R&D, operation, marketing and after sales services. Different from traditional individual owned businesses, OPCs enjoy institutional advantages including independent legal person status, limited liability protection and preferential tax policies, and have emerged as an important vehicle for fostering new quality productive forces and stimulating the vitality of micro market entities. This paper systematically reviews the current development of China's OPC industry, analyzes practical bottlenecks concerning legal compliance, factor supply, commercial operation and policy implementation. Countermeasures are proposed from four dimensions: institutional improvement, factor guarantee, business ecosystem construction and policy optimization, so as to provide references for the standardized and high quality development of the OPC industry.

Keywords— One Person Company (OPC); AI empowerment; personal economy; new quality productive forces; digital economy.

I. INTRODUCTION

The year 2026 is hailed by the industry as the inaugural year for OPC development. With the maturation of large-language models and AI Agent technologies, the lightweight entrepreneurial model of “one individual + AI agent = one company” is moving from conceptual vision toward large-scale practice.

The disruptive nature of OPC lies in its reconstruction of the “organisation-market” boundary. Leveraging AI to realise large-scale individual-led service delivery, OPCs retain the agility of decision-making while enabling exponential replication of services and products through automation. “This represents a paradigm shift in the commercial world toward the “individual as platform” model, rather than just a simplification of organizational structures” (Fan, 2026). According to the founder of an OPC specialising in smart-library solutions, the venture generated over 4 million RMB in revenue last year, with per-capita output far exceeding that of industry peers (Fan, 2026).

II. CURRENT DEVELOPMENT STATUS OF OPCs IN CHINA

In terms of scale, the community of OPC entrepreneurs continues to expand. As of May 2026, 426 OPC communities have covered 65 cities across 28 provincial-level administrative regions in China (Zhang, 2026). Hangzhou has assembled more than 2,000 “AI-enabled OPC” enterprises and established over 50 OPC communities. From the perspective

of entrepreneur profiles, OPC founders are predominantly college graduates, internet practitioners and industry-specific technical talents, and the entrepreneurial group features youthfulness and high educational attainment (Meng, 2026). Surveys reveal that 75 percent of existing OPC entrepreneurs come from non-technical backgrounds; the share of operation-background practitioners is nearly equivalent to that of technical-background counterparts, indicating a diversified trend among OPC founders.

Regarding policy provision, over 30 cities nationwide have rolled out special policies targeting OPCs. Jiangsu Province has taken the lead. After OPCs were incorporated into the 2026 Jiangsu Provincial Government Work Report, numerous cities within the province saw a boom in constructing OPC innovation-and-entrepreneurship ecosystems (Fan, 2026). Suzhou was the first city in China to set the goal of building “the preferred city for OPC entrepreneurship”; Yangzhou aims to develop “China’s top-tier city for OPC entrepreneurship”; Changzhou has officially launched OPC communities to explore the “solo-founder” entrepreneurial model (Fan, 2026). In July 2026, the Jiangsu Provincial Intellectual Property Administration, the Provincial Administration for Market Regulation and the Provincial Copyright Bureau jointly issued the *Jiangsu Provincial Guidelines on Intellectual-Property Compliance for AI-Powered OPCs*. As China’s first provincial-level guideline on intellectual-property compliance for OPCs, it marks a critical step forward in building the OPC compliance system (He & Tao, 2026).

In entrepreneurial practice, AI tools allow founders to independently complete the full workflow of product R&D, content creation and marketing promotion. Nevertheless, beneath the seemingly prosperous outlook, OPC as an emerging business format still lacks fully-fledged supporting systems in law, factor supply, market mechanisms and policy instruments. The growing tension between the rapid expansion of this new business form and lagging institutional supply has become a key bottleneck constraining the further development of OPCs.

III. PRACTICAL PROBLEMS FACING OPC DEVELOPMENT

(1) Deficiencies in the Legal and Compliance System

The existing legal framework is mainly designed for traditional enterprises, while a specialised rule-set adapted to the new business form of AI-powered OPCs remains underdeveloped.

First, there is substantial risk of asset commingling. Article 23 of the revised *Company Law* retains the reverse burden-of-proof rule regarding asset independence for shareholders of one-person companies. Shareholders must prove the separation between their personal assets and corporate assets; otherwise, they may be subject to unlimited joint and several liability. Equity transfers in one-person companies do not break the causal link for liability arising from personality confusion, meaning transferring shareholders remain jointly and severally liable for corporate debts incurred during their shareholding period (He et al., 2025). Lu Dingliang, Partner at Jingshi Law Firm in Beijing, points out that one-person companies also face legal-compliance pressures concerning fiscal-tax compliance, data privacy and intellectual-property governance (Fan, 2026). In practice, OPC entrepreneurs often hold multiple roles. For operational convenience, they may intermingle personal and corporate bank accounts and blur corporate expenses and personal living costs. Once corporate-personality confusion is established, limited-liability protection ceases to apply.

Second, rights and obligations concerning AI-related intellectual property remain ambiguous. China has not yet enacted special laws and regulations for OPCs operating within an AI context. OPCs suffer prominent pain points including “insufficient understanding of rules, weak awareness of protection and limited capacity for rights-defence” in trademark deployment, patent protection, ownership of AIGC-generated content, trade-secret protection and training-data compliance (He & Tao, 2026). When entrepreneurs use AI to generate copywriting, graphic designs or programming code, copyright-infringement disputes may arise if outputs bear substantial similarity to third-party works or if training materials incorporate unauthorised copyrighted content.

Third, inadequate adaptability of the market-entity registration system. The novel human-AI collaborative operational model adopted by OPCs poorly aligns with conventional administrative systems for enterprise qualification recognition and bidding eligibility. Conventional registration procedures require valid proof of business premises, which implicitly raises OPC establishment costs and imposes geographical constraints.

(2) Insufficient Supply of Core Production Factors

Computing power, capital and talent constitute the three most vital production factors for OPCs, and notable supply-side deficiencies persist at the current stage.

In terms of computing power, OPCs rely heavily on large-model invocation and AI inference capacity and are confronted with soaring computing costs. OPCs deploy AI tools to accomplish tasks formerly performed by full teams. Saved labour costs are converted into substantial “computing-power bills” paid to large-model providers, and recurring computing-power expenditures severely squeeze profit margins (Meng, 2026).

With respect to financing, OPCs are generally small-scale, feature low registration thresholds and lack conventional physical collateral, and thus commonly suffer

from narrow financing channels. Traditional credit systems primarily serve brick-and-mortar enterprises, and financing secured by digital intellectual property has not yet achieved large-scale adoption.

Regarding talent, founders differ markedly in technical expertise and commercial-operation capabilities. A one-person company is far from a solitary struggle. Founders cannot afford to be one-sided innovators. Support is needed to help entrepreneurs remedy capability gaps and evolve into “super-individuals” proficient in technology, innovation, operation, finance and legal affairs (Zhang, 2026).

(3) Substantial Barriers to Commercial Monetisation

OPCs are frequently trapped in the dilemma of “being able to develop products yet failing to secure orders”. High market-trust barriers lead clients to prefer cooperation with larger-sized firms. Homogenised competition prevails: numerous OPCs crowd into low-entry-threshold tracks, resulting in severe product homogeneity. Domestic industry-level involution compresses profit margins. Meanwhile, OPCs lack industrial-chain docking platforms, creating disconnection between product offerings and real-market demands.

(4) Limited Implementation Effect of Certain Support Policies

Policies across regions tend to “prioritise hardware subsidies over real-world needs”, with interventions concentrated on basic measures such as rent relief, computing-power subsidies and registration streamlining. OPC communities exhibit pronounced homogenisation, and the problem of “emphasising quantity over quality” stands out. Some local governments blindly pursue scale expansion while neglecting core links such as entrepreneurial services, industrial supporting facilities and resource matching. This gives rise to dual hidden risks: community hollowing-out and low OPC survival rates (Zhang, 2026). Research conducted by Professor Wang Jining (Second-grade Professor, School of Economics and Management, Nanjing Tech University) identifies persistent bottlenecks in Jiangsu’s OPC innovation-entrepreneurship ecosystem, including imperfect policy mechanisms, unreasonable factor support and underdeveloped service ecosystems (Fan, 2026). Complicated application requirements and benefit-disbursement procedures prevent start-up-stage OPCs from accessing policy dividends.

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V. TYPICAL CASE ANALYSIS: A CASE STUDY OF ALIBABA MODEL SCOPE

In July 2026, the research team conducted an on-site field visit to Alibaba’s ModelScope community and held in-depth interviews with its management and several OPC practitioners. Co-built by Alibaba DAMO Academy and domestic open-source institutions, ModelScope is a national-level public service platform for open-source AI models. As a core benchmark platform in China dedicated to lightweight AI entrepreneurship and empowering the OPC solo-preneurship model, it serves as a vital carrier for realizing the “AI-powered individual economy” amid the development of new-quality productive forces.

To date, the platform has hosted more than 170 000 open-source AI models, serving over 2.5 million developers at home and abroad. It covers a full spectrum of scenarios including copywriting, visual design, code development, intelligent Q&A, and industry-specific solutions. Equipped with convenient toolkits such as inclusive free computing resources, one-click model fine-tuning, cloud-based lightweight development, and automated deployment,

ModelScope fundamentally eliminates the traditional entrepreneurial reliance on high-end hardware and large technical teams. It is highly compatible with OPC operational characteristics: low-asset operation, solo-operator setup, and high operational flexibility.

Leveraging Hangzhou's industrial agglomeration advantages for OPC development, ModelScope has fostered a distinctive ecosystem of "public AI infrastructure plus solo-preneur entities". A large number of university graduates, internet professionals, and cross-domain entrepreneurs carry out OPC entrepreneurial practices on the platform. Compared with conventional OPC entrepreneurship models, ModelScope effectively fills critical gaps in core industrial elements. First, inclusive computing resources mitigate the pain point of exorbitant computing costs for OPC practitioners. Free computing quotas and on-demand invocation replace heavy hardware-procurement investment, lowering the cost of solo entrepreneurship. Second, its mature open-source model library substantially reduces technical barriers, enabling numerous non-technical entrepreneurs to rapidly build product prototypes and accommodating the diversified development trends within the current OPC entrepreneur community. Third, it builds an ecosystem for developer communication and achievement demonstration, overcoming information isolation and resource shortages common in solo-entrepreneurship. It supports OPC product iteration and preliminary commercial exploration, establishing itself as a core incubation hub for lightweight OPC entrepreneurship in China.

VI. COUNTERMEASURES AND SUGGESTIONS FOR PROMOTING HIGH-QUALITY DEVELOPMENT OF OPC

(I) Improve Institutional Rules and Reduce Compliance Risks

Optimize registration and compliance guidelines. Based on the framework of the newly-revised *Company Law*, formulate practical guidelines for the AI-enabled new OPC business form, and disseminate legal requirements for asset independence. Lu Dingliang suggests that in response to the rapid growth of OPCs, OPC-friendly registration and administration mechanisms may be established, and the social security system for flexible employment should be improved to remove entrepreneurs' worries (Fan Jun, 2026).

Clarify the legal boundaries of AI-related intellectual property rights. Implement requirements specified in *Jiangsu Provincial Compliance Guidelines for Intellectual Property of AI-enabled OPCs*. Enterprises must verify the scope of commercial authorization before utilizing AI-generated content. AI-generated content released to the public shall be conspicuously marked, and complete records including prompts and revision logs shall be retained. The legal representative of an enterprise shall serve as the primary person responsible for intellectual property compliance. Light-weight compliance ledgers may be constructed to coordinate routine management of various intellectual property rights (He Jiarui & Tao Wei, 2026).

Optimize supporting institutions. Study simplified annual audit mechanisms for low-asset OPCs to cut compliance costs. Establish exclusive "credit accounts" for OPCs and implement tiered credit management. Apply the principles of "no penalty

for first-time offences" and "exemption from punishment for minor violations" for unintentional initial offences with negligible harmful consequences.

(II) Remedy Factor Shortages and Build a Support System

In terms of computing power, encourage governments to cooperate with large-model enterprises to launch inclusive computing-power packages. Leverage OPC communities for bulk procurement to lower unit prices via group-buying models. Regions with sufficient resources are encouraged to offer computing-power or token subsidies for start-up OPCs. Build public AI-infrastructure platforms to lower technical barriers for individual entrepreneurs (Fan Jun, 2026).

In terms of finance, explore pledge-based financing models for digital intellectual property and algorithm copyrights, bringing OPCs' digital intangible assets into the scope of collateral. Encourage banks to develop credit products tailored for solo-preneur entities and expand financing channels for low-asset tech-oriented entrepreneurs.

In terms of talent, build a systematic training system and embed government services within OPC communities. Functional departments shall provide regular one-on-one consultations to help entrepreneurs strengthen their capacity sets (Zhang Xiao, 2026). Entrepreneurs shall proactively acquire basic legal and financial knowledge or engage professional third-party services to guarantee compliant operation (Fan Jun, 2026).

(III) Unlock Market Channels and Enhance Commercialization Capacity

Open up application scenarios. Encourage local governments and state-owned enterprises to appropriately open small-value service procurement channels and eliminate unreasonable thresholds such as enterprise scale. Restrict setting workforce size or registered capital as access criteria.

Build supply-demand matching platforms. OPC communities shall proactively respond to entrepreneurs' demands, actively introduce chain-leading enterprises, and smooth industrial chains to foster a sound ecosystem where "neighbouring participants form industrial upstream-downstream linkages". This enables high-quality products and entrepreneurs to gain genuine exposure and effectively boosts project commercialization conversion rates and entrepreneurial success rates (Zhang Xiao, 2026). Release industrial digitalization "opportunity lists" and hold special matchmaking events on a regular basis.

Construct collaborative ecosystems. Promote flexible cooperation mechanisms among OPCs and between OPCs and small-and-medium-sized enterprises. Large-scale projects can be undertaken jointly by temporary collaborative networks composed of multiple OPCs.

(IV) Optimize Policy Supply and Foster Differentiated Ecosystems

Shift away from extensive site-subsidy schemes. Transform policy orientation from "blood transfusion" to "hematopoiesis", and design support measures centering on core demands including order acquisition, compliance and computing resources. Policies shall avoid uniform

“one-size-fits-all” arrangements across cities. Instead, regions shall pursue differentiated development based on local comparative advantages: the Yangtze River Delta features a sophisticated industrial ecosystem; the Pearl River Delta boasts complete hardware supply chains; the Beijing-Tianjin-Hebei region is endowed with abundant science-and-education resources; central and western China enjoys prominent cost advantages in computing power (Zhang Xiao, 2026). Simplify application procedures and lower access barriers for start-up entities. Introduce dynamic evaluation mechanisms to track policy outcomes and iteratively optimize support measures.

VII. CONCLUSION

As an emerging entrepreneurial form born in the artificial intelligence era, the One-Person Company (OPC) breaks the organizational boundaries of traditional entrepreneurship and bears great significance for stimulating microeconomic vitality. Nevertheless, as a nascent business format, OPCs still face multiple obstacles concerning legal compliance, factor supply, commercial monetization and policy implementation. The development of OPCs should not merely pursue scale

expansion. Instead, coordinated efforts from institutions, markets and policies are required. On the premise of observing compliance bottom lines, factor guarantees shall be improved and market channels shall be opened. OPCs shall be guided to serve the real economy, translate individual creativity into industrial value, and facilitate the high-quality development of the digital economy.

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