

---

AI translation · View original & related papers at  
[chinaxiv.org/items/chinaxiv-202310.03032](https://chinaxiv.org/items/chinaxiv-202310.03032)

---

## Society-wide Open Knowledge Supply System: Background, Connotation, and Postprint Cultivation

**Authors:** Wang Zheng

**Date:** 2023-10-08T00:00:00+00:00

### Abstract

[ Purpose/Significance ] Understanding the generation and function of open knowledge from a supply-side perspective facilitates better utilization of open knowledge as an innovation resource. [ Method/Process ] Through theoretical analysis, this study proposes a comprehensive definition of open knowledge and an integrated framework for the open knowledge supply system, and explains the framework's constituent elements through typical cases. [ Results/Conclusion ] In an open innovation environment, open knowledge has become an important resource driving innovation; the open knowledge supply system can be developed and cultivated theoretically from aspects including content supply, policy supply, and service and platform supply.

### Full Text

## Open Knowledge Supply System for the Whole Society: Background, Connotation and Cultivation

Wang Zheng<sup>1, 2</sup>

<sup>1</sup> School of Economics and Management, Northwest University, Xi'an 710127

<sup>2</sup> School of Information Management, Nanjing University, Nanjing 210093

### Abstract

[Purpose/Significance] Understanding the generation and function of open knowledge from a supply-side perspective helps to better activate open knowledge as an innovation resource. [Method/Process] Through theoretical analysis, this study proposes a comprehensive definition of open knowledge and an integrated framework for the open knowledge supply system, explaining the framework's components through typical cases. [Result/Conclusion] In an

open innovation environment, open knowledge has become an important resource driving innovation. The open knowledge supply system can be theoretically understood and practically cultivated through three dimensions: content supply, policy supply, and service/platform supply.

**Keywords:** open knowledge; knowledge supply; open movement

**Classification Number:** G251

---

## 1.1 Generation and Development of Open Knowledge in an Open Innovation Environment

In recent years, “supply-side reform” has become the main policy focus of China’s economic development. The core of supply-side reform is adjusting economic structure to achieve optimal allocation of factors and improve the quality and quantity of economic growth. While the demand side is driven by the “three engines” of investment, consumption, and exports, the supply side comprises four major elements: labor, land, capital, and innovation. The reform path for the innovation element includes cultivating an innovation environment and enhancing innovation willingness. In the current open innovation environment, as open policies, systems, and infrastructure gradually improve, a large volume of open content resources continues to emerge and accumulate. At the intersection of various trends—including the arrival of the big data era, advances in computing technology and scale, shifts in scientific research paradigms, transformations in knowledge organization and discovery methods, and iterations in business models—open content can be rapidly transformed into open knowledge, which itself has become a new wave of drivers stimulating innovation.

Tracing the origins of open knowledge reveals diverse sources, multiple supply channels, and continuous evolution with mutual influence and penetration across channels. Examples include open source code activities that initiated the open movement, open access movements that advanced it, open courseware and open education movements, open government initiatives in the public sector, and open innovation activities in the commercial realm. Although the specific contexts and motivations for generating open knowledge differ across social domains, each field has developed substantial forms of open knowledge over the years, continuously enriching the public knowledge domain. This has become an established fact. For instance, governments and public sectors attract enterprises, citizens, and social groups to participate in the open government movement through open data, collaboratively addressing major challenges in government management and services to enhance government effectiveness. Similarly, enterprises disclose open knowledge through scientific publications, which in turn achieve effective dissemination through the open access movement in the scientific community, enabling all audiences, including businesses, to access and utilize knowledge (see Figure 1 [Figure 1: see original paper]).

*Note: Figure translations are in progress. See original paper for figures.*

*Source: ChinaXiv — Machine translation. Verify with original.*