

The Selection of Mechanisms and Effect Presentation Forms for Knowledge Products by Research and Enterprise Users

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Date: 2017-01-03T00:00:00+00:00

Abstract

Abstract: This article explores the career development plans and implementation methods for professional librarians in a market economy and network environment from three perspectives: analysis of information usage rights exchange, the mechanism of users utilizing intelligence products, and performance demonstration of libraries and knowledge learning centers. 1. Analysis of Information Usage Rights Exchange 1.1 Prerequisites for Information Usage Rights Exchange 1.2 Significance of Information Usage Rights Exchange 1.3 Forms of Information Usage Rights Exchange 2. Mechanism of Users Utilizing Intelligence Products 2.1 What is Intelligence Benefit 2.2 Conditions and Work Areas for Realizing Intelligence Benefits 2.3 Benefit Detection Process 3. Performance Demonstration of Libraries and Knowledge Learning Centers 3.1 Knowledge Learning Center 3.2 Benefits of Real Wisdom (Knowledge Learning) Services 3.3 Process of Record Anchoring.

Full Text

Preamble

This paper examines the career development planning and implementation strategies for professional librarians within the context of market economies and network environments from three perspectives: the exchange analysis of information usage rights, the mechanisms of user engagement with intelligence products, and the performance demonstration of libraries and knowledge learning centers.

1. Information Usage Rights Exchange Analysis

1.1 Prerequisites for Information Usage Rights Exchange

As tangible assets in industrial society, land use rights and property use rights exhibit relative receptor exclusivity. However, the concept of knowledge or information usage rights has inevitably emerged in the knowledge economy era of the information society. While information is inherently non-exclusive, information gaps between individuals generate exchange value for information usage rights in the information society (for example, the cost of gaining entry into an “inner circle”).

The property rights system of industrialization is termed the modern property rights system, whereas that of the internet represents a “post-modern” property rights system. The fundamental distinction lies in their focus: the modern property rights system centers on the separation of ownership and management rights, while the internet’s property rights revolution unfolds around ownership itself, triggering a nuclear fission within ownership that separates control rights from usage rights. Charging by usage means charging based on these usage rights, with the prerequisite that control rights have already been separated.

In network environments, this property rights revolution will fundamentally transform how research institutions and enterprises achieve competitiveness. Phenomenologically, usage-based charging (exchange) has become prevalent on the internet, appearing inconspicuous yet heralding a property rights revolution behind the scenes. The prerequisite for this revolution is that means of production corresponding to control rights (fixed costs, heavy capital) can be replicated at zero cost—representing an adjustment of production relations driven by changes in productive forces.

1.2 Significance of Information Usage Rights Exchange

From the perspective of internet practice, cloud computing exemplifies this model: control rights over software are provided free of charge, while fees are levied based on usage rights within services. This creates the peculiar new phenomenon of separated control and usage rights. Historically, Roman law completely distinguished between control and usage rights, yet since the 1793 Declaration of the Rights of Man and of the Citizen during the French Revolution, these rights have been integrated. Throughout the industrialization period, few considered reforming property rights in this domain. Remarkably, upon the completion of industrialization, control and usage rights have magically separated once again. Apple Inc. has unleashed \$560 billion in competitiveness from this nuclear fission of property rights.

Under industrialization conditions, only three market structures existed: complete monopoly, perfect competition, and monopolistic competition. The internet has introduced a fourth market structure—new monopolistic competition—characterized by a unified two-tiered operation combining natural platform

monopoly with perfectly competitive applications. The internet's free model is predicated on this new monopolistic competition structure.

The difference between new monopolistic competition and Chamberlin's monopolistic competition lies in the former's distinction between platform and application. The earlier model did not feature platform-free yet value-added service-charging competition methods, instead employing branding and advertising for differentiation.

Changes in the competitive landscape brought by the internet have transformed business formats between research industries and enterprises, creating a separation between platform-based foundational services and application-based value-added services, along with their mutual integration. The direct change in the competitive background is the emergence of commercial quasi-public goods providers.

1.3 Forms of Information Usage Rights Exchange

For research institutions and enterprises to grow stronger, larger, and more dynamic (or "optimized"), this optimization primarily occurs through internal and external adjustments that enable transformation.

Regarding the regulation of increasing returns, there are two types: scale-based increasing returns (typically used for price competition) and scope-based increasing returns (typically used for price premium competition). The adjustment method involves transforming the core business platform composed of fixed investments from a physical core business to a data-centric core business, which consistently generates scope-based increasing returns—meaning greater differentiation and higher pricing simultaneously reduce costs and increase benefits.

In regulating returns variation states, there are increasing returns ("the horse runs fast only by eating more grass") and decreasing returns ("the horse eats no grass"). The adjustment method reveals that reducing initial fixed investment while increasing marginal investment inevitably leads to decreasing (or constant) returns—a conclusion of neoclassical economics. Conversely, expanding initial fixed investment while reducing marginal investment inevitably produces increasing returns, a conclusion of new growth theory.

The innovation model for research institutions and enterprises in the internet age primarily concerns environmental and systemic issues: the former equivalent to Buddha's palm, the latter to Sun Wukong. The core focus is strengthening and optimizing to cultivate world-class research institutions and enterprises with international competitiveness.

This demonstrates that free public platform services combined with paid hierarchical services have become a sustainable development strategy for professional libraries—namely, an enterprise-style service operation management model.

2. User Mechanism for Intelligence Products

2.1 Defining Intelligence Benefits

Intelligence benefits refer to the effects and impacts of intelligence on users. Value is defined as the attribute of something to satisfy human needs. Discussing intelligence value requires clear objects and conditions: intelligence possesses absoluteness in having the same value for any observer, while simultaneously exhibiting absoluteness in having different values for different recipients.

Intelligence value can be calculated as the difference between the benefits gained from using intelligence and the losses incurred from not using it. Alternatively, it can be computed by multiplying the average time required for researchers to collect, analyze, and organize information to produce intelligence by the researchers' hourly compensation rate.

2.2 Conditions for Realizing Intelligence Benefits and Operational Zones

During the interaction between intelligence and users, intelligence fulfills its functions while users exhibit varying degrees of “absorption responses” and even engage in recreative activities that add value to information, intelligence, or knowledge. The benefits derived from the same intelligence differ across users, depending on their reactions and absorption levels.

The user mechanism for intelligence engagement can be summarized as a process of receiving, comprehending, and absorbing intelligence, expanding knowledge, guiding behavior, and creating new intelligence. The central link is intelligence absorption.

Assuming user-led determination of intelligence benefits, the conditions for realizing such benefits (excluding indirect transmission control behaviors) depend on: user concern for intelligence; user comprehension of intelligence; the degree of influence intelligence exerts on users; user expectations for intelligence benefits; similarity between user work and intelligence producers' work; and the actual degree of user work' s need for intelligence.

Based on these conditions, users can be classified into six levels: zero-level, low-level, intermediate, advanced, and 特级 (special-grade) users. Generally, transmitting intelligence to intermediate-level and above users readily yields the following effects and outcomes: stimulating user thinking; altering user knowledge structures; assisting user decision-making; guiding user behavior; and serving as a source for various user activities. These represent not only the manifestation forms of intelligence effects and benefits but also potential design objectives for intelligence service activities—consciously enhancing service effectiveness and relevance. From a pragmatic perspective, they constitute essential conditions for realizing intelligence benefits.

Following the market economy principle of benefit maximization, the core of an

information service provider' s plan involves two aspects: first, timely intervention and exit from the information (knowledge) service process—determining at which point on the knowledge curve to purchase how much time for information and knowledge aggregation (the time/money/information curve follows an S-shaped structure, demonstrating the inefficiency of collecting information too early or too late); second, optimizing the collection space of the information system and identifying the most effective information territory or domain for a specific information product.

Information territories can be distinguished into five zones (1 as outer ring, 2 as secondary, 3 and 4 as subsequent, 5 as solid core): (1) Electronic information—the first and most accessible layer, increasingly abundant over time, obtainable through computers and network databases with simple operational training. (2) Paper information—if information cannot be found electronically, the next layer is paper domain. Not all paper information can be found electronically, and paper sources are becoming increasingly scarce and difficult to search. (3) Conversation—vast amounts of information in our scientific and commercial activities are obtained and transmitted through conversation, mostly unrecorded and unsaved. Though difficult to quantify, this domain contains extremely valuable information, termed early-warning or unofficial authentic information, often learned before official release. Collecting and detecting this domain can be complex yet necessary. (4) Gray information zone—between conversation and patent/confidential information exists a crucial intermediate zone called the gray information territory. It contains recorded and technically accessible information that cannot be obtained through conventional means, awaiting requests and discovery. Accessible from any of the three outer zones but never found without effort, this information truly exists only for those who know or have found it. (5) Patents and confidential information: (omitted) It is often possible to infer deep dynamics of institutions or companies through public domain research, thereby mapping forthcoming achievements, profits, markets, or product concepts.

Theoretically, mining and developing zones 3, 4, and 5 should be more meaningful. Practically, zones 3 and 4 remain difficult “nuts to crack” (though many start from zones 1, 2, and 5).

2.3 Benefit Detection Process

From a complex external evaluation perspective, qualitative and semi-quantitative combined assessments are primarily employed, covering five aspects: (1) Effectiveness detection of intelligence (knowledge) on user thinking; (2) Effectiveness detection of intelligence in altering user knowledge structures; (3) Effectiveness analysis of intelligence on user decision-making; (4) Detection of actual effects after user intelligence utilization; and (5) Estimation of user satisfaction with intelligence.

These require meticulously designed intelligence service content and the estab-

lishment of systematic institutions and frameworks for detailed documentation of intelligence service processes. Satisfaction estimation emphasizes service attitude and process factors rather than solely functional benefits derived from intelligence services.

From a singular internal evaluation perspective, individual or team choices fall into four categories: no value and no meaning, valuable but meaningless, meaningful but without value, and both valuable and meaningful. Choices must comply with legal regulations and social moral baselines, meeting both higher-level departmental requirements and global industry development trends. Public performance evaluation should dominate to achieve unity between public benefit and efficiency objectives.

3. Performance Display of Libraries and Knowledge Learning Centers

3.1 Knowledge Learning Center

Theoretically, the knowledge learning center represents an expanded service form of library functions. The transformation from smart services to knowledge learning centers shifts from abstract service concepts to concrete service processes and content with knowledge value-added (perception and evaluation).

3.2 Benefits of Real-World Smart (Knowledge Learning) Services

Under the dual influence of the knowledge economy and network environment, the smart service concept represents the optimal professional philosophy for maximizing library value. Emphasizing knowledge management and information value-added, this concept can transform library management models and advance the socialization of library services. Establishing libraries and knowledge learning centers constitutes an important component of smart city construction, capable of assuming educational and training responsibilities for elevating knowledge from poverty to wealth and character from wealth to nobility.

3.3 The Process of Record Anchoring

The vast amount of information in daily life prevents accurate judgment, often subject to anchoring effects. When making judgments and decisions about events, people are frequently influenced by their own knowledge, experience, others' suggestions, and various information about the event itself. These influences act like anchors sinking into cognition, causing judgment results to adjust toward these anchor points with non-objective bias, ultimately leading to decision deviations. As a pervasive judgment bias phenomenon in life, anchoring effects are powerful, and in most cases, people cannot avoid being influenced.

Therefore, the process of recording service value holds significant meaning for user judgment and decision-making.

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

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