Demand-Oriented Social Work Practice Logic

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Abstract. The advancement and development of social work in China rely heavily on government policy support and resource investment. Currently, social work services are primarily promoted through government-purchased services, which essentially cater to the needs of grassroots government innovation in social governance. This has gradually led to a top-down, one-way supply of social work services, where residents passively receive services. This model often overlooks the actual needs of service recipients, resulting in issues such as repeated services for the same recipients, a focus on process rather than outcomes, superficial intervention, and ineffective services, thus wasting resources and diminishing the professionalism of social work. Technological innovations, such as the internet and artificial intelligence, have deeply integrated into people's behavioral patterns, leading to increasingly diverse, personalized, and complex demands from residents. These heightened demands place greater pressure on social work services while the accumulation of substantial livelihood data provides an opportunity for the development of social work. Based on recent practical explorations and abundant case studies concerning livelihood data, this paper explores the use of such data to transform service logic, with residents' needs as the starting point for all services. It proposes a demand-oriented approach at each stage of social work services, including demand perception, identification, provision, and evaluation, to establish a demand-oriented social work practice logic.

Keywords: Social governance, Social work, Demand orientation, Livelihood data

1. Introduction

The 20th National Congress of the Communist Party of China has outlined a grand blueprint for the new phase of Chinese modernization, calling for the acceleration of the construction of a new development pattern, promotion of high-quality development, improvement of people's well-being, and enhancement of the quality of life. These new requirements are directly related to social work, which aims to assist vulnerable groups, promote social fairness, and maintain harmony and stability. The concept of "advancing the great rejuvenation of the Chinese nation through Chinese-style modernization" provides vast prospects and space for the professional advantages of social work while also placing new demands on it, giving social work a higher historical mission and objectives [1].

In recent years, with the vigorous promotion of the Party and government, the professionalization and vocationalization of social work have progressed rapidly. Since the reform and opening up, with the rapid development of the economy and changes in social structure, the needs of society have become increasingly diversified, leading to a growing demand for professional social services. Social work has thus entered a stage of professional development. Unlike the long-standing independent development path of Western social work, social work in China, since its restoration, has been characterized by strong government leadership [2]. Due to policy preferences and interest-driven factors, traditional policy-making and public services have lacked the ability to perceive and respond to the real needs and satisfaction of residents. In particular, issues such as long data acquisition cycles and the disconnection between policymakers' perceptions and residents' lives have gradually led to a top-down, one-way supply model where residents passively accept services. Under this model, government-purchased social work services face problems such as inaccurate targeting of service recipients, low service efficiency, and resource waste. For social work services to be effective, they must focus on addressing residents' needs. With the use of big data, the internet, and other information communication technologies, the question of how social work can leverage data to transform its service logic and shift towards a demand-driven approach in the intelligent era, in order to provide precise and high-quality services, is an important and practical issue to address.

2. Practical Representation: Supply-Oriented Social Work

Social work, as a profession, has specific connotations. It is a field in which professional social workers, guided by altruistic values, use specialized knowledge and theories to provide services aimed at helping service recipients solve problems and improve their environments, thereby achieving harmonious coexistence between people and their surroundings. Since the restoration of sociology in the 1980s, social work has undergone a process of professional construction under institutional empowerment [3]. Initially, the focus of social work development shifted from training applied talents to meet the needs of the market economy, to promoting the construction of a socialist harmonious society, and now to participating in and innovating social governance practices [4]. However, the development capacity of social work remains weak, and under a supply-oriented approach, it inevitably leads to issues such as high repetition rates of service recipients, homogenization of services, and difficulties in highlighting the effectiveness of services.

2.1. The Inevitability of Supply-Oriented Social Work in Historical Context

By reviewing the development process of social work, it is clear that the promotion and development of social work cannot be separated from government policy support and resource investment. In the field of social work education, since the restoration of social work as an academic discipline in 1987, its development has remained in the education-driven phase, gradually establishing a standardized academic system [5]. However, there has been a lack of practical fields and professional positions. It was not until 2006 that the central government, in response to the need for building a harmonious society, made the significant strategic decision to "build a large social work talent pool," prompting many cities to open policy windows from the top down [6]. This marked the beginning of social work entering a fast track, with professionalization advancing continuously. In 2012, the Third Plenary Session of the 18th Central Committee proposed "promoting the modernization of the national governance system and governance capabilities," shifting the focus of social work to participation in and innovation of social governance practices. The Ministry of Civil Affairs clarified the norms and procedures for the government purchasing social work services, with social work agencies relying on government purchase agreements to provide social service projects. These agencies design service goals, formulate service plans, and implement social work services according to community requirements. In 2020, the nationwide promotion of social work stations at township (or street) levels began[7], with full-time social workers taking on specialized roles, integrating professional forces into grassroots governance frameworks. With the national policy advocacy and local institutional innovations, social work gradually gained institutional identity and a professional practice field.

2.2. Deviation in Professionalism: The Bottleneck of Social Work Development under a Supply-Oriented Approach

Policy support and institutional innovation have promoted the development of the social work profession, but they have also shaped a skewed approach to social work services at higher levels [8]. Essentially, this approach is designed to meet the needs of grassroots government innovation in social governance, but in doing so, it has lost the driving force to address the needs of the people. Under a supply-oriented, top-down service provision model, the real interests of service recipients are often considered secondary. This deviation from a demand-oriented approach tends to result in a large number of social service projects hovering over problems without addressing them effectively, leading to issues such as a relatively concentrated service recipient group, service content homogenization, and difficulty in highlighting the effectiveness of services. As a result, these services fail to truly meet the needs of recipients, impacting the sustainable development of social work and the overall well-being of society.

First, the concentration of service recipients. Due to the complexity and diversification of modern society, people's needs have been increasing, leading to the emergence of various types of social organizations and social work institutions. This has resulted in a certain degree of blind spots and repetition in the selection and distribution of service recipients, with most services concentrating on groups such as the elderly, women, and children. Some service recipients may simultaneously receive services from multiple different organizations and institutions, or the same institution may conduct multiple community activities, but participants are often "familiar faces." This repetition of service recipients can lead to wasted service resources and weakened service effectiveness. Additionally, as social service provision becomes increasingly market-oriented, the number of staff and time available at social work agencies and social organizations is limited. Guided by a logic of "efficiency first," these institutions aim to optimize resource use and maximize benefits. As a result, when selecting service recipients, there is often a practical consideration: individuals who actively participate, are highly motivated, and are less demanding become the preferred targets of service, while those who truly need assistance are often neglected or insufficiently addressed. This is one of the reasons for the repetition of service recipients, which further diminishes the relevance and precision of social work services.

Second, homogenization of service content. There are many reasons for the homogenization of social work service content. First, it is due to the standardization and patternization of social work services. Social work practice often focuses on technical and operational aspects, with fixed work models and methods. When the government purchases services, social work agencies plan service goals and services based on service demand benchmarks. While executing specific services according to the established plan, they also need to consider service evaluation standards. Some social workers tend to adopt standardized and patterned services, simply transmitting service content, which leads to overly simplistic services that lack creativity. Second, there

is the "inertia of demand." On one hand, this is reflected in the "inertial thinking" of government departments in grasping people's needs, which impacts the specific practice of social work. Social work services in China are heavily influenced by administrative practices, with clear boundaries between government and market responsibilities. Administrative departments usually base their selection of social service demands on initial understandings and motivations, continuing to choose the same service projects or service groups, thus generating inertia in demand. This results in a lack of innovation in social work services. On the other hand, inertia is also reflected in social work practice itself. Social workers continuously integrate theory with practice, and as practical work accumulates, experience becomes richer. However, this may also lead to inertia in the demands of similar types of service recipients, where social workers neglect the true individual needs of service recipients and construct their needs based on subjective experience. In services at different stages, there is often a tendency to assess and intervene repeatedly based on these constructed needs [9]. Third, there is a failure to account for the complex and ever-changing nature of the practice field. Social work is a profession that directly addresses social problems and human needs, and the complexity and variability of practice situations make the flexibility and adaptability of social work services especially important. However, sometimes institutions or social workers may place too much emphasis on established service models and methods, neglecting the influencing factors within a changing practice field. This leads to homogenization of service content and undermines the actual effect and quality of the services. Social workers need to embed themselves in the context of the service recipients' environment and respond to their needs. They cannot remain at a single level but should link different levels of complexity to construct the overall context of the service recipients' situation. Effective social work practice involves the interweaving of multiple contextual practices, rather than a singular behavior within a single context [10]. Moreover, some social work services focus too much on activities and form, neglecting the substance and core of the service content, which leads to services becoming formalized and hollow, failing to meet the real needs of service recipients.

Third, Difficulty in Highlighting Service Effectiveness. Although social work agencies and organizations are committed to providing social welfare and helping vulnerable groups, in some cases, the effectiveness of services is not significant. On one hand, the irrational allocation and utilization of service resources lead to insufficient quality and coverage of services. On the other hand, some social work services only address surface-level problems, and the activity-oriented nature of social work services causes the services to remain superficial, failing to uncover and resolve root causes. Even in cases where service recipients repeatedly receive services, the fundamental issues are not addressed. Government-purchased social work services help promote the institutionalization and marketization of social work services. However, the "result-oriented" principle and performance-driven thinking, in their pursuit of tangible benefits, make it difficult to ensure the actual effectiveness and long-term impact of services [11]. Additionally, the low effectiveness of services is also related to the lack of initiative and participation among service recipients. They may not have sufficient understanding or awareness of the services, or may lack a proactive attitude and action regarding the issues at hand. The lack of autonomy among service recipients, combined with the selective nature of social work agencies in choosing recipients, leads to a lack of precision in the services, making it difficult to ensure the effectiveness of social work.

3. Comparative Analysis of Supply-Oriented and Demand-Oriented Practice Logic

With the widespread adoption of internet technology, the integration of virtual and physical spaces has become increasingly flexible. Personal information, behavioral habits, opinions, and various other data inevitably leave traces in the digital space, generating vast amounts of data with significant utilization potential. Data related to medical care, education, employment, elderly care, and other personal matters constitute livelihood data, which is a critical resource closely connected to people's lives. The development of livelihood data aligns with the digital economy trend and the inevitable need for individuals to construct digital identities, offering ample opportunities for demand-oriented social work practices.

To address the current challenges in the development of social work, this paper proposes a demand-oriented social work practice model that integrates livelihood data. By leveraging the value of livelihood data, the model places the needs of service recipients at the core of selecting service providers, determining service recipients, supplying service content, and choosing service methods. This approach aims to transform the traditional supply-driven logic of social work practice and overcome the bottlenecks in social work development. Compared to supply-driven social work practices, demand-driven practices emphasize collaboration among multiple entities and integration of all relevant resources into a resource supply system. In supply-driven social work, the government plays a leading role as the primary source of funding, making decisions based on its own preferences, intuition, and subjective experience. It creates project lists and purchases social work services. Social workers, in turn, serve as the deliverers of services, with the professional strength of social work itself being weak and largely dependent on government resources. Social workers design sub-goals based on the overall goals set by the government and provide services accordingly. In contrast, demand-driven social work emphasizes the inclusion of various stakeholders, integrating resources to create a collaborative system. When determining service recipients, supply-driven practices rely on traditional methods, selecting individuals based on service experience, regardless of whether the recipients truly need the service. Demand-driven practices, however, prioritize demand surveys, ensuring that service recipients are selected based on actual needs. Regarding service content and its foundation, supply-driven practices often involve repetitive and homogeneous content, operating in cycles and focused on events tied to holidays. The activities tend to be similar in nature, lacking innovation. In contrast, demand-driven practices emphasize personalized services based on the needs of service recipients, with more diverse and tailored offerings. In terms of service delivery, supply-driven

practices are top-down, one-dimensional, and prescriptive. Events are organized first, and service recipients are attracted to participate. On the other hand, demand-driven practices focus on categorizing needs in detail and providing precise services, while fostering interaction between service recipients and providers, continually improving service quality. As for service outcomes, supply-driven practices struggle with issues such as a lack of professional social workers, relying instead on community staff and volunteers, who are often not professionally trained. The overall quality of service providers is low, and the approach of "finding service recipients based on services offered" overlooks the basic needs of service recipients. This makes it difficult to guarantee service quality, and the pressure of mid-term evaluations and project completion assessments often leads to crude service delivery, with a focus on activities that fail to meet actual needs, ultimately leading to ineffective results. In contrast, demand-driven practices start from the needs of the service recipients, maximizing the value of supply resources and meeting the growing and diverse needs of service recipients.

Table 1. Comparison of Two Practice Logics

	Supply-Oriented Social Work Service Practice	Demand-Oriented Social Work Service Practice
Service Providers	Social workers, government staff, volunteers	Government, market, and other diverse entities
Source of Service Recipients	Determined based on service experience	Actively mining needs based on livelihood data to identify service recipients
Basis for Service Content Provision	Pre-designed according to the project	Based on the needs of the service recipients
Service Content	Repetitive, homogeneous	Diversity, precision
Service Methods	Unidirectional, instructive	Equal interaction, precise supply
Service Effectiveness	Superficial, minimal actual impact	Meeting the real needs of the service recipients

4. Moving Towards a Demand-Oriented Social Work Practice Logic

With the support of information technology, the explosion of data and the continuous growth of data content have led to a new social form characterized by the digital transformation of various sectors and fields. People are increasingly disengaging from traditional communities and immersing themselves in fluid and virtual spaces constructed by digital technologies [12]. The widespread and frequent use of digital production has become the foundation for the operation of both the economy and society [13]. Social work must fully leverage the convenience provided by digital technology and explore ways to use livelihood data to deliver professional social work services more efficiently and promptly. The foundation for effective social work services is the satisfaction of the service recipients' needs. Integrating these needs into every stage of social work services enables the transformation from a supply-oriented to a demand-oriented social work practice. By combining various stages of social work, such as case reception, estimation, planning, intervention, evaluation, and follow-up, with the collection, transmission, storage, mining, processing, and application of livelihood data, the focus is placed on the needs of the residents. The process is summarized into four phases: demand perception, demand positioning, demand supply, and demand evaluation.
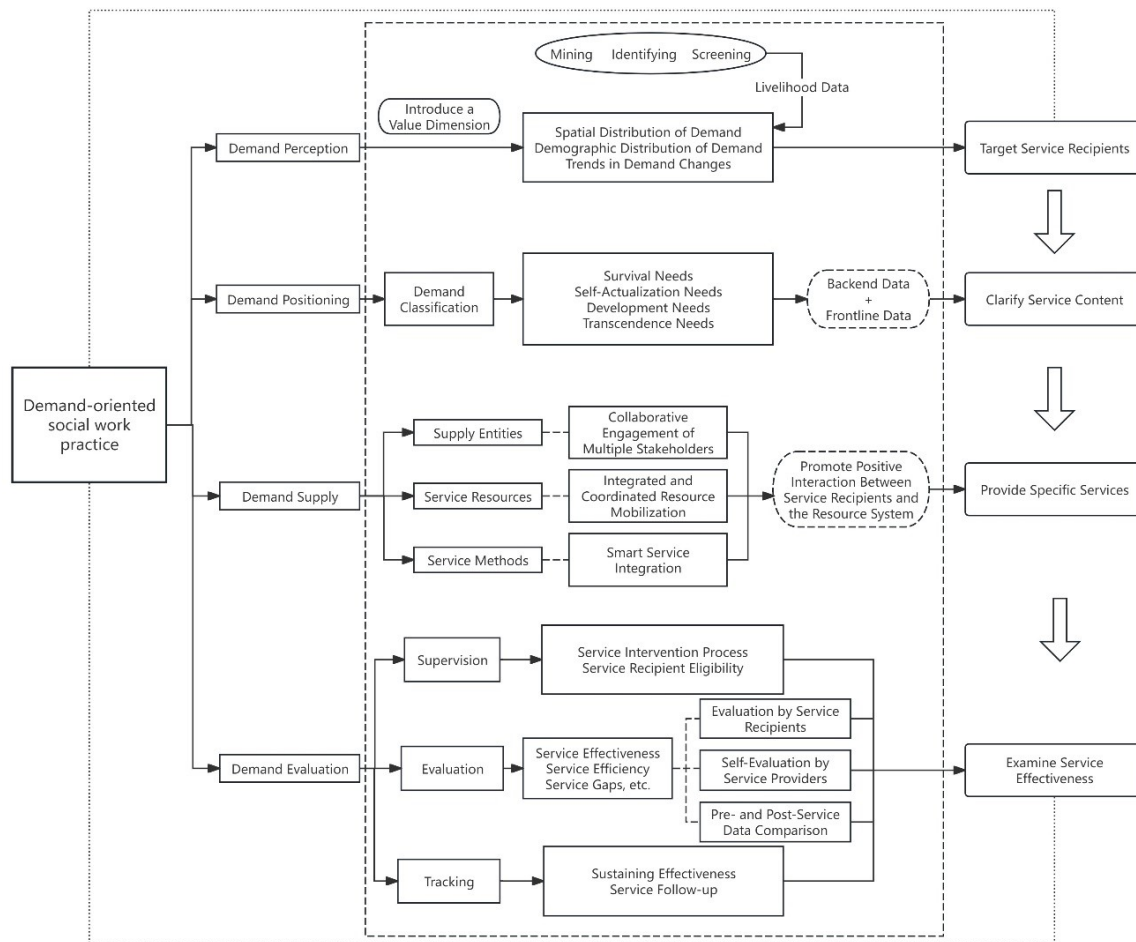
Figure 1. Flowchart of Demand-Oriented Social Work Practice

4.1. Demand Perception: Targeting Service Recipients

The existence of demand is the prerequisite for effective supply, and perceiving the demand is the first step in delivering services. The provision of effective social work services depends on accurately understanding the service recipients' needs. The vast amount of livelihood data generated makes it easier for social work to perceive these needs. With the widespread application of information technology, using data as an intermediary to understand and transform the world has become possible. Digital technology is an embedded tool with ideological biases, promoting one way of constructing the world over another, or attributing higher value to certain things [14]. When digital technology is applied to social governance, attention must first be paid to the value orientation of the governing entities. When utilizing livelihood data, which covers information such as geographic locations, personal experiences, social relationships, and societal emotions, the introduction of a value dimension is necessary. The human-centered approach should shift the focus from serving social governance to serving the public, transforming the mindset from a top-down to a people-first service model.

By leveraging digital technology to mine, identify, and filter key demands in livelihood data—such as demand hotspots, spatial distribution, group distribution, and demand trends—social work can improve service efficiency. On one hand, the demand can be judged based on clearly expressed network information from potential service recipients. For example, the 12345 government service hotline data directly reflects the public's demands. As a "direct channel" through which the public can voice their concerns, the hotline covers a wide range of issues, including daily living matters like housing, food, and transportation, ensuring that the collected data is genuine due to its bottom-up, passive collection method. By using hotline data, social work practitioners can identify high-demand areas based on the volume of requests, understand the spatial distribution of demands through concentrated issues in certain regions, and analyze the satisfaction level with existing services by tracking demand trends. Apart from issues such as property management, real estate transactions, and consumer rights protection, which are commonly addressed, the hotline also deals with social issues that are crucial to social work, such as reemployment for unemployed individuals, school enrollment for children from poor families, and community rehabilitation for people with disabilities. By adhering to confidentiality principles, the data collected can help identify and personalize the needs of service recipients and provide tailored services. On the other hand,

data mining from relevant information can also uncover and identify demand patterns. Given that the behavior and demands of internet users often follow an inherent logical consistency, mining user behavior data from the internet can also help identify needs. Livelihood data is not only abundant in quantity but also contains complex data structures with multi-layered information. The integration of multiple information systems can provide a comprehensive view of user characteristics, allowing for precise identification of service recipients based on their needs. For example, previous studies have used LBS (Location-Based Services) data, POI (Points of Interest) data, and urban land use data to map urban population profiles and reflect behavioral patterns [15]. Additionally, studies have used data from smart elderly care platforms to build profiles of elderly users, predicting their actual service needs [17]. Digital technology, as a revolutionary communication tool, enables information to transcend time and space, allowing for the creation of digital portraits of populations. By perceiving real needs based on behavioral patterns, digital technology makes social work services more targeted and effective.

4.2. Demand Positioning: Clarifying Service Content

After perceiving the existence of demand, it is necessary to precisely position and clarify the demand in order to define the service content. The key to establishing a sound demand positioning mechanism is to classify the demand and identify the target service groups. Public demands can be categorized into survival needs, development needs, self-actualization needs, and transcendental needs to identify the service population. First, identify the population whose basic survival needs are unmet. For groups with non-basic survival needs, further classify them into those with development needs (those seeking a certain social status and role to improve their quality of life), self-actualization needs (those striving to fulfill their potential and achieve a higher vision during development), and transcendental needs (those going beyond personal interests and real-life conditions). These categories serve as the basis for prioritizing services. For instance, the Dynamic Monitoring Information Platform for Low-Income Populations in Guangdong Province targets low-income individuals by providing assistance and monitoring. To determine the target population and service scope, the platform relies on the Guangdong Province Basic Livelihood Information Verification Management System, which screens and identifies five groups of people: those eligible for basic social security, those facing extreme poverty, people living at the margin of basic social security, those at risk of returning to poverty, and other low-income groups. These individuals are incorporated into the dynamic monitoring service for low-income populations, covering over 4 million people across the province. By perceiving the basic survival needs of service recipients, the system identifies service targets and categorizes them according to levels of need, such as people at the margin of basic social security, those eligible for social security, and individuals in extreme poverty. Services are then provided accordingly, including basic livelihood assistance and support for people in extreme poverty. While the government offers essential livelihood assistance, social work can play a supplementary role by further subdividing the needs within the low-income list. Social work services can be tailored to provide professional services beyond economic aid, such as enhancing employment skills or improving information retrieval abilities. This not only saves time, human, and material resources but also ensures the accuracy of target selection and the precision of service provision.

It is important to note that the data that supports this information is often incomplete and cannot cover all the details of every service recipient's information [18]. Additionally, there is a time lag between the recording of livelihood data and its subsequent use for demand perception and positioning. Therefore, while using data to perceive and position needs, offline research is also necessary to identify and filter these needs. The combination of online and offline approaches, compared to traditional methods of providing social work services, reduces the time needed to select service recipients and improves the efficiency of understanding service demands.

4.3. Demand Supply: Providing Specific Services

The key to service supply lies in utilizing livelihood data to establish a sound demand-supply mechanism. After determining the service recipients and their needs, the key elements in providing specific services include the service provider, service resources, and service methods. All three elements are indispensable, together forming the resource system for the service recipient and driving the resolution of their problems and the fulfillment of their needs. First, in terms of the service provider, it is important to promote the joint participation of multiple stakeholders. The effective delivery of social work services relies on the collaboration of social workers, social organizations, the government, and other entities. For example, helping the children of low-income families attend school not only requires social workers to provide professional services, but also the cooperation of community organizations, streets, schools, and other relevant stakeholders to achieve a common goal. Second, in terms of service resources, the focus is on integrating and coordinating available resources. While clarifying the participants involved, social workers play the role of resource linkers, identifying all available resources, integrating and coordinating them to form a resource system that matches the service recipient's needs. Third, in terms of service methods, emphasis is placed on the positive interaction between the service recipient and the resource system. Establishing personal records for service recipients and selecting the best methods for delivering services can promote a healthy interaction between the service recipients and the resource system, ensuring a positive feedback loop in demand supply.

Livelihood data itself has asset-like properties, and social workers can mine relevant resources that can be utilized to facilitate multi-stakeholder collaboration, resource integration, and the provision of intelligent services. Personal records can be established

for service recipients, documenting basic information, service needs, service records, etc., with information shared among various service entities to avoid gaps in participation and fragmented service supply. For instance, in the field of elderly social work, some social workers have proposed intelligent elderly care service models, utilizing artificial intelligence technology. These models connect with resources from the government, market, and other social sectors at the front-end, while the main integration focuses on elderly groups, service institutions, and other service demand information. This technology-based approach assists in the daily lives of the elderly and enhances their ability to self-manage their care [19]. For example, in medical assistance, various medical sensors can be used to collect data on the elderly's blood pressure, heart rate, sleep patterns, etc., to assess their physiological health needs. Artificial neural networks, support vector machines, and other methods can be employed to predict the elderly's mental health needs. Health monitoring and disease warning systems can be based on changes in this data. For economically disadvantaged patients, social workers can link with government entities to apply for social welfare subsidies, use online platforms to raise funds for them, and also engage media or institutions to connect relevant companies, charitable foundations, and other organizations, providing related assistance to the service recipients. Based on a precise understanding of the service recipients' needs, the service process is documented, and service strategies are adjusted in real time based on feedback. This ensures information sharing among multiple supply entities and the complementary capabilities of resources, collectively fulfilling the service supply process.

4.4. Demand Evaluation: Examining Service Effectiveness

Demand evaluation primarily includes supervision, assessment, and tracking. Supervision runs throughout the entire service process, involving not only the oversight of the service itself but also ensuring that the service recipients meet the criteria to receive the services. As services are provided, the demands of the service recipients, identified and selected through livelihood data, continuously change. The entire service process is electronically recorded, allowing for a clear understanding of the effectiveness of each service stage and the changes in service recipients. When the needs of a service recipient have been met, they are promptly removed from the service list, ensuring that limited resources are efficiently utilized for those who truly need them. For example, the "Smart Government Integration" platform established in Chongqing allows for retrospective tracking of responsibilities once data is uploaded. This platform not only supervises the service process but also uses data comparison to identify cases where individuals in a certain town use multiple documents to repeat their insurance enrollment, thus canceling their eligibility for services. The Guangdong Livelihood Data Verification System also plays a supervisory role, re-checking service recipients and issuing alerts for those who do not meet the eligibility criteria for assistance, canceling their access to support. Assessment refers to the conclusion reached after analyzing the entire service practice. It constitutes the main part of demand evaluation. The evaluation covers aspects such as service effectiveness, service efficiency, service gaps, the interaction between service providers and recipients, participation rates, and other related factors. The evaluation is based on feedback from service recipients, self-assessments from service providers, and data comparisons before and after the service, collectively forming a comprehensive evaluation of the service. The overall effectiveness of the service can be understood through multiple feedback channels. For services where the recipients' needs have been effectively met, the experience is summarized, and typical or representative cases are selected for case studies and promotion. For services that failed to meet the service goals or did not effectively satisfy the recipients' needs, the reasons are analyzed and the service direction is promptly adjusted. This process is similar to action research, following stages such as analysis, action, observation, evaluation of the action's effectiveness, and reflection [20]. Based on the existing data and feedback, the service content is promptly modified and supplemented to ensure service effectiveness. After the service concludes, the data enters the tracking phase. Service recipients' demand is monitored for a period of time after the service to check if their needs have truly been met or if new demands have emerged. This helps determine whether follow-up services are necessary. Relevant information is entered into the personal file for future service surveys and preparatory work.

5. Conclusion and Discussion

Chinese-style modernization focuses on the modernization of the people. The demands of the people are the driving force behind the acceleration of modernization and the essential requirement for upholding the principle of putting people first. The core of demand-oriented social work practice logic is to start with the needs of service recipients, utilize the resources and value contained in livelihood data in the digital era, perceive the demands of service recipients, clarify the service content, provide services through resource sharing and complementary efforts from multiple stakeholders, and finally conduct demand evaluation to examine the effectiveness of the services. This forms a complete service practice loop. While fully utilizing service resources, enhancing service efficiency, and ensuring service quality, it is also of great significance in genuinely addressing the needs of service recipients. However, two issues still need further consideration: the legality of data usage and the protection of the privacy of service recipients. Livelihood data encompasses a wide range of information, including biological data, behavioral data, and attitude data, with most of it being controlled by government departments. When public sector data is shared and cooperated with society and the market, how to define the boundaries of data sharing and usage, and how to ensure the data is used for public service purposes, are critical issues to ensure the legality of data utilization. In the era of the internet, individuals produce a massive amount of behavioral data, yet they have no corresponding rights to manage this data. For the general public, the process of data collection and utilization is

a "black box" that is difficult to open. How individuals can protect their privacy [21], how to prevent data leakage, and how to address information security risks and threats remain issues that need further exploration.

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