

Convenient and Caring Kitchen—An “Internet Plus” Medical and Livelihood Catering Service Station

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Abstract

This study explores the innovative model, developmental significance, and implementation timeline of the "Convenient and Caring Kitchen," a catering service station based on the "Internet Plus" framework within the realm of medical and livelihood services. By analyzing the project's background, service offerings, operational mechanisms, sustainability, as well as potential risks and corresponding countermeasures, this paper highlights the project's potential and value in enhancing medical support services and improving public well-being. The findings aim to serve as a reference for research and practical applications in related fields.

Keywords

Medical and livelihood services; Internet Plus; medical support services; self-service kitchen.

1. Research Background and Societal Challenges

1.1. Societal Issues

In contemporary China, the uneven distribution of medical resources and the inadequacy of supporting services have become increasingly prominent challenges. This issue reflects the difficulties of healthcare system transformation and represents an urgent social problem that requires immediate attention and resolution.

1.1.1. The Uneven Distribution of Medical Resources

The imbalance in regional allocation of medical resources has led to a concentration of high-quality healthcare facilities in large public hospitals located in provincial capital cities. This, in turn, has resulted in a “siphon effect,” where patients from across the country flock to major cities and large hospitals for medical treatment. [1]

The centralization of medical resources in provincial capitals is primarily driven by the presence of well-established medical infrastructure, abundant healthcare resources, and a high concentration of medical professionals and investments. Additionally, the relatively advanced economic conditions and development opportunities in these cities further attract both healthcare talent and patients.

However, this concentration of resources exacerbates the siphon effect, leading to overwhelming patient inflows in large urban hospitals. Consequently, these hospitals face an increasing patient load, resulting in prolonged waiting times, soaring medical costs, and insufficient medical support services. [2]

1.1.2. Inadequate Medical Support Services

Despite the concentration of medical resources in large cities, China's vast patient population and the limited number of qualified healthcare professionals create immense strain on the healthcare system. For instance, statistics indicate that in the Guangxi Zhuang Autonomous Region, there are only 2.75 physicians per 1,000 people and 6.74 hospital beds per 1,000 people.

On one hand, healthcare workers struggle with inadequate rest and meal provisions. Due to excessive patient loads, many medical professionals work extended hours, often sacrificing their own rest. Hospital cafeterias, however, may not always provide sufficient meal options, as they typically offer a limited selection of dishes with mild flavors, which may not cater to the diverse dietary needs of medical staff.

On the other hand, family members of patients often bear the burden of supplementing medical support services, leading to the prevalence of "companion caregiving." In many families, a member may need to give up work or other responsibilities to stay with and care for the patient, creating a significant financial and emotional burden.

1.1.3. Challenges in Meeting the Personalized Needs of Patients and Their Families

For caregivers who accompany hospitalized patients, specialized dietary requirements pose a significant challenge. Some patients may have specific nutritional needs that hospital cafeterias cannot accommodate, or they may simply prefer home-cooked meals. Consequently, family members often resort to purchasing food from nearby fast-food restaurants, which can be costly and nutritionally inadequate.

Moreover, caregivers must juggle multiple responsibilities, including transporting the patient, purchasing food, and managing daily affairs. Given the limited hospital space and the high demand for hospital beds, caregivers often lack proper rest areas equipped with essential amenities such as mobile phone charging stations and temporary relaxation spaces.

1.2. Market Prospects

1.2.1. National Emphasis on Innovation and Entrepreneurship in the Service Industry

The National Development and Reform Commission (NDRC) issued the *Outline for the Innovative Development of the Service Industry (2017–2025)*, emphasizing that comprehensive reforms, expanded openness, and the rule of law are injecting new momentum into the development of the service sector. [3] The continuous increase in urban and rural residents' incomes, along with consumption upgrading, provides immense potential for the expansion of the service industry. The simultaneous advancement of industrialization, digitalization, urbanization, and agricultural modernization has significantly broadened and deepened the scope of service industry development. Additionally, new service sectors, such as eco-friendly services and elderly care, are rapidly emerging.

Considering these trends, China's service industry is currently in a critical period of opportunity. To align with this trajectory, it is essential to respect market principles, leverage national conditions, and shift traditional mindsets. The focus should be on deepening reform, fostering a conducive development environment, and stimulating societal momentum for service industry innovation. These efforts will drive industrial upgrades, enhance public welfare, and strengthen economic growth, ultimately advancing China toward a new era of service-oriented economic development.

As an innovative catering service within the medical support sector, the *Convenient and Caring Kitchen* aligns with the government's policy priorities. By leveraging national support for service industry innovation, integrating unique business models with emerging local market demands, and developing innovative service solutions, this initiative has significant potential to provide convenient and patient-centered services for both medical staff and patients.

1.2.2. Increasing Market Demand for Specialized Medical Support Services

The global rise in aging populations and the growing prevalence of chronic diseases have created an urgent demand for specialized and high-quality medical support services. According to statistical data:

In 2020, China had 2,749 tertiary hospitals, serving a total of 1.8 billion patient visits.

In other healthcare institutions (including secondary, primary, and unclassified hospitals), there were an additional 1.57 billion patient visits.

In 2021, inpatient services across medical institutions recorded 247 million hospital admissions and 246 million discharges, with 81.03 million surgical procedures performed.

These figures highlight a vast patient population with diverse and complex service needs. Consequently, there is a growing demand for specialized and personalized healthcare support services. A self-service kitchen could effectively address patients' dietary customization needs, alleviate the stress on medical staff, and reduce the caregiving burden on patients' families. This suggests a significant market opportunity and promising future prospects for self-service kitchen solutions in medical settings. [4]

Currently, self-service kitchen services remain a relatively underdeveloped market segment. While hospitals typically provide basic food and beverage services, dedicated self-service kitchen solutions are still rare. Given the limited competition, this sector presents an open market landscape where innovative service providers can establish a strong market presence and competitive positioning.

2. Project Development

2.1. Project Scope

Targeting hospital patients, medical staff, and local community residents, this project will be strategically located at the intersection of large general hospitals and residential communities. The chosen location ensures easy accessibility, allowing hospital patients, their families, and community residents to reach the facility within walking distance.

2.2. Service Offerings

To effectively implement the project, the services are structured into four main components:

Self-Service Kitchen for Hospitalized Patients and Their Families

A specially designed self-service kitchen will be provided for hospitalized patients and their caregivers, allowing them to prepare home-cooked meals. This service aims to enhance dietary satisfaction by enabling caregivers to cook personalized meals that align with the patient's tastes and nutritional needs, mitigating the monotony of hospital-provided meals. The project will offer kitchen space, stoves, cookware, seasonings, and cooking utensils. Fresh meat and vegetables can be either supplied by the project or brought in by the caregivers. Only a basic rental fee for kitchen space and equipment will be charged, ensuring affordability and convenience.

Meal Subscription Service for Medical Staff and Community Residents

A "three-meal subscription service" will be available, offering freshly prepared, nutritious home-style dishes. This service will utilize a small-portion, multi-variety format to cater to diverse tastes. Unlike typical restaurants or takeout services, this initiative will emphasize nutritional balance, freshness, variety, and completeness to address common issues associated with processed, high-fat, and high-sodium fast food. This ensures that medical staff can access healthy, ready-to-eat meals after work, patients and caregivers can enjoy nutritious meals, and community residents can have a convenient home-style dining option when they are too busy to cook.

Rest Area for Patients, Caregivers, and Medical Staff

A dedicated resting area will be established, equipped with ample seating, charging stations, and on-site food and beverage services. This space will serve as a comfortable waiting area for patients and their families, providing a place to relax, recharge, and dine while waiting for medical consultations or treatment.

Rental Services for Patient Care Equipment

To further enhance convenience, the project will offer rental services for foldable hospital companion beds and simple chairs/stools, facilitating overnight stays for caregivers attending to hospitalized patients.

2.3. Project Characteristics

Through comprehensive research and systematic analysis, the project has been identified as possessing the following key attributes:

Practical Feasibility

Market research based on media reports, healthcare service demand analysis, and food industry data confirms strong market demand for such services. Despite this demand, similar services remain scarce, making the project an innovative and viable solution. The project is designed from the perspective of patients, medical staff, and community residents, prioritizing accessibility and convenience, aligning with both market trends and contemporary societal needs.

Long-Term Sustainability

With increasing health concerns and chronic overcrowding in hospitals, the project's location and service offerings cater to high and consistent foot traffic. Food services represent an essential and recurring consumer need, ensuring a stable customer base and continuous revenue flow. The overarching goal is to establish a one-stop solution for convenient dining and self-service kitchen facilities, providing long-term benefits to hospital patients, medical staff, and local residents.

Innovative Approach

Leveraging 5G networks and digital technology, the project integrates online reservations, meal ordering, and e-commerce partnerships with agricultural suppliers to ensure efficient supply chain management and food quality assurance. By addressing a market gap and meeting the demand for specialized, high-quality services, the project introduces a technologically advanced and consumer-centric solution to the healthcare support industry.

3. Sustainability Analysis of the Project

3.1. Innovative Pathways for Hospital and Community Development from an Internet Perspective

Encouraged by national policies promoting the tertiary industry, mass entrepreneurship and innovation, and the "Internet+" strategy, this project introduces a novel pathway for hospital district and community development. By establishing the "Convenient & Caring Kitchen" as a one-stop dining service and self-service kitchen, the project aims to provide long-term convenience for hospital patients, medical staff, and community residents.

The integration of e-commerce agricultural suppliers and relevant production enterprises within the project underscores the sustainability and vitality of its industrial chain, ensuring the long-term viability of the initiative. Hospital districts, as key urban and rural hubs, offer a strategic foundation for this "Internet+"-driven development model. Leveraging digital platforms for promotion and service delivery, the project maximizes the role of hospital districts in enhancing social welfare and economic benefits.

Moreover, the replicability and scalability of this initiative make it applicable beyond hospital districts. A case in point is Jiangxi's "Anti-Cancer Kitchen", a public-benefit initiative that has provided long-term convenience to patients and their families. The "Convenient & Caring Kitchen" project, built upon similar principles, offers an innovative blueprint for hospital district and community development.

3.2. Enhancing Public Welfare and Strengthening Project Sustainability

The "Convenient & Caring Kitchen" contributes to public welfare by alleviating the financial and emotional burden on patients and their families. Through multi-channel promotional efforts, the project generates both direct and indirect consumer engagement, attracting increasing public attention and fostering long-term investment for continuous optimization.

By addressing dietary challenges faced by patients and caregivers in hospitals, the project significantly enhances their dining experience and overall well-being. Additionally, the establishment of rest areas and rental services helps mitigate overcrowding issues in hospital districts. The project also aims to collaborate with hospitals, integrating hospital staff meal plans and specialized patient nutrition services, further expanding its impact.

As a pioneering service model, the "Convenient & Caring Kitchen" enters the public sphere with a strong social mission, reinforcing its long-term value in improving healthcare-related living conditions.

3.3. Integrating Social Responsibility and Charitable Initiatives

Beyond providing convenient services, the "Convenient & Caring Kitchen" embodies a spirit of social responsibility and charity. The project incorporates volunteer recruitment programs, allowing volunteers to guide customers through service areas and assist in operational procedures. By actively promoting the values of "dedication, friendship, mutual assistance, and progress", the project fosters a win-win ecosystem that benefits both volunteers and service users.

3.4. Continuous Culinary Innovation to Strengthen Project Competitiveness

The project's "Three-Meal Subscription Service" offers freshly prepared, nutritionally balanced home-style meals using a small-portion, multi-variety approach. By continuously gathering customer feedback, the project refines its menu offerings, ensuring the nutritional quality, freshness, diversity, and appeal of its meals. This dynamic approach enhances customer satisfaction, reinforcing the project's competitive edge in the market.

4. Conclusion

Leveraging "Internet+" technology, the "Convenient & Caring Kitchen" addresses the imbalanced distribution of medical resources and the lack of hospital support services by introducing an integrated solution encompassing self-service kitchens, meal subscription services, rest areas, and rental services.

By catering to the customized dietary needs of patient families, the dining convenience of medical staff, and the temporary rest requirements of hospital visitors, the project effectively alleviates service shortages in hospital districts. It also demonstrates the synergistic value of healthcare services and public welfare initiatives.

Looking ahead, the project aims to strengthen collaborations with hospitals, expand service scenarios (e.g., community elderly care centers), and enhance brand recognition to further solidify its sustainability and social impact. By doing so, it seeks to serve as an innovative model for advancing healthcare-related public services.

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