

Exploration of Innovation Paths in Hotel Management under the Background of “Internet Plus”

Zhengfang Zhu

Hong Kong Community College, Hong Kong 999077, China

Copyright: © 2025 Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution License (CC BY 4.0), permitting distribution and reproduction in any medium, provided the original work is cited.

Abstract: In the current era when the “Internet Plus” wave is sweeping the world, the hotel management industry is undergoing profound changes. Aiming at the problems existing in traditional hotel management models, such as homogeneous services, lagging information construction, and difficulty in meeting consumers’ diversified needs, exploring innovative management models and “Internet Plus” systems has become the key to breaking the deadlock. In this context, hotel management should optimize and reform in terms of service models, marketing mechanisms, and organizational management, give full play to the advantages of “Internet Plus” technologies such as artificial intelligence, big data, and integrated platforms, and create a new type of hotel management model with personalized services, precise content, and intelligent experiences. This article analyzes the current situation of hotel management under the background of “Internet Plus”, proposes the innovation paths of hotel management at the current stage, and conducts analysis combined with practical cases, so as to provide inspiration for the update of hotel management models.

Keywords: “Internet Plus”; Hotel management; Informatization; Digital intelligence; Precise service

Online publication: June 26, 2025

1. Introduction

In the era of “Internet Plus”, technologies such as artificial intelligence, big data, and 5G have gradually matured and have been deeply applied in various industries and fields. In the field of hotel management, digital transformation has become an inevitable trend. Only by quickly building an intelligent system that meets the needs of hotel management can we promote the transition of hotel management from “informatization” to “digital intelligence”. In this context, exploring the innovation paths of hotel management under the background of “Internet Plus” can not only fill the theoretical gap in the integration and application of “Internet Plus” technologies and hotel management, but also help improve the competitiveness of hotels, effectively meet the new needs of current consumers, and thus drive the reform and upgrading of the hotel industry.

2. Analysis of the current situation of hotel management under the background of “Internet +”

2.1. Traditional hotel management models

The traditional hotel management models can be divided into “four forms”, namely the direct operation model, the

entrusted management model, the franchise model, and the strategic alliance model. The direct operation model is managed independently by the owner; the entrusted management model involves entrusting the management right to a professional management company; the franchise model usually involves the hotel brand owner authorizing the owner to use the brand and service standards; the strategic alliance model adopts a joint marketing method among multiple enterprises, which not only retains their respective independence but also achieves the effect of resource sharing.

The traditional hotel management process can be discussed from three aspects. Firstly, in the operation of explicit processes, hotels usually adopt the waterfall-style stage division method, which proceeds in the order of project initiation, demand analysis, scheme design, management execution, maintenance support, etc. Secondly, in terms of departmental division of labor, hotels divide management functions into structures such as finance, catering, housekeeping, and front office, each responsible for different management matters^[1]. In addition, traditional hotel management also relies on manual operation services, and its standardized service processes include front desk registration, room cleaning, restaurant food delivery, etc.

Based on this, it is not difficult to find that traditional hotel management has four basic characteristics. Firstly, it establishes a standardized service system by standardizing service processes to control service quality. Secondly, it has a hierarchical organizational structure, and management work is carried out through levels such as general manager, department manager, supervisor, and employees, with high execution efficiency but insufficient adaptability. Thirdly, its risk response is passive: on the one hand, the operational risks are borne solely by the owner or the management party; on the other hand, when facing risks and crises, it usually adopts post-event remedial strategies, lacking prevention and early warning mechanisms. Fourthly, the cost control mechanism is single, mostly relying on the experience of relevant management personnel for control, lacking dynamic adjustment and data-based analysis.

2.2. Existing problems

Against the backdrop of the “Internet +” era, the flaws in traditional hotel management models have become increasingly prominent, which can be analyzed from the following aspects:

2.2.1. Low level of informatization in hotel management

Firstly, there is a lack of capability in collecting and analyzing management data. Neither an integrated customer database nor big data tools and artificial intelligence technologies are used to analyze customers’ behavioral preferences, resulting in a lack of personalization in hotel services. Secondly, there is no highly integrated system platform. The systems of different departments such as the front desk, finance, and catering are insufficiently interconnected, making it difficult to form a multi-department collaborative operation system. Thirdly, there is a shortage of advanced intelligent equipment, especially in small and medium-sized hotels where smart room systems have not been deployed.

2.2.2. Slow response speed of hotel services

Firstly, most traditional hotels still rely on manual work as the mainstay of services. Service processes need to go through layers such as the front desk, supervisors, and housekeeping department, leading to high service delays. Secondly, there is a lack of personalized service capabilities. Traditional hotel management lacks a data center and cannot build customer portraits based on customer data, thus failing to meet customers’ customized service needs. Thirdly, there is an inadequate complaint handling mechanism. Most customer complaints take a long time to be effectively feedback, and the repetition rate of customer feedback issues is high, indicating that hotels fail to timely adjust and revise service content based on customer feedback^[2].

2.2.3. Singularization of hotel marketing channels

Firstly, traditional hotels mainly rely on OTA platforms for marketing purposes, especially on third-party software platforms to obtain orders, which incurs high commission costs. Secondly, hotels lack independent online marketing

channels. Only a few hotels have established official websites, software platforms, or mini-programs, but their functions are limited, and there is a lack of interaction and connection with customers. Thirdly, the role of new media in promotion is not fully utilized. Hotels cannot leverage emerging marketing models such as short videos and live broadcasts to build brand influence, nor can they form effective interactions with customers.

2.3. Opportunities and challenges brought by “Internet +”

The popularization and promotion of “Internet +” technologies have brought many opportunities to modern hotel management:

Firstly, they have expanded marketing channels and promoted the expansion of the hotel market coverage. Especially with the integrated application of booking service platforms and social media, hotels can provide services to global customers, reducing dependence on traditional OTA channels. Secondly, a precise service system has been built, which can effectively improve customer experience. For example, hotels can use big data and artificial intelligence to analyze customers’ consumption habits and service needs, thereby enhancing customer satisfaction through personalized recommendations. Thirdly, an intelligent operation mechanism has been established, effectively reducing management costs. For instance, with the support of IoT technology and intelligent devices, hotels can achieve remote management, reducing labor costs while improving service efficiency.

However, the “Internet +” era has also brought new challenges to hotel management:

Firstly, there is the issue of data security risks. Hotel customer data centers store a large amount of customer information, which is vulnerable to attacks, leading to information leakage. Secondly, the cost of technology application is high, and hotels face significant financial pressure in the process of digital and intelligent transformation^[3]. Thirdly, traditional management models have inertia. On the one hand, their original hierarchical management structure is incompatible with the digital and intelligent management system; on the other hand, existing managers and service personnel lack information literacy and digital skills, which can easily lead to various problems when digital and intelligent systems are applied to services.

3. Innovation paths of hotel management in the context of “Internet +”

3.1. Innovation in service models

3.1.1. Establishing intelligent service application systems

Firstly, an intelligent room control system should be established. For equipment such as lighting, curtains, and air conditioners, IoT devices should be deployed, and an internal network should be built to connect voice assistant software systems, so as to achieve scenario-based control effects. Customers can interact with voice assistants at any time to adjust the use of equipment, or directly select different scenario modes such as sleep and meeting for adjustment.

Secondly, the unmanned front desk and AI customer service mode should be adopted. Self-service check-in equipment can be arranged in the front hall. Customer identities can be identified through various forms such as document scanning and face recognition, and customers can independently select room types by scanning codes, so as to achieve self-service effects and reduce queuing. Room door locks should be replaced with intelligent door lock devices, which can be linked with the front desk self-service equipment, and the door can be opened or locked through document recognition or face recognition. At the same time, an AI customer service system for artificial intelligence services should be established. When customers feedback problems, artificial intelligence robots will first reply, answer and record. When AI cannot solve the problem, it will be transferred to manual service, so as to reduce labor costs and improve the efficiency of customer feedback.

In addition, delivery robot services should be provided. When customers put forward various needs, robots can deliver them, including catering, pillows, blankets, refreshments, chargers and other items, thus reducing labor costs.

3.1.2. Providing personalized customized services

Firstly, a big data service center and a customer data center should be established. Data collection tools are used to collect data such as customers' consumption records and check-in preferences, so as to establish customer portraits. Through behavior analysis, a customer label system is built to clarify the demand characteristics of each customer.

Secondly, establish a precise service recommendation system, which can combine intelligent robot systems and emotion recognition technology to analyze customers' actual needs, adjust service processes accordingly, and even provide personalized service guides for them. For example, when a customer is found to have a cold, ginger tea and blankets can be automatically delivered.

In addition, the scene design should be optimized to enhance customers' sense of experience. For example, a "hotel + cultural tourism" package service can be established to provide customers with a combination of hotel and scenic spot tickets.

3.2. Innovation in marketing models

3.2.1. Building online marketing platforms

Firstly, an online marketing platform covering all channels should be established. On the one hand, it is necessary to integrate platforms such as the hotel's official website, APP, and WeChat mini-program to build an integrated user service platform, where users can log in to multiple platforms with a unified account and book services independently. On the other hand, it is necessary to strengthen the in-depth docking between self-service platforms and OTA platforms, and use platform advertisements to increase exposure and attract more users.

Secondly, social media should be used to carry out new media marketing activities. For example, with the help of short video platforms, cooperate with excellent video producers to release store exploration videos; or launch a "cloud check-in" live broadcast mode to comprehensively broadcast and display the hotel's characteristics and software and hardware facilities^[4]. In addition, graphic promotion information can be released through UCG platforms to drive traffic and reduce traditional advertising costs.

In addition, new pre-use experience services can be provided for users. For example, virtual reality technology is used to make VR experience videos, and users can 360° tour the rooms through online platforms, so as to improve users' sense of experience and enhance their willingness to choose.

3.2.2. Building precision marketing and membership systems

Firstly, relying on the big data system, a data-driven recommendation mechanism should be established. On the one hand, it is necessary to establish an RFM model to set different membership levels, and then promote birthday coupons, room type upgrade rights, etc. according to customer information and needs, so as to improve the repurchase probability of members. On the other hand, it is necessary to regularly push marketing service information according to the consumption habits of different members.

Secondly, a cross-industry alliance marketing model should be established. Hotels can cooperate with airlines, banks, etc. to carry out activities such as membership rights sharing and expansion, forming a linkage effect.

In addition, a user life cycle management mechanism can be established. On the one hand, a customer data platform should be established to predict the risk of customer loss in advance, so as to automatically trigger the customer retention mechanism and provide them with necessary preferential services. On the other hand, marketing information should be automatically pushed to customers according to important time nodes such as festivals, birthdays, and promotion festivals, so as to continuously enhance the brand impression.

3.3. Innovation in management modes

3.3.1. Upgrading information management systems

First, establish an integrated PMS system. Hotels should introduce cloud-based hotel management systems such as

Opera and Shiji Soft, synchronize various types of information including room status and financial data, and enhance the efficiency of inter-departmental collaboration.

Second, establish a dynamic revenue management mechanism. Hotels should adopt revenue management systems like IDEaS. On one hand, use data analysis tools to analyze historical data and market trends, so as to dynamically adjust room prices; on the other hand, provide time-limited return discounts for users who trigger the recovery mechanism^[5].

In addition, a data security protection system should be established to improve the privacy of user data and prevent data leakage.

3.3.2. Optimizing supply chain management

First, establish an intelligent procurement platform. Based on the traditional supply chain, connect with enterprise shopping platforms, and select the most suitable supply chain channels through a comprehensive evaluation of quality and price. At the same time, use AI algorithms to calculate material consumption based on the number of customers, so as to preset procurement plans.

Second, fully develop green supply chains. On one hand, actively adopt green and energy-saving equipment and facilities; on the other hand, connect with local green food supply chains to ensure that fruits and vegetables are green, environmentally friendly, and fresh.

In addition, a supplier collaborative network system should be established. It is necessary to optimize the settlement process through a supplier performance evaluation system, and use artificial intelligence to assist in inventory management to improve the quality of material management.

3.4. Innovation in talent cultivation

3.4.1. Cultivating compound talents

Hotels should establish cooperative relationships with colleges and universities to cultivate compound talents that meet their own needs. On one hand, hotels should cooperate with colleges to develop interdisciplinary curriculum systems, expand the curriculum content for hotel management talent cultivation, and integrate interdisciplinary content such as big data analysis and new media marketing. On the other hand, establish an order-based training mechanism. Hotels participate in curriculum development, professional management, internships and training, forming a training system for specific talents.

3.4.2. Establishing employee training systems

Within the hotel, employee quality should be improved through an employee training system. First, establish a digital skills training system, adopt online courses, and guide employees to learn skills such as AI tools and customer data analysis. Second, establish a practical drill mechanism, and carry out regular simulation training, such as fire evacuation drills and emergency handling for special customers. In addition, an incentive mechanism should be established to encourage employees to put forward suggestions for hotel management optimization or process improvement proposals, and reward employees who make contributions with bonuses.

4. Case analysis

4.1. Successful case

Currently, well-known domestic and foreign hotel brands are transforming towards informatization and intellectualization, and the Emirates Palace Hotel in Abu Dhabi, UAE is an excellent example. Against the background of digital intelligence, the hotel has established a super intelligent terminal integration service mechanism. On the one hand, it provides each customer with a super intelligent handheld computer, through which they can enjoy the full-process services of the hotel, including wake-up calls, download of film and television resources, summoning of waiters,

online shopping, self-service check-out, etc., achieving contactless and closed-loop services. On the other hand, it can also provide customers with personalized recommendation services, including weather reminders, dressing guides, introductions to surrounding attractions, travel reservations, etc. At the same time, the hotel has established a high-level security and privacy protection system. It has not only deployed 16 firewalls and intrusion detection systems, but also has a professional security monitoring team for 24-hour protection to ensure the absolute security of customer information. In addition, the hotel has realized full wireless network coverage in the hotel area, swimming pool area and beach area, and real-time control of the intelligent room system can be achieved through the network.

4.2. Experience summary

Based on the analysis of the case of Emirates Palace Hotel in Abu Dhabi, UAE, it can be found that in the construction of high-end hotels, emphasis should be placed on both technology integration and scenario adaptation, so as to improve the integration of the Internet of Things, intelligent terminals and hotel positioning, thus meeting the actual needs of customers and highlighting the differentiated effect of the brand.

5. Conclusions and Prospects

To sum up, in the era of “Internet +”, hotel management should carry out optimization and innovation from the aspects of service, marketing, management and talent training. It is necessary to use intelligent technology to help improve management efficiency, and at the same time improve personalization and accuracy through data analysis, so as to meet the diverse needs of the public in the new era. In the future, hotel management will further deepen the penetration and application of intelligent technologies, realize the reconstruction and integration of service scenarios and technology chains, and then promote the development of hotel organizational structure and operation mode towards agility, systematization, precision and intelligence, bringing customers a seamless “online + offline” experience.

Disclosure statement

The author declares no conflict of interest.

References

- [1] Hu T, 2024, Hotel management should be upgraded in a timely manner under the background of “Internet+”. China Business, 2024(02): 214-215.
- [2] Xu H, 2023, Exploration on the innovation path of hotel management in China under the background of “Internet+”. Shanghai Business, 2023(10): 58-60.
- [3] Wang J, Yang Y, 2023, Research on marketing strategy of H Hotel in L City under the background of traffic economy. Investment and Entrepreneurship, 34(06): 125-127.
- [4] Zhou Y, 2023, Problems and solutions of hotel information management under the background of “Internet+”. Internet Weekly, 2023(01): 13-15.
- [5] Jiang H, 2022, Problems and countermeasures of hotel information management under the background of “Internet+”. Market Modernization, 2022(19): 61-63.

Publisher's note

Whioce Publishing remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.