How Can the Food and Beverage Industry Enhance Profitability and Operational Efficiency Through the Utilization of the Internet in China

An Zheng[1, *]

[1] Department of International Exchange, Shandong Agricultural University, Shandong, China

*Corresponding author: 1610011005@stu.sqxy.edu.cn

Abstract:

Over the past decade, China has witnessed exponential growth in its internet sector. Presently, various industries in China are gradually aligning with the internet, with the restaurant industry particularly standing out. The restaurant sector has transitioned from traditional, purely manual service to a more intelligent approach. The emergence of various restaurant software, including delivery services, along with the adoption of online ordering and payment methods for in-house dining, exemplifies this shift. This paper primarily explores how the restaurant industry can leverage the Internet to enhance efficiency and profitability in the current economic landscape. This includes utilizing online platforms to provide basic information about their restaurants and enhancing their reputation and image through customer reviews. Given the high costs of labor and labor shortages, reducing operational costs is a significant concern for every restaurant. Research suggests that implementing QR code ordering services and offering delivery can help restaurants save on labor costs and achieve profitability at a lower expense. Through research, it has been found that online platforms for information dissemination, customer reviews, and delivery services can effectively enhance a restaurant's profitability and efficiency. This implies that restaurants need to pay close attention to their online reputation and business expansion, innovating and providing quality service on Internet platforms.

Keywords: Internet software; Review data; QR codes; Takeaway service.

1. Introduction

The Internet in China has attained a sophisticated level of development, becoming indispensable for various sectors in their pursuit of advancement. Within the context of the catering industry, China has witnessed rapid growth in recent years, culminating in the establishment of a mature Internet Plus (Internet +) ecosystem for dining services. This ecosystem encompasses a multitude of software applications tailored specifically for the catering sector, through which customers can access a wealth of pertinent information. Such information includes individual restaurant ratings, average expenditure per customer, and other relevant details. Customer reviews are a crucial factor as many customers rely on the evaluations of others when selecting a restaurant. Amidst contemporary challenges, the effective management of a restaurant emerges as a paramount concern for operators. This paper discusses how implementing the Internet Plus model in the restaurant industry can effectively aid restaurant management. Among these, QR code-based online ordering and payment, as well as delivery services, are highly effective methods. The drawbacks associated with manual management can

be effectively circumvented through the Internet, which is highly beneficial for enhancing the operational efficiency of a restaurant.

In the current economic landscape, China has transitioned into a phase of subdued growth, marking a departure from the rapid expansion experienced over the past several decades. The efficacy of methodologies and experiences derived from the high-speed economic development paradigm of yesteryears has diminished, necessitating a recalibration of developmental strategies towards structural transformation, upgrading, and innovation [1]. In response, the Chinese government has introduced the concept of "supply-side structural reform" within the catering industry, emphasizing the provision of goods and services at elevated levels of quality and efficiency [2]. This reform is exemplified by the emergence of the "Internet Plus" platform business model, wherein catering enterprises harness internet-based platforms to curtail marketing expenditures, transitioning traditional offline promotional efforts into digitally mediated advertising campaigns. Furthermore, some establishments within the catering sector solicit customer feedback encompassing various facets such as taste, ambiance, and overall dining experience,

disseminating these evaluations across social media platforms [2]. Additionally, individuals may produce video blogs offering firsthand accounts and recommendations, enabling prospective patrons to acquaint themselves with a restaurant's offerings, pricing, and service quality before patronage [3]. Given contemporary consumer predilections for gastronomic satisfaction, eateries failing to meet expectations in taste find themselves at a disadvantage in attracting clientele. Conversely, establishments garnering favorable evaluations naturally accrue greater patronage, bolstering their reputation and augmenting their influence within the public sphere[4]. To further entice customers, some restaurants have introduced delivery services, mirroring international collaborations such as Uber Eats' partnerships with over 40,000 eateries abroad. Domestically, Chinese food delivery platforms such as DianPing boast expansive user bases, affording individuals the convenience of relishing delectable fare from the comfort of their homes. This development proves particularly advantageous for time-strapped professionals, while also granting access to culinary delights from establishments situated at considerable distances without necessitating physical visits [2].

Moreover, group purchasing initiatives serve as another means of customer attraction, with merchants offering discounted rates and periodic distribution of coupons to facilitate bulk purchases of desired menu items at reduced prices[5]. Some eateries have even devised promotional campaigns where select items are available for purchase at a nominal fee of one cent, a tactic aimed at rapidly penetrating the market. Such measures, including judicious price adjustments, align with prevailing economic conditions characterized by sluggish growth and declining consumer purchasing power[6]. Additionally, they enhance the cost-effectiveness of dining establishments, thereby expanding their customer base, and bolstering their competitiveness within the industry.

In summation, the aforementioned developments underscore the multifaceted strategies adopted by the Chinese government and catering industry stakeholders in response to evolving economic conditions. Through initiatives such as supply-side structural reforms, digitalization, and innovative marketing approaches, efforts are underway to revitalize the sector, enhance consumer experiences, and sustain growth amidst shifting market dynamics.

This paper delineates two aspects of utilizing Internet resources to optimize restaurant management. Firstly, it involves attracting customers through online software, leveraging customer reviews, and price advantages. Secondly, it entails deploying complementary services via the Internet, such as group purchasing of restaurant dishes, delivery services, and employing a range of online services including online ordering and payment. Through these two approaches, restaurants can effectively harness the power of the digital domain to enhance their visibility and reputation.

2. Use Social Media to Attract Customers

Restaurants can significantly enhance their sales figures by leveraging various app software and social media platforms for promotional purposes. For instance, Domino's Pizza experienced a notable surge in sales back in 2001, achieving a remarkable 72% growth within a year through online promotion, resulting in the acquisition of 85,000 registered users [7]. When undertaking promotional activities, restaurants typically highlight unique features to attract customers and provide comprehensive details about their establishment. Individual proprietors have the opportunity to showcase their restaurant's location, amenities, and food menu, accompanied by relevant images and other pertinent information. Such endeavors effectively appeal to potential customer segments, including diners and families. Notably, the pivotal determinant of successful promotion lies in the establishment's ability to generate sufficient interest among customers [8]. In China, numerous restaurants opt to incorporate customers into their WeChat network, inviting them to join dedicated fan groups and subscribe to their official accounts. Periodically, these establishments disseminate pertinent discount vouchers and notifications of special events within these groups, thereby fostering heightened interactivity between the restaurants and their clientele. This approach not only facilitates deeper customer engagement with the restaurant's offerings but also serves to attract a broader clientele base.

Customers, upon encountering this information, gain valuable insights into whether the restaurant's ambiance aligns with their preferences and if the food offerings meet their expectations. Additionally, they can estimate the approximate time required to reach the restaurant. Through this informational exchange, customers develop an interest in the restaurant online and are motivated to patronize it, thus presenting the restaurant with a pool of potential clientele.

In recent years, China has witnessed the emergence of numerous websites offering significant convenience to customers seeking dining options. Dianping.com, established in 2003, stands as a prominent example, providing online guidance to consumers in China. Renowned as China's largest local life information trading platform, Dianping.com offers users services such as store information, consumer reviews, and discounts, with a particular emphasis

on dining information services. As of March 2015, the website boasted approximately 200 million active users, over 14 million businesses, and monthly page views exceeding 15 billion. Notably, the platform primarily facilitates reviews and evaluations of restaurants, covering aspects such as taste, ambiance, and service, rated on a scale from 0 to 10, while also providing information on average spending per person and review count [2]. Wang conducted a survey categorizing average spending into high and low groups and reviewing counts into high, medium, and low groups, thereby stratifying restaurants into six categories. The findings revealed that restaurants characterized by high spending and review counts adeptly leverage Internet marketing. Such establishments typically boast superior ingredient quality, and environment, and consequently enjoy consumer favor. Hence, restaurants are encouraged to adeptly utilize applications akin to Dianping to enhance their quality and review count. Simultaneously, fostering customer loyalty is imperative. By accumulating a certain volume of ordinary customer reviews, restaurants can extend invitations to influential individuals for reviews, subsequently sharing these on social media platforms, thereby leveraging celebrity endorsements to create a brand effect [4]. This approach serves to cultivate customer loyalty, enhance the quality of followers, and facilitate continued feedback collection for refining food and service quality, thereby establishing a virtuous cycle conducive to restaurant growth and expansion.

In essence, multifaceted Internet marketing activities are imperative for an exceptional restaurant. Establishing brand superiority through marketing to meet public demand has emerged as the mainstream direction in the restaurant market. Through strategic endeavors encompassing promotional activities and fostering customer loyalty, restaurants can effectively bolster their profitability and brand recognition. As exemplified by the case of Dianping.com, leveraging online platforms can significantly enhance a restaurant's visibility and appeal to a broader customer base, thus propelling its growth trajectory within the competitive dining landscape.

3. Ancillary Services Provided by the Internet

Outstanding businesses are increasingly adopting intelligent services such as smart ordering, smart payment, and delivery to expand their consumer base. Traditionally, customers engaged in the cumbersome process of ordering through paper menus and interacting with servers, followed by the manual transmission of orders to the kitchen and subsequent billing, a process prone to errors and time-consuming[9]. Moreover, labor costs typically account for 30% of a restaurant's operational expenses, underscoring the potential for significant labor cost reduction through internet-based ordering systems[10]. Restaurants prefer to have a deeper understanding of customers' dietary information. However, due to limited space on paper menus and the inconvenience of thick menus, as well as the substantial funds required for menu production, restaurants encounter challenges in achieving this goal. By utilizing internet platforms to create electronic menus, restaurants can effectively address these issues. Accessing the electronic menu online via QR codes is the simplest and quickest method for customers. This expedited approach is highly welcomed by customers and generates significant scanning intent. Substituting electronic menus for paper menus is the most cost-effective and efficient means to enhance management[5]. Presently, businesses favor QR code scanning for orders, a method that not only saves customer time but also reduces the need for a portion of service staff, thereby enhancing restaurant efficiency and reducing operational costs. Customers can conveniently place orders by scanning QR codes on tables, with the system directly connecting to the kitchen via a central processor, effectively replacing traditional paper menus in kitchens with ordering methods utilizing smartphones and tablets[9].

Modern youth, heavily influenced by an information-driven environment, increasingly gravitate towards digitized operations in various aspects of life, including restaurant searches. Consequently, restaurants may consider investing in systems capable of sending real-time updates, particularly regarding coupons and discounts, and allowing customers to place orders and make virtual payments[3]. This aligns with the consumption habits of modern youth, offering convenience that not only facilitates easier access to restaurant information but also enhances consumer quality, while simultaneously helping restaurants save substantial service expenses. Consumer quality and the marginal cost of dishes stand as two critical factors determining a restaurant's profitability[4]. From the perspective of consumer interaction, ordering software supporting online ordering and payment aids restaurant enterprises in digital management, thereby reducing menu costs. Traditional marketing strategies often focus on specific combination meals or individual items, simplifying consumption objectives and improving service efficiency for restaurant enterprises.

Additionally, many restaurants have expanded their services to include delivery, allowing consumers to enjoy restaurant delicacies from the comfort of their homes. A survey revealed that the two most common complaints regarding restaurants were receiving incorrect orders and experiencing excessively long wait times[10]. Human er-

rors in operations or limited capacity for guest reception often lead to extended wait times for many consumers, occasionally resulting in incorrect orders, both of which negatively impact the dining experience. Moreover, many working individuals often lack sufficient time for dining, and ordering delivery assists them in saving time. A survey conducted in the United Kingdom revealed that, in 2008, 21.1% of adults consumed takeaway meals two or more times per week, while 21.0% of children consumed takeaway meals at the same frequency. This suggests that takeaway meals were already highly popular as early as 2008. With the advancement of the internet, this proportion is expected to increase further[11]. After customers place orders remotely via the Internet, restaurants promptly input their information, such as phone numbers and accurate addresses, into the database to ensure precise delivery of goods[12]. This facilitates the accurate fulfillment of customer orders. Leveraging delivery channels for group purchases and coupon distribution enables restaurants to swiftly target customer groups and enhance their loyalty. Customers are more likely to engage with the restaurant upon encountering coupons and promotional information, thus benefiting the restaurant's profitability and brand awareness. A study conducted in the UK found that restaurants joining Deliveroo significantly improved their profitability in terms of restaurant liquidity[13]. This underscores the efficacy of internet-based approaches such as smart ordering and delivery in effectively attracting more consumers and thereby enhancing restaurant profitability.

In summary, the adoption of intelligent services and internet-based approaches such as smart ordering and delivery presents significant opportunities for restaurants to expand their consumer base and improve profitability. By embracing digitized operations and leveraging technological advancements, restaurants can enhance efficiency, reduce costs, and offer greater convenience to consumers, thereby reinforcing their competitive position in the dynamic food service industry landscape.

4. Conclusion

This paper primarily investigates two highly effective strategies for enhancing restaurant operational efficiency: attracting customers to increase revenue and implementing efficient management through online services. The methods studied for attracting customers mainly involve showcasing restaurant information to pique their interest and improving the quality of restaurant dishes to raise prices, thereby garnering highly favorable reviews from customers and enticing them to return. Additionally, enhancing the restaurant's presence on restaurant software platforms through reviews proves to be an effective method, as it allows customers to form an initial impression of the restaurant, with successful restaurants often attracting a clientele based on positive reviews. All of these methods contribute to increasing customer loyalty and, consequently, profitability. There are also numerous ways to aid restaurants' ineffective management. QR code scanning for ordering and payment can effectively prevent errors and omissions that may occur with manual ordering, while also reducing labor costs and enhancing restaurant management efficiency. Furthermore, implementing group purchasing of dishes can help restaurants promote signature dishes, reducing the need for manual advertising and thus decreasing costs. Additionally, offering delivery services can significantly expand a restaurant's revenue, avoiding overcrowding in the restaurant at peak times, which can help the restaurant manage its operations more effectively and prevent negative reviews resulting from excessively long wait times for customers. Through the aforementioned research, it is evident that a well-managed restaurant should effectively utilize the Internet to attract customers and enhance customer loyalty by improving the quality of its dishes. Moreover, leveraging the internet to enhance management capabilities and bring in more revenue through online channels are essential strategies for improving operational efficiency. In conclusion, by implementing these strategies, restaurants can optimize their operations, enhance customer satisfaction, and ultimately increase profitability. The integration of online services not only attracts customers but also streamlines management processes, leading to more efficient operations. Therefore, for restaurants aiming for sustained success in the competitive food service industry, it is imperative to embrace and leverage Internet resources effectively.

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