

THE INFLUENCES OF DIGITAL MARKETING ON THE CATERING QUALITY COMPETITIVENESS

Yan Yang*, and Daranee Pimchangthong

Institute of Science Innovation and Culture, Rajamangala University of Technology, Krungthep, Thailand

**email Corresponding author: 658240300348@mail.rmutk.ac.th*

ABSTRACT

The catering business is exceptionally diverse, with consumers increasingly favoring digital means to enhance the dining experience. Digital marketing plays an important role in increasing catering companies' competitiveness and market share. This paper will investigate and demonstrate the impact of the independent variable demographic factors, including gender, age, marital status, educational background, occupation, and monthly income, and the dependent variable digital marketing, including the three digital means of social media, online advertising, and online branding on the quality competitiveness of the catering businesses. The study adopts a rigorous quantitative research design, utilizing a comprehensive questionnaire distributed to a sample size of 400 participants. The statistical analysis is multifaceted, encompassing descriptive statistics (frequency, percentage, mean, and standard deviation) and inferential statistics (including independent samples t-test, one-way ANOVA, LSD, and multiple linear regression), with a significance level set at 0.05. The hypotheses found that age, educational background, occupation, and monthly income affect the competitiveness of catering quality. Digital marketing positively relates to quality competitiveness with multiple correlation (R) = .952. The ability to predict the analytical equation is 90.6%.

Keywords:

Catering Industry; Digital Transformation; Consumer Preferences; Quality Competitiveness and Digital Marketing

INTRODUCTION

As a vast and diverse industry on a global scale, the catering industry plays a vital role in providing a wide range of culinary choices and serving as a hub for social interactions and cultural exchanges. According to the "2022 China Catering Industry Annual Report" released by China Hotel Association and Xinhua News Agency, the catering industry in China reached ¥4689.5 billion in 2021, with a year-on-year growth of 18.6%, almost recovering to the level before the pandemic. However, with the continuous evolution of lifestyles and increasing consumer demands, the catering industry faces new challenges and opportunities. Digital transformation has emerged as a significant trend in the catering industry, essential for enhancing competitiveness and meeting the demands of modern consumers.

The catering industry is an exceptionally diverse sector, encompassing various types of businesses, from traditional restaurants and fast-food chains to food trucks and delivery platforms. This diversity necessitates that businesses continuously adapt and innovate their menus and operational models to meet the ever-changing consumer demands. Digital transformation has already reshaped how the catering industry operates. An increasing

number of consumers prefer mobile applications for restaurant searches, online ordering, food delivery, or reservations. Social media and online reviews have become critical factors influencing consumers' choices of restaurants and menus. These digital tools not only enhance consumer convenience but also improve the overall dining experience at restaurants. In this digital age, catering businesses must actively embrace digital technologies to enhance efficiency, improve customer experiences, and maintain a competitive advantage.

COVID-19 has impacted the whole world since 2019, especially the dietary patterns of customers. It has become a vital mission to improve the food production and service process if businesses wish to pursue sustainability due to the changing environment of the epidemic. The sustainability of food systems inherently implies not only customer satisfaction but also the saving of costs. The catering service must find new ways to increase customer loyalty and satisfaction while implementing improved practices for building their brand image and modern decoration (Chung et al., 2021)

The increasing digitization of economies has highlighted the importance of digital transformation and how it can help businesses stay competitive (Kraus et al., 2021). The exploitation and integration of digital technologies often affect large parts of business and even go beyond their borders by impacting products, business processes, sales channels, and supply chains. Potential benefits of digitization are manifold and include increases in sales or productivity, innovations in value creation, and novel forms of customer interaction, among others. As a result, entire business models can be reshaped or replaced (Hoang, H., & Le Tan, T. 2023)

In the age of digitization, organizations should think of advanced strategies to increase their competitiveness and market share by employing the potential of digital content and enhancing their digital capabilities. Recently, many digital media have appeared available to organizations to build their brand, reach and retain their target customers, and promote their products. Digital media represented a real revolution that made it difficult for organizations to survive in the business environment without investing in these means. Therefore, this study will investigate the impact of digital marketing on the competitiveness of the catering business (Fernandez-Miguel, 2020). To study and prove the impact of three digitization methods, including social media, online advertisement, and online branding, on the competitiveness of the catering business. The study aims to provide insights and guidance for catering business decision-makers and practitioners on addressing the challenges posed by digital marketing and leveraging digital tools to enhance competitiveness and adapt to market dynamics.

Research Questions

The research questions are as follows:

- 1) How do demographic factors affect the quality competitiveness in the catering business?
- 2) What kind of digital marketing influences the quality competitiveness in the catering business?

Research Objectives

These objectives aim to provide a comprehensive understanding of how digital marketing contributes to catering businesses' competitiveness in the modern digital landscape. The research objectives for this study are as follows:

- 1) To investigate the impact of demographic factors on the quality competitiveness of the catering industry.

- 2) To examine how digital marketing influences the quality competitiveness of catering businesses.

Social Media

Social media are paid advertisements on social media platforms to promote a company's products, services, or brands. Social media allows people to interact with others freely and offers multiple ways for marketers to reach and engage with consumers. Due to its dynamic and emergent nature, the effectiveness of social media as a marketing communication channel has presented many challenges for marketers. It is considered to be different from traditional marketing channels. Many organizations are investing in their social media presence because they appreciate the need to engage in existing social media conversations in order to build their consumer brand. Social Media are increasingly replacing traditional media, and more consumers are using them as a source of information about products, services, and brands (Siriwardana, 2020). Social media, also referred to as social networking media, has been the subject of research by many scholars with different perspectives on what it is and its connotations. In the early days of research, scholars regarded social media as a novel form of online media characterized by openness, interactivity, and community features. Users gained greater participation opportunities within this space, where they could generate more content. Social media was initially seen as a technological tool for new information sharing as it evolved. People could use this tool to publish created content, allowing more individuals to view and propagate it. Building upon traditional media, social media leveraged new technologies to facilitate information dissemination, expanding the channels for information distribution and diversifying content. This transformation has significantly changed the global media industry (Duanbing, 2021).

Online Branding

Online Branding is one of the essential forms of digital transformation. By establishing websites, social media accounts, and other digital channels, businesses can better interact with customers, enhance their brand image, and increase their visibility. Techniques such as search engine optimization (SEO) and search engine marketing (SEM) can also be used to improve the rankings in search results, thereby increasing traffic and exposure of the brand. Smith (2019) examines the effects of digital transformation on online branding, specifically focusing on the role of social media and search engine optimization in building and enhancing brand image. Johnson (2020) discusses various digital transformation strategies businesses can adopt to enhance online branding efforts, such as creating a strong brand identity, engaging with customers through social media, and utilizing data analytics to optimize marketing campaigns.

Online Advertising

Online Advertising is another crucial form of digital transformation. By placing ads on the internet, businesses can expand target audiences and attract more potential customers. Online ads have a broader reach and higher precision than traditional advertising methods. Furthermore, businesses can use data analysis and artificial intelligence (AI) technologies to monitor and optimize ad effectiveness in real time, improving ad campaign efficiency and return on investment. Brown (2020) investigates the impact of the COVID-19 pandemic on digital advertising and its implications for businesses. It highlights both challenges and opportunities presented by the current situation and provides insights into how businesses can adapt advertising strategies to stay relevant and successful.

Online Service Quality

Online Service Quality is a key element of digital transformation. Businesses can provide more convenient and efficient customer service experiences by establishing online service platforms. For example, through online customer service systems and self-service portals, customers can communicate and exchange information with businesses anytime to solve problems. Additionally, businesses can leverage big data analytics and AI technologies to analyze customer behavior and feedback in-depth, continuously improving product and service quality. Chen (2019) examines the relationship between digital transformation and customer experience management. It highlights the benefits of leveraging digital channels to enhance service quality, e.g., real-time communication, personalized support, and data-driven decision-making. Zhang (2020) discusses how big data analytics can be used to identify trends, patterns, and areas for improvement in online service quality. It provides examples of how businesses successfully implement data-driven approaches to enhance customer satisfaction and loyalty.

Quality Competitiveness Research

A wide range of factors can impact quality competitiveness, as demonstrated by numerous studies. Zhang Wanyong and Yang Guangzhao (2022) found that a favorable business environment can enhance quality competitiveness. Jin Bei and Gong Jianjian (2014) emphasized the importance of stable economic growth trends in boosting quality competitiveness. Zhu Zhujun et al. (2018) explored the effects of financial sector openness on quality competitiveness. Cheng Xiang et al. (2020) examined the impact of technological and financial policies on quality competitiveness. The research by Zhang Jiazhao (2023) focused on digital finance and its influence on quality competitiveness. Zhang Jiazhao (2023) suggested that technological innovation, resource capabilities, green technology innovation, and prototyping innovation can enhance quality competitiveness. Wang Hongjian et al. (2020) and Su Yuan and Li Guangpei (2021) all highlighted the positive impact of corporate social responsibility, charity work, corporate culture, and training on quality competitiveness. Wang Hongjian et al. (2020) discovered that corporate governance information disclosure and shareholding in financial institutions can improve credit efficiency and reduce capital mismatch, thereby enhancing quality competitiveness. In terms of corporate characteristics, Hu et al. (2021) and Wu Zhaoyun and Wang Yulu (2018) all pointed out that corporate social responsibility, charitable activities, corporate culture, and training can all contribute to the enhancement of quality competitiveness, while corporate culture needs to follow cost-benefit principles for optimal results.

METHOD

This study adopted a quantitative research design using the questionnaire to collect data online using the "Wenjuanxing" platform. The questionnaire's link was distributed to the catering business customers in Kunming, Yunnan Province. The questionnaire was customized based on the research framework (see Figure 1). The questions include both checklist and 5-point Likert scale question types. Since the population is infinite, the sample size is determined at a 95% confidence level with a sampling error within 5% from the Yamane table. The sample size for this study was 400 customers of the catering business in Kunming City, Yunnan Province. This study employed a convenience random sampling method. The survey period was August through November 2023.

Hypotheses

- H1: The difference in demographic factors, including gender, age, marital status, educational level, occupation, and monthly income, affect the quality competitiveness of the catering business differently.
- H2: Digital marketing, including social media, online advertisements, and online branding, influences the quality competitiveness of the catering business.

Descriptive statistics were used to analyze data, including Frequency, Percentage, Mean, and Standard Deviation, and inferential statistics, including Independent Samples t-test, One-way ANOVA, LSD, and Multiple Linear Regression.

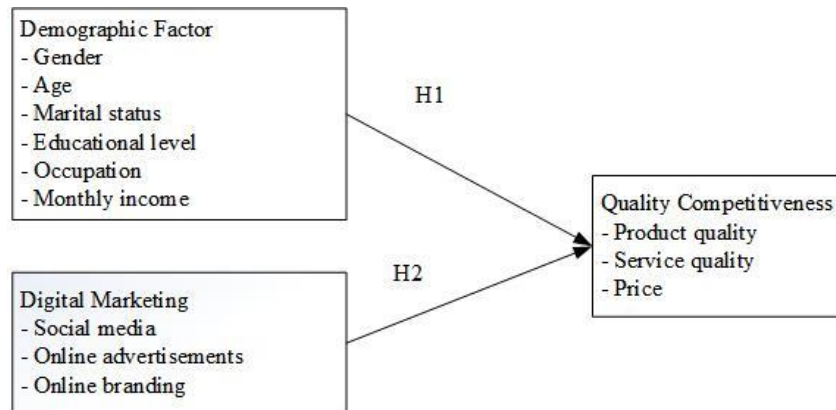


Figure 1. Research framework

RESULT AND DISCUSSION

Most respondents are male, at 50.2%, and aged between 31 and 40, at 43.3%. 84% are married, and 70.3% graduated from college or technical school. Occupations are diverse, with 44.8% being civil servants or business workers. Income levels vary, with the highest percentage falling within the 5001–10000 RMB category (48.5%).

Table 1 displays the descriptive statistics of digital marketing and quality competitiveness. The results show that customers' perceptions of the overview of digital marketing and social media are ranking well, with a mean value of 3.50 and 3.63 and a standard deviation of 0.870 and 1.082. At the same time, the online advertisements and online branding were ranking moderately.

For quality competitiveness, the results show that the overview of quality competitiveness, product quality, service quality, and price are ranking moderately with a mean value of 3.42, and the rest is all equal to 3.40 with a standard deviation of 0.889, 1.062, 1.110, and 1.071 accordingly.

Inferential Statistics

Inferential statistics were used to test hypotheses. Table 2 summarizes the testing results for hypothesis 1. The results show that gender has no different effects on the quality competitiveness of the catering business; age has different effects on price and overview of quality competitiveness; marital status has different effects on service quality; educational level has different effects on all dependent variables except product quality, which has no different effects; occupation has different effects on all dependent variables; and monthly income has different effects on service quality and overview of quality competitiveness.

Table 1. The descriptive statistic of digital marketing and quality competitiveness

	1	2	3	4	5	Mean	SD	Meaning	Rank
Digital Marketing									
Social media	11	75	45	190	79	3.63	1.082	Good	1
Online advertisements	9	88	70	173	60	3.47	1.061	Moderate	2
Online Branding	15	79	90	167	49	3.39	1.052	Moderate	3
Overview of digital marketing	11	41	113	208	27	3.50	0.870	Good	
Quality Competitiveness									
Product Quality	11	91	79	166	53	3.40	1.062	Moderate	1
Service quality	16	88	80	154	62	3.40	1.110	Moderate	3
Price	15	80	92	157	56	3.40	1.071	Moderate	2
Overview of Quality Competitiveness	13	42	138	179	28	3.42	0.889	Moderate	

Table 2. Summary of demographic data affects the quality competitiveness of catering business, Kunming city

Demographic	Product Quality	Service Quality	Price	Overview of Quality Competitiveness
Gender	-	-	-	-
Age	-	-	✓	✓
Marital Status	-	✓	-	-
Educational Level	-	✓	✓	✓
Occupation	✓	✓	✓	✓
Monthly Income	-	✓	-	✓

- no different effects at the statistical significance of 0.05

✓ have different effects at the statistical significance of 0.05

Table 3 summarizes the testing results for hypothesis 2. The results indicate that digital marketing has a positive relation with an overview of the quality competitiveness, product quality, service quality, and price with multiple correlations (R) =.952, .515, .545, and .563 and the ability to predict the analytical equation is 90.6%, 25.90%, 29.20%, and 31.20 % respectively at the statistically significant level of 0.05. The forecasting equations for each analysis result are provided in Table 4.

Table 3. Summary of the digital marketing influence on the quality competitiveness of catering business, Kunming city

Quality Competitiveness	R	R Square	Adjusted R Square	Std. Error of the Estimate
-Product Quality	.515 ^c	.265	.259	.914
-Service quality	.545 ^c	.297	.292	.934
-Price	.563 ^c	.317	.312	.889
Overview	.952 ^c	.907	.906	.266

c. Predictors: (Constant), online branding, advertisements, social media

d. Dependent Variable: quality competitiveness

Table 4. Forecasting equations for digital marketing influence the quality competitiveness of catering business, Kunming city

Quality Competitiveness	Forecasting Equations
-Product Quality	$\hat{Y}_1 = 1.115 + 0.240X_1 + 0.216X_2 + 0.198X_3$
-Service quality	$\hat{Y}_2 = 0.892 + 0.287X_1 + 0.284X_2 + 0.150X_3$
-Price	$\hat{Y}_3 = 0.918 + 0.295X_1 + 0.294X_2 + 0.126X_3$
Overview of Quality Competitiveness	$\hat{Y}_T = 0.035 + 0.348X_1 + 0.356X_2 + 0.289X_3$

X_3 = online branding, X_2 = online advertisements, X_1 = social media

The conclusions drawn from the demographic analysis are consistent with previous literature. According to a study by Liu, Guo, and Lee (2018), demographic factors such as age and income play a significant role in customer satisfaction and quality competitiveness in the catering industry. The study found that younger and higher-income customers tend to be more demanding regarding service quality, significantly influencing their overall satisfaction and perception of competitiveness. Similarly, a study by Hsu and Lin (2016) found that marital status and educational background significantly affect customers' perception of service quality, with married and highly educated customers having higher expectations. This is consistent with our finding that marital status and educational background differ in service quality and overall quality competitiveness. In terms of occupation, a study by Kim and Lee (2017) found that it significantly influences the

perception of quality competitiveness in the catering industry. They argued that people with different occupations may have different needs and preferences, affecting their perception of product quality, service quality, and price. Although this finding that monthly income does not show a significant difference in product quality and price may seem to contradict previous literature, it could be explained by the unique context of this study. In this study area, the catering industry may have a relatively uniform pricing and product quality strategy, which may not vary significantly across different income levels.

Several studies support the finding that digital marketing significantly impacts the quality competitiveness of businesses. For example, a study by Lee et al. (2014) suggests that digital marketing, mainly through social media, dramatically influences customer perceptions of product and service quality. They argue that businesses can leverage digital marketing to interact more closely with customers, gain feedback, and improve their offerings. Likewise, Kannan and Li (2017) find that online branding and advertising can enhance a business's price competitiveness. They explain that these digital marketing strategies allow businesses to reach a wider audience, build a strong brand image, and offer competitive prices, which can attract more customers and increase sales.

Moreover, Chaffey and Ellis-Chadwick (2019) highlight the importance of digital marketing in today's business landscape. They argue that businesses need to invest in digital marketing to stay competitive as more consumers use digital platforms for shopping and information seeking. In the context of the catering industry, a study by Sigala (2018) indicates that digital marketing is crucial for enhancing the quality and competitiveness of restaurants. They suggest that restaurants can use digital marketing to showcase their food and service quality, offer discounts, and communicate directly with customers, which can boost their competitiveness. In conclusion, the significant positive impact of digital marketing on the quality and competitiveness of catering businesses in this study is well supported by previous literature. It underscores the importance for businesses to fully embrace digital marketing in shaping their product quality, service quality, and price competitiveness.

CONCLUSION

The analysis results demonstrate that most of the respondents are male, aged between 31 and 40 years old, married, graduated from college or technical school, occupation civil servants or business workers, and the category of income levels is 5001–10000 RMB.

The differences in age, educational level, occupation, and monthly income affect the overview of quality competitiveness differently. In detailed consideration, the differences in marital status, educational level, occupation, and monthly income affect service quality differently. However, the differences in occupation affect product quality differently. The differences in age, educational level, and occupation affect prices differently.

The study concludes that digital marketing, including online branding, online advertisements, and social media, significantly impacts the quality and competitiveness of catering businesses in Kunming City. This impact spans product quality, service quality, and price competitiveness, thereby enhancing the overall quality competitiveness of these businesses. The results suggest that businesses that effectively utilize digital marketing strategies can significantly improve their competitive edge in quality and price aspects. This affirms the crucial role of digital marketing in today's business landscape.

Tailor market strategies differ based on demographic factors such as gender, age, marital status, education level, occupation, and monthly income. This includes designing advertisements, services, and products to meet various customer segments' diverse needs and preferences. Catering businesses should actively engage in social media platforms by

providing helpful information and engaging content. Social media is a vital channel for interacting with customers, conveying brand values, and boosting brand loyalty.

The catering business can increase investments in online advertising, especially on search engines and other online platforms. Catering businesses can highlight product information, creative menus, and service advantages through online advertising, attracting more potential customers and improving their expected service experiences.

Catering businesses should intensify their online brand promotion efforts to raise awareness and recognition. Effective online brand promotion allows catering businesses to establish a distinctive brand image, enhance customer trust, and foster loyalty.

REFERENCES

- Adner, R., Puranam, P., & Zhu, F. (2019). What is Different about Digital Strategy? From Quantitative to Qualitative Change. *Strategy Science*, 4(4), 253-261.
- AlBalushi, T. H. (2021). E-services quality: A perspective of service providers and service users. In *Digital Service Platforms*. IntechOpen.
- Ambrus, R., Izvercian, M., Artene, A., et al. (2018). Considerations Regarding Inbound Regenerative Management Accounting Application on Eco-efficient Business Models. *Procedia-Social and Behavioral Sciences*, 238, 460-465.
- An Chao. (2021). A Brief Analysis of the Impact of Digitalization on Business Competitiveness. *Tianjin Economic*, 2021(12), 38-41+48.
- Anaya-Sánchez, R., Castro-Bonaño, J. M., & González-Badía, E. (2020). Millennial consumer preferences in social commerce web design. *Revista Brasileira de Gestão de Negócios*, 22, 123-139.
- Bashir, M., Naqshbandi, M. M., & Farooq, R. (2020). Business Model Innovation: A Systematic Review and Future Research Directions. *International Journal of Innovation Science*, 12(4), 457-476.
- Bol, N., Dienlin, T., Kruikemeier, S., Sax, M., Boerman, S. C., Strycharz, J., ... & De Vreese, C. H. (2018). Understanding the effects of personalization as a privacy calculus: Analyzing self-disclosure across health, news, and commerce contexts. *Journal of Computer-Mediated Communication*, 23(6), 370-388.
- Cennamo, C. (2021). Competing in Digital Markets: A Platform-Based Perspective. *Academy of Management Perspectives*, 35(2), 265-291.
- Chandra, S., Verma, S., Lim, W. M., Kumar, S., & Donthu, N. (2022). Personalization in personalized marketing: Trends and ways forward. *Psychology & Marketing*, 39(8), 1529-1562.
- Nambisan, S., Lyytinen, K., Majchrzak, A., et al. (2017). Digital Innovation Management: Reinventing Innovation Management Research in a Digital World. *MIS Quarterly*, 41(1), 223-238.
- Ning, L., Sun, Z., Yuan, Y., et al. (2020). Research on the Formation and Evolution Mechanism of Business Ecosystems Based on Transaction Cost Theory. *Economic Issues*, 2020(06), 8-18.
- Zhao Yuan, Fan Chongjun, Zhu Yue. (2020). Exploration of Digital Transformation Strategies for Catering business. *Logistics Technology*, 43(02), 43-44+55.
- Zhongguancun Information Technology and Entity Economy Integration Development Alliance. (2020). *Digital Transformation Reference Framework (T/AIITRE 1001-2020)*. Tsinghua University Press.
- Zhu, Z., Huang, X., & Yu, X. (2018). The Impact of Financial Industry Opening on China's Manufacturing Competitiveness: A Case Study. *Journal of Economic and Management Sciences*, 35(3), 114-131.