



## From Clicks to Satisfaction: A Study on How Customer-Based Brand Equity Shapes Customer Satisfaction in Online Food Delivery Realm for Generation Z in Lampang Province, Thailand

Pongsiri Kamkankaew<sup>1</sup>, Pojnicha Thongyoy<sup>2</sup> and Yontida Phonracharnon<sup>3</sup>

<sup>1</sup> Faculty of Business Administration, North-Chiang Mai University, Thailand

<sup>2,3</sup> BISN High School Diploma in Business and Arts, The British International School of Northern Thailand, Thailand

<sup>1</sup>Coordinator Email: Kpongsiri85@gmail.com, ORCID: <https://orcid.org/0000-0002-5885-4805>

<sup>2</sup>E-mail: jshekwlhio@gmail.com, ORCID: <https://orcid.org/0009-0003-3453-756X>

<sup>3</sup>E-mail: indysmilelampang@gmail.com, ORCID: <https://orcid.org/0009-0001-0568-2747>

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### Abstract

**Background and Aim:** The rise of online platforms, especially in the food service industry, has significantly impacted Generation Z, enhanced brand preference and loyalty and potentially affecting customer satisfaction. This research explores the impact of customer-based brand equity on customer satisfaction with online food delivery applications for Generation Z in Lampang Province, Thailand.

**Materials and Methods:** This study focuses on a quantitative approach to investigate the relationship between customer satisfaction and brand awareness among Generation Z users of online food delivery applications in Lampang Province, Thailand. A sample size of 400 users was chosen. Data was collected using accidental and convenient sampling techniques, with an online questionnaire as the most suitable instrument. The questionnaire was designed with five key variables and tested for internal consistency using Cronbach's alpha coefficient. A multiple regression analysis was performed to understand the influence of the independent variables on the dependent variable, customer satisfaction.

**Results:** The study uses enter method regression analysis to explore the relationships between four hypotheses on customer satisfaction in online food delivery applications for Generation Z in Lampang Province, Thailand. With these factors accounting for about 63.90% of the variance, the findings demonstrate a positive impact of brand awareness, association, loyalty, and perceived quality on customer satisfaction.

**Conclusion:** The results show a positive impact of brand awareness, association, loyalty, and perceived quality on customer satisfaction. Implementing these suggestions can enhance customer satisfaction and competitiveness in the online food delivery market for Generation Z in Lampang Province, Thailand.

**Keywords:** Customer-based Brand Equity; Customer Satisfaction; Food Delivery; Online Application; Generation Z

### Introduction

The rapid digitization of industries, intensified by technological advancements, has given rise to a myriad of online platforms and services, of which online food delivery applications have become increasingly popular (Burgos, 2022). These platforms, driven by convenience and a wide variety of food choices, have not only transformed the way consumers order and consume food, but also reshaped traditional business models in the food service industry (Lee & Tan, 2022). Notably, Generation Z, often defined as individuals born between 1997 and 2012, has emerged as a significant demographic, being digital natives and having grown up amidst the proliferation of technology and the internet (Malangpoothong & Boonyanam, 2023)

Over the past ten years, Thailand has experienced a significant upswing in the realm of online food delivery. At the heart of this expansion is Generation Z, individuals born between 1997 and 2012, who, with their inherent digital prowess and penchant for convenience, have become primary patrons (Malangpoothong & Boonyanam, 2023). According to the Digital Economy Promotion Agency (DEPA) (2023) report, an astounding 70% of this demographic has delved into online food delivery services. This mounting interest has propelled the industry's market size, witnessing an annual growth of 23%. Major players in this arena, such as GrabFood, Foodpanda, and Line Man, have seen substantial traction. The Thailand Internet User Behavior 2022 study indicates a pronounced preference for GrabFood, capturing 45% of





Generation Z's patronage, credited to its vast culinary options and timely service (Electronic Transactions Development Agency, 2022)

Furthermore, the financial behavior of Generation Z in this sector is particularly noteworthy. Findings from the Thai E-Commerce Association underline an average monthly expenditure of 1,500 Thai Baht on these platforms, a figure that suggests their elevated spending habits, often driven by their desire for foreign and premium dishes (Malangpoothong & Boonyanam, 2023). However, beyond their spending and ordering trends, there's a deeper layer to their consumer behavior. Their ordering frequency, influenced by factors such as convenience, diverse food choices, and attractive promotions, averages 3 to 4 times a week (Muangmee et al., 2021). Yet, amidst this consumption pattern, a surge in environmental awareness has been detected. The Thailand Internet UsBehavior 2022 highlights that a majority of this age group is leaning towards sustainable packaging, signifying their broader concerns beyond mere convenience. In essence, the burgeoning online food delivery landscape in Thailand is not just growing—it's being actively molded by the preferences and values of Generation Z, providing a roadmap for businesses aiming for success in this vibrant market (Electronic Transactions Development Agency, 2022). The province of Lampang, located in the northern region of Thailand, is no exception to these global trends (Kamkankaew, et al, 2023). With its unique blend of traditional charm and modernity, it has become a fertile ground for the integration of technological services into daily life, especially among its younger residents (Lee & Tan, 2022).

Brand equity, as conceptualized from the customer's perspective, comprises components such as brand awareness, perceived quality, brand associations, and brand loyalty (Aaker, 1991; Aaker & Alexander Biel, 1992). Customer-based brand equity (CBBE) refers to the differential effect that brand knowledge has on consumer response to the marketing of that brand (Keller, 1993; Kamkankaew, 2021). It is posited that a strong CBBE leads to enhanced brand preference and greater loyalty, potentially impacting customer satisfaction in various industries (Deshmukh, 2021).

In the context of online food delivery applications, where choices are abundant and competition is fierce, understanding the factors that contribute to customer satisfaction is paramount. While several studies (Abu ELSamen, 2015; Ali & Muqadas, 2015; Bhimavarapu et al., 2021) have explored the dynamics of brand equity and customer satisfaction in various sectors, there remains a gap in literature specifically addressing the influence of CBBE on customer satisfaction of online food delivery applications among Generation Z in Lampang Province (Kamkankaew, 2016).

This research endeavors to bridge this gap by investigating the impact of customer-based brand equity on the satisfaction of Generation Z consumers using online food delivery services in Lampang. By honing in on this specific demographic and regional context, the study aims to provide insights that are both academically robust and practically relevant for businesses, policymakers, and other stakeholders in the evolving landscape of digital food delivery services.

## Research Objective

To explore the impact of customer-based brand equity on customer satisfaction of online food delivery application of Generation Z in Lampang Province, Thailand





## Literature Review

This section introduces the fundamental principles of customer satisfaction, customer-based brand equity, and hypothesis creation. The specific information is outlined as follows:

### *The Concept of Customer Satisfaction for Online Food Delivery Applications*

The modern digital era has ushered in a surge of online food delivery applications, thus creating a paradigm shift in how consumers order and consume food (Hasbi et al., 2022). At the heart of this transition lies the concept of customer satisfaction, which remains paramount for both service providers and academic researchers (Hasbi et al., 2022; Pal et al, 2022; Santoso & Ardianti, 2023). This literature review aims to encapsulate key studies and findings on the subject, focusing specifically on customer satisfaction within the context of online food delivery applications. Customer satisfaction is traditionally defined as the discrepancy between consumers' expectations and the perceived performance of a product or service (Goodman et al., 1995; Sharma & Sarel, 1995). Anderson, Fornell & Lehmann (1994) further elaborated that it is a consumer's post-consumption assessment of how well a service meets their original expectations.

Several studies have sought to discern the determinants of customer satisfaction in the realm of online food delivery (Hasbi et al., 2022; Pal et al, 2022; Santoso & Ardianti, 2023). Among these determinants, service quality has been frequently underscored as a key factor. Specifically, the speed of delivery (Macías-Rendón, Rodríguez-Morales & Raúl Barriga-Medina, 2021), the accuracy of the order (Goh, Ho & Ng, 2021), and the interface usability of the application (Tavitiyaman, Tsang & Lo, 2022) significantly influence satisfaction levels. Additionally, the perceived value, which entails the trade-off between the quality of food and its cost, is pivotal (Santoso & Ardianti, 2023).

In the rapidly evolving realm of online food delivery, various factors significantly influence customer satisfaction (Hasbi et al., 2022). Key among these is the technological infrastructure, with a user-friendly interface and features like real-time tracking, bolstered further by AI-driven chatbots and personalized recommendations (Santoso & Ardianti, 2023). Concurrently, trust remains crucial, with secure payment methods and data privacy being indispensable. How feedback is addressed—through swift redressals and compensations—plays a paramount role, while the influence of positive external reviews on third-party platforms substantially enhances trust and satisfaction (Goh, Ho & Ng, 2021). Furthermore, as consumers become more ethically aware, practices such as ethical sourcing, sustainable packaging, and fair labor underscore their satisfaction levels (Pal et al, 2022).

In conclusion, the landscape of customer satisfaction in online food delivery applications is multi-faceted. While traditional determinants like service quality and perceived value remain foundational, newer elements like technological interface, trust, feedback mechanisms, external reviews, and sustainability concerns are continuously reshaping the contours of satisfaction in this domain. As the industry continues to evolve, a holistic understanding of these determinants becomes indispensable for both academicians and practitioners.

### *The Concept of Customer-Based Brand Equity for Online Food Delivery Applications*

Customer-based brand equity (CBBE) has emerged as a salient concept in marketing academia, primarily owing to its implications on brand value from the perspective of the customer (Lassar, Mittal & Sharma, 1995). The rise of online food delivery applications further elevates the relevance of this construct, as the digital landscape amplifies brand interactions.





This literature review encapsulates pivotal studies and findings surrounding CBBE within the sphere of online food delivery applications.

CBBE was first described by Keller (1993) as the unique impact that brand knowledge has on how consumers react to a company's marketing. This comprises the dimensions of brand awareness, perceived quality, brand associations, and brand loyalty. Within the context of digital food delivery, this understanding pertains to the perceived worth and emotional attachment that consumers establish with a particular application or service.

Brand awareness in the context of online food delivery applications is linked to the omnipresence of the application across digital channels and its memorability (Aaker, 1991). Studies by Bhimavarapu et al. (2021) found that online food delivery brands with higher visibility in online advertising and social media tend to resonate more with users, resulting in heightened brand equity. Given the foundational assertion by Aaker (1991) that brand awareness is inextricably associated with the omnipresence of a brand across digital avenues and its ability to be easily recalled, it becomes pivotal to explore this concept in the burgeoning online food delivery application market. Further corroborated by the findings of González-Mansilla, Serra-Cantallops & Berenguer-Contrí (2023), there exists empirical evidence to suggest that brands manifesting greater visibility in the online domain, particularly via advertisements and social media platforms, hold a stronger resonance among users, thus amplifying their brand equity. Drawing upon these foundational studies (Octavia & Riza, 2023; Park & Le, 2023) the following hypothesis is proposed:

*H1: Brand awareness has an impact on customer satisfaction with the online food delivery application of Generation Z in Lampang Province, Thailand.*

Brand association refers to the informational nodes linked to the brand in consumer memory (Farquhar, 1989). For online food delivery brands, these associations can range from convenience to a sense of community or even sustainability. Patel and Kumar (2019) highlighted the emotional connection consumers form when brands engage in sustainability practices or community services, thereby enhancing brand equity. Rooted in the theoretical framework put forth by Park & Srinivasan (1994), brand associations encompass the informational nodes that consumers associate with a specific brand, which reside in their memory. In the digital milieu of online food delivery services, these associations evolve to encompass a myriad of facets including, but not limited to, convenience, community affinity, and sustainability. The research by Kaynak, Salman & Tatoglu (2008) Dandis & Al Haj Eid (2022) Bouchriha, Farid & Ouidad (2023) further elucidates this by underscoring the profound emotional connections consumers, especially younger demographics, form when brands actively partake in sustainability endeavors or foster a sense of community. This emotional bond, in turn, catalyzes amplifying the brand's equity. Given the evolving nature of brand associations and the predilection of Generation Z towards brands that reflect their values, particularly in the context of Lampang Province, Thailand, the following hypothesis is formulated:

*H2: The brand association has an impact on customer satisfaction with the online food delivery application of Generation Z in Lampang Province, Thailand.*

Brand-perceived quality revolves around the consumer's judgment about a brand's overall excellence or superiority (Farquhar, 1989). In the world of online food deliveries, this perception is influenced by factors such as user interface efficiency, delivery speed, and food quality. Rahman and Areni (2016) elucidated those applications ensuring consistent delivery times and order accuracy fortified their brand equity more effectively. Prasad's (2018)







conceptualization, of perceived quality, pertains to the consumer's evaluation and judgment regarding a brand's overarching excellence or superiority. When transposed to the digital landscape of online food delivery services, this perception takes on multiple dimensions—encompassing facets such as the efficiency of the application's user interface, punctuality and reliability of the delivery, and the inherent quality of the food delivered. Drawing upon empirical insights from Rodríguez-López, del Barrio-García & Alcántara-Pilar (2020) González-Mansilla, Serra-Cantallops & Berenguer-Contrí (2023), it becomes evident that platforms that ensure and uphold consistent delivery times, combined with impeccable order accuracy, tend to fortify their brand equity more robustly. In the context of the digital-native Generation Z demographic within Lampang Province, Thailand, this multifaceted concept of perceived quality takes on heightened significance. Therefore, based on the aforementioned theoretical and empirical foundations, the subsequent hypothesis is proposed:

*H3: Brand perceived quality has an impact on customer satisfaction with the online food delivery application of Generation Z in Lampang Province, Thailand.*

Brand loyalty in the digital landscape often translates to app stickiness – the frequency of app usage and reluctance to switch to competitors (Keller, 1993). Aaker (1991) identified that seamless user experience and personalized recommendations within food delivery apps significantly boost brand loyalty, thereby escalating brand equity. Brand loyalty, within the confines of the digital realm, undergoes a subtle transformation, manifesting as "app stickiness" (Farquhar, 1989). This term, as expounded by Kayaman & Arasli (2007), encapsulates the regularity of app usage coupled with a palpable hesitancy among users to migrate to rival platforms. Expanding upon this notion, research conducted by Suhartanto et al. (2019) Karimbanakkal & Mullappallykayamkulath (2022) Rombach et al. (2023) provide empirical credence to the idea that an unblemished user experience, harmonized with tailored recommendations, considerably amplifies brand loyalty in the sphere of food delivery applications. This heightened loyalty, in turn, acts as a lever, elevating the brand's equity. Given this backdrop and considering the intrinsic characteristics of Generation Z, particularly in the geographical context of Lampang Province, Thailand, we can distill the following hypothesis:

*H4: Brand loyalty has an impact on customer satisfaction with the online food delivery application of Generation Z in Lampang Province, Thailand.*

Customer-based brand equity, as applied to online food delivery applications, offers a rich tapestry of insights (Rabie, Ooshaksaraie & Chirani, 2015). While traditional pillars like brand awareness, perceived quality, and brand loyalty remain foundational, the digital nature of these services introduces novel facets like app stickiness and digital brand associations. As the online food delivery sector continues to burgeon, understanding the nuances of CBBE becomes indispensable for both marketers and researchers.

## Research Methodology

This part introduces the fundamental ideas of study design, population and sample size determination, data collection methods, research instrument preference, and data analysis techniques. The provided information is outlined as follows:

### Research Design

The chosen approach for this study was a quantitative method, which allowed for empirical investigations and statistical analyses of the gathered data.

### Population and Sample Size

The defined population for this research was Generation Z users of online food delivery applications in Lampang Province, Thailand. The sample size was set at 400 users, a number



derived using the formula proposed by Roscoe (1969), ensuring a statistically representative segment of the broader population.

### **Data Collection**

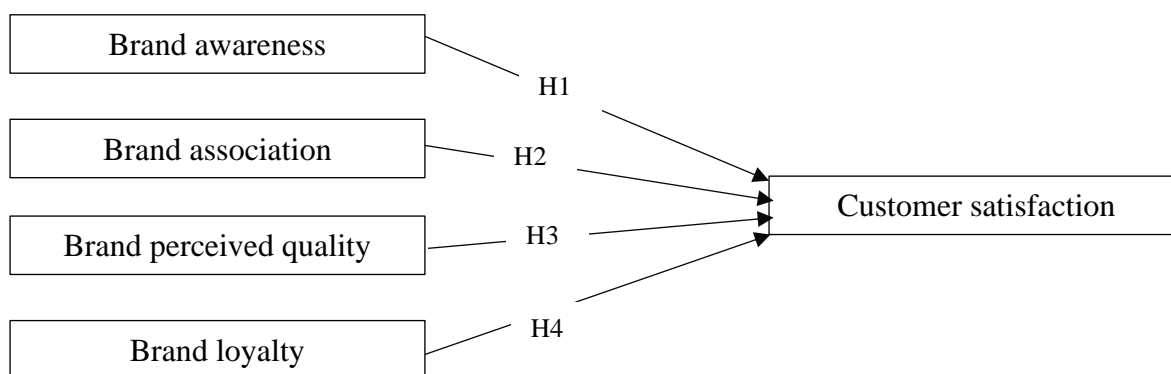
Accidental sampling and convenient sampling techniques were employed in this research. These non-probability sampling techniques enabled data gathering from participants who were readily available and willing to partake. Given the digital nature of the study and the target audience, an online questionnaire between August and September 2023 was chosen as the most suitable data collection instrument.

### **Research instrument**

The research instrument was a structured online questionnaire, comprising 25 items distributed among five key variables. Each variable, namely customer satisfaction, brand awareness, brand association, perceived brand quality, and brand loyalty, was represented by five items. The items in the questionnaire were crafted with insights from prior empirical studies to ensure validity. Participants responded to each statement using a five-point Likert scale, where '1' indicated 'Strongly Disagree' and '5' meant 'Strongly Agree'. The internal consistency of the questionnaire, which is crucial for ensuring the validity of the responses, was tested using Cronbach's alpha coefficient. The derived values ranged from 0.759 to 0.915. A coefficient above 0.7 is traditionally regarded as reliable, signifying that this research instrument was suitable for the objectives of this study (Craig & Moores, 2006) Kamkankaew et al., 2023).

### **Data Analysis**

To investigate the relationships among the variables and to validate the hypotheses, a multiple regression analysis was performed. This analytical technique helped in understanding the extent to which the independent variables (brand awareness, brand association, brand perceived quality, and brand loyalty) influenced the dependent variable (customer satisfaction).



**Figure 1** Conceptual framework

## **Research Result**

The primary aim of this study was to elucidate the impact of customer-based brand equity on the satisfaction levels of Generation Z users of online food delivery applications in Lampang Province, Thailand. To achieve this, the research employed a comprehensive set of analytical tools. Notably, descriptive statistics were used to evaluate the normal distribution of variables. Correlation analysis and regression analysis, using the enter method, were then conducted to determine the strength and nature of the relationship between the variables.



Ultimately, the tests provided valuable insights and verified the effects of customer-based brand equity on the satisfaction of online food delivery users within the specified scope in Lampang Province, Thailand.

### *Descriptive statistics*

In the methodical evaluation of the dimensions encompassing brand awareness, brand association, brand perceived quality, brand loyalty, and customer satisfaction, a comprehensive statistical approach was employed. This involved the meticulous calculation of the average mean score, standard deviation (S.D.), skewness (SK), and kurtosis (KU) for each statement pertinent to the aforementioned dimensions. The results of these calculations have been systematically organized and presented in the subsequent table 1.

**Table 1** Descriptive statistics of the variables

Variables	Mean	S.D.	SK	KU	Meaning of Mean
Brand awareness	4.34	0.557	0.436	0.731	strongly agree
Brand association	4.33	0.565	0.410	0.455	strongly agree
Brand perceived quality	4.30	0.770	0.579	1.090	strongly agree
Brand loyalty	3.35	0.684	0.580	0.624	agree
Customer satisfaction	3.38	0.646	0.561	0.648	agree

In the academic investigation delineated in Table 1, a comprehensive analysis of various brand-related variables reveals a consensus of agreement among the respondents, as indicated by the statistical parameters provided. Analyzing brand awareness, yielded a mean score of 4.34, a standard deviation of 0.557, a skewness of 0.436, and a kurtosis of 0.731. Similarly, brand association presented closely related results with a mean of 4.33, a standard deviation of 0.565, skewness of 0.410, and kurtosis of 0.455. Brand perceived quality reported a mean of 4.30, but a slightly higher standard deviation of 0.770, accompanied by skewness of 0.579 and kurtosis of 1.090. On the other hand, customer satisfaction and brand loyalty scored lower on the mean, registering at 3.38 and 3.35 respectively, but displayed consistent standard deviations of 0.646 and 0.684, and identical skewness and kurtosis values at 0.561 and 0.648. Notably, the report underscores that all variables concluded with a standard deviation rounded off to zero, indicating a complete alignment of values with the mean. Furthermore, the skewness of all variables remained within the confines of twice the standard error of their respective skewness, demonstrating that the values did not exhibit extreme peaks. Likewise, the kurtosis of all variables was encapsulated within twice the standard error of their kurtosis, further confirming the absence of peaked distributions. This comprehensive analysis, as cited by Hair et al., (2010), leads to the conclusive inference that the data distributions of the resultant variables adhere to a general trend of normality.

### *Correlation analysis*

Correlation analysis is utilized to quantify the association between the specified variables. The correlation analysis table (Table 2) in this study presents the Pearson correlation coefficients and associated significance levels. In advance of commencing hypothesis testing, it is imperative that all independent variables, namely brand awareness (BAW), brand association (BAS), brand perceived quality (BPQ), and brand loyalty (BLY), exhibit positive interrelationships with the dependent variable, customer satisfaction (Y\_CSF). The data indicates a significant positive linear relationship with a correlation value and a significance level of .001.

**Table 2** Correlation analysis

	Y_CSF	BAW	BAS	BPQ	BLY
Y_CSF	1.000				
BAW	0.746**	1.000			
BAS	0.725**	0.653**	1.000		
BPQ	0.604**	0.696**	0.698**	1.000	
BLY	0.602**	0.668**	0.627**	0.672**	1.000

\*\* is sig level = 0.001

The strongest association is shown between customer satisfaction (Y\_CSF) and brand awareness (BAW), exhibiting a positive correlation ( $r = 0.746$ ,  $p < 0.001$ ). The present study examines the link between customer satisfaction (Y\_CSF) and brand loyalty (BLY), revealing a positive correlation coefficient of 0.602 ( $p < .001$ ). The data indicates that the correlation coefficients ( $r$ ) between the variables exhibit a strong association with the linear relationship of the other covariates, surpassing a value of 0.700, which signifies the presence of multicollinearity. Table 3 demonstrates that the Variance Inflation Factor (VIF) values do not exceed a threshold of 10. The variance inflation factor (VIF) values observed in this study range from 1.18 to 1.66. The tolerance values range from 0.646 to 0.846, all of which are below 1.00. Therefore, based on the findings of Hair et al. (2010), it may be inferred that there is no presence of multicollinearity. All variables can be examined in the context of hypothesis testing.

**Table 3** The result of multicollinearity testing

Variables	VIF values	Tolerance values	Meaning
Brand awareness (BAW)	1.66	0.602	Not Multicollinearity
Brand association (BAS)	1.55	0.646	Not Multicollinearity
Brand perceived quality (BPQ)	1.28	0.782	Not Multicollinearity
Brand loyalty (BLY)	1.18	0.846	Not Multicollinearity

In this research, a detailed examination of the correlation between various brand-related variables and customer satisfaction has been conducted, yielding insights into the strength and nature of these relationships. The results indicate a prominent positive correlation between customer satisfaction (Y\_CSF) and brand awareness (BAW), with a correlation coefficient ( $r$ ) of 0.746 and a significance level of 0.001, positioning it as the strongest correlation observed in the study. In contrast, the relationship between customer satisfaction (Y\_CSF) and brand loyalty (BLY) is identified as the weakest, albeit still positive, with a correlation coefficient of 0.602 and a significance level of 0.001. Notably, the data reveals that the correlation values ( $r$ ) between the variables are predominantly high, consistently surpassing the 0.700 threshold, which typically denotes multicollinearity when variables are highly correlated in a linear combination with other covariates. However, upon consulting Table 3, it is evident that the Variance Inflation Factor (VIF) values remain well below the critical value of 10, ranging between 1.18 and 1.66, while the tolerance values are found to be below 1.00, specifically within the 0.646 to 0.846 range. These findings allow us to infer that multicollinearity is not present within the data set, as corroborated by Hair et al. (2010). Consequently, the validity of conducting hypothesis testing on all the variables is upheld, facilitating a robust and reliable investigation into the brand-related dimensions under study.







### Hypothesis Testing

To examine the hypothesis, the present study employed the entry method regression analysis to ascertain the influence of customer-based brand equity on customer satisfaction within the context of food delivery online applications among Generation Z consumers in Lampang Province, Thailand. The regression equation model can be represented as follows:

$$Y\_CSF = a + \beta BAW + \beta BAS + \beta BPQ + \beta BLY + e$$

The execution of the enter method regression analysis facilitated an in-depth examination of the relationships postulated in modified hypothesis 1 (H1), hypothesis 2 (H2), hypothesis 3 (H3), and hypothesis 4 (H4), with the corresponding results meticulously outlined in Table 4. This rigorous statistical approach revealed that all the independent variables under consideration exert a positive and statistically significant impact on customer satisfaction (Y\_CSF). Specifically, brand awareness (BAW) showcased a beta coefficient ( $\beta$ ) of 0.321 with a p-value less than 0.05, denoting a significant relationship. Similarly, brand association (BAS) exhibited a  $\beta$  of 0.309, brand loyalty (BLY) demonstrated a  $\beta$  of 0.315, and brand perceived quality (BPQ) also displayed a  $\beta$  of 0.315, all with p-values falling below the 0.05 threshold. The robustness of the model was further affirmed through an F-statistic of 139.90, alongside a highly significant p-value of less than 0.001. Additionally, the model exhibited substantial explanatory power, with an Adjusted  $R^2$  value of 0.639, implying that approximately 63.90% of the total variance observed in the model can be comprehensively explained by the influence exerted by brand awareness, brand association, brand perceived quality, and brand loyalty on the customer satisfaction about the online food delivery applications utilized by Generation Z in Lampang Province, Thailand. The outcomes derived from the empirical testing of the research hypotheses unequivocally lead to the acceptance of all the posited hypotheses. This conclusion is substantiated by the statistical validity and significance of the results, as delineated in the previous sections, establishing the robustness of the proposed relationships within the theoretical framework of this study. Consequently, this lends credence to the underlying theoretical constructs and the hypothesized associations, contributing to the scholarly discourse in this domain.

**Table 4** the result of the enter method regression analysis

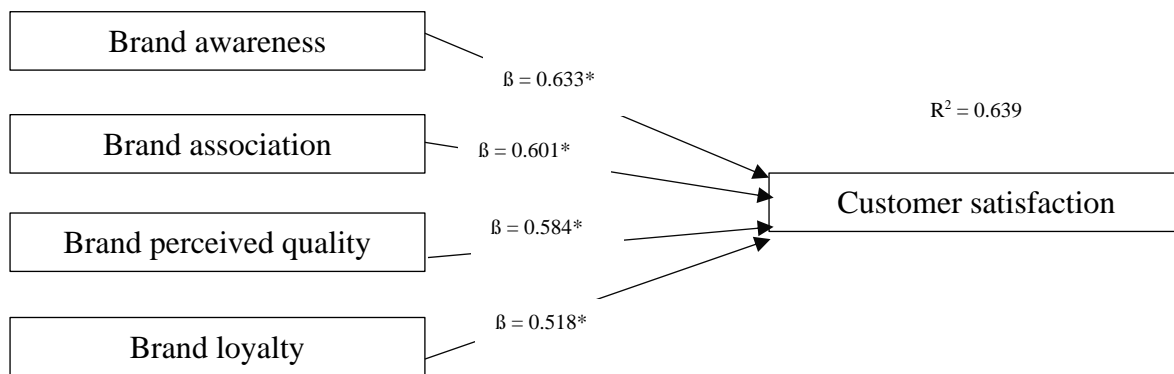
Independent Variable	Dependent Variable: Y_CSF				
	b	SE	$\beta$	t	p-value
a(constant)	0.836	0.135		6.164	< 0.05
BAW	0.644	0.142	0.633*	8.158	< 0.05
BAS	0.614	0.103	0.601*	7.481	< 0.05
BPQ	0.515	0.106	0.518*	5.078	< 0.05
BLY	0.525	0.101	0.584*	5.064	< 0.05

$R = 0.722$ ,  $R^2 = 0.687$ , Adjusted  $R^2 = 0.639$ ,  $R^2_{\text{change}} = 0.687$   
 $F = 139.90$ , Sig  $F = < 0.001$ , Durbin-Watson = 1.969

\*  $p < 0.05$

Drawing from the data delineated in the aforementioned Table 4, the regression model can be aptly represented through the following equation:

$$Y\_CSF = 0.836 + (0.633) \beta BAW + (0.601) \beta BAS + (0.584) \beta BLY + (0.518) \beta BPQ + e$$



\*  $p < 0.05$

**Figure 2** Result of Hypothesis Testing

## Conclusion

Four hypotheses (H1–H4) were investigated using the enter method and regression analysis in this substantial academic study. Customer satisfaction for online food delivery apps used by Generation Z in Lampang Province, Thailand, increased significantly and positively across all examined independent variables. Customer satisfaction was significantly related to measures of brand awareness, brand association, brand loyalty, and brand perceived quality. These associations were statistically significant, with beta coefficients ( $\beta$ ) of 0.321, 0.309, and 0.315, respectively. A large F-statistic (139.90) and a small p-value (less than 0.001) demonstrated the model's dependability. The modified  $R^2$  value of 0.639 also demonstrated that these brand-related characteristics could account for around 63.90% of the overall variance in customer satisfaction. The findings corroborate every one of the assumptions. They back up the study's theoretical underpinnings and contribute significantly to the scholarly discourse on how brand features impact consumer happiness in this market sector and among these individuals.

## Discussion

The findings of this study indicate that brand awareness (BAW), brand association (BAS), brand perceived quality (BPQ), and brand loyalty (BLY) have a significant positive impact on customer satisfaction (Y\_CSF). An effect size of 0.633 and a statistical significance level of 0.05 supported the findings of Hypothesis 1. Hypothesis 1 proposes a conceptual framework that says brand awareness impacts customer satisfaction with Generation Z's online food delivery application in Lampang Province, Thailand. This result explains that brand awareness in online food delivery applications is linked to omnipresence and memorability across digital channels. It shows that brand awareness with higher visibility in advertising and social media resonates more with users, resulting in heightened customer satisfaction. This concept is crucial in the growing online food delivery application market. This result is consistent with the studies of Octavia Riza (2023), Park & Le (2023), and Yunpeng & Khan



(2023). An effect size of 0.601 and a statistical significance level of 0.01 supported the findings of hypothesis 2. Hypothesis 2 proposes a conceptual framework that suggests that brand association impacts customer satisfaction with Generation Z's online food delivery application in Lampang Province, Thailand. This result explains that brand associations are informational nodes linked to a brand in consumer memory, ranging from convenience to community affinity or sustainability. These associations can include convenience, community affinity, and sustainability in online food delivery services. Emotional connections, particularly among younger demographics, form when brands engage in sustainability or foster a sense of community, enhancing customer satisfaction. This result is also consistent with the studies of Kaynak, Salman, Tatoglu (2008), Dandis Al Haj Eid (2022), and Bouchriha, Farid & Ouidad (2023). An effect size of 0.518 and a statistical significance level of 0.05 supported the findings of Hypothesis 3. Hypothesis 3 proposes a conceptual framework for how brand-perceived quality impacts customer satisfaction with Generation Z's online food delivery application in Lampang Province, Thailand. This finding explains how user interface effectiveness, delivery speed, and food quality affect brand-perceived quality in online food delivery. Platforms that maintain consistent delivery times and order accuracy strengthen customer satisfaction more effectively. This concept is essential for the digital-native Generation Z demographic in Lampang Province, Thailand, where the importance of perceived quality is heightened. This result is also consistent with the studies of Prasad (2018), Rodríguez-López, del Barrio-García & Alcántara-Pilar (2020), and González-Mansilla, Serra-Cantalops & Berenguer-Contrí (2023). An effect size of 0.584 and a statistical significance level of 0.05 supported the findings of Hypothesis 4. Hypothesis 4 proposes a conceptual framework that says brand loyalty impacts customer satisfaction with Generation Z's online food delivery application in Lampang Province, Thailand. This result explains that brand loyalty on digital platforms is often called "app stickiness," which refers to the regularity of satisfaction, app usage, and reluctance to switch to competitors. This result is also consistent with the studies of Suhartanto et al. (2019), Karimbanakkal & Mullappallykayamkulath (2022), Pal et al. (2022), and Rombach et al. (2023).

## Recommendation

Based on the comprehensive results derived from the enter method regression analysis in our study, we propose the following suggestions for marketers in the realm of online food delivery applications targeting Generation Z in Lampang Province, Thailand, and academicians:

### *Managerial Recommendations*

1. Given the significant relationship between brand awareness and customer satisfaction ( $\beta = 0.321$ ), marketers should invest in strategies that amplify the visibility and recognizability of their brand. This could involve robust social media campaigns, influencer partnerships, and engaging content creation tailored to the preferences and habits of Generation Z.
2. With a positive and significant beta coefficient of 0.309 for brand association, it is crucial for marketers to foster positive and relevant associations with their brand. Delivering high-quality service consistently, ensuring a user-friendly app interface, and coordinating the brand with trends and values significant to the Generation Z audience can all help achieve this.
3. The study revealed a significant positive impact of brand loyalty on customer satisfaction ( $\beta = 0.315$ ). Marketers should, therefore, focus on loyalty programs, personalized





promotions, and exceptional customer service to encourage repeat usage and build a loyal customer base.

4. As brand-perceived quality also showed a significant positive relationship with customer satisfaction ( $\beta = 0.315$ ), it is imperative for marketers to maintain high standards of service quality, provide accurate and timely order deliveries, and ensure the food quality meets customer expectations. Regular quality checks and customer feedback loops can be instrumental in achieving this.

By implementing these suggestions, marketers can expect to see a tangible impact on customer satisfaction, thereby fostering a competitive edge in the bustling online food delivery market catering to Generation Z in Lampang Province, Thailand.

#### ***Academic Contribution Recommendations***

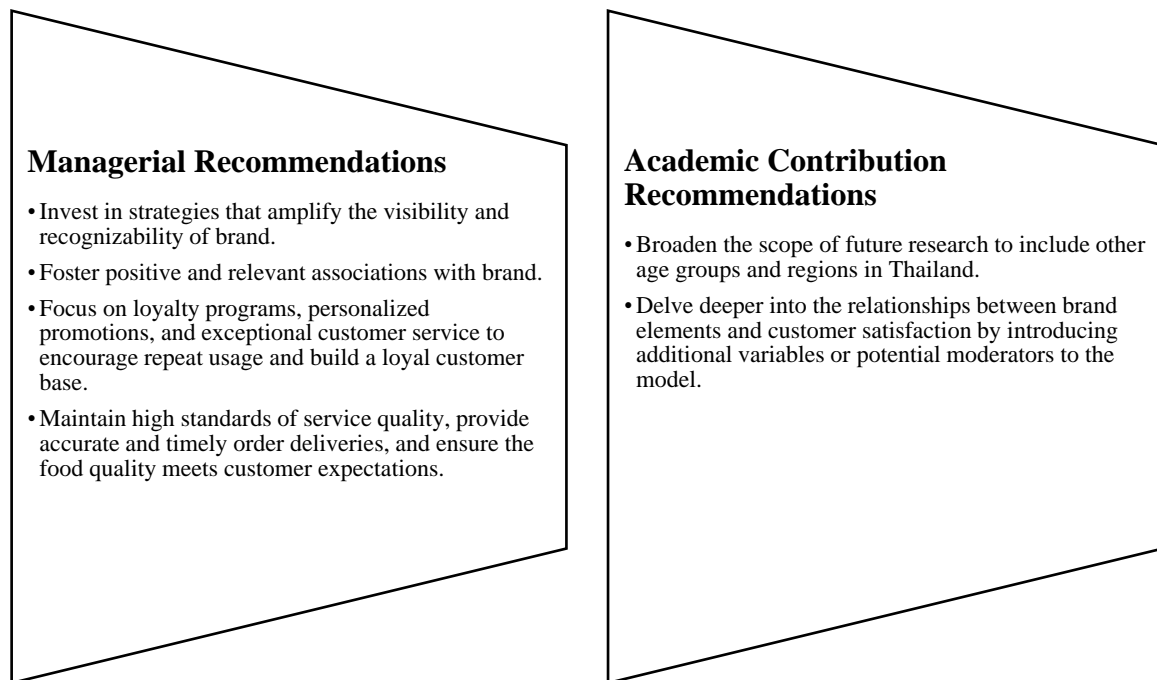
Based on the empirical facts offered in this study, the report suggests the following guidelines for scholarly contributions:

1. While the current study provides substantial insights into the Generation Z demographic in Lampang Province, Thailand, future research could broaden the scope to include other age groups and regions in Thailand. In this way, the results would be more applicable to a broader range of Thai people and places, and we would have a better idea of how different aspects of a brand affect customer satisfaction. Comparative analyses between different age groups or Thai regions could uncover unique preferences or trends, contributing to a more nuanced body of knowledge.

2. The strong relationships established between brand awareness, brand association, brand loyalty, brand perceived quality, and customer satisfaction highlight the importance of these factors in the context of online food delivery applications. Future research could delve deeper by introducing additional variables or potential moderators to the model. For example, looking into how outside factors like cultural influences or the economy might affect or change the connections between brand elements and customer satisfaction could give marketers more information and help them develop better ways to make customers happier and more loyal in the online food delivery sector.



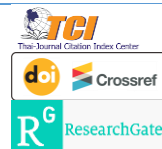




**Figure 3** Recommendation of the study

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