

Research Paper

Facebook Reviews and Consumers' Food Purchase Behaviour in Cloud Kitchens: The Moderating Role of Product Knowledge

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Abstract: A cloud kitchen is an innovative concept involving a virtual commercial restaurant that operates exclusively for delivery orders, without any physical dining area for food preparation. Usually, cloud kitchen businesses promote their products and stay connected with their consumers through the Facebook platform. This study investigates the influence of Facebook reviews on Bangladeshi consumers' food purchase behaviour in cloud kitchens. This quantitative study surveyed 377 Bangladeshi consumers who are Facebook users and have experience purchasing food from cloud kitchens. The findings reveal that the quality, credibility, quantity, and valence of Facebook reviews are significantly associated with the consumers' food purchase intention, leading to actual purchases from cloud kitchens. Interestingly, product knowledge does not moderate the relationship between consumers' purchase intention and purchase behaviour. The present study contributes to the research discipline of hospitality and marketing, mainly social media marketing and unique cloud kitchen concepts in the context of developing countries.

Keywords: Cloud kitchen, Facebook reviews, product knowledge, purchase behaviour, Bangladesh

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Introduction

Nowadays, consumers depend more on online review platforms to collect product and service information (Denga & Rakshit, 2022). Online reviews are a significant source of information for consumers when making purchasing decisions (Pandey et al., 2023). Online reviews allow customers to exchange their perceptions with other customers about products or services that they have consumed through online platforms (e.g., e-commerce platforms) (Hancock et al., 2022). Consumers prefer to check previous consumers' or experts' reviews before purchasing tangible and intangible products and services, which assists them in making decisions perfectly (Alhemimah, 2019).

The advent and progression of social media have introduced an additional facet to online reviews by amplifying the number of user-generated reviews posted (Sharma et al., 2022). Social media users can now share their perceptions regarding products and services conveniently. In response to this higher consumer interest, marketers have started using social media to communicate with prospective and existing customers. Consumers read social media reviews of a product to get a more comprehensive representation before making purchase decisions. When they find reviews that are of quality and credible, they become more inclined to use that information which impacts their behaviour towards online purchasing (Fileri, 2016; Wang et al., 2021).

The use of social media marketing expanded dramatically during COVID-19 to specify products/services, collect information, evaluate products/services, and make purchase decisions (Hu, 2022; Mason et al., 2021). In this regard, Kulshreshtha and Sharma (2022) highlighted that the cloud kitchen is an innovative way of serving customers, especially during the pandemic. When restaurants could not accept orders during lockdowns (Movement Control Order), they came up with this innovative cloud kitchen concept to take customers' orders and deliver food without the need for customers to be present at the physical restaurant (Poon & Tung, 2022). Similarly, the concept of cloud kitchens emerged in Bangladesh during the pandemic as all restaurants were ordered to shut down (Haque, 2020).

As of January 2023, Bangladesh was reported to have 43.25 million Facebook users (The Business Standard, 2023). A cloud kitchen is a ghost kitchen that delivers food to its clients without a physical existence (Kulshreshtha & Sharma, 2022). Customers can order through phone calls and online platforms (social media, food ordering apps, restaurant websites, etc.) (Balasubramanian & Konar, 2022) and the orders will be delivered to the given address. Most cloud kitchens operate through the B2C (Business to Consumers) model (Nurul Islami et al., 2022). A noticeable number of cloud kitchens in Bangladesh cropped up and started operating as the demand for optimum food packaging and delivery rose during COVID-19 (Haque, 2020; Hossain et al., 2023). The Bangladeshi cloud kitchen industry mainly operates on Facebook (Zarif, 2020). While it is evident that the Bangladeshi cloud kitchen

industry primarily relies on Facebook for various functions such as taking orders, promotional advertisements, and sharing consumer reviews (The Daily Star, 2021), there is a notable research gap in understanding the specific impact of social media reviews (particularly Facebook reviews) on consumer food purchases from cloud kitchens in Bangladesh. Existing studies have yet to sufficiently explore how these reviews influence consumer behaviour and purchase decisions within this rapidly growing sector. Therefore, this study aims to fill the research gap by exploring the impact of Facebook reviews on Bangladeshi consumers' food purchase behaviour in cloud kitchens.

A previous study revealed that the quality and credibility of online reviews influence consumers' intention to purchase (Kumar et al., 2023). In addition, consumer purchase intent is influenced by the quantity of reviews and the valence (positivity or negativity) of these reviews (Indrawati et al., 2023). The information acceptance model (IACM) is an underlying theory that explains these interactions. However, the role of information or review quantity is not examined in the IACM model, whereas numerous previous studies have demonstrated that the quantity of information or review is also significant in consumers' intention to purchase (Cheong et al., 2020; Thomas et al., 2019). Vazquez et al. (2023) also denoted that review valence is an essential factor that significantly impacts an individual's purchasing decisions, but was not integrated into the IACM theory. However, Alhemimah (2019) argued that the ICAM theory does not indicate the consequence of the consumer's purchase intention.

In addition, purchase intention does not always lead to actual purchases, and customers' purchase decisions are significantly influenced by their knowledge of the product (Fu & Elliott, 2013). Although product knowledge has been studied in the context of online reviews in several studies (Hung & Li, 2007; Imbayani & Gama, 2015), the influence of product knowledge is understudied within a single framework that integrates review quantity, review quality, review valence, and purchase intention. Thus, the present study aims to identify how consumers are triggered or influenced by Facebook reviews towards purchasing food from cloud kitchens in Bangladesh with the moderating impact of product knowledge.

Literature Review and Hypotheses Development

Information Acceptance Model (IACM)

Erkan and Evans (2016) developed the Information Acceptance Model (IACM) to examine the impact of social media information on consumers' purchase intention. The IACM model illustrates that the quality and credibility of information have a relationship with purchase intention; in several studies, information quality and information credibility have been adapted as review quality and review credibility in

the context of social media platforms (Chen & Chang, 2018; Thomas et al., 2019; Zhu et al., 2020). However, the IACM model did not investigate the influence of review quantity and valence despite previous studies demonstrating its significance in shaping consumers' purchase intentions (Cheong et al., 2020; Thomas et al., 2019; Vazquez et al., 2023). Additionally, the post-stage process of the consumer's purchase intention was not studied in the IACM theory. However, Ajzen (1991) argued that an individual's intention to act is a precursor to their behaviour. Therefore, this study investigates the actual purchasing behaviour of consumers as a follow-up to their purchase intentions. In addition, according to Chen and Deng (2016), individuals with a higher level of product knowledge are more capable of comprehending the value of products, which increases their likelihood of making purchases. Therefore, perceived behavioural control may vary in impact based on the individual's level of product knowledge.

Review Quality (RQ) and Purchase Intention (PI)

The quality of an online review is evaluated based on the relevance, comprehensibility, purposefulness, and adequacy of its content (Huyen & Costello, 2017). Review quality can be categorised into two types: the first one is a basic recommendation review that is emotional, subjective and provides supporting information without argument, and the other, an online review that offers comprehensive and objective information along with reasoned arguments based on the actualities of the product or service (Alhemimah, 2019; Lee et al., 2008). Hence, the quality of online reviews relies on the persuasive power of the reviews. So many anonymous reviews exist online, often needing to be more comprehensible, understandable, and trustworthy (Santos, 2021).

Online reviews consisting of authentic and specific arguments are more persuasive than reviews that express abstract emotion and provocative comments, and ultimately, managing the value of more basic online reviews will create a more productive state of mind (Arora & Mail, 2018). Consumers prefer to trust websites that give buyers unbiased reviews of legitimate products and services, and the precise, timely, and reliable information gives prospective consumers, confidence. Bataineh (2015) stated that accurate information helps consumers assess the products, which can influence their purchase intention. Several studies have found that the quality of online reviews influences consumers' purchase intention (Chen & Chang, 2018; Islam et al., 2023; Lee et al., 2008). Therefore, this study hypothesises the following:

H1: Review quality positively impacts consumers' food purchase intention for cloud kitchen.

Review Credibility (RC) and Purchase Intention (PI)

López and Sicilia (2016) described review credibility as the perception of consumers regarding a review's trustworthiness. When a review is perceived as knowledgeable, trustworthy, and reliable by consumers, it is perceived as credible, an essential characteristic of the review (Bataineh, 2015). Online review credibility is also illustrated as the belief in the reviews and opinions that the consumers have shared on the internet, and review credibility can make sense of trustworthiness and inspire consumers' purchase intention (Mauri & Minazzi, 2013). Organisations emphasise online reviews because they stimulate customers' purchasing intention (Zhu et al., 2020). Lis (2013) highlighted that consumers are positively encouraged by higher recommendation ratings on content trustworthiness. While searching for information online, consumers trust past consumers' credible reviews and expert opinions rather than the general information about the products by marketers (Sutanto & Aprianingsih, 2016). Therefore, a higher degree of credibility increases the intention to purchase and consume a product (Alcántara-Pilar et al., 2024; Sutanto & Aprianingsih, 2016; Thomas et al., 2019). Therefore, this study suggests that:

H2: Review credibility positively impacts consumers' intention to purchase food from cloud kitchen.

Review Quantity (RQN) and Purchase Intention (PI)

The quantity of the review influences the opinion of the consumers and their attitude towards their purchasing intention. Consequently, the abundance of positive reviews convinces consumers to make the purchase (Park et al., 2007; Sutanto & Aprianingsih, 2016). The higher number of reviews strengthens consumers' confidence and decreases the potential risk. Previous studies have demonstrated a positive association between review quantity and consumers' purchasing intention (Cheong et al., 2020; Thomas et al., 2019). Further, Park et al. (2007) denoted that numerous positive reviews and recommendations on products or services positively influence consumers' attitude towards purchasing and pre-determining the quality.

Moreover, consumers often predict the product's popularity based on the review quantity. Huyen and Costello (2017) demonstrated that review quantity significantly influences consumers' purchase intention. Large amounts of online reviews help to lessen consumers' feelings of anxiety and confusion over any products and influence them to purchase these products. Song et al. (2021) and Wang et al. (2021) also denoted that a large number of positive reviews on any brand enhances consumers' confidence towards that brand, and intention to purchase that brand. Therefore, the following is posited:

H3: Review quantity positively impacts consumers' food purchase intention for cloud kitchen.

Review Valence (RV) and Purchase Intention (PI)

Valence is the emotional tone or sentiment expressed in an online review for a product or service. Review valence denotes whether a review is mainly positive, negative, or neutral (Vazquez et al., 2023). Wang et al. (2023) explained that positive valence means a review is favourable, negative valence is unfavourable, and neutral valence suggests a balanced or objective viewpoint. Tayal et al. (2023) highlighted that online retailers receive thousands of customer reviews, making it challenging for customers to read them all. To make the process convenient, retailers provide filters allowing customers to sort reviews based on criteria such as positive, negative, or recent.

A customer's decision is substantially influenced by the specific reviews they choose to explore. From a rational perspective, a positive review tends to boost a consumer's inclination to purchase, while a negative review can deter them (Roy et al., 2019). In addition, for reviews that have a combination of positive and negative sentiments, the shopper's response hinges on the overall sentiment. However, negative reviews strongly influence consumers' purchase decisions (Roy et al., 2019), that is, negative reviews exert a more substantial impact than positive ones (von Helversen et al., 2018). Furthermore, research has indicated that the degree of positivity or negativity within reviews shapes consumers' purchase intentions. Conversely, Chen and Lurie (2013) asserted that positive reviews influence consumer purchase intentions more than negative ones. Cheong et al. (2020) identified a positive association between review valence and consumer purchase intentions. Therefore, it is hypothesised that:

H4: Review valence positively impacts consumers' food purchase intention for cloud kitchen.

Purchase Intention (PI), Actual Purchase Behaviour (AP), and Product Knowledge (PK)

Purchase intention is vital to the consumers' decision process. It is a psychological variable that plays the role of a connector between consumers' attentiveness to purchase a product and the possibility of purchasing. Purchase intention is the determinant of purchasing, representing the consumers' eagerness to purchase any product or service in collaboration with consumer requirements, attitude, and awareness towards that product or service (Beneke et al., 2016). The consumers' desire to purchase any product can be considered as their purchase intention, showing the robustness of their eagerness to purchase (Meng et al., 2021). Identifying the consumers' purchase intention is complicated as their actions reflect their intentions

(Song et al., 2021). The theory of planned behaviour (TPB) also indicates that an individual's behavioural intention is an antecedent of actual behaviour (Ajzen, 1991). Hence, the association between purchase intention and actual purchase is the connection between a consumer's intent or willingness to purchase a product or service and their eventual decision to make that purchase. However, consumers become more motivated to purchase products that they are familiar with (Park & Kim, 2016). Moreover, Kim and Hwang (2020) also noted that product knowledge moderates an individual's behavioural intention.

Meanwhile, Chen and Deng (2016) argued that individuals with more product knowledge are better equipped to understand the benefits and value of a product, thereby enhancing their likelihood of making actual purchases. Conversely, those with less product knowledge may need help recognising these benefits and face more significant barriers, such as perceived risks. As such, perceived behavioural control may have different impacts depending on the level of product knowledge. Therefore, the present study hypothesised that:

H5: Consumers' food purchase intention for cloud kitchen positively impacts consumers' actual purchase behaviour.

H6: Product knowledge moderates the association between consumers' food purchase intention and actual purchase behaviour.

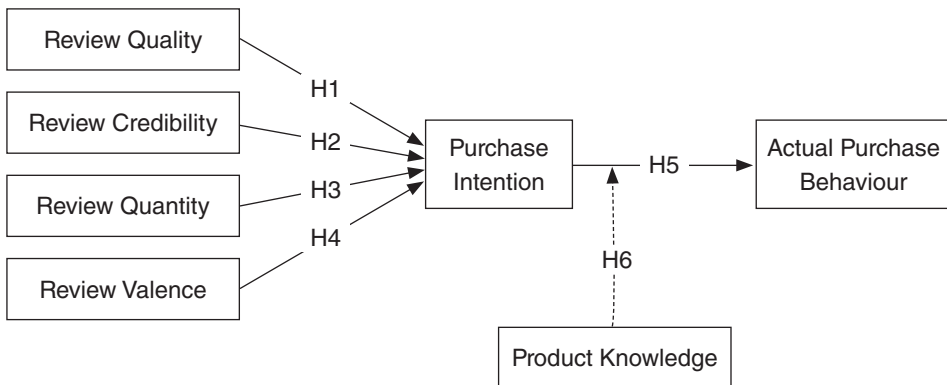


Figure 1. Conceptual research framework

Methodology

The quantitative research method was adopted for this study due to the appropriateness of collecting extensive data. Purposive sampling was utilised to collect data from a specified target population. The authors employed purposive sampling as it better

matches the sample to the aims and objectives of the research, thus improving the study's rigour and trustworthiness of the data and results (Campbell et al., 2020). The residents of Bangladesh who have prior experience ordering food from cloud kitchens were selected as the target population of the current study. A sample size of 146 was estimated as the minimum sample size based on G*Power analysis with 0.15 effect size, 95% confidence level, and 0.05% errors (Faul et al., 2009). A structured online questionnaire was distributed through social media platforms (e.g., Facebook and WhatsApp) and recipients were requested to share the questionnaire link with their peers.

All measurement items were adapted from previous studies on various online reviews and e-WoM contexts. The responses were measured using a 5-point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). Four items for measuring review quality and three items of review valence were adapted from Sutanto and Aprianingsih (2016). Further, four items of review credibility and three items for measuring review quantity were adapted from Reyes-Menendez et al. (2019) and Zhu et al. (2020). In addition, to measure consumer purchase intention, three items were adapted from Bataineh (2015), and three items for actual purchase behaviour were adapted from Wee et al. (2014).

Moreover, to measure the moderating variable "product knowledge," three items were adapted from Fu and Elliott (2013). Two academicians and two hospitality industry players pre-tested the instrument to ensure content validity. The present study is considered cross-sectional, and data was collected from different individuals in a single time frame (April 1, 2023 to September 30, 2023). A total of 392 responses were collected, and after screening the data, 377 responses were found fit for analysis.

Consequently, the authors used Harman's single factor test on the seven constructs comprising 24 items to assess common method bias (CMB). CMB can have potentially severe effects on research findings. Thus, it is essential to understand their sources and when they are especially likely to be problematic. CMB is deemed to exist when one component accounts for more than 50% of the total variance (Podsakoff et al., 2003). The statistical analysis in our study established the absence of CMB, as a single component only extracted 44.863% of the total variance.

Data Analysis and Results

Respondents' Demographic Profile

Table 1. Demographic profile of respondents

	Category	Frequency	Percentage (%)
Gender	Female	125	33.16
	Male	252	66.84

Table 1. (cont)

	Category	Frequency	Percentage (%)
Age	18–24	151	40.05
	25–34	112	29.71
	35–44	83	22.02
	45 and above	31	8.22
Occupation	Business	101	26.79
	Service	111	29.44
	Student	124	32.89
	Others	41	10.88
Frequency of purchasing food online weekly	Less than 2 times	132	35.01
	2–3 times	112	29.71
	4–5 times	91	24.14
	More than 5 times	42	11.14
Frequency of Facebook usage daily	Less than 1 hour	42	11.14
	1–2	103	27.32
	3–4	113	29.97
	5–6	67	17.77
	More than 6 hours	52	13.79

Respondents' demographic profile (Table 1) indicates the percentage of male and female respondents was 66.84 % and 33.16 %, respectively. In addition, 40.05% of respondents were between the ages of 18 and 24 years, 29.71% belonged to the age group of 25–34 years, 22.02% were 35–44 years, and 8.22% were above 45 years. Moreover, 26.79% were involved in the business sector, 29.44% were from the service sector, 32.89% were students, while 10.88% were from different professions. Furthermore, the majority of the respondents (35.01%) purchased food online less than two times weekly, and used Facebook for 3–4 hours daily (29.97%).

Measurement Model Assessment

The partial least square structural equation modelling (PLS-SEM) technique is commonly used for investigating intricate relationships between observable and latent variables. SmartPLS (v. 4) software was used to evaluate the study's measurement and structural model. In the measurement model, Cronbach's alpha ($C\alpha$), composite reliability (CR), and average variance extracted (AVE) were employed to determine the construct's reliability, validity, and internal consistency, respectively. The loadings,

$C\alpha$, and CR values were found above 0.7, while the AVE value was beyond 0.6, confirming that the model demonstrates satisfactory reliability, internal consistency, and convergent validity (see Table 2) (Hair et al., 2021).

Table 3 presents the discriminant validity assessment using Fornell and Larcker's criterion and Heterotrait-Monotrait Ratio (HTMT). Based on Fornell and Larcker's criterion, discriminant validity is achieved as the square root of the average variance extracted by a construct exceeded its correlation with any other construct (1981) (Table 3). Henseler et al. (2015) recommended that a HTMT value below 0.9 is acceptable, indicating no issues with the discriminant validity in the current research.

Table 2. Construct reliability and validity

Constructs	Items	Loading	$C\alpha$	CR	AVE
Actual Purchase Behaviour (AP)	AP1	0.837	0.755	0.859	0.671
	AP2	0.819			
	AP3	0.801			
Purchase Intention (PI)	PI1	0.802	0.756	0.860	0.672
	PI2	0.814			
	PI3	0.843			
Product Knowledge (PK)	PK1	0.861	0.779	0.872	0.694
	PK2	0.790			
	PK3	0.846			
Review Credibility (RC)	RC1	0.760	0.807	0.874	0.634
	RC2	0.820			
	RC3	0.787			
	RC4	0.815			
Review Quality (RQ)	RQ1	0.743	0.806	0.873	0.632
	RQ2	0.823			
	RQ3	0.826			
	RQ4	0.784			
Review Quantity (RQN)	RQN1	0.815	0.770	0.867	0.685
	RQN2	0.832			
	RQN3	0.837			
Review Valence (RV)	RV1	0.835	0.757	0.860	0.673
	RV2	0.844			
	RV3	0.781			

Table 3. Discriminant validity

Fornell-Larcker criterion							
Constructs	AP	PI	PK	RC	RQ	RQN	RV
AP	0.819						
PI	0.725	0.820					
PK	0.710	0.766	0.833				
RC	0.675	0.693	0.777	0.796			
RQ	0.654	0.698	0.751	0.766	0.795		
RQN	0.675	0.709	0.722	0.638	0.686	0.828	
RV	0.660	0.700	0.718	0.705	0.717	0.670	0.820
Heterotrait-monotrait ratio (HTMT) – Matrix							
PI	0.856						
PK	0.821	0.787					
RC	0.869	0.782	0.882				
RQ	0.832	0.786	0.844	0.852			
RQN	0.786	0.829	0.829	0.806	0.758		
RV	0.863	0.822	0.831	0.803	0.804	0.773	

Structural Model Assessment

As per the structural model assessment outcome, the coefficient of determination (R^2) values (0.587 and 0.638) were found to be in the acceptable range (Hair et al., 2021). In addition, the Q^2 values (0.406 and 0.452) signify the study's predictive relevance.

Table 4 displays the f^2 values, which reveal that RQ, RC, RQN, and RV have a small effect on the PI (f^2 value below 0.2). In contrast, PI has a medium effect on AP (f^2 value above 0.2) (Cohen, 2013). Furthermore, the multicollinearity test was conducted through the inner VIF value (see Table 4). In addition, all the inner VIFs were found between 1.061 and 3.100. Inner VIF values below 5 ensure the absence of multicollinearity issues in this study (Hair et al., 2021). Moreover, six hypotheses were developed in the current research and tested based on t-values and p-values. Hair et al. (2016) stated that a hypothesis is accepted when the t-value is more than 1.96, and the p-value is less than 0.05. The hypotheses test results indicate that H1, H2, H3, H4, and H5 have been accepted, whereas H6 was rejected (see Table 4 and Figure 2).

Table 4. Results of structural model assessment

Hypothesis	Coefficient	T-value	P-value	Results	Effect size (f ²)	Inner VIF
H1: RQ → PI	0.159	2.439	0.015	Accepted	0.022	3.100
H2: RC → PI	0.212	3.108	0.002	Accepted	0.044	2.801
H3: RQN → PI	0.314	5.253	0.000	Accepted	0.124	2.196
H4: RV → PI	0.227	3.334	0.001	Accepted	0.056	2.563
H5: PI → AP	0.456	7.448	0.000	Accepted	0.202	2.489
H6: PK × PI → AP	0.061	1.643	0.101	Rejected	0.010	1.061

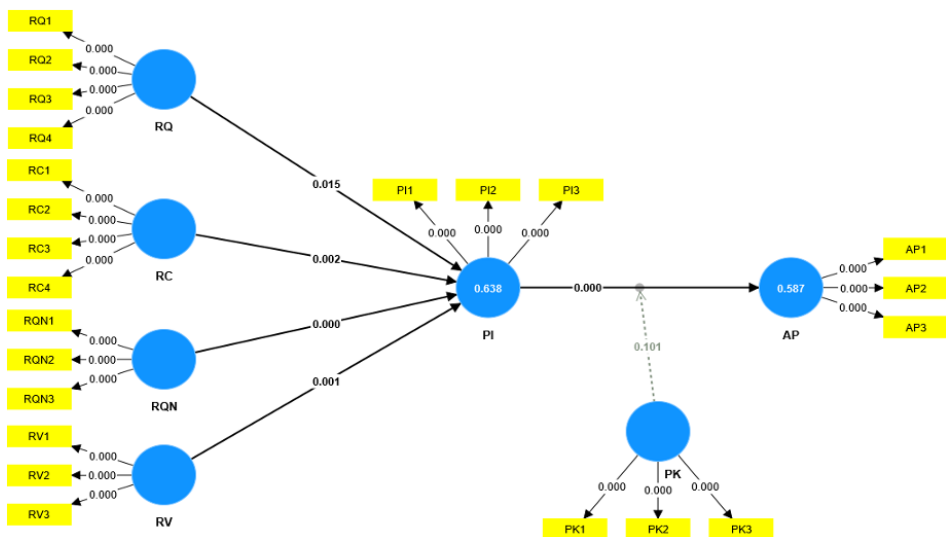


Figure 2. Bootstrapping result with p-values

Discussion and Implications

This research endeavoured to comprehend the influence of quality, quantity, valence, and credibility of the reviews on social media, particularly on Facebook pages, on food purchased from cloud kitchens in Bangladesh. The statistical outcome evidenced the positive influence of Facebook reviews’ quality (H1), credibility (H2), quantity (H3), and valence (H4) on the intention of purchasing food from cloud kitchens. In addition, consumers’ purchase intention positively influences their purchase behaviour (H5). However, product knowledge does not moderate the association between consumers’ purchase intention and actual purchase behaviour (H6). The findings reflect that social media significantly influences consumers’

decision-making by generating regular peer evaluations before, during, and after purchases and providing a secure platform for online purchases (Kunja & GVRK, 2018). Existing literature demonstrates that customers' discussions on social media generates positive online word-of-mouth that triggers consumers' purchase intention (Kunja & GVRK, 2018; Rao & Rao, 2019). It should be noted that compared to employee reviewers, anonymous online reviewers' content is considered a more persuasive and reliable source of information (Steward et al., 2020).

Review quality strongly influences purchase intention, consistent with Chen et al. (2018). The positive impact of review quality suggests that consumers value well-constructed and informative reviews. High-quality reviews provide valuable insights into a product or service, thus increasing the likelihood of a purchase. Chen and Chang (2018) as well as Kim and Park (2017) also mentioned that consumer satisfaction is influenced by information quality and purchase intention. Existing literature indicates that perceived credibility plays a vital role in customers' decision-making processes and reduces uncertainty (Nan et al., 2017). Credibility is crucial in online reviews, as consumers trust reviews from credible sources. Thus, the positive impact of review credibility on purchase intention emphasises the importance of cloud kitchen operators maintaining a credible online presence.

In regard to review quantity, a product's performance and popularity can be determined through the volume of reviews available online (Chevalier & Mayzlin, 2006). The relationship between review quantity and purchase intention suggests that more reviews can positively influence consumer decision-making. This could be due to increased social proof and a larger pool of information. The higher review volume boosts the review's potency and positively influences purchase intention (Cheong et al., 2020). Huyen and Costello (2017) further mentioned that the quantity of reviews usually decreases uncertainty and builds consumer confidence. The finding that review valence affects purchase intention aligns with prior research findings (Cheong et al., 2020). Positive reviews can boost consumers' confidence in their purchase decisions, while negative reviews may have the opposite impact (Roy et al., 2019).

Moreover, consumers' purchase intentions significantly impact their purchase behaviour, corroborating with Ajzen (1991). This finding emphasises the predictive power of intention in understanding and forecasting consumer actions. In the context of cloud kitchens, it suggests that an increase in purchase intention can lead to a corresponding increase in actual food orders. In addition, findings indicate that the relationship between purchase intention and actual purchase behaviour in cloud kitchens is not moderated through product knowledge. The current study's findings fully and partially align with a previous study's findings (Hansen, 2013). This finding implies that the influence of purchase intention on actual behaviour remains consistent across different levels of product knowledge. In other words, even

consumers with varying levels of product knowledge are similarly affected by their intentions when purchasing cloud kitchen food. Since food is a high-involvement product, rigorous decision-making is required when deciding to purchase, and cloud kitchen does not offer any dine-in facility. Hence, customers have to rely on online reviews immensely. Thus, this study's findings will assist in decision formation.

Theoretical Implications

Theoretically, this research expands the existing knowledge on the influence of online reviews on consumers' purchase intention. The IACM theory explains the influence of information quality and credibility on purchase intention with the mediation role of information usefulness and information adoption. This study adopted information quality and credibility as review quality and credibility. A significant association between review quality and credibility with purchase intention is indicated in the present study. Moreover, the role of review quantity on purchase intention was not assessed in the original IACM model, but numerous previous studies revealed the importance of review quantity on purchase intention (Cheong et al., 2020; Thomas et al., 2019).

Moreover, developing a theoretical model integrating Facebook review quality, quantity, valence, and credibility to identify consumers' intention towards online food purchases from cloud kitchens and their actual purchase behaviour is a significant contribution to the current research. Additionally, the moderating role of product knowledge was also studied. The study's integration of product knowledge as a moderating factor into the theoretical model adds depth to our understanding of how consumers' familiarity with a product affects their online purchase intentions and actual behaviour.

Practical Implications

Cloud kitchen marketers can leverage the research findings to implement strategies tailored to enhance brand reputation and drive consumer trust. Marketers can foster a positive online reputation and influence consumer purchase intentions by establishing real-time reputation management systems, actively monitoring and responding to online reviews, and incentivising positive feedback. As technology has advanced and many Bangladeshi millennials use the "crowd mentality" phenomenon, there should be a way to respond immediately to pressing issues on negative online reviews.

Moreover, this study assists consumers in ordering wisely, reducing the chance of wasting money by purchasing food from reliable platforms, avoiding overconsumption, and ensuring economic benefits. Entrepreneurs can also consider this study's findings while designing their business and digital marketing strategies.

Cloud kitchen businesses can utilise quality information from review websites to assist consumers in comprehending the company's overall quality, building the business's overall quality, and strengthening a favourable reputation. Lastly, policymakers can raise public awareness about food consumption through digital platforms, and these initiatives ensure social sustainability and foster food ordering through education.

Conclusion

The present study examined how Bangladeshi consumers are affected by Facebook reviews when purchasing food from cloud kitchens. The study includes the four characteristics of online reviews: review quality, credibility, quantity, and valence. The findings provide evidence of factors that affect Bangladeshi consumers' food purchase intentions from cloud kitchens. The study depicts that Facebook reviews influence consumers' purchasing intentions. Moreover, consumer purchase behaviour positively correlates with consumer purchase intention for cloud kitchens.

Limitations and Future Research Directions

This study contains a few limitations despite offering some noteworthy findings. Although the present study maintained the minimum sample size threshold, it is better to conduct a study with a large sample size to reduce the multivariate non-normality of the data. Four features of online reviews (quality, credibility, quantity, and valence) have been adopted in this study. Future research can be carried out with more characteristics of online reviews. Moreover, future studies can integrate and examine other moderating and mediating variables.

This research was focused only on the Facebook platform to validate the conceptual model; therefore, further studies can be conducted on other social media platforms (e.g., Instagram/Twitter). Due to the insufficiency of total members on Facebook fan pages for cloud kitchens in Bangladesh, the current research utilised a non-probability purposive sampling method. Researchers can consider the geographical variety in Bangladesh and worldwide in further studies. Only the cloud kitchen business was considered in the present study, so other types of industries and sub-sectors might be studied in future studies.

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References

Ajzen, I. (1991). The theory of planned behaviour. *Organisational Behaviour and Human Decision Processes*, 50(2), 179–211.

- Alcántara-Pilar, J. M., Rodríguez-López, M. E., Kalinić, Z., & Liébana-Cabanillas, F. (2024). From likes to loyalty: Exploring the impact of influencer credibility on purchase intentions in TikTok. *Journal of Retailing and Consumer Services*, 78, 103709.
- Alhemimah, A. (2019). *The influence of online reviews on Saudi consumers' tourism destination choices*. University of Plymouth.
- Arora, L., & Mail, B. K. S. (2018). Influence of review quality, review quantity and review credibility on purchase intention in context of high involvement products. *European Journal of Applied Business and Management*, 4(4), 25–40.
- Balasubramanian, K. & Konar, R. (2022). Moving forward with augmented reality menu: Changes in food consumption behaviour patterns. *Asia-Pacific Journal of Innovation in Hospitality and Tourism*, 11(3), 91–96.
- Bataineh, A. Q. (2015). The impact of perceived e-WOM on purchase intention: The mediating role of corporate image. *International Journal of Marketing Studies*, 7(1), 126–137. <https://doi.org/10.5539/ijms.v7n1p126>
- Beneke, J., de Sousa, S., Mbuyu, M., & Wickham, B. (2016). The effect of negative online customer reviews on brand equity and purchase intention of consumer electronics in South Africa. *The International Review of Retail, Distribution and Consumer Research*, 26(2), 171–201. <https://doi.org/10.1080/09593969.2015.1068828>
- Campbell, S., Greenwood, M., Prior, S., Shearer, T., Walkem, K., Young, S., Bywaters, D., & Walker, K. (2020). Purposive sampling: complex or simple? Research case examples. *Journal of Research in Nursing*, 25(8), 652–661. <https://doi.org/10.1177/1744987120927206>
- Chen, C.-C., & Chang, Y.-C. (2018). What drives purchase intention on Airbnb? Perspectives of consumer reviews, information quality, and media richness. *Telematics and Informatics*, 35(5), 1512–1523. <https://doi.org/10.1016/j.tele.2018.03.019>
- Chen, K., & Deng, T. (2016). Research on the green purchase intentions from the perspective of Product knowledge. *Sustainability*, 8(9), 943.
- Chen, Z., & Lurie, N. H. (2013). Temporal contiguity and negativity bias in the impact of online word of mouth. *Journal of Marketing Research*, 50(4), 463–476.
- Cheong, J. W., Muthaly, S., Kuppusamy, M., & Han, C. (2020). The study of online reviews and its relationship to online purchase intention for electronic products among the millennials in Malaysia. *Asia Pacific Journal of Marketing and Logistics*, 32(7), 1519–1538. <https://doi.org/10.1108/APJML-03-2019-0192>
- Chevalier, J. A., & Mayzlin, D. (2006). The effect of word of mouth on sales: Online book reviews. *Journal of Marketing Research*, 43(3), 345–354. <https://doi.org/10.1509/jmkr.43.3.345>
- Cohen, J. (2013). *Statistical power analysis for the behavioral sciences* (2nd ed.), Routledge.
- Denga, E. M., & Rakshit, S. (2022). Digital marketing and the sustainable performance of small and medium enterprises. In R. M. Potluri & N. R. Vajjhala (Eds), *Advancing SMEs toward e-commerce policies for sustainability* (pp. 213–234). IGI Global. <https://doi.org/10.4018/978-1-6684-5727-6.ch011>

- Erkan, I., & Evans, C. (2016). The influence of eWOM in social media on consumers' purchase intentions: An extended approach to information adoption. *Computers in Human Behaviour*, *61*, 47–55. <https://doi.org/10.1016/j.chb.2016.03.003>
- Faul, F., Erdfelder, E., Buchner, A. & Lang, A. G. (2009). Statistical power analyses using G* Power 3.1: Tests for correlation and regression analyses, *Behavior Research Methods*, *41*(4), 1149–1160.
- Filieri, R. (2016). What makes an online consumer review trustworthy? *Annals of Tourism Research*, *58*, 46–64. <https://doi.org/10.1016/j.annals.2015.12.019>
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of Marketing Research*, *18*(3), 382–388. <https://doi.org/10.1177/002224378101800313>
- Fu, F. Q., & Elliott, M. T. (2013). The moderating effect of perceived product innovativeness and product knowledge on new product adoption: An integrated model. *Journal of Marketing Theory and Practice*, *21*(3), 257–272. <https://doi.org/10.2753/MTP1069-6679210302>
- Hair Jr, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2021). *A primer on partial least squares structural equation modeling (PLS-SEM)*. Sage Publications.
- Hancock, T., Breazeale, M., Adams, F. G., & Hardman, H. (2022). Fuelling and cooling firestorms: How online community members enable and disable online negative e-WOM. *Journal of Product & Brand Management*, *32*(2), 286–304. <https://doi.org/10.1108/JPBM-12-2021-3756>
- Hansen, H. (2013). Price consciousness and purchase intentions for new food products: The moderating effect of product category knowledge when price is unknown. *Journal of Food Products Marketing*, *19*(4), 237–246. <https://doi.org/10.1080/10454446.2013.724363>
- Haque, S. S. (2020). The effects of COVID-19 pandemic and recovery strategies for the travel and tourism sector in Bangladesh. *Hospitality & Tourism Review*, *2*(1), 1–13.
- Henseler, J., Ringle, C. M. & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modelling, *Journal of the Academy of Marketing Science*, *43*(1), 115–135.
- Hossain, M. I., Maideen, M. B. H., Sharmin, N., & Islam, T. (2023). COVID-19 repercussions on Bangladeshi on-demand-food delivery, restaurant, and hotel industry. *International Journal of Innovation and Business Strategy (IJIBS)*, *18*(1), 50–62.
- Hu, L. (2022). The PPE industry in Italy during COVID-19: Supply chain disruption and the adoption of digital and social media in B2B firms. *Journal of Business & Industrial Marketing*, *37*(10), 2050–2063. <https://doi.org/10.1108/JBIM-01-2021-0005>
- Hung, K. H., & Li, S. Y. (2007). The influence of eWOM on virtual consumer communities: Social capital, consumer learning, and behavioural outcomes. *Journal of Advertising Research*, *47*(4), 485–495.
- Huyen, T., & Costello, J. (2017). Quality versus quantity: An investigation into electronic word of mouth's influence on consumer buying intention. *Journal of Promotional Communications*, *5*(2), 137–155.

- Imbayani, I., & Gama, A. W. S. (2015). The influence of electronic word of mouth (e-WOM), brand image, product knowledge on purchase intention. *Jurnal Ekonomi & Bisnis JAGADITHA*, 5(2), 145–153.
- Indrawati, P., Yones, P. C., & Muthaiyah, S. (2023). eWOM via the TikTok application and its influence on the purchase intention of something products. *Asia Pacific Management Review*, 28(2), 174–184. <https://doi.org/10.1016/j.apmr.2022.07.007>
- Islam, M. T., Hussin, S. R., & Wong, F. Y. (2023). What drives travellers' adoption of online travel reviews? Integrating helpfulness with information adoption factors. *Asia-Pacific Journal of Innovation in Hospitality and Tourism*, 12(1), 143–161.
- Kim, J. J., & Hwang, J. (2020). Merging the norm activation model and the theory of planned behaviour in the context of drone food delivery services: Does the level of product knowledge really matter? *Journal of Hospitality and Tourism Management*, 42, 1–11. <https://doi.org/10.1016/j.jhtm.2019.11.002>
- Kim, W. G., & Park, S. A. (2017). Social media review rating versus traditional customer satisfaction: Which one has more incremental predictive power in explaining hotel performance? *International Journal of Contemporary Hospitality Management*, 29(2), 784–802. <https://doi.org/10.1108/IJCHM-11-2015-0627/FULL/XML>
- Kulshreshtha, K., & Sharma, G. (2022). From restaurant to cloud kitchen: Survival of the fittest during COVID-19 An empirical examination. *Technological Forecasting and Social Change*, 179, 121629. <https://doi.org/10.1016/j.techfore.2022.121629>
- Kumar, S., Prakash, G., Gupta, B., & Cappiello, G. (2023). How e-WOM influences consumers' purchase intention towards private label brands on e-commerce platforms: Investigation through IAM (Information Adoption Model) and ELM (Elaboration Likelihood Model) Models. *Technological Forecasting and Social Change*, 187, 122199. <https://doi.org/10.1016/j.techfore.2022.122199>
- Kunja, S. R., & GVRK, A. (2018). Examining the effect of eWOM on the customer purchase intention through value co-creation (VCC) in social networking sites (SNSs). *Management Research Review*, 43(3), 245–269. <https://doi.org/10.1108/MRR-04-2017-0128>
- Lee, J., Park, D.-H. H., & Han, I. (2008). The effect of negative online consumer reviews on product attitude: An information processing view. *Electronic Commerce Research and Applications*, 7(3), 341–352. <https://doi.org/10.1016/j.elerap.2007.05.004>
- Lis, B. (2013). In eWOM we trust: A framework of factors that determine the eWOM credibility. *Business and Information Systems Engineering*, 5(3), 129–140. <https://doi.org/10.1007/s12599-013-0261-9>
- López, M., Sicilia, M., & Hidalgo-Alcázar, C. (2016). WOM marketing in social media. In P. De Pelsmacker (Ed), *Advertising in new formats and media* (pp. 149–168). Emerald Group Publishing Limited. <https://doi.org/10.1108/978-1-78560-313-620151007>
- Mason, A. N., Brown, M., Mason, K., & Narcum, J. (2021). Pandemic effects on social media marketing behaviours in India. *Cogent Business & Management*, 8(1). <https://doi.org/10.1080/23311975.2021.1943243>

- Mauri, A. G., & Minazzi, R. (2013). Web reviews influence on expectations and purchasing intentions of hotel potential customers. *International Journal of Hospitality Management*, *34*, 99–107. <https://doi.org/10.1016/j.ijhm.2013.02.012>
- Meng, L. (Monroe), Duan, S., Zhao, Y., Lü, K., & Chen, S. (2021). The impact of online celebrity in livestreaming E-commerce on purchase intention from the perspective of emotional contagion. *Journal of Retailing and Consumer Services*, *63*, 102733. <https://doi.org/10.1016/j.jretconser.2021.102733>
- Nan, G., Yang, J., & Dou, R. (2017). Do only review characteristics affect consumers' online behaviours? A study of relationship between reviews. *Journal of Electronic Commerce Research*, *18*(4), 330–345.
- Nurul Islami, P. Y., & Romli, N. A. (2022). Cloud kitchen as innovation digital marketing communication strategy for small medium enterprise. In N. M. Ismail, A. H. Ummah, & R. H. Chaniago (Eds.), *Communication Today* (pp. 185–201). Syiah Kuala University Press.
- Pandey, U., Islam, M. T., & Hossain, M. I. (2023). Servicescape, E-WoM, and satisfaction on tourists' revisit intention to yoga tourist destination: Evidence from Patanjali Yogpeeth, India. *Revista Turismo & Desenvolvimento*, *44*, 313–333.
- Park, D.-H., Lee, J., & Han, I. (2007). The effect of on-line consumer reviews on consumer purchasing intention: The moderating role of involvement. *International Journal of Electronic Commerce*, *11*(4), 125–148. <https://doi.org/10.2753/JEC1086-4415110405>
- Park, J.-H., & Kim, M.-K. (2016). Factors influencing the low usage of smart TV services by the terminal buyers in Korea. *Telematics and Informatics*, *33*(4), 1130–1140. <https://doi.org/10.1016/j.tele.2016.01.001>
- Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioural research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*(5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>
- Poon, W. C., & Tung, S. E. H. (2022). Consumer risk perception of online food delivery during the COVID-19 Movement Control Order (MCO) in Malaysia. *Journal of Foodservice Business Research*, *26*(2), 381–401. <https://doi.org/10.1080/15378020.2022.2054657>
- Rao, K. S., & Rao, B. (2019). Examining eWOM credibility - consumer purchase intention relationship in Facebook: A mediation analysis. *Indian Journal of Marketing*, *49*(8), 7. <https://doi.org/10.17010/ijom/2019/v49/i8/146169>
- Reyes-Menendez, A., Saura, J. R., & Martinez-Navalon, J. G. (2019). The impact of e-WOM on hotels management reputation: Exploring Tripadvisor review credibility with the ELM model. *IEEE Access*, *7*, 68868–68877. <https://doi.org/10.1109/ACCESS.2019.2919030>
- Roy, G., Datta, B., & Mukherjee, S. (2019). Role of electronic word-of-mouth content and valence in influencing online purchase behaviour. *Journal of Marketing Communications*, *25*(6), 661–684. <https://doi.org/10.1080/13527266.2018.1497681>
- Santos, M. L. B. dos. (2021). The “so-called” UGC: An updated definition of user-generated content in the age of social media. *Online Information Review*, *46*(1), 95–113. <https://doi.org/10.1108/OIR-06-2020-0258>

- Sharma, M., Antony, R., Sehrawat, R., Cruz, A. C., & Daim, T. U. (2022). Exploring post-adoption behaviours of e-service users: Evidence from the hospitality sector /online travel services. *Technology in Society*, 68, 101781. <https://doi.org/10.1016/j.techsoc.2021.101781>
- Song, B. L., Liew, C. Y., Sia, J. Y., & Gopal, K. (2021). Electronic word-of-mouth in travel social networking sites and young consumers' purchase intentions: An extended information adoption model. *Young Consumers*, 22(4), 521–538. <https://doi.org/10.1108/YC-03-2021-1288>
- Steward, M. D., Burns, A. C., Morgan, F. N., & Roehm, M. L. (2020). Credible effects: The impact of disclosure of material connections within online product reviews. *Journal of Public Policy & Marketing*, 39(3), 353–368.
- Sutanto, M. A., & Aprianingsih, A. (2016, September). The effect of online consumer review toward purchase intention: A study in premium cosmetic in Indonesia. *International Conference on Ethics of Business, Economics, and Social Science*, 53(2), 1689–1699.
- Tayal, D. K., Yadav, S. K., & Arora, D. (2023). Personalized ranking of products using aspect-based sentiment analysis and Plithogenic sets. *Multimedia Tools and Applications*, 82(1), 1261–1287. <https://doi.org/10.1007/s11042-022-13315-y>
- The Business Standard. (2023, Dec 26). *Meta falls short in detecting political ads in Bangladesh ahead of JS polls: Study*. <https://www.tbsnews.net/bangladesh/meta-falls-short-detecting-political-ads-bangladesh-ahead-js-polls-study-764058>
- Thomas, M.-J., Wirtz, B. W., & Weyerer, J. C. (2019). Determinants of online review credibility and its impact on consumers' purchase intention. *Journal of Electronic Commerce Research*, 20(1), 1–20.
- Vazquez, E. E., Patel, C., Alvidrez, S., & Siliceo, L. (2023). Images, reviews, and purchase intention on social commerce: The role of mental imagery vividness, cognitive and affective social presence. *Journal of Retailing and Consumer Services*, 74, 103415. <https://doi.org/10.1016/j.jretconser.2023.103415>
- von Helversen, B., Abramczuk, K., Kopeć, W., & Nielek, R. (2018). Influence of consumer reviews on online purchasing decisions in older and younger adults. *Decision Support Systems*, 113, 1–10. <https://doi.org/10.1016/J.DSS.2018.05.006>
- Wang, F., Xu, H., Hou, R., & Zhu, Z. (2023). Designing marketing content for social commerce to drive consumer purchase behaviours: A perspective from speech act theory. *Journal of Retailing and Consumer Services*, 70, 103156. <https://doi.org/10.1016/j.jretconser.2022.103156>
- Wang, Y., Kim, J., & Kim, J. (2021). The financial impact of online customer reviews in the restaurant industry: A moderating effect of brand equity. *International Journal of Hospitality Management*, 95, 102895. <https://doi.org/10.1016/j.ijhm.2021.102895>
- Zarif, M. M. (2020, October 3). Cloud kitchen: A recipe for growth in food business? *The Daily Star*. <https://www.thedailystar.net/city/news/cloud-kitchen-recipe-growth-food-business-1971905>
- Zhu, L., Li, H., Wang, F.-K., He, W., & Tian, Z. (2020). How online reviews affect purchase intention: a new model based on the stimulus-organism-response (S - O - R) framework. *Aslib Journal of Information Management*, 72(4), 463–488. <https://doi.org/10.1108/AJIM-11-2019-0308>