

# MEASURING TOOLS FOR ANALYZING FACTORS INFLUENCING CONSUMER PURCHASE INTENTION IN FOOD DELIVERY APPLICATIONS IN INDONESIA

KEZIA AYU BRILLIANY <sup>1</sup>, INDRAWATI <sup>2\*</sup> and SUBHASH K.B. PILLAI <sup>3</sup>

<sup>1</sup> Master of Management Student, Telkom University, Bandung, Indonesia. Email: keziaayu.by@gmail.com

<sup>2</sup> Professor in Marketing, Telkom University, Bandung, Indonesia.

\*Corresponding Author Email: indrawati@telkomuniversity.ac.id

<sup>3</sup> Professor in Marketing, Goa University, Goa, India. Email: subhash@unigoa.ac.in

## Abstract

A significant proportion of the Indonesian population recognises the importance of the internet in their everyday existence. The COVID-19 pandemic has resulted in a surge in internet usage especially in service-oriented businesses and applications that leading to significant alterations in consumer behaviour across several domains of life. Gofood, a mobile application developed by Indonesia, is a subsidiary of PT Goto Gojek Tokopedia Tbk (publicly listed company). It is the leading platform for food delivery in the Southeast Asian region, with the greatest gross merchandise (GMV). Currently, Gofood has been through a phase of stagnation over the preceding three years, as evidenced by its Gross Merchandise Value (GMV) remaining constant. The current era presents an opportune moment for Gofood to serve as a persuasive communication channel, facilitating effective communication between merchants and consumers, thereby contributing to a balanced marketing communication strategy. The research model adopted in this study is the Information Adoption Model. The measuring instrument tested on a sample of 30 participants who use online food delivery (OFD). The data is processed using IBM SPSS Statistics 27. The results of the testing indicate that the measuring instrument, which consists of 7 constructs and 45 items, satisfies the criteria for both validity and reliability. Hence, this particular measurement instrument is prepared for use in further study objectives.

**Keywords:** COVID-19, Indonesia, Information Adoption Model, Marketing Communication, Online Food Delivery.

## INTRODUCTION

The industry of food delivery is not a recent development in Indonesia. The internet platform's presence can greatly help culinary entrepreneurs expand and build their businesses to appeal to a larger customer base. In January 2023, Indonesia had 212.9 million internet users, which accounted for 77% of the entire population of 276.4 million people. The number has experienced a 3.3% growth compared to the previous year in January 2022 (We Are Social & Meltwater, 2023). According to a survey conducted in six South-east Asian countries, Gofood is ranked third among food delivery applications in terms of Gross Merchandise worth (GMV). This indicates that Gofood, which was developed in Indonesia, has a GMV worth of US\$ 2 billion, making it the highest among all applications in the country. In addition, Gofood has been selected as the preeminent application and is the predominant platform for online meal delivery (Jakpat, 2022). Grab now holds the majority market share of 49% in the online food delivery business in Indonesia, followed by Gojek with a share of 44%. Shopeefood, a relatively new company, with a market share of 7%. Nevertheless, in comparison to its rival,

the incorporation of review and rating features on Gofood acts as a compelling reason for users to remain in using the application. Gofood attained the top position in the application's rating and review metrics. Gofood stands out from its competitors by offering a greater number of reviews on its application. This feature enables consumers to make informed judgements while ordering food and drinks through the application (Jakpat, 2022).

Based on Gofood's performance, there has been no growth in Gross Merchandise Value (GMV) on Gofood in comparison to previous years. Over the past three years, Gofood has had a period of little to any growth, as indicated by its Gross Merchandise Value (GMV) of barely US\$ 2 billion, according to Momentum Works (Momentum Works, 2023). The primary driver is the return of the offline market. Presently, individuals are no longer subject to limitations on their movement, and their ability to travel has been restored to its usual state. A multitude of offline services have resumed, thereby reinstating the opportunity for consumers to dine in. Consequently, this is also affecting sellers who are modifying their technique to accommodate in-person dining. In light of this opportunity, numerous franchises are once again growing their brick-and-mortar establishments. In addition, there will be variations in discounts and deals provided by merchants for dining in versus ordering through food delivery apps. Gofood should adapt its strategy to ensure that consumers continue to utilise the application, thereby enhancing its business performance. Transactions on food delivery applications are mediated by technology, rather than taking place directly between suppliers and buyers. Specialised research is required to comprehend customer behaviour. OFD applications serve as an influential means of communication between merchants and consumers (Kang & Namkung, 2019), thus necessitating a careful balance between information technology and effective marketing communication strategies.

## LITERATURE REVIEW

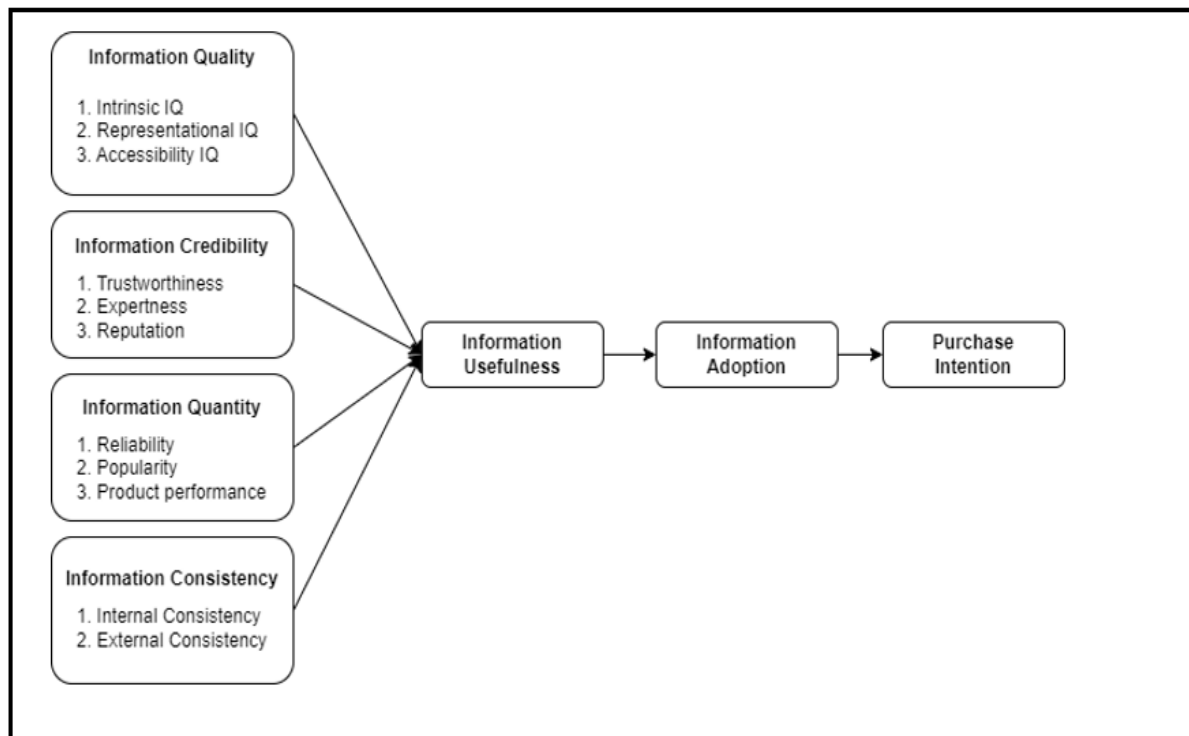
Consumer behavior theory emphasizes the significance of establishing effective communication channels with the target audience and ensuring that all elements of the marketing mix are suitable to fulfill the desired consumer demand. Given the diverse consumer categories, specialty markets, and individual customers, their distinct demands and preferences necessitate the customization of the communication program (Kotler et al., 2018). In light of the current advanced communication technology, organizations are not only expected to attract customers, but also to facilitate their active engagement. Hence, marketers must comprehend the influence of communication at every stage of the purchasing process, in order to assist in the efficient and effective allocation of communication funds. In order to achieve effective communication, marketers must possess a thorough comprehension of the marketing communication mechanism.

The Elaboration Likelihood Model (ELM) is a process that quantifies an individual's capacity to enhance and refine the knowledge required for decision-making. This method clarifies the distinction between the central route and peripheral route, with the variation lying in the cognitive level's impact on the information recipient. The primary route involves the engagement and involvement of information recipients in processing the given information. In

contrast, the peripheral route exhibits minimal engagement and involvement from information recipients (Hung et al., 2023). The following theory that employs the framework for examining the acceptance and utilization of information technology by customers is known as the Technology Acceptance Model (TAM). The Technology Acceptance Model (TAM) is a theoretical framework derived from the Theory of Reasoned Action (TRA). It posits that an individual's attitudes and behaviors are shaped by their reactions and perceptions towards a particular object or concept (Ismagilova et al., 2017). Within the realm of technology, the Technology Acceptance Model (TAM) pertains to the perceived ease of use, which indicates the degree to which potential users perceive the technology as user-friendly, and the perceived usefulness, which reflects users' belief in the technology's ability to enhance performance.

The two theories were identified, then there were discoveries by Sussman and Siegal (2003) on (Erkan & Evans, 2018) who developed the Information Adoption Model (IAM) as a more particular and subtle notion by merging ELM and TAM. Then in another finding, the framework produced by Indrawati et. al. (Indrawati et al., 2023) from the IAM is based on the formulation between the Elaboration of the Model (ELM) and Technology Acceptance Model (TAM). The formulation of the two theories allows IAM to represent the process by which individuals acquire information through computer-mediated communications and how this can influence their behavior and intentions. The IAM model, derived from the TAM and ELM models, utilizes the ELM framework to comprehend customer attitudes. On the other hand, the TAM model is employed to forecast customer behavior in relation to the application of OFD (Kang & Namkung, 2019). This study includes variables derived from the original model proposed by Sussman and Siegal (2003) in Indrawati et al. (Indrawati et al., 2023). These variables include information quality, information credibility, information usefulness, and information adoption, serving as the primary model. Furthermore, additional variables pertaining to the information quantity have been included on that study.

This study introduces the concept of information consistency as an independent variable, recognizing the urgent requirement for consistent information regarding a particular product or service, both inside and outside the platform (Hung et al., 2023). This statement is supported by empirical research, which indicates that when individuals find positive reviews that align with other reviews across various platforms, they are more likely to show raised confidence in these reviews. Consequently, this increased confidence significantly impacts their decision-making process when engaging in the purchase of a particular product or service (Shankar et al., 2020). The whole model proposed for this study is presented in Figure 1.



**Figure 1: Conceptual Model adapted from Information Adoption Model**

The model mentioned earlier represents an extension of the IAM. The definition of every variable is as follows: Information Quality relates to the the quality of information available on Gofood, which has the potential to impact consumers during their decision-making process (Indrawati et al., 2023). The study conducted by Huang et al. (1999) in Kang and Namkung (Kang & Namkung, 2019), involves four primary dimensions pertaining to the information quality, which are outlined as follows: intrinsic, contextual, representational, and accessibility. Nevertheless, contextual indicators fail to meet the criteria of validity assessments. It is assumed that there exist additional factor that have influence the contextual aspects of the time or task factor, which are not feasible to incorporate within the framework of OFD in Indonesia. Information credibility refers to the extent to which consumers assess and place trust in the information provided by the Gofood (Kang & Namkung, 2019). Information credibility can be measured using three components, namely trustworthiness, expertness, and reputation (Kang & Namkung, 2019). The information quantity is the frequency or count of times in which consumers receive information through the Gofood (Indrawati et al., 2023). The effectiveness of the information quantity is influenced by three (3) components: Reliability, Popularity, and Product performance (Ngarmwongnoi et al., 2020). Information consistency can be defined as the extent to which multiple reviewers concur with the information presented on the Gofood (Shankar et al., 2020). In the perspective of online consumer reviews, consistency is divided into two (2), namely internal consistency and external consistency (Abedin et al., 2021). Information usefulness can be construed as the extent to which Gofood consumers perceive

the information they receive as valuable for the purpose of making better choices (Indrawati et al., 2023). Information Adoption is a cognitive process in which consumers of Gofood integrate and internalize information with the intention of adopting new concepts, behaviors, and beliefs that may help them in making better choices (Indrawati et al., 2023)(Song et al., 2021). Purchase intention refers to the tendency of consumers to engage in the act of purchasing food or beverages through the Gofood (Kumar et al., 2023).

## MEASUREMENT MATERIAL

This study employs a four-phase methodology in order to develop a questionnaire that is both valid and reliable (Indrawati, 2015). The initial phase, content validity measures how well the item of research variables align rationally with the desired construct by adopted and modified the questionnaire items from a prior study conducted by Kang & Namkung (Kang & Namkung, 2019), Ngarmwongnoi et al. (Ngarmwongnoi et al., 2020), Abedin et al. (Abedin et al., 2021), and Indrawati et al. (Indrawati et al., 2023) for each variable. Following that, the authors proceed to evaluate the questionnaire item by seeking the expert opinion who possess expertise in the fields of marketing and technology adoption to receive feedback or suggestions from experts in order to enhance the questionnaire item. In the third stage, the clarity of the questionnaire can be ensured by conducting a readability test to a sample of individuals. This phase seeks to recognize and fix any potential sources of ambiguity or confusion. Table 1 shows the outcomes of previously conducted item tests prior to the getting started of the pilot test.

**Table 1: Questionnaire Items**

<b>Item Code</b>	<b>Items on Information Quality</b>
<b>Intrinsic Information Quality</b>	
IQL1	Gofood provides accurate details about food products.
IQL2	Gofood provides food product information objectively
IQL3	Gofood provides food product information clearly
IQL4	Gofood provides food product information precisely
<b>Representational Information Quality</b>	
IQL5	Gofood provides food information that is easy to understand
IQL6	Gofood provides information on food products concisely
IQL7	Gofood provides information on food products consistently
IQL8	Gofood provides information on food products attractively
<b>Accessibility Information Quality</b>	
IQL9	Food product information on Gofood is easily obtainable
IQL10	Food product information on Gofood is quickly accessed when needed
IQL11	Food product information on Gofood is easily retrievable
IQL12	Food product information on Gofood is easily accessible
<b>Item Code</b>	<b>Items on Information Credibility</b>
<b>Trustworthiness</b>	
ICR1	Gofood provides food product information as truthfully as possible
ICR2	Gofood provides food product information as honestly as possible
<b>Expertness</b>	
ICR3	Gofood is qualified to sell food products

ICR4	Gofood is competent in selling food products
ICR5	Gofood is an expert in selling food products
Reputation	
ICR6	Gofood has a good reputation
ICR7	Gofood has a better image than its competitors
<b>Item Code</b>	<b>Items on Information Credibility</b>
Reliability	
IQN1	Gofood provides numerous reviews of food product
IQN2	I trust the numerous food product reviews on Gofood.
IQN 3	I trust the numerous product reviews on Gofood will reduce risks
Popularity	
IQN4	Gofood serves food products that are liked by many people
IQN5	I trust in food products that many people like in Gofood
IQN6	The greater the number of product reviews on Gofood, the greater the food preferred
Product Performance	
IQN7	The more reviews on food products on Gofood, the more pleasing the product will be
IQN8	The more people buying food products on Gofood, the better the product
IQN9	The more people reviewing food products on Gofood, the better the product
<b>Item Code</b>	<b>Items on Information Consistency</b>
Internal Consistency	
ICN1	The food rating on Gofood is in accordance with the comments
ICN2	The arguments for food reviews by users on Gofood are consistent with one another
ICN3	The arguments for food reviews by users on Gofood do not contradict one another
External Consistency	
ICN4	Gofood application food reviews are consistent with reviews on other platforms
ICN5	The arguments in food reviews on Gofood are generally objective
<b>Item Code</b>	<b>Items on Information Usefulness</b>
IU1	Information on the Gofood is useful
IU2	Information on the Gofood is informative
IU3	Information on the Gofood helps me to evaluate food
IU4	Information on the Gofood is helpful for me to be familiar with the food products
<b>Item Code</b>	<b>Items on Information Adoption</b>
IA1	I learn something new food products on Gofood
IA2	I accept the food products information on Gofood
IA3	I accept the recommendation of food products on Gofood
<b>Item Code</b>	<b>Items on Purchase Intention</b>
PI1	I am considering buying food on the Gofood in the future
PI2	When I need to buy food, I consider purchasing on Gofood
PI3	When I need to buy food, it is likely I purchase on Gofood
PI4	It is very likely that I will buy food on Gofood
PI5	I will try using Gofood

## METHOD AND RESULT

Following completing of the questionnaire in the previous phase, it was deemed essential to conduct a pilot test in order to enhance the quality of the queries, format, and scale. Additionally, the pilot test aimed to ascertain the validity and reliability of the instrument scores, involving the participation of 30 respondents for the collection of preliminary data. The

questionnaire's validity is dependent upon the Critical Item Total Correlation (CITC) metric, which exceeds the threshold of 0.3. In the context of reliability test, Cronbach's Alpha is commonly employed, that can be deemed reliable if it surpasses a Cronbach's Alpha score of 0.70 (Indrawati, 2015). Prior to conducting the study and developing the measurement model, the authors gathered preliminary data from customers, which indicated that customers consider the quality, credibility, quantity, and consistency of information provided by Gofood when making decisions regarding the usage of the application. In summary, the outcome of the pilot test is presented in Table 2 below.

**Table 2: Pilot Test Result**

<b>IQL Code</b>	<b>CITC</b>	<b>Cronbach Alpha</b>
IQL1	0,471	0.876
IQL2	0,583	
IQL3	0,572	
IQL4	0,572	
IQL5	0,356	
IQL6	0,581	
IQL7	0,605	
IQL8	0,689	
IQL9	0,517	
IQL10	0,801	
IQL11	0,583	
IQL12	0,566	
<b>ICR Code</b>	<b>CITC</b>	<b>Cronbach Alpha</b>
ICR1	0,660	0.850
ICR2	0,446	
ICR3	0,609	
ICR4	0,656	
ICR5	0,693	
ICR6	0,602	
ICR7	0,689	
<b>IQN Code</b>	<b>CITC</b>	<b>Cronbach Alpha</b>
IQN1	0,507	0.871
IQN2	0,542	
IQN 3	0,638	
IQN4	0,602	
IQN5	0,751	
IQN6	0,529	
IQN7	0,584	
IQN8	0,795	
IQN9	0,556	
<b>ICN Code</b>	<b>CITC</b>	<b>Cronbach Alpha</b>
ICN1	0,661	0.826
ICN2	0,577	
ICN3	0,619	
ICN4	0,678	
ICN5	0,591	
<b>IU Code</b>	<b>CITC</b>	<b>Cronbach Alpha</b>

IU1	0,497	0.792
IU2	0,621	
IU3	0,617	
IU4	0,690	
<b>IA Code</b>	<b>CITC</b>	<b>Cronbach Alpha</b>
IA1	0,486	0.738
IA2	0,533	
IA3	0,690	
<b>PI Code</b>	<b>CITC</b>	<b>Cronbach Alpha</b>
PI1	0,786	0.891
PI2	0,810	
PI3	0,769	
PI4	0,691	
PI5	0,634	

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## CONCLUSION

This study conducted a pilot test with a sample size of 30 respondents. The criteria for respondents include being users of OFD with a minimum of three (3) transactions, aged between 15 and 64 years, and domiciled in Indonesia. The pilot test findings demonstrate the validity and reliability of the measuring material, which comprises 45 question items used in this research. Hence, the suggested measurement material is prepared for utilisation in further study.

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