

How Consumer Attitude Mediates Risk Perception and Trust in Using Food Delivery Application (FDA)

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Abstract

This study's objective is to observe the variables influencing decisions to use food delivery applications (FDAs) in West Java, Indonesia. We start with the argument that observing risk and trust factors in online transactions were crucial to determine consumer's attitude and their online purchase behaviour in the end. By surveying 384 individuals and responses were taken from structured questionnaires, the relationships between variables were analyzed using quantitative methods incorporating structural equation model, partial least square (SEM-PLS). The results showed that online purchase behaviour is influenced by risk perception and trust, but mediating effect can cause different results in indirect effects.

Keywords

Food online application; online marketing; e-commerce; e-marketing

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Introduction

Utilizing smartphone technology is one of the inventive ways to help businesses improve their performance in the market (Arvin, 2022). Smartphone use has affected the culinary business as a result of e-commerce (Hasbi et al., 2022). Many industries, as well as the food industry, have all seen considerable transformation as a result of information technology like mobile e-commerce (Prasetyo et al., 2021).

The availability of culinary delivery services makes it simpler for clients to get the food products they want (Dewi et al., 2022). Savitri et al., (2020) agree that when excellent food and service are provided, customer satisfaction can increase, which

has an effect on building customer loyalty. In this case, one determinant of whether assurance is successfully delivered as a client satisfaction is the service quality.

Food Delivery Applications (FDA) constantly adds to the sustainable revenue stream in Indonesia. In 2022, it brought in about \$2 million USD, and by 2024, it is expected to have grown by 54.8% In addition to the revenue stream, it has been expected that Indonesia's FDA app penetration rate will increase over time (Prasetyo et al., 2021). The benefits offered by FDA apps are what primarily draw in new users. With the stroke of a button, FDA apps offer clients nearly everything they require for purchasing food and beverages (Hasbi et al., 2022).

Additionally, many FDA apps come with digital payment methods to make transactions even simpler (Zaman et al., 2021). Due to this new behavior, numerous restaurants are available on FDA apps in an effort to draw customers and raise brand exposure (Hasbi et al., 2022). Nowadays, the company must maintain a favorable reputation in the eyes of its clients, making the quality of service a key factor. How satisfied people are with an e-service will depend on how it is perceived to be (Budiatmo, 2018). As the quality of e-services increases, customer contentment will rise (Gusfei & Pradana, 2022).

The elements of e-service quality can be observed from a number of perspectives, including security, dependability, responsiveness, delivery, and communication (Bilgin, 2018). Hasanuddin & Pradana (2023) argue that the definition of satisfaction in the context of e-commerce is customer satisfaction with their online shopping experience. For the business to successfully expand, the customers must remain loyal (Dewi et al., 2022). One who is willing to repurchase goods and services from a business and recommend it to others is referred to as a loyal customer (Savitri et al., 2020)

While the use of FDAs is now increasingly common, especially in big cities, studies in this sector is required to observe development of e-commerce together with the growth of the food service sector. Therefore, we conduct this research to provide contributive publication in the direction of online consumer behaviour.

Literature Review

Risk Perception and Trust

It is sometimes doubtful whether describing uncertainty can boost confidence and trust in the public (Willayat et al., 2021). First, people may be disturbed by uncertainty; they desire reassurance of their safety and may prefer to be informed if a situation is

safe or unsafe rather than obtaining a formal risk estimate (Gusfei & Pradana, 2022).

One study revealed that early information sharing significantly lowered perceived risk and enhanced assessments of agency performance (Elisa et al., 2022). Another study found that perceptions of personal in business and government, and the belief that technology concerns could be managed all had a substantial impact on concern (Haryati et al., 2019). Renaldi & Pradana (2023) believe that disclosing ambiguity in risk estimations could cause dispute or confusion among the public rather than resolve it.

Consumer Attitude

In creating concepts or models that account for a larger amount of the variance in consumer behavior, measures of attitudinal dimensions serve as a foundation (Kumalasari et al., 2022). Marketers can evaluate the success of advertising campaigns that emphasize experiential or functional positioning techniques by using measures of the hedonic and utilitarian dimensions of attitude (Oktafani et al., 2022). According to earlier studies, brands and items that are highly valued on the attitude are better able to command a higher price or run sales promotions (Dewi et al., 2022).

With studies have been connecting relationships between risk perception, trust, and consumer attitude, we also formulated these hypotheses:

Hypothesis 1 (H1): Risk perception has a positive and significant impact on consumer attitude.

Hypothesis 2 (H2): Trust has a positive and significant impact on consumer attitude.

Hypothesis 3 (H3): Consumer attitude has a positive and significant impact on online buying intentions.

Online Buying Intentions

One of the active research areas in the body of literature was customer online purchasing intention. The strength of a consumer's intention to engage in a certain purchasing behavior over the Internet will be determined by their customer online purchase intention in the web-shopping environment (Savitri et al., 2021). Additionally, according to the idea of Ajzen's theory of reasoned action consumer behavior can be predicted from intentions that directly reflect that behavior in terms of action, target, and context (Augustrianto et al., 2019).

Robani & Wardhana (2022) argue that nline purchase intention, or the way a person plans to purchase a particular brand on the internet, can be categorized as one of the elements of consumer cognitive behavior. An online buy intention is a customer's willingness and intention to engage in an online transaction (Oktafani et al., 2022).

Several hypotheses are formulated based on these elaborations:

Hypothesis 4 (H4): Risk perception has a positive and significant impact on online buying intentions.

Hypothesis 5 (H5): Trust has a positive and significant impact on online buying intentions.

Hypothesis 6 (H6): Risk perception has a positive and significant impact on online buying intentions with mediating effect of consumer attitude.

Hypothesis 7 (H7): Trust has a positive and significant impact on online buying intentions with mediating effect of consumer attitude.

We formulated theoretical framework based on the theories and hypotheses. The framework can be seen as figure 1.

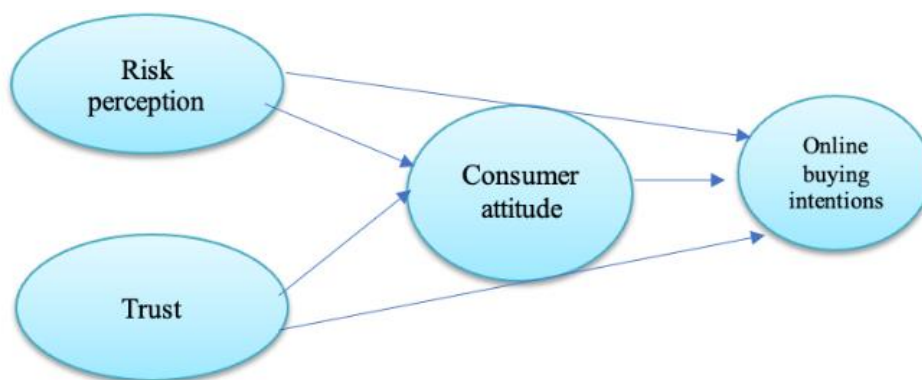


Figure 1. Research Framework

Methodology

Quantitative methodologies were used to undertake this study. Questionnaires will be the primary tool used by researchers to collect the important data and information. In order to evaluate the validity and reliability of the questionnaires, a pilot research is done. For the pilot study, 50 respondents were chosen from all around

West Java. In addition to numerous other pertinent variables found during the (qualitative) interview and pilot research, the questionnaire will also include a number of items linked to usage patterns as they are described in the model. Based on Lemeshow Sample Size (Ullah et al., 2022), a minimum of 384 respondents are chosen for the actual study. This number of 384 sample is taken out of the population of

West Java, which is 49,94 million inhabitants.

The right program, SMART-PLS, will be utilized to carry out the statistical analysis. To address each of the research objectives, the data will be analyzed using both descriptive and inferential methods (Hernowo & Lestari, 2021). The findings of

this study distinguish between usage trends and patterns from greatest to lowest levels.

Before discussing the result, we provide respondents' profiles in table 1. Female FDA users are more avid than male according to our result. The most users are in age group 30-39 years old.

Table 1. Respondents Profiles

Variables	Categories	Frequency
Gender	Men	129
	Women	255
	Total	384
Education	High School	128
	Bachelor	119
	Graduate	137
	Total	384
Age	< 20 Years	14
	20-29 Years	126
	30-39 Years	148
	40-49 Years	74
	> 50 Years	22
	Total	384

Result and Discussion

According to the findings of the analysis that has been described, the attitude of consumers is the most important factor influencing their intent to make a purchase at FDA in West Java. This is in line with their responses to questionnaire deployments, which revealed that each

consumer had a favorable attitude toward the product type, product quality, and product delivery up until it reached the customer's location. This thus serves as the foundation for the claim that customer attitudes have the most significant impact on consumers' intentions to shop online at FDA. Before continuing with the analysis, we analyzed the R square value in Table 2.

Table 2. R-Square values

	R Square	R Square Adjusted
Risk	0.645	0.642
Trust	0.387	0.358
Consumer Attitude	0.416	0.442
Online Purchase Intention	0.387	0.358

Furthermore, the value of $R = 0.645$ indicates that there is a significant correlation between customer attitudes about online shopping at FDA and risk perception, trust, and consumer attitude. While it can be seen from $R_{square} = 0.416$ that the variability of consumer intentions to buy online on FDA can be explained by variables of risk perception, consumer confidence, and attitudes to the extent of 41.60 percent.

Afterwards, the validity and reliability testing for the outer model were conducted. This test assessed the markers of latent

variables' factor loading, average variance extracted (AVE), and discriminant validity. According to the source cited by Hair, et al. (2019), a factor loading value of larger than 0.7 indicates that an indication is credible. Additionally, both Cronbach's alpha and the composite dependability index values must be greater than the essential threshold of 0.7. In exploratory investigations, it is still acceptable if the results are near to 0.7 (for instance, 0.6) and the Average Variance Extracted (AVE) value is more than 0.5. Meanwhile, the value of Average Variance Extracted is used to assess convergent validity (AVE)

Table 3. Measurement Validity and Reliability

	Cronbach's Alpha	Composite Reliability	AVE
Risk	0.779	0.683	0.559
Trust	0.764	0.717	0.676
Consumer Attitude	0.708	0.568	0.681
Online Purchase Intention	0.975	0.577	0.655

The results of our preliminary testing on the impact of risk perception, customer attitude, and consumer confidence on the

intention to make an online purchase at FDA in West Java are seen in table 4.

Table 4. Path Coefficient and Significance Values (p-values)

Hypothesis	Path Relationship	Path coefficient	P Values
H1	Risk perception has a positive and significant impact on consumer attitude.	0.337	0.000
H2	Trust has a positive and significant impact on consumer attitude.	0.179	0.000
H3	Consumer attitude has a positive and significant impact on online buying intentions.	0.006	0.000
H4	Risk perception has a positive and significant impact on online buying intentions.	0.032	0.000
H5	Trust has a positive and significant impact on online buying intentions.	0.511	0.000
H6	Risk perception has a positive and significant impact on online buying intentions with mediating effect of consumer attitude.	-0.032	0.056
H7	Trust has a positive and significant impact on online buying intentions with mediating effect of consumer attitude.	0.511	0.000

From the data in table 4, we draw several conclusions:

a. The impact of risk perception on internet shopping intentions

Our analysis revealed that the value of the path analysis is positive with significance value above 0.05, indicated that consumers' perceptions of risk had a substantial impact on their intentions to shop online at FDA. This suggests that the lower the intention of consumers to make an online purchase at FDA, West Java, the higher their perception of risk will be. Therefore, hypothesis 1 is accepted.

b. The Impact of Trust on Online Purchase Intentions

Path coefficient testing yielded a value of 0.179 for the influence of trust on the intention to purchase something online from FDA. Because the trust factor has a value value above 0.05, this indicates that West Java residents are more likely to shop online with high significance value. Therefore, hypothesis 2 is accepted.

c. The impact of consumer sentiments on their decision to make an online purchase. The analysis using path coefficient yielded result that the intention of consumers to shop online at FDA is partially influenced by their attitudes (a value value = $0.001 < 0.05$), it can be concluded that consumer attitudes have a significant impact on boosting consumers' intents to shop online at FDA. Therefore, hypothesis 3 is accepted.

Based on the findings of the partial testing that has been conducted, overall it can be said that this discovery can illustrate that, in part, customer attitudes, trust, and perceptions of risk can have a significant impact on raising the intention to shop online at FDA. However, there is an exception of hypothesis 6 which was rejected (path coefficient -0.032 and significance value above the threshold of 0.05). risk perception does not influence

inline buying intention with mediating effect of attitude. It means that risk and trust have the tendency to have direct effects in consumer attitude and in the end their online buying behaviour.

Discussion

This study demonstrates how consumers' intentions to shop online at FDA are influenced by their perceptions of risk, trust, and consumer attitudes all at once. Before presenting the route analysis in this study, a test drawing of the path that can be represented as follows will be shown, which is based on the regression analysis and correlation of models 1 and 2 that have been stated above:

Following the presentation of the direct effect, the computation of the indirect influence (indirect effect) of each path in this study will be shown. Based on the outcomes of the online Sobel test, a test value of 2,500 and a value of 0.012 were achieved. Because of the conclusion that consumer attitudes can moderate the impact of risk perception on the intention to shop online at FDA, which indicates that risk perception has a significant impact on customers' low desire to purchase online at FDA.

Based on the findings of the online sobel test, a statistical sobel test value of 3,521 and a value value of 0.000 were obtained to represent the influence of consumer attitudes on the intention to purchase online. These results show that trust can have a significant impact on enhancing customer attitudes, which in turn can impact purchasing intentions online, with a value value = $0.000 < 0.05$ showing that consumer attitudes can mediate the influence of trust on buying intentions online.

Conclusions

Our research managed to give numerous conclusions based on the findings of the analysis and discussion of the research, including the following: The study of the research data reveals that risk perception has a negative impact on consumer perceptions.

These findings suggest that consumers' unfavorable attitudes toward online shopping at FDA will be influenced by their sense of high risk. It is possible to accept or prove the prior study hypothesis. Analysis of research data demonstrates that trust has a favorable and significant impact on consumer sentiments while making purchases of goods online at FDA. The previously proposed research hypothesis is valid, as this finding suggests that the perceived level of confidence might be followed by a rise in consumer attitudes for shopping online at FDA.

The impact of risk perception on consumer intentions to purchase online demonstrates how the impression of high risk can have a major impact on consumers' low inclinations to purchase products online from FDA. These results suggest that any rise in consumers' perceptions of risk when making purchases on FDA will decrease their willingness to do so, proving the validity of the hypothesis.

This study examined the impact of consumer trust on their intentions to make purchases online and found that trust had a positive and significant influence. The research hypothesis is accepted or proven based on this finding, which shows that greater consumer confidence will actually be able to improve consumers' purchasing intentions to make online product purchases at FDA. The impact of customer attitudes on online purchase intentions, which demonstrates that these intentions are positively and significantly influenced, These results suggest that when consumer

attitudes rise, so will their intents to purchase goods from FDA online, proving the validity of the hypothesis research. This study demonstrates that consumer attitudes can mediate the influence of risk perception on purchase intentions online. Consumer attitudes are a mediator of the influence of risk perception on buying intentions online.

The research hypothesis is accepted or confirmed based on these data, which show that an increase in risk perception will lead to a decline in consumer attitudes and may have an effect on consumers' low intention to purchase goods online from FDA. Consumer attitudes act as a buffer between consumer attitudes and the influence of trust on purchasing intentions online, demonstrating the importance of this buffer in determining whether or not consumers will make an online purchase from FDA.

These results suggest that trust has a significant impact on customer sentiments, which in turn affects consumers' intentions to buy products from FDA online. Each FDA online store is advised to implement the recommendations that can be made in light of the research's findings in order to further raise the standard of service provided to consumers by speeding up delivery to their addresses. By offering a guarantee of a refund or redemption of damaged or non-compliant items in accordance with the specifications of the goods bought by the customer, FDA may further boost its customers' faith.

It is advised that clients make the most of live chat options so they can consult online before deciding to transact in the acquisition of products. If the things that customers buy are not what they expected while making their purchases, sellers (online stores) at FDA should be more responsive to address customer complaints. It is advised for FDA sellers (online retailers) to continue expanding the variety of products offered so that customers would be happy since they can meet their wants.

Future research should include additional factors, such as pricing, promotion, and service quality, that influence consumers' inclinations to buy products on FDA.

Notes on Contributors

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