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Antecedents Affecting Behavioral Intention Involving UTAUT Variables, Internet Shopping Anxiety, Herd Behaviour and Covid-19 Fear (Empirical Study on Online shopping Users in Bandung City)

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ABSTRACT: This study aims to measure the influence of behavioral intention involving UTAUT variables, Online Shopping Anxiety, Herd Behavior, and COVID-19 Pandemic Fear on online shopping users in the city of Bandung. The research method employed is quantitative, used to test the cause-and-effect relationships among variables that form the structural equation model. This is done using empirical data collected through a survey with a five-point Likert scale for 23 questionnaire items. The indicators of each variable obtained from the survey data were tested for validity and reliability. The data was collected from 331 respondents who are online shopping users in the city of Bandung. The collected data were analyzed using SmartPLS 3.2.9 software. The results of this study show that Performance Expectancy has a positive influence on Behavioral Intention, Facilitating Conditions have a positive influence on Behavioral Intention, Internet Shopping Anxiety has a negative influence on Behavioral Intention, Imitating Others has a positive influence on Behavioral Intention, Discounting One's Own Information has a positive influence on Behavioral Intention. Moreover, COVID-19 Fear has a negative influence on Imitating Others, and COVID-19 Fear has a positive influence on Discounting One's Own Information.

KEYWORDS: Behavioral Intention, Covid-19 Fear, Herd Behaviour, Internet Shopping Anxiety, Internet Online Shopping, Unified Theory of Acceptance and Use of The Technology.

INTRODUCTION

At the beginning of the year 2020, the world was struck by the Covid-19 pandemic, including Indonesia. One of the impacts of Covid-19 was that consumers increasingly shifted towards online purchases. Therefore, companies needed to be innovative in finding alternative forms of offerings to enhance interest and facilitate interactions between companies and consumers [15]. Companies could boost their sales revenue through online shopping sites that helped increase sales and attract potential new customers during the pandemic [10]. Covid-19 and the global crisis in general could trigger widespread anxiety and mass panic fueled by inaccurate information. Additionally, consumers were unable to physically assess products when buying online, leading to product development. Literature indicates that customer information data is collected online and attention is paid to data-driven marketing efforts, but they are not optimally maintained [1]. In many cases, the use of digital technology faces the need to address new realities. Technology adoption has been a broad research field based on several theoretical foundations, with the unified theory of acceptance and use of technology (UTAUT) being one of the most widely and commonly used theories in explaining the use and adoption of technology by individuals in organizations and consumer settings [4]. However, the emergence of specific circumstances due to COVID-19 has created unique conditions where users do not have the time to go through the usual decision-making process of technology adoption, initial use, and post-adoption usage phases as defined by [9].

Herd behavior as a phenomenon has been suggested to be used in studies related to information management research or as a pathway for further research in relation to UTAUT. Meanwhile, several significant determinants of Internet shopping that impact have been overlooked and underexplored. Essentially, one of these determinants is Internet Shopping Anxiety (ISA), which is expected to play a crucial role in understanding the dynamics of Internet shopping technology adoption [3]. One of the most challenging issues faced by the development of Internet shopping formats among potential buyers is the aspect of ISA. As ISA has been comparatively studied in the context of online purchase behavior, it is considered necessary to conduct this type of empirical examination as it enriches our knowledge base about the phenomenon of online shopping [3]. The emergence of anxiety in Internet

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shopping behavior has been linked to issues and considerations such as the fact that the Internet is a global marketplace with a fertile environment for negative activities that can endanger online transactions, leading to the formation of anxiety responsible for fostering distrust among potential online buyers. Furthermore, users' technical inability to control technology responsible for facilitating Internet-based transactional services through online media. As a result, the anxiety that arises during the interaction process with such technology will contribute to the development of consumer inertia towards the transition from potential consumers to actual online buyers. There is also the possibility that buyers may not receive the purchased product (a duplicate instead of the original product) or the received product might not match the agreed-upon characteristics of quality and both physical and operational aspects of status. [3]. Risks related to personal information security have been found to have a strong negative effect on online transactions therefore,

This research is a study to test the existing UTAUT model in the context of the COVID-19 pandemic and to identify potential new mechanisms that influence behavioral intention in decision-making situations.

LITERATURE REVIEW

A. UTAUT

The Unified Theory of Acceptance and Use of Technology (UTAUT) is a prominent research model in technology acceptance and understanding the driving factors behind technology adoption, introduced by Venkatesh in 2003. UTAUT was originally designed for application in research, particularly within organizational contexts, to explain the acceptance and usage of technology by individuals. UTAUT was developed as a response to various theoretical models of technology acceptance and usage, by integrating eight previously established theoretical models used to study perceptions, acceptance, and willingness to adopt technology [17]. There are original constructs within UTAUT that are built upon the foundation of these integrated theories. The UTAUT model adjusted for consumer context includes:

a. Performance Expectancy is defined as the extent to which users perceive benefits from using the technology [18].
b. Facilitating Condition is defined as consumers' perception of resources and support available to perform a behavior [18].

B. Behavioral Intention

Behavioral intention can be understood as how strongly someone desires to try and how much determination is planned to be used in a particular behavior. This intention is a function of three factors: customer behavior, subjective norm, and perceived behavioral control. In simple terms, behavioral intention can be seen as the end goal, where an individual's desire to behave in a certain way, to possess or use a product or service, is planned and then executed.

C. Herd Behaviour

In the context of technology adoption, herd behavior describes individuals who follow others when adopting technology, even when their personal information suggests otherwise. This can happen for two reasons: Discounting Own Information (DOI) by disregarding personal information when making adoption decisions, or Imitating Others (IMI) by following previous adopters of a specific technology [14].

D. Internet Shopping Anxiety

Internet shopping anxiety is endemic to the online environment that negatively influences consumers' perceptions and behavior to the extent that this negative effect becomes a serious stumbling block in the process of deciding to adopt and use online channels [5].

E. Covid-19 Fear

The COVID-19 pandemic has created an unprecedented contemporary situation, including lockdowns that have altered business and social norms in several countries. The fear of contracting the disease (COVID-19 fear) has triggered anxiety and uncertainty in individuals, which further shapes their behavior and decision-making processes. Health, the use of traditional and social media, and the risks to loved ones are important factors in influencing behavior and decision-making [12].

F. Hypothesis

H1: Performance Expectancy has a significant positive effect on Behavioral Intention
H2: Facilitating Conditions has a significant positive effect on Behavioral Intention

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H3: Internet Shopping Anxiety has a significant negative effect on Behavioral Intention
H4: Imitating others has a significant positive effect on Behavioral Intention
H5: Discounting One's Own Information has a significant positive effect on Behavioral Intention
H6: Covid-19 Fear has a significant positive effect on Imitating Others
H7: Covid-19 Fear has a significant positive effect on Discounting One's Own Information

METHODOLOGY

The population is the entire group of people, events, or objects that researchers find interesting to examine and will serve as the boundary for the obtained research results [8]. This means that the research will only apply to the selected population. The population in this study consists of all Internet online shopping in Bandung city.

This study employs purposive sampling, which is a non-probability sampling method. Non-probability sampling involves selecting samples from the population without ensuring equal opportunities for all members to be chosen, and it is unclear whether they have similar or varying probabilities [8]. As a result, the findings of the research cannot be reliably generalized to the population. On the other hand, purposive sampling is defined as the deliberate selection of specific sample members by the researcher because only those samples can represent or provide information to address the research problem. In this study, the selection of the sample size was decided by considering the number of variables [1]. In this research, there are six variables, and when a study has 1-10 variables, the minimum sample size required is 200. Therefore, the designated sample for this study consists of 301 respondents who are users Internet online shopping

This study employs a quantitative research approach and utilizes an online survey as the method for collecting data. The chosen data analysis technique is Structural Equation Modeling (SEM), which is widely recognized and used to construct and evaluate statistical models that depict cause and effect relationships. SEM is a statistical method employed to examine and validate such models. When researchers have multiple variables with several indicators, and these variables can be distinguished into exogenous and endogenous variables, SEM is most suitable to be used [6]. In this research, the software SmartPLS is utilized because it is considered robust as it does not rely on various assumptions, requires a relatively small sample size, includes bootstrapping, and is capable of testing both formative and reflective SEM models with different scales of measurement for indicators within one model [7].

The evaluation of the Measurement Model (Outer Model) and the evaluation of the Structural Model (Inner Model) are the two primary phases of SEM-PLS testing. The validity and realibility of the measurements are evaluated using the outer model, while the model fit and R-square values are calculated using the inner model.

Validity testing shows the extent to which a measurement instrument can measure what it intends to measure. Therefore, the higher the validity of a measuring instrument, the more accurate its target and the more it reflects what should be measured [26]. Average Variance Extracted (AVE) is typically used to evaluate convergent validity, which measures how much variance in the indicators can be explained by the latent variable. AVE is tested through Confirmatory Factor Analysis (CFA). The requirements that must be met are AVE > 0.5, and if the AVE value exceeds 0.5, it means that the indicator can converge and represent the variable. Reliability testing pertains to the level of confidence, dependability, consistency, and stability of measurement results. The purpose of reliability testing is to examine the consistency of each indicator in a measuring instrument. Reliability testing can be conducted by measuring Cronbach's Alpha and Construct Reliability (CR). If the Cronbach's Alpha and Construct Reliability (CR) value is ≥ 0.7, it can be concluded that the indicator is consistent.

The overall testing of a model can be described by the Goodness of Fit or degree of suitability and the significance of the structural model coefficients. Goodness of Fit indicates how well the model fits a set of observations. If the GOF value shows little difference between the observed covariance and estimated covariance matrix, it is considered good [7]. The criteria for goodness of fit indices in SmartPLS are the Normed Fit Index (NFI) and the Standardized Root Mean Square Residual or SRMR [7]. In assessing the structural model, we begin by examining the R-square values for each endogenous variable as indicators of the predictive strength of the structural model. Changes in the R-square values (R^2) can be used to explain the substantive influence of specific exogenous latent variables on the endogenous latent variables. R-square values of 0.67, 0.33, and 0.19 can be inferred to represent a strong, moderate, and weak model.

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Hypotheses in research need to be tested in order to prove the relationship between variables in a research model. In this study, a one-tailed hypothesis test is used. One-tailed testing involves a rejection region for H0 on only one side, either on the right or on the left. Since there is only one rejection region, the size of this region is equal to the significance level (α), and the critical value is commonly denoted as Zα. When α = 0.05, if the t-statistic or t-value of the study is greater than 1.65, then H0 is rejected. Conversely, if the t-statistic or t-value of the study is ≤ 1.65, then H0 is accepted.

RESULT AND DISCUSSION

The given context describes the methodology and analysis of a study involving UTAUT, Internet shopping anxiety, Herd behavior, and Covid-19 fear. The study includes 301 Online Shopping users as respondents. Data was collected through an online questionnaire with selected participants.

A. Measurement (Outer) Model

The research findings employed PLS-SEM measurement using SmartPLS 3.2.9 software. The outer model aimed to define constructs or variables (Hair et al., 2010). Validity testing and reliability assessment can be performed through evaluating the outer model measurement.

Table 1. Validity Testing

Variables	Indicators	Loading Factor	AVE	Conclusion
Performance Expectancy	**PE1**	0.829	0.653	Valid
	PE2	0.768		
	PE3	0.826		
Facilitating Conditions	**FC1**	0.754	0.569	Valid
	FC2	0.744		
	FC3	0.757		
	FC4	0.760		
Behavioral Intention	**BI1**	0.796	0.640	Valid
	BI2	0.806		
	BI3	0.799		
Internet Shopping Anxiety	**ISA1**	0.885	0.782	Valid
	ISA2	0.895		
	ISA3	0.882		
	ISA4	0.876		
Imitating Others	**IM1**	0.803	0.661	Valid
	IMI2	0.811		
	IMI3	0.825		
Discounting One's Own information	**DOI1**	0.739	0.642	Valid
	DOI2	0.851		
	DOI3	0.811		
Covid-19 Fear	**CF1**	0.837	0.731	Valid
	CF2	0.832		
	CF3	0.870		
	CF4	0.868		
	CF5	0.868		

In the presented table, it is evident that all indicators possess values exceeding 0.50, signifying a substantial correlation between each indicator and its corresponding variable. Furthermore, the AVE values for all variables are greater than 0.50, indicating a

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convergence of indicators within each variable and affirming their ability to accurately reflect the underlying constructs, thus establishing the validity of the variables.

Table 2. Reliability Testing

Variables	Cronbach's Alpha	CR	Conclusion
Performance Expectancy (PE)	0.734	0.850	Reliable
Facilitating Conditions (FC)	0.747	0.841	Reliable
Behavioral Intention (BI)	0.719	0.842	Reliable
Internet Shopping Anxiety (ISA)	0.907	0.935	Reliable
Imitating Others (IMI)	0.744	0.854	Reliable
Discounting One's Own Information (DOI)	0.723	0.843	Reliable
Covid-19 Fear (CF)	0.908	0.931	Reliable

According to the findings presented in Table 2, it is evident that every indicator pertaining to the variable exhibits robust internal consistency and reliability. This conclusion arises from the total variable values of Cronbach's Alpha and Composite Reliability, both surpassing the acceptable threshold of 0.70. The conducted validity and reliability assessments have conclusively demonstrated the validity and reliability of all indicators and variables examined in this study.

B. Structural (Inner) Model

1) Model Fit

According to the provisions that the SRMR value of 0.08, the findings indicate an SRMR value of 0.165 with a moderate category. The NFI rating of 0.720 falls into the moderate fit. The research model is a workable and effective model to apply, as shown by the outcomes of SRMR and NFI.

2) R Square

The R-Square value for the Behavioral Intention (BI) variable is 0.755. This means that 75.5% of BI can be explained by the variables Performance Expectancy (PE), Facilitating conditions (FC), Imitating others (IMI), and Discounting one's own information (DOI) while the rest (24.5%) is an error or variable. others that have not been included in the model. It is hoped that these other variables will improve the research model further. Then for the variable Discounting one's own information (DOI) it is known that the R-Square value is 0.378, which means that the variable Discounting one's own information (DOI) can be explained by 37.8% by the Covid-19 fear (CF) variable, while the remainder is (62, 2%) is an error or influenced by other variables not studied. For the Imitating Others (IMI) variable, it is known that the R-square value is 0.007, which means that the Imitating Others (IMI) variable can be explained by 0.7% by the Covid-19 fear (CF) variable, while the rest is influenced by other variables that were not studied.

C. Hypothesis Testing

Following the preceding discussion's examination of the outer and inner models, hypothesis and significance tests are conducted. To assess each link between variables in light of the previously established hypothesis, hypothesis testing is done. The t-value, p-value, and path coefficient values are used in hypothesis testing. The following lists the findings of the significance and hypothesis testing:

Table 3. Hypothesis Testing

Hypothesis	Path Diagram	Path Coefficient	T-statictic	P-value	Result
H1	PE→BI	0.432	6,945	0.000	Accepted
H2	FC→BI	0.275	4,669	0.000	Accepted
H3	ISA→BI	-0.015	0,506	0.613	Rejected
H4	IMI→BI	0.215	3,685	0.000	Accepted
H5	DOI→BI	0.057	2,072	0.000	Accepted
H6	CF→IMI	-0.081	1,637	0.102	Rejected
H7	CF→DOI	0.615	14,232	0.000	Accepted

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The results of bootstrapping in Table 3. indicate the hypothesis testing outcomes in this study. It can be seen that out of the 7 proposed hypotheses, 5 were accepted, while 2 were rejected. The findings suggest significant relationships among the investigated variables, such as Performance expectancy, Facilitating Conditions, Imitating others to Behavioural intention, Discounting one's own information to Behavioral intention, Covid-19 fear to Discounting one's own information. However, there were insignificant relationships between Internet shopping anxxiety to behavioral intention and Covid-19 fear to Imitating others.This is because the t-statistic values were less than 1.65, and the p-values were greater than 0.05.

CONCLUSION AND RECOMMENDATION

In conclusion, in this study, the researchers examined factors influencing the Behavioral Intention to adopt online consumer shopping within the context of the COVID-19 pandemic. These factors include the core determinants of UTAUT, extended to encompass Covid-19 fear, Herd Behavior, and Internet Shopping Anxiety, which the researchers identified as novel mechanisms that might influence Behavioral Intention during this pandemic scenario. Based on the findings, the researchers suggest expanding the UTAUT model by incorporating Herd Behavior and Internet Shopping Anxiety as supplementary endogenous mechanisms of social influence in situations where potential user information sources extend beyond their close social circle. This study underscores that the pandemic has not only disrupted everyday life but has also altered existing theoretical models.

Businesses engaged in online shopping should view the Covid-19 pandemic as an environmental factor that could occur at any time, allowing them to respond more effectively if a similar pandemic were to happen again. Although the COVID-19 pandemic has affected all generations, the transition to online shopping has not presented significant challenges or major behavioral differences among younger generations, as they were already accustomed to shopping online. Building on the insights from this study, sellers can focus on crafting an image that persuades customers to become online buyers by observing others within their broader social circles who are already doing so. This can occur when potential online buyers perceive that their larger social network is better informed than they are. Sellers can, for example, run applications or similar tools, utilize apps to enhance customer shopping experiences, and harness the power of social media sharing capabilities to reach other potential online buyers. The adoption and use of new technology in times of uncertainty and increased social distancing are increasingly influenced by the information individuals receive from media, the web, and social networks, rather than information they receive from their immediate family and close friends. The rise in remote working (a new reality due to COVID-19) will result in more social distancing and, in turn, might lead group behavior to have a stronger influence on technology adoption than social influence.

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