

## INTEGRATING TRA AND TAM THEORY TO EXPLAIN CONSUMERS' WILLINGNESS TO USE CREDIT CARD IN INDONESIA

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### ABSTRAK

Dalam kurun waktu 10 tahun terakhir, pembayaran non-tunai telah menjelma sebagai opsi pembayaran yang cukup banyak digunakan oleh masyarakat Indonesia ketika melakukan transaksi akan pembelian suatu barang atau jasa tertentu. Adapun tren ini semakin meningkat di masa pandemi COVID-19, dimana, dikarenakan masyarakat cenderung berusaha untuk meminimalisir kontak fisik dengan orang lain ataupun dengan benda-benda tertentu (termasuk uang fisik) yang dianggap mampu mempercepat penularan virus COVID-19 dari satu pihak kepada pihak lain, maka banyak masyarakat cenderung memilih untuk melakukan transaksi pembayaran secara non-tunai. Namun, hal yang menarik dari fenomena ini adalah bahwa dari berbagai media transaksi non-tunai yang dapat dipilih, kartu kredit masih menjadi salah satu pilihan opsi pembayaran yang cukup banyak digunakan ataupun dipilih oleh masyarakat dibandingkan dengan opsi pembayaran non-tunai lainnya. Dengan demikian, maka studi ini dilakukan guna mengkaji beberapa aspek yang di-hipotesakan mampu mendorong penggunaan kartu kredit sebagai media pembayaran non-tunai di kalangan masyarakat Indonesia dari perspektif theory of reasoned action (TRA) serta technology acceptance model (TAM). Sebanyak 178 data terkumpul dari para responden, dimana, responden merupakan pengguna kartu kredit aktif yang telah menggunakan kartu kredit untuk berbagai transaksi yang telah dilakukan minimal 5 kali dalam 6 bulan terakhir. Metode purposive sampling digunakan untuk memastikan bahwa responden telah memenuhi kriteria yang ditetapkan di dalam studi ini. Dengan menggunakan metode PLS, hasil analisis data menemukan bahwa perceived ease of use, ditambah dengan subjective norm, attitude serta perceived usefulness, merupakan beberapa faktor yang secara signifikan mempengaruhi intensi masyarakat di dalam menggunakan kartu kredit untuk bertransaksi.

**Kata Kunci:** *Perceived Ease of Use; Attitude; Perceived Usefulness; Subjective Norm; Behavior to Use Credit Card*

### ABSTRACT

For the past 10 years, cashless payment had emerged as one of the most popular payment method used by Indonesians to conduct various transactions for the goods or services that they buy. Such trend intensified during the COVID-19 pandemic, in which, since people decided to limit the amount of physical contact that they had toward various goods (such as physical money) due to fear of contracting the virus, many of these people opted to shift to various forms of cashless payment in order to pay for the products that they're buying. In this case, surprisingly, compare to the other forms of cashless payments, credit cards still regarded as one of the most preferred cashless payment tool by Indonesians, thus proving the popularity of credit cards despite the influx of several cashless payment applications established in Indonesia which offer similar services to consumers. Therefore, this research aims to specify factors which can affect people's willingness to use credit cards from the perspectives of both theory of reasoned action (TRA) and technology acceptance model (TAM). 178 respondents filled in the questionnaires, in which, respondents were active credit cards users who've used credit cards for various transactions that they've conducted at least 5 times in the last 6 months. Using PLS, the results of the data analyses showed that perceived ease of use, together with attitude, subjective norm and perceived usefulness, serve as four significant factors which affect Indonesians' willingness to use credit cards for the transactions that they conducted.

**Keywords:** *Perceived Ease of Use; Attitude; Perceived Usefulness; Subjective Norm; Behavior to Use Credit Card*

## 1. INTRODUCTION

### Background of the Research

Cashless payment refers to a specific and innovative method of payment which enables its users to perform various payment activities for the transactions that they conducted without needed to use or spend the actual cash (hard cash) that these users hold, in which, for the past decades, this new method of payment had transformed as one of the most popular (and most preferred) payment options by many individuals in Indonesia (Putra, 2021). While such trend can be explained from the fact that the number of Indonesians utilizing various cashless payment tools for the transactions that they made tend to escalate over time, the increasing number of consumers or people utilizing various cashless payment tools or methods to pay for some kind of purchases that they made tend to also be driven by the fact cashless payment tend to be more secure than cash payment (using physical money), particularly in various transactions which involve a large amount of fees or money needed to be paid (Kotkowski and Polasik, 2021; Gorshkov, 2022). In this case, some people believe that carrying (or possessing) a large amount of cash might be unwise from the safety or security perspective, considering that there's a high chance that people could get robbed or subjected to various criminal actions conducted by irresponsible individuals if people are carrying a noticeable (unusually large) amount of physical money in their possessions. Therefore, the emergence of this so-called cashless payment tools enable these individuals to pay a large sum of fee or money for the goods or services that they're buying virtually, without needing to possess large amount of cash to finalize the transaction. Data illustrated on figure 1 underlined or showed the increasing number of Indonesians using cashless (digital) payment as their preferred method of payment for the transactions that they conducted for the last 5 years, in which, these numbers were also projected to further escalate or increase after 2022.

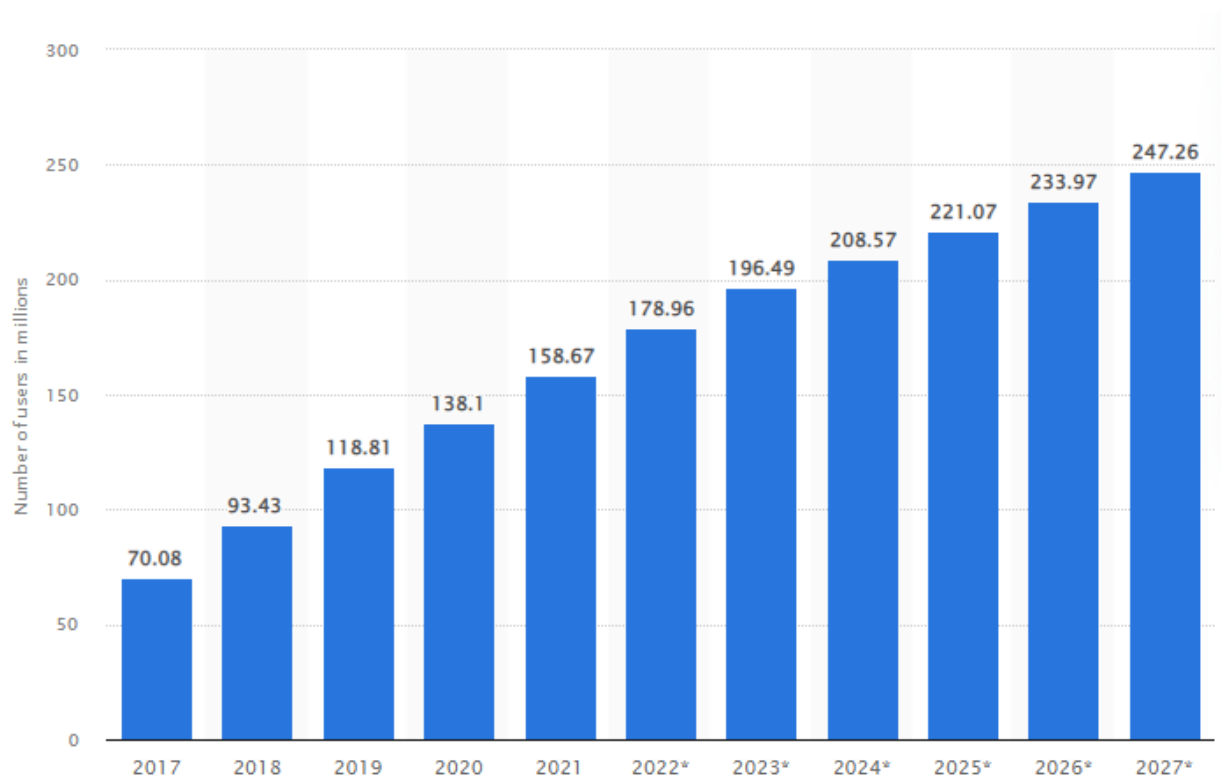


Figure 1. Number of Cashless Payment Users in Indonesia (In Millions)

Source: [www.Statista.com](http://www.Statista.com) (2022)

Meanwhile, while the number of Indonesians preferring cashless payment as their main method of payment as opposed to cash payment tend to increase on an annual basis, credit card turned out to be one tool or option that was preferred and used by many people to conduct cashless payment activities on the transactions that they conducted. In fact, compare to the other cashless payment services offered by various companies in Indonesia, the amount of credit card transactions conducted in Indonesia seems to experience a stable trend for the past 5 years, albeit such trend dwindled in the last 2 years due to the COVID-19 pandemic which tend to cause many individuals to save more money in the middle of uncertainties during the pandemic, thus indirectly reducing the number of transactions that people conducted within such timeframe. As illustrated in figure 2, the number of credit card transactions conducted by individuals (in Indonesia tend to escalate from 319,29 million transactions in 2017 to around 340,25 million transactions in 2019, before decreasing to around 268.21 transactions right in 2020 – the year when the pandemic first started. Such number then re-escalate to around 277,05 million transactions in 2021, in which, such data not only prove that credit card was still preferred by many Indonesians as they main tool for conducting various transactions up to this point, but also show that the amount of credit card transactions conducted by various users in Indonesia could further increase and recover in the following years once the “critical” phase of the pandemic situation is over. In regard with such phenomenon, then it is such an interesting thing for all parties (both academicians and practitioners) to look deeper into this trend by assessing (or predicting) the reason behind of why many Indonesians still prefer to use credit card as opposed to the other similar cashless payment tools, together with determining which factors affect these people’s intention to use credit card for the transactions which these people conduct.

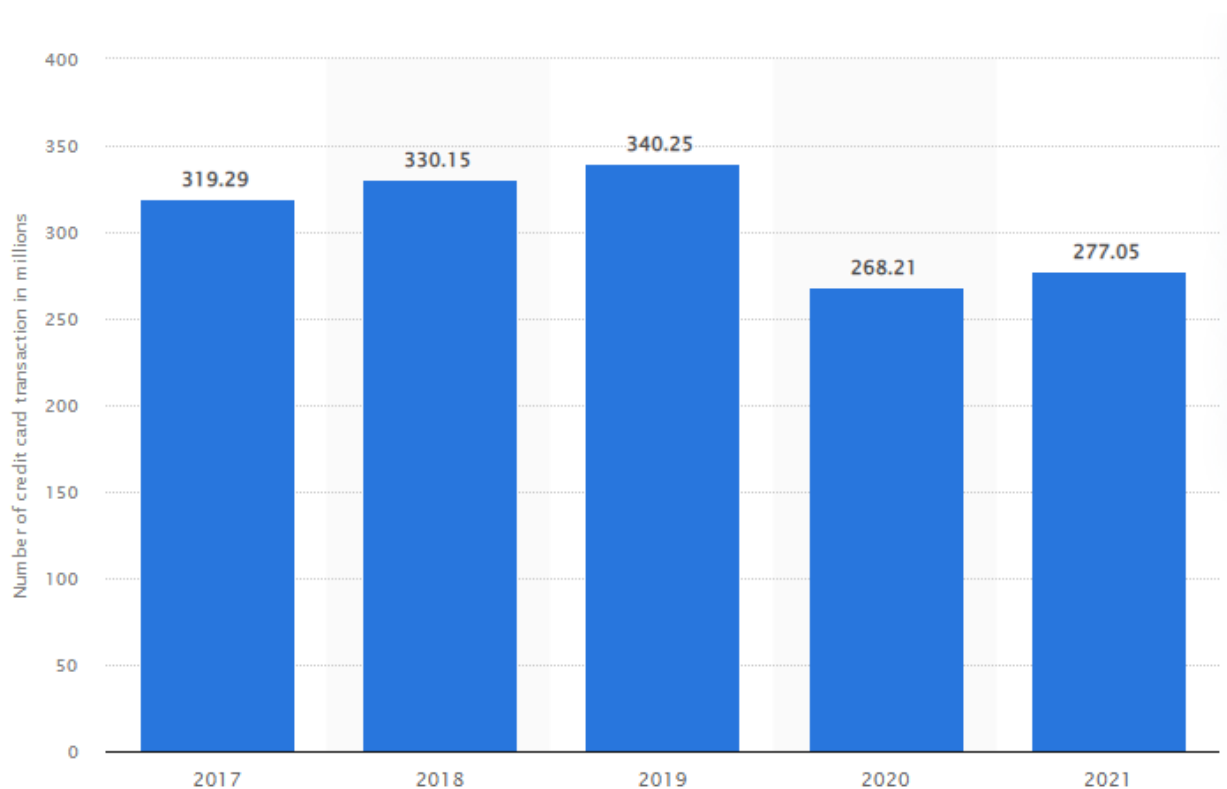


Figure 2. Number of Credit Cards Transactions Conducted in Indonesia (In Millions)

Source: [www.statista.com](http://www.statista.com) (2022)

While various studies had been conducted to try to explain consumers' behavior toward using cashless payment apps, studies which attempt to assess factors affecting consumers' willingness to use credit card as a specific form of cashless payment tool from the perspective of both theory of reasoned action (TRA) and technology acceptance model (TAM) still in rarity. In fact, in regard to the theory of reasoned action (TRA), most researchers tend to implement or adopt TRA in order to explain consumers' green purchase behavior as opposed to consumers' behavior to use certain technologies or innovation – which in this case is credit card as one tool of cashless payment that consumers. Theory of reasoned action (TRA) itself is a famous concept formulated by Fishbein & Ajzen (1975) which argue that human or individual's behavioral intention tend to be affected by two main antecedents, namely attitude and subjective norm. Attitude refers to individuals' personal judgement toward certain action. In this case, every single individual tends to have their own perception regarding whether or not certain action was deemed acceptable, and whether or not performing such action was viewed in a positive light.

Related to the concept of credit card, individuals' assessment concerning whether or not using credit cards as a main method of conducting transactional activities was seen as a better alternative compared to the other payment methods could serve as an important factor which can determine these individuals' willingness to use credit cards. When people feel or argue that credit card serves as a better option or tool that they could use when conducting certain transactions compared to the other similar payment options, then these people's tendencies or willingness to use credit card will increase, and vice versa. In addition to attitude, TRA also posited that subjective norm could also serve as the other factor which could affect one's willingness to conduct certain behavior (Wilson and Edelyn, 2022). While the basic notion of attitude argues that people's personal beliefs and judgement toward one specific behavior can determine people's willingness to actually perform the behavior, the term subjective norm refers to the social pressure given by people around an individual toward certain behavior, in which, such pressure could ultimately determine the individual's courage and decision on whether or not they should conduct the behavior (Jang and Cho, 2022).

In this case, all of the beliefs, judgements, comments or evaluations provided by the other parties close to a person (like peers, family, colleagues, friends, and so on) toward certain behavior tend to affect the strength of the person's intention to actually perform the behavior. When most people (around certain individual) think that certain behavior could yield bad or negative impact toward the others, then there's a high chance that these kind of perceptions will eventually lower, diminish or weaken the person's willingness or motivation to conduct the behavior, while, on the contrary, people's favourable assessment or comments toward the behavior will strengthen or increase the chance that such individual will eventually perform the behavior. Together, both subjective norm and attitude had been repeatedly studied (and regarded) by many authors as two significant variables which can ultimately affect one's tendency toward performing a behavior (Procter *et al.*, 2019).

While TRA had long been deemed as one of a few appropriate theories which authors or researchers could adopt to explain consumers or people's behavior, the so-called technology acceptance model (TAM) emerged in the late 80s as another concept which specifically discuss or talk about factors which tend to determine a person's willingness to adopt, buy or use certain technology. First formulated by Davis (1989), the basic theory of technology acceptance model (TAM) (which also turned out to be one theory that was developed from the theory of reasoned action (TRA)) argue that people's willingness to adopt certain technology was mainly determined by two factors, namely perceived usefulness and perceived ease of use. Perceived

usefulness itself refers to people’s subjective judgement regarding whether or not using or adopting certain technology could improve their work performance, while perceived ease of use refers to people or users’ personal evaluation concerning whether or not learning to use or acquire certain technology will be effortless (Alnemer, 2022). In this case, people’s intention to adopt a technology will increase or strengthen if people believe that not much efforts are needed to learn to use such technology (perceived ease of use), and that such technology will be useful for the users themselves (perceived usefulness) (Hubert *et al.*, 2019).

Within the realm of marketing and management (in general), there have been various studies which attempt to explain or understand people’s tendency to perform certain behavior within various different contexts using either theory of reasoned action (TRA) or technology acceptance model (TAM). However, compare to all of these studies, only few research which attempt to combine, merge or integrate both of these concepts at once in order to explain consumers or individuals’ behavior to use cashless payment – which in this study refers to credit cards - as their preferred payment method. Therefore, this research attempt to fill in such gap by explaining or uncovering factors which tend to affect Indonesians’ willingness to use credit card as their chosen payment method from the perspective of both theory of reasoned action (TRA) or technology acceptance model (TAM).

Table 1. Comparisons between current study and several previous studies which attempted to understand people’s motivation toward performing certain behavior using either TRA or TPB

Author(s)	Main Theory/Concept that was Used	Purpose of the Study
Troudi & Bouyoucef (2020)	Theory of Reasoned Action (TRA)	This study attempt to determine factors affecting people’s motivation to buy Green Food in Algeria
Zeinabadi (2022)	Theory of Reasoned Action (TRA)	This research tried to understand the impact of school principals’ knowledge-sharing leadership (KSL) toward teachers’ knowledge-sharing behaviours (KSB) in Iran
Effendi <i>et al.</i> , (2021)	Theory of Reasoned Action (TRA)	This study attempted to adopt TRA concept to understand why people decided to use Islamic rural banks’ services in Indonesia
Jiang <i>et al.</i> , (2019)	Extended Theory of Reasoned Action (TRA)	This research tried to adopt and extend the basic concept of TRA in order to explain why people decided to buy counterfeit luxury products in China
Gundala <i>et al.</i> , (2022)	Theory of Reasoned Action (TRA)	This study tried to uncover factors affecting consumers’ intention to purchase organic foods in the United States
Zhong <i>et al.</i> , (2021)	Technology Acceptance Model (TAM)	This research tried to understand factors affecting people’s acceptance toward hotel service robots in China
Hubert <i>et al.</i> , (2019)	Technology Acceptance Model (TAM)	This research attempted to understand the impact of various variables on people’s intention to use a smart home application in Germany from the Technology Acceptance Model (TAM) perspective
Alnemer (2022)	Technology Acceptance Model (TAM)	This study attempted to uncover various antecedents of digital banking adoption in Saudi Arabia
Wilson & Prayitno (2022) → Current Study	Theory of Reasoned Action (TRA) & Technology Acceptance Model (TAM)	Current Study attempt to merge both TRA and TAM concept in order to predict and analyze factors affecting consumers’ willingness to use credit card as their preferred tool for conducting cashless payment in Indonesia

## **Purpose of the Study**

While both theory of reasoned action (TRA) and technology acceptance model (TAM) had been adopted countless times by various researchers in order to assess factors affecting people's willingness to conduct certain behavior, studies which tried to combine or merge both concepts to predict consumers' willingness to adopt or utilize credit card as a tool to conduct cashless transactions in a simultaneous manner were still in rarity. Therefore, in order to fill in this gap, this study attempts to integrate both the concept of TRA and TAM in order to assess factors affecting Indonesians' willingness to adopt or use credit card as their main (and preferred) tool to conduct various transactional activities. Moreover, several questions that authors attempt to explain and answer in this study were as follows: does attitude significantly affect consumers' willingness to use credit card as their preferred tool to conduct cashless transactions?; does subjective norm significantly affect consumers' willingness to use credit card as their preferred tool to conduct cashless transactions?; does perceived usefulness significantly affect consumers' willingness to use credit card as their preferred tool to conduct cashless transactions?; does perceived ease of use significantly affect consumers' willingness to use credit card as their preferred tool to conduct cashless transactions?

## **Literature Review & Hypotheses Formulation**

### **Theory of Reasoned Action (TRA): The Role of both Attitude and Subjective Norm and the Impact of both Factors toward People's Willingness to Use Credit Card**

Theory of reasoned action (TRA) had been regarded by numerous scholars to be one of the oldest, most utilized and most popular concept within the context of consumer behavior, considering that there have been quite a lot of studies which adopt TRA as a foundation to explain variables which affect consumers, users or people's intention to conduct a behavior. As the creators of this concept, Fishbein & Ajzen (1975) argue that consumers' intention (or willingness) to conduct certain specific behavior tend to be affected by two main variables, which are subjective norm and attitude (Zeinabadi, 2022; Cahigas *et al.*, 2022). While subjective norm refers to how other parties or people around the consumers see, judge or evaluate certain behavior, attitude refers to the consumers' individual beliefs and evaluation regarding whether or not a behavior was deemed acceptable.

In regard with the context of subjective norm, it was hypothesized that consumers' behavior tend to be heavily affected by how the other people around the consumers behave and think about such behavior (Javid *et al.*, 2022). In regard to this concept, when consumers believe that the other people around them approve the behavior (or tend to have a favourable evaluation toward the behavior), then such subjective belief could push or escalate consumers' willingness to conduct the behavior, and vice versa. Meanwhile, in a similar manner, in regard to the context of attitude, when consumers themselves argue and think that certain behavior was seen in a favourable or positive light, then such judgement will eventually increase people's motivation to eventually perform the behavior, and vice versa (Effendi *et al.*, 2021).

Therefore, based on all of the arguments and explanations above, authors decided to posit the following hypotheses:

**H1:** Attitude significantly affect people's willingness to use Credit Card

**H2:** Subjective Norm significantly affect people's willingness to use Credit Card

### **Technology Acceptance Model (TAM): The Role of both Perceived Usefulness and Perceived Ease of Use**

Other than the fact that TRA had become one of the most utilized and adopted theory within the field of marketing and consumer behavior, the basic concept of TRA itself had also inadvertently become an inspiration for many scholars to develop new theories or concept. In this case, there had been several theories formulated in order to assess human or consumers' behavior which were actually developed based on the basic theory of TRA, in which, technology acceptance model (TAM) was actually one of these theories (which were developed from TRA). Posited by Davis (1989), despite being developed from TRA, however, technology acceptance model (TAM) had tried to distinct (or differentiate) itself from TRA, in which, while TRA tend to focus on multiple factors affecting consumers or people's behavior in general, technology acceptance model (TAM) was posited in order to assist both academicians and practitioners to deeply understand several reasons behind consumers or people's willingness to adopt certain technology.

The technology acceptance model (TAM) theory itself argue that consumers or users' intention to adopt, purchase or use certain technologies was actually heavily affected by two things, which are their personal evaluations concerning whether or not adopting such technologies will be useful and beneficial in improving their life and work activities (perceived usefulness), and users' personal judgement concerning how much effort that they should exert (or put) in order for them to be able to understand and eventually use the technology (perceived ease of use) (Wilson *et al.*, 2021; Alwabel and Zeng, 2021). In regard to both of these concepts, when being linked with people's intention to adopt cashless payment tools (such as credit cards) as compared to traditional payment tools (such as hard cash), people's judgement regarding how difficult it will be for them to learn how to use these new cashless technology, together with their perceptions or evaluations concerning whether or not using these so-called cashless payment tools will be useful for them compared to traditional payment tools (Zhong *et al.*, 2021; Wong *et al.*, 2021).

When people believe that using cashless payment tools (such as credit card) was actually better in general (and enable these users to gain various benefits) compare to traditional cashless methods, then such evaluation will eventually strengthen people's willingness to adopt or use cashless payment as their main or preferred payment method for the transactions that they made. Meanwhile, other then the beneficial (and usefulness) aspect of the technology itself, consumers' personal judgement regarding how difficult it will be for them to learn the new technology (which, in this case, refers to credit card as one of several forms of cashless payment) could similarly determine their willingness to use it. When consumers believe that there won't be much effort needed to study how to use the technology, then such assessment or belief can strengthen consumers' intention to adopt the technology, and vice versa (Wilson *et al.*, 2021; Wang *et al.*, 2022)

Therefore, based on all of the arguments and explanations above, authors decided to posit the following hypotheses:

**H3:** Perceived Usefulness significantly affect people's willingness to use Credit Card

**H4:** Perceived Ease of Use significantly affect people's willingness to use Credit Card

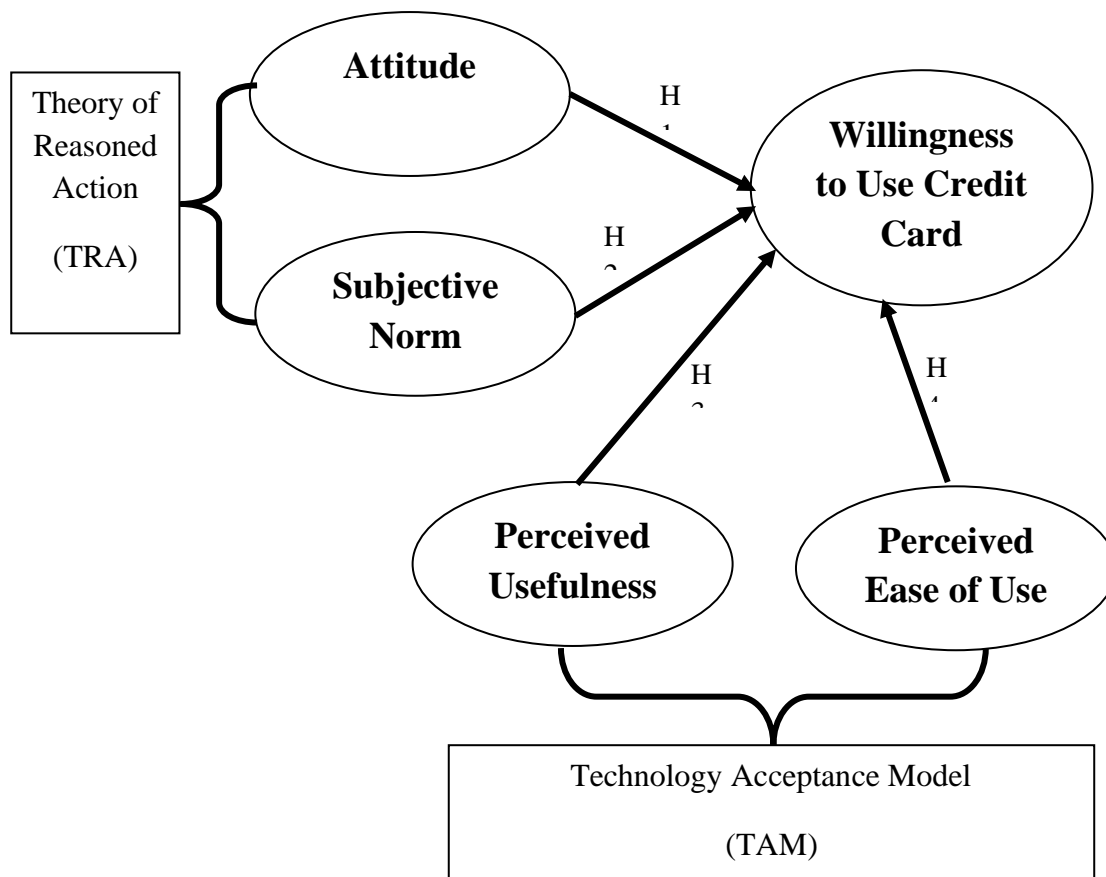


Figure 1. Proposed Conceptual Framework

Sources: Liu *et al.*, (2020); Wang *et al.*, (2022); Acharya and Mekker, (2022); Li *et al.*, (2022)

## 2. RESEARCH METHOD

Conducted in the form of survey, since all respondents in this study were Indonesians who've used credit card as their main tool of conducting cashless payment of various transactions that they made for at least 5 times within the past 6 months, then online questionnaires (using google forms) were utilized to collect all of the data. In this case, a total of 178 questionnaires were filled in, and that after further examination, all of these data were deemed usable to be used in this study. Meanwhile, a non-probability sampling method in the form of purposive sampling was utilized with the purpose of ensuring that all respondents had satisfied all requirements or specific criteria determined in this research. Moreover, PLS was utilized to assess all of the data gained from all respondents.

Furthermore, there are a total of 18 indicators representing all five factors. Indicators used to explain perceived usefulness, perceived ease of use and willingness to use credit card were adapted from Wang *et al.*, (2022), while indicators used to explain attitude and subjective norm were adapted from Liu *et al.*, (2020). All of these indicators then were translated to Indonesian before being adopted and included within the questionnaires which were distributed to all respondents. All of these indicators had also been modified in order to ensure that the wording used for all of these indicators had conformed with the context or the topic of this study.



### 3. RESULTS AND DISCUSSIONS

Before assessing all of the data using PLS in order to gain a thorough understanding concerning the relationships between all variables, respondents' characteristics analysis was performed in order to gain better understanding (and better look) concerning the general characteristics of all respondents in this study. Based on this analysis, authors found that most of the respondents are female (66,85%), and that most of them had used credit cards with a frequency of more than 8 times in the last 6 months to complete various transactional or payment activities that they made (55,05%). Meanwhile, most of them hold Bachelor's Degree as their highest educational degree (76,40), and that the majority of the respondents were living in Jakarta (43,25%). These respondents' characteristics analyses were performed using SPSS 23 software.

Next, other than the respondents' characteristics analyses, PLS-SEM was used to analyze the entire data gathered in this study, and that both measurement and structural model assessment need to be completed in order to determine the relationships between factors proposed in this research. While the measurement model analyses were commenced with the purpose of confirming both the reliability and the validity of the data, the structural model analysis was specifically conducted to understand the effect given by one variable toward the others. In this case, structural model analysis can be performed only if all data in this study had been confirmed to be both valid and reliable. Both table 2 and 3 illustrated the results of the measurement model analyses, while table 4 and 5 both illustrated the results of the structural model analyses.

Table 2. Measurement Model Assessment

Variables	Measurements	Loading	AVE	Composite Reliability	Cronbach's Alpha
<b>Attitude</b>	I feel positive toward using credit card as a payment method for the transactions that I made	0,807	0,657	0,740	0,739
	I believe that using credit card as a payment method is better than traditional payment method	0,803			
	I love the idea of using credit card as a payment method for the transactions that I made	0,821			
<b>Subjective Norm</b>	My family think that I should use credit card as a payment method to complete the transactions that I made	0,880	0,746	0,902	0,888
	My friends think that I should use credit card as a payment method to complete the transactions that I made	0,886			
	My family use credit card as a payment method to complete the transactions that they made	0,822			
	My friends use credit card as a payment method to complete the transactions that they made	0,867			
<b>Perceived Usefulness</b>	I think using credit card to pay for my transactions is more secure than when I'm using hard cash as my payment method	0,832	0,676	0,765	0,761
	The economic benefits of using credit card is attractive for me	0,804			
	I think using credit card will make my payment activities more convenient	0,831			
<b>Perceived Ease of Use</b>	Learning to use credit card to complete my payment is easy	0,874	0,699	0,825	0,789

	I find that using credit card is an easy thing to do	0,768			
	I find it easy to understand all of the information provided by the credit card issuer(s)	0,862			
<b>Willingness to Use Credit Card</b>	I will utilize credit card as a tool to complete my transactions more frequently in the future	0,927			
	I will consider to complete most of my transactions using credit card in the future	0,955			
	I will recommend my friends to use credit card as a main tool to complete their payment in the future	0,939	0,871	0,964	0,963
	I will consider to create additional credit card(s) in the future	0,931			
	I will recommend my family to use credit card as a main tool to complete their payment in the future	0,912			

Table 3. Discriminant Validity Analysis - HTMT

	<b>Attitude</b>	<b>Perceived Ease of Use</b>	<b>Perceived Usefulness</b>	<b>Subjective Norm</b>	<b>Willingness to Use</b>
<b>Attitude</b>					
<b>Perceived Ease of Use</b>	0,316				
<b>Perceived Usefulness</b>	0,178	0,735			
<b>Subjective Norm</b>	0,233	0,767	0,710		
<b>Willingness to Use</b>	0,143	0,655	0,667	0,768	

Table 4. Structural Model Analysis – R-Squared

<b>Variable</b>	<b>R-Squared</b>	<b>%</b>
<b>Willingness to Use Credit Card</b>	0,574	57,4%

Table 5. Structural Model Analysis – Path Coefficient

<b>Relationships</b>	<b>Original Sample (O)</b>	<b>Sig.Value</b>	<b>Significant/Not Significant</b>
<b>Attitude → Willingness to Use</b>	0,546	0,000	Significant
<b>Subjective Norm → Willingness to Use</b>	0,518	0,000	Significant
<b>Perceived Usefulness → Willingness to Use</b>	0,329	0,000	Significant
<b>Perceived Ease of Use → Willingness to Use</b>	0,456	0,000	Significant

Table 6. Structural Model Analysis – Goodness-of-Fit (GoF)

<b>Criterion</b>	<b>Value</b>	<b>Conclusion</b>
<b>Goodness-of-Fit (GoF)</b>	0.645	Strong Goodness-of-Fit

Data analysis results presented in both table 2 and 3 illustrated the results of the measurement model assessment, while all data presented in both table 4 and 5 underlined the results of the structural model assessment performed in this study. Based on the results of the measurement model assessment, all data had satisfied all criteria set within this research, in which, both the AVE of each factor and the loading of each indicator had been greater than 0,50 and 0,70 respectively; while both the composite reliability and the cronbach's alpha of each factor had also been greater than 0,70. Moreover. the HTMT value of each factor (as presented on table 3) was lower than 0,85, thus confirming that both the reliability and the validity criteria had been achieved in this research.

Next, after completing the measurement model assessment, the structural model assessment was performed with the purpose of determining the correlation or relationships between variables discussed in this study. Based on the results of the r-squared assessment presented in table 4, the endogenous variable, which is willingness to use credit card, had a r-squared value of 57,4, which imply that 57,4% of the effect given to willingness to use credit card could be well-explained by all exogenous variables in this study, namely attitude, subjective norm, perceived usefulness, and perceived ease of use.

Furthermore, according to the Goodness-of-Fit (GoF) value calculated in this study, it turned out that the model proposed in this study generated a GoF value of 0,645, which means that the GoF value obtained in this study was high, which in turns indicate that all of the samples obtained in this study could perfectly represent the population from which these samples were derived from. Meanwhile, the rest of the effects (42,6%) were given by the other factors not included in this study. Furthermore, discussing the results of the path coefficient analyses presented in table 5, it can be concluded that all relationships between variables analyzed in this study were significant and positive. These findings imply that all variables, namely attitude, subjective norm, perceived usefulness, and perceived ease of use can positively and significantly affect consumers or users' willingness to use credit card as their preferred cashless payment method utilized to complete transactional activities that consumers made. Furthermore, based on these findings, it can also be concluded that all hypotheses (H1, H2, H3, and H4) posited in this study were all supported.

## **Discussions**

Based on the findings presented on the previous section, it can be suggested or concluded that all four variables (attitude, subjective norm, perceived usefulness, and perceived ease of use) found to have significant effects in determining or altering Indonesians' willingness to use credit card in order to conduct payment activities for any kind of transactions that these people made. These findings are also in line with the results obtained by various authors who found the significant effects of attitude, subjective norm, perceived usefulness and perceived ease of use toward determining people or consumers' willingness or intention to perform certain behavior (Tseng *et al.*, 2022; Wilson, 2019; Sudyasjayanti and Salsabil, 2020; Susanto and Sugiyanto, 2021; Acharya and Mekker, 2022; Li *et al.*, 2022; Ly and Ly, 2022).

In this case, these results had successfully strengthened or reinforced the basic concept of both TRA and TAM which imply that attitude and subjective norm (in the case of TRA), together with perceived ease of use and perceived usefulness (in the case of TAM), serve as several important factors which undoubtedly can strengthened, affect or shape individuals' willingness or intention to conduct certain behavior - which in this research refers to the behavior of conducting payment activities using credit card.

Since attitude deals with consumers' individual judgement about both the favourable aspect and the non-favourable aspect of certain behavior, then whether or not users believe that credit card is a better payment option compared to traditional "hard cash" payment method will undoubtedly determine their willingness to use credit card. If people believe that using credit card to pay for the transaction that they made is certainly better than using hard cash, then such attitude will eventually increase people's willingness to use credit card, and vice versa. Similarly, in regard to the concept of subjective norm, when people close to the consumers (such as family members and peers) judge or argue that credit card is a far better alternative to be used as a tool to complete a transaction compare to traditional payment method (such as cash), then consumers' willingness to adopt or use credit card will be strengthened. Other than subjective norm and attitude, both perceived ease of use and perceived usefulness (which derived from the basic concept of TAM) had also been found in this study as two significant antecedents of consumers' willingness to use credit card.

In both of these cases, when consumers (or users) felt that using or adopting credit card bring various advantages or benefits thich they can't experience from using the other kind of payment options, together with consumers' personal assessment that using (or learn how to use) credit card wasn't a difficult thing to do, then these perceptions or judgements could eventually strengthen consumers' willingness to use credit card as a cashless payment method that consumers prefer relatives to the other similar payment methods that are available in the market.

#### **4. CONCLUSION AND SUGGESTION**

##### **Conclusion and Managerial Implications**

Based on the findings obtained in this research, authors concluded that all four factors - attitude, subjective norm, perceived ease of use, and perceived usefulness – play significant and positive roles in determining, altering or strengthening Indonesians' willingness to use credit card as a form of cashless payment tool or method used to pay various transactions that users or consumers were conducting. In regard to these results, credit card companies operating in Indonesia need to be able to further develop the credit cards that these companies offer to Indonesians, not only in order to enhance the security aspect of the card itself, but also in order to ensure that any kind of innovations applied to these cards will entice many Indonesians to use the cards, thus increasing the number of credit card users in Indonesia, and accelerate the shifting trend from traditional payment to cashless payment method in the country. For example, creating or developing virtual credit card app which users can install on their personal devices could be one way that credit cards companies or operators could consider in regard to how credit cards could be re-developed in the future, in which, within this system or app, users or consumers could conduct various transactions directly from their devices, together with controlling and monitoring their spending rate (and the number of transactions which had been conducted) within a specific timeframe from the same application.

Such technology or innovation could eventually bring (or offer) extra benefits to the users, considering that they tend to have a tighter or higher level of control (in regard to how they use their credit card) this way as opposed to the conventional physical credit card (in which people tend to have some difficulties in monitoring the amount of spending that they've conducted). In this case, such additional benefits that people could get and experience, together with their perception that learning or using such innovation or system was an easy thing to do, can motivate many people to use credit card as their preferred payment option as opposed to the other similar methods.

Moreover, enhancing the security aspect (or systems) installed within the cards themselves, together with actively conducting various communication or public relations activities aim to educate people about the advantages of using credit card to complete various payments that people made, could also be a great strategy that companies can implement in order to further strengthen people's attitude and positive evaluation toward credit card, in which, such attitude can eventually enhance the probability of these individuals (together with the other people close to these individuals) using credit card as their method of conducting payment activities for various goods or services that they buy.

Moreover, various financial incentives or benefits offered to credit card users (such as financial rebates, discount, free gifts, coupons, etc) every time they conduct payment activities using credit card can also be considered as another strategy which credit card companies can use or implement, not only with the purpose of enhancing or strengthening people's positive evaluation and judgement that credit card is a better cashless payment option compare to the other similar alternatives (which in the end could enhance people's willingness to adopt credit card as their preferred payment method), but also in order to draw (and attract) more people to use credit card, which in the end will increase the number of credit card users in Indonesia.

### **Suggestions for Future Studies**

Despite being conducted in a rigorous manner, this research was still not free of limitations. First of all, this study specifically focusing on factors affecting Indonesians's willingness to use credit card from the perspective of both theory of reasoned action (TRA) and technology acceptance model (TAM). Considering that there are still quite a lot of the other theories or concept which can also be used to predict or explain people's behavior, then future authors are suggested to develop the framework or topic of this study by adopting the other concepts of theories other than TRA and TAM to explain why people prefer to use credit cards as opposed to the other similar payment methods which are available in the market. Next, this study was conducted in Indonesia, in which, considering that there might some demographic or cultural differences between Indonesians and the other people living or originated from the other countries, then future researchers are welcomed to replicate the framework or concept developed in this study by conducting similar studies in the other countries other than Indonesia.

Finally, future studies are also suggested to further develop and expand the boundaries the main topic of this study (which is about cashless payment methods) by assessing antecedents of consumers' willingness (or intention) to use the other forms or methods of cashless payments other than credit card, considering that for the past decades, there have been various cashless payment apps or systems offered to people all around the globe which basically offer similar features to credit cards.

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