



## Considerations in the Adoption of Solar Home System Technology in Indonesia

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**ABSTRACT:** The high potential for solar energy in Indonesia has prompted the Ministry of Energy and Mineral Resources of the Republic of Indonesia to aim for solar energy utilization. Unfortunately, since it was planned in 2010, the target has not been achieved due to the low interest of society to purchase and use solar home systems.

Using the Technology-Personal-Environment (TPE) framework, this study aims to identify the factors that are being considered in the adoption of solar home system technology and understand the interest of the Indonesian people in repurchasing it. The data for the study were obtained through in-depth interviews with eight participants.

The study found that most participants do not consider perceived simplicity, but they consider perceived compatibility, regulations, technology support providers, performance expectations, and personal innovation. It was found that trust is also considered by participants. Additionally, they consider Regulations, Need/Urgency, Price, Technology Specifications, and Maintenance in repurchasing solar home systems. A new model proposed which exchange the perceived simplicity from technology context by trust in personal context.

It is recommended that renewable energy companies disseminate information about solar home systems through targeted websites, social media, and advertisements. Moreover, it is recommended that the government enact regulations that can support the use of solar home systems, such as providing incentives, subsidizing its materials, and building domestic factories that can produce the materials. Finally, it is recommended that further studies use other research methods, test new variables, and use the proposed models.

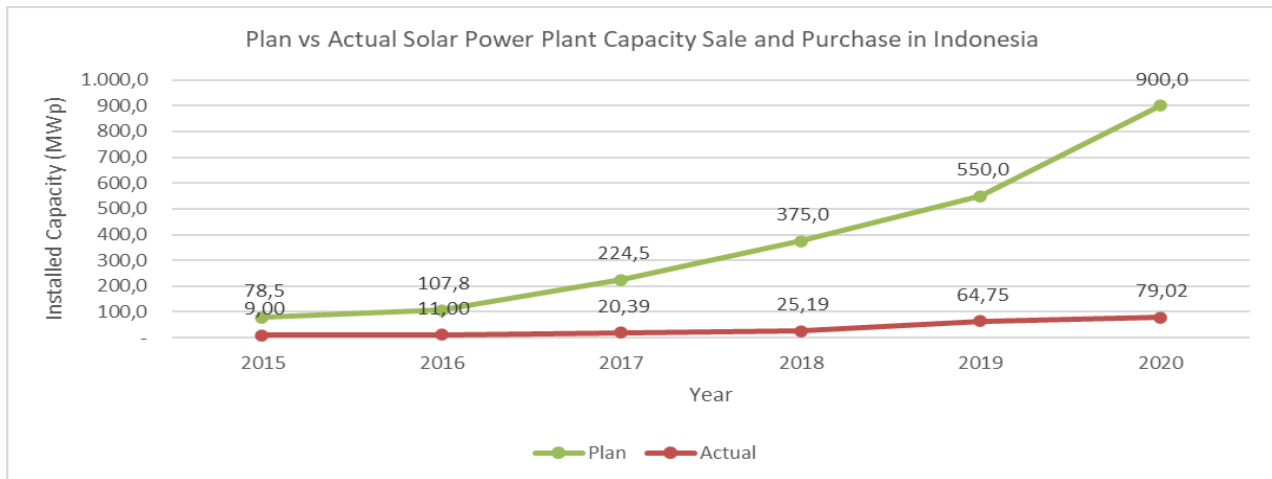
**KEYWORDS:** Environment, Personal, Purchase Intention, Technology Adoption, TOE Framework, TPE Framework, Technology, Solar Home System.

### INTRODUCTION

Over time, the human need for electricity is increasing. The International Energy Agency (2021), It is predicted worldwide electricity demand to increase by 4.5% by 2021. This increase is caused by economic conditions that are recovering from the cessation of economic activity due to COVID-19. Simultaneously, this causes an increase in the need for electricity-producing natural resources. Unfortunately, about 60% of the energy sources for generating electricity still came from limited natural resources such as coal, natural gas, and oil (Our World in Data, 2021). In contrast to the ever-increasing demand for natural resources for power generation, the limited supply of available natural resources is decreasing and becoming scarce. Due to this scarcity, renewable natural resources such as biomass, water, geothermal, wind, and solar are starting to be used (U.S Energy Information Administration, 2021). In the last ten years, the use of solar power to produce electricity has increased by 2000% from 32,147 GWh in 2010 to 678,999 GWh in 2020 (International Renewable Energy Agency 2020).

Indonesia has enormous potential for solar resources. The intensity of solar energy in Indonesia had an average of 4.8 kWh/m<sup>2</sup> or around 207,898 MWp (Indonesian Ministry of Energy and Mineral Resources, 2017). This potential has prompted the Indonesian government to set a target of converting solar energy into electricity of 6.5 GW in 2025 (Indonesian Ministry of Energy and Mineral Resources, 2017). To achieve this target, the Indonesian government expects participation from state-owned companies, private companies, and the Indonesian people in selling and purchasing solar power plants for both public and private use.

The total capacity of installed solar power plants in Indonesia continues to grow every year. Specifically, the capacity of 1 MWp in 2010 increased to 79.02 MWp in 2020 (Indonesian Ministry of Energy and Mineral Resources, 2021). This increase can also mean that the number of sales and purchases of solar power plants in Indonesia continues to grow.



**Figure 1.** Plan vs Actual Solar Power Plant Capacity Sale and Purchase in Indonesia

**Source:** Indonesian Ministry of Energy and Mineral Resources, 2021

Based on Fig. 1 above, although the total sales and purchases of solar power plants in Indonesia continue to increase, the realization of sales and purchases is still far behind the target set by the Indonesian government in the National Energy General Plan (RUEN – Rencana Umum Energi Nasional).

In a commitment to achieve sales and purchase targets for solar power plants in Indonesia, the Ministry of Energy and Mineral Resources continues to encourage public interest in purchasing and using solar power plants. Unfortunately, the interest of the Indonesian people to buy and use solar power plants was still low (Institute for Essential Services Reform, 2019 and 2021). In its survey, the Institute for Essential Services Reform found that only about 22% of Indonesian people were interested in purchasing and using solar home systems, which for personal use are called solar home systems (Institute for Essential Services Reform, 2019 and 2021).

As a new technology, solar home systems do not immediately attract everyone’s interest to purchase and use them. An individual needs to go through the stages of technology adoption before having an interest in purchasing or using new technology, including solar home systems. TOE or Technology-Organization-Environment is one of the well-known theories in discussing technology adoption (Hunafa, Hidayanto, & Sandhyaduhita, 2017).

Solar home system is not a product that can be used by all people. It is a product that must be installed by authorized parties before it can be used. Therefore, prospective users of solar home systems need to consider several factors, such as the feasibility of infrastructure, government regulations, and the availability of companies that can support the installation of solar home systems. These factors make the TOE framework the most appropriate theory of technology adoption to be used in discussing the adoption of solar home system technology because many external factors are involved in the technology adoption process (Hwang, Huang, & Wu, 2016).

In general, TOE is used to study technology adoption at the organizational or group level. To be able to study technology adoption at an individual or personal level, it is necessary to modify to the TOE framework (Hunafa, Hidayanto, & Sandhyaduhita, 2017). The modification in question is modify the organizational context into a personal context. As a result of this modification, the TOE framework is modified to a TPE framework with Technological, Personal and Environmental factors (Hunafa, Hidayanto, & Sandhyaduhita, 2017).

Although the purchase and use of solar power plants in Indonesia continue to increase every year, the target for utilizing solar energy in Indonesia through the purchase and use of solar power plants targeted by the Indonesian government has not been achieved yet. Based on this problem, it is necessary to conduct a study to determine the role and factors considered in the process of adopting solar power plant technology or solar home system for personal use in Indonesia.



## LITERATURE REVIEW

### A. Marketing

Marketing is a process to engage directly with consumers, build strong relationships with consumers, and build value in the eyes of consumers to get value from consumers in return (Kotler & Armstrong, 2021). In addition, marketing can also be interpreted as activities and processes in creating, communicating, delivering, and exchanging something that has a certain value to consumers, clients, partners, and society (Grewal et al., 2021).

### B. Consumer Behavior

Consumer behavior is a behavior shown by consumers in the process of searching, purchasing, using, evaluating, and disposing of a product or service that they feel will satisfy their needs (Schiffman & Wisenblit, 2019). Consumer behavior can also be described as a study that studies an individual, group, or organization in their process of selecting, securing, or obtaining, using, and producing a product, service, experience, or idea to satisfy consumer needs (Mothersbaugh, Hawkins, & Kleiser, 2020).

### C. Purchase Intention

Purchase intention is an element of consumer behavior that can provide information regarding an individual's tendency to buy a particular brand (Jacob & Tan, 2021). Purchase intention can also be described as consumer behavior or attitudes towards purchasing behavior and consumer willingness to pay for certain products at the expense of the value they have (Zhang, Zhou, & Liu, 2020).

### D. Technology Adoption

Technology is a method, system, and device produced by science to be used practically (Collins, 2022). Adoption is defined as a process of acceptance or change in good behavior that includes knowledge, attitudes, and skills (Mardikanto, 2009). From these two terms, technology adoption can be described as a decision-making process to use innovation or new technology both in the near future and in the long run (Wibisono & Waloejo, 2019).

### E. Technology – Personal - Environment

First defined by Tornatzky & Fliescher (1990), TOE describes a process from the development of technological innovation to its adoption and implementation in a business entity (Baker, 2011). TOE is modified into Personal-Environmental Technology (TPE) to be used at the individual level (Hunafa, Hidayanto, & Sandhyaduhita, 2017).

#### 1) Technological Context

Technology refers to all relevant technologies for an organization, both those that have been used and those that have not been used (Baker, 2011). There are three factors in the technological context, namely perceived simplicity, perceived compatibility, and performance expectations.

- a) Perceived simplicity is the degree to which a technology or innovation is considered easy to use (Rogers, 1995).
- b) Perceived compatibility is the degree to which a technology or innovation is considered consistent and suitable for use with existing and future values (Rogers, 1995).
- c) Performance expectations can be defined as the level at which a new technology is considered more useful than previous technology (Awa, Ukoha, & Igwe, 2017).

#### 2) Personal Context

Personal context refers to the state of the user in the technology adaptation process (Ma & Lee, 2019). There are two factors in the personal context, namely personal innovativeness and intrinsic motivation (Hunafa, Hidayanto, & Sandhyaduhita, 2017).

- a) Personal innovativeness is someone's desire to be able to try and use a new technology (Hunafa, Hidayanto, & Sandhyaduhita, 2017)
- b) Intrinsic motivation is the desire to do an activity because the activity is considered interesting and fun (Hunafa, Hidayanto, & Sandhyaduhita, 2017).

#### 3) Environmental Context

Environmental context refers to personal external matters that play an important role in the technology adoption process (Gupta 2018). There are three factors in the environmental context, namely regulations, technology support providers, and competitive pressures.



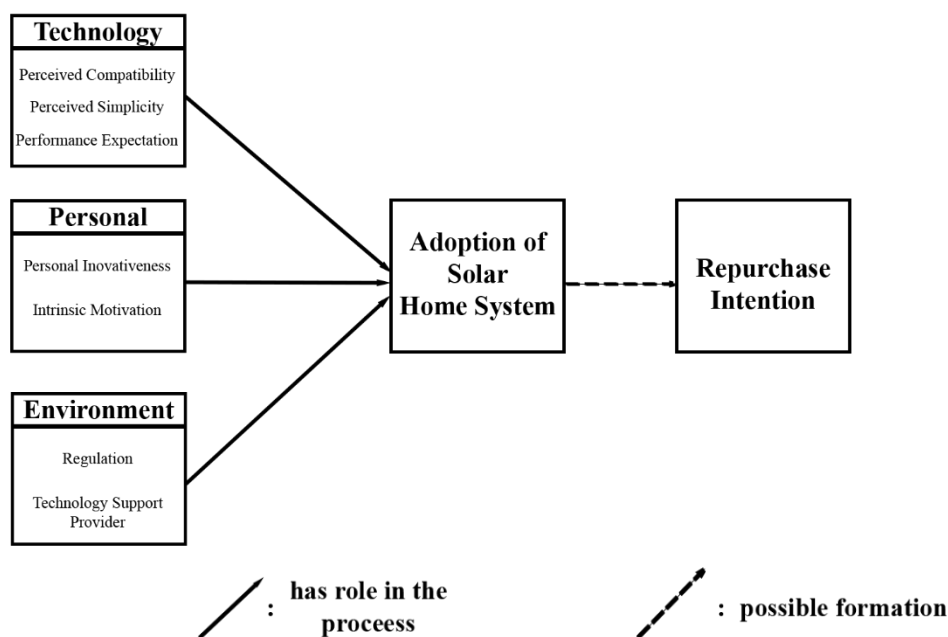
- a) Regulations are rules implemented by the government to regulate individual and organizational behavior (Khemani & Shapiro, 1993).
  - b) Technology support providers in the environmental context mean an organization or company that can financially support the use of the technology, installation, or maintenance (Bandi & Anandarao, 2021).
  - c) Competitive pressure is the level of the competitive atmosphere of an industry, where a company operates (Soewarno, Tjahjadi, & Permatanadia, 2020).
- The competitive pressure factor is not used in this study because this study examines the individual level.

**F. Repurchase Intention**

Repurchase intention is defined as a consumer’s desire to repurchase or upgrade something that has been purchased before (Nguyen, Nguyen, & Tan, 2021). Another definition of repurchase intention is the consumer’s assessment and consideration of their desire to interact and transact again in the future (Keni, 2020).

**G. Research Framework**

The research framework in this study is a modification of TOE to TPE, with additional interest in repurchasing solar home system technology.



**Figure 2.** Research Framework

**Source:** Bandi & Anandarao (2021), Hunafa, Hidayanto, & Sandhyaduhita. (2016), & Awa et al. (2017).

In the research framework, the solid arrow lines between technological context, personal context, and environmental context mean that the contexts in the TPE Framework play a role in the process of technology adoption. Meanwhile, the dashed arrow lines between the adoption of solar home system technology and repurchase intention mean that there is a possibility of repurchasing interest to occur after adopting solar home system technology.

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**METHODOLOGY**

This study is a descriptive study with an interpretive paradigm, inductive approach, qualitative methodology, individual units of analysis, minimal involvement, non-contrived research background, and cross-sectional timeframe. The study used variables based on the TPE framework, namely technology, personal, and environment.



The data in this study were collected by conducting in-depth interviews with eight participants. Seven of them were solar home system users, and one was a representative of a solar home system service provider. The interviews were conducted online and offline depending on the availability of the participants.

The validation of the collected data was carried out using three methods. The first method was confirming the interview results with the participants to ensure that the data obtained was correct and in accordance with what they intended, which was done after the interview was completed and the data was processed by the researchers. The second method was collaborating with an expert who has more than 10 years of experience in the field of solar home systems to help correct and understand the participants' statements. The final method was the triangulation of data sources obtained from solar power users and providers. To ensure that the data are reliable, all participants were studied using the same method, namely in-depth interviews, to maintain the consistency of the research methods.

**RESULTS**

**A. Characteristic of the Participants**

There were eight participants, seven of whom were solar home system users with the following characteristics:

**Table 1.** Characteristics of Participant 1 to 4

	N1	N2	N3	N4
<b>Initial</b>	NE	R	AP	BP
<b>Electric Capacity in the Household</b>	5,500 Wp	3,500 Wp	6,600 Wp	22,000 Wp
<b>Installed Solar Home System Capacity</b>	5,000 Wp	3,000 Wp	3,000 Wp	10,000 Wp
<b>Year of Installation</b>	2017	2018	2017	2019
<b>Domicile</b>	Jakarta	Bandung	Tangerang	Bekasi
<b>Monthly Income</b>	(retired)	> Rp5,000,000.-	-	Rp75,000,000.- to Rp100,000,000.-
<b>Occupation</b>	SOE Retiree	SOE Employee	Civil Servant	Veteran

Source: Result of Data Processing (2022)

**Table 2.** Characteristics of Participant 5 to 7

	N5	N6	N7
<b>Initial</b>	H	IW	SN
<b>Electric Capacity in the Household</b>	5,500 Wp	5,500 Wp	2,000 Wp
<b>Installed Solar Home System Capacity</b>	3,000 Wp	5,000 Wp	200 Wp
<b>Year of Installation</b>	2021	2020	2021
<b>Domicile</b>	Jakarta	Tangerang	Bandung
<b>Monthly Income</b>	Rp10,000,000.-	Rp50,000,000.-	-
<b>Occupation</b>	Private Employee	SOE Employee	Private Employee

Source: Result of Data Processing (2022)

One participant, a solar home system service provider, has the following characteristics:

**Table 3.** Characteristics of Participant 8

	N8
<b>Initial</b>	F
<b>Domicile</b>	Bandung
<b>Position</b>	Project Manager
<b>Experience</b>	5-6 years

Source: Result of Data Processing (2022)



**B. Findings**

The results of data collection using the in-depth interview method include factors that were within the TPE framework and outside the TPE framework in the adoption of solar home system technology, which is presented in Table 4.

**Table 4.** Research Findings

No	Factor	Result
<b>1</b>	<b>Technological Context</b>	
1.1	Perceived Simplicity	Not considered
1.2	Perceived Compatibility	Considered by most participants
1.3	Performance Expectations	Considered by all participants
<b>2</b>	<b>Personal Context</b>	
2.1	Personal Innovation	Considered by most participants
2.2	Intrinsic Motivation	Not considered
<b>3</b>	<b>Environmental Context</b>	
3.1	Regulations	Considered by most participants
3.2	Technology support providers	Considered by most participants
<b>4</b>	<b>Factors outside the TPE Framework</b>	
4.1	Trust	Considered by most participants

**Source:** Result of Data Processing (2022)

**C. Discussion**

*1) Factors considered in the adoption of solar home system technology in Indonesian society based on the TPE framework*

In this study, five factors were considered by most participants, namely perceived compatibility, performance expectations, personal innovation, regulation, and technology support providers. In addition, it was also found that the factors considered by most participants in adopting solar home systems outside the TPE framework included cost and environmental awareness.

Perceived compatibility becomes one of the main considerations because people want to improve their quality of life without causing major changes to their environment or lifestyle (Hubert et al., 2018). The main goal of the participants in adopting solar home systems is to gain benefits, so they expect that the performance provided by their solar home system can provide better benefits than before they installed them. As stated by Rogers (1995), one adopts new technology because it is believed to provide better benefits than existing ones.

Before adopting a new technology, one needs to have an interest in the technology first. Interest in new technology cannot be separated from one’s desire to try new things. Those who have a high level of desire to try new things will have a positive perception of new technology and a desire to use the technology (Hunafa, Hidayanto, & Sandhyaduhita, 2017). Participants in this study also said that they already had an interest in solar home systems before they started installing them in their homes.

Solar home systems are a product linked directly to natural resources and state-owned companies. Consequently, the adoption and use of solar home systems are regulated by the government. The regulations implemented by the government are one of the main considerations for participants because regulations can increase or eliminate opportunities for new technologies to be adopted by the public (Bandi & Anandarao, 2021). In addition, the community does not have sufficient capability to install, use and maintain solar home systems themselves. To operate according to user expectations, solar home systems require adequate technical knowledge. For safety reasons, the adoption of solar home systems also needs to be accompanied by companies that are experts in the field of solar home systems. The existence of technology support providers can minimize the risks of adopting new technology (Bandi & Anandarao, 2021).

Participants considered the cost of solar home systems to be quite high. This was considered by the participants because one of the main objectives of adopting solar home systems is to gain financial benefits. High costs are a barrier to technology adoption (Qureshi, Ullah, & Arentsen 2017). Apart from the financial side, several participants also hoped to get environmental benefits from installing solar home systems. Those who care about the environment tend to have an interest in using environmentally friendly products (Azalia et al., 2021).



## 2) *The technological context considered in the adoption of solar home systems in Indonesian society*

Simplicity plays an important role in technology adoption (Bandara & Amarasena, 2020). Participants agreed that using and obtaining solar home systems was easy. However, the simplicity factor was not considered by the participants when they adopted solar home systems. This was due to the participants' trust in solar home system installation service providers in terms of installing and controlling solar home systems. The participants thought that they did not need to do anything other than download the solar home system monitoring application. Trust can be defined as a level of believes an individual to other individual or other groups (Doney & Cannon, 1993). One type of trust, cognitive trust is a level where a consumer sure the ability of the seller to satisfy his needs (Yeon & Lee, 2019). Trust became a major aspect that have an important role in technology adoption process (Gefen & Straub, 2003). In a relationship between consumer and seller, trust believed able to reduce the unnecessary cost (Yeon & Lee, 2019). Perceived compatibility was found to be considered by most participants. This finding is in line with several previous studies (Mairura, Ngugi, & Kanali, 2016; Awa, Ukoha, & Igwe, 2017; Hubert et al., 2018). The participants agreed that houses in Indonesia, especially theirs, are suitable for installing solar home systems. This suitability is seen from various aspects such as sunlight intensity, installation method, and the risk of damage. These aspects are confirmed by Qureshi, Ullah, and Arentsen (2017), who state that the geographical factor that determines the intensity of sunlight is a compatibility factor that is considered by many people before carrying out the installation of solar home systems. In addition, the correct installation method is a very important aspect of adopting solar home systems because it will affect their function, minimize damage caused by installation, and ensure safety (Palm, 2018).

All participants agreed that performance expectations were their main reason for adopting solar home systems. The participants expected that solar home systems could provide benefits both financially and for the environment. They agreed that using solar home systems is more beneficial than just using electricity supplied by the State Electricity Company. Previous studies have found that financial savings have an important role in the adoption of solar home systems (Qureshi, Ullah, & Arentsen, 2017). For the environment, it is proven that solar home systems can produce the same amount of electricity with lower pollution levels compared to other power plants (Grover, 2007), which is in line with participants' expectations. This finding is in line with several previous studies (Awa et al., 2017; Sair & Danish, 2019; Chao, 2019).

## 3) *The personal context considered in the adoption of solar home systems in Indonesian society*

One cannot adopt new technology without having an interest in learning new things (Agarwal & Prasad, 1998). This is in line with this study which found that personal innovativeness is an important factor in the adoption of solar home system. It was found that the participants had started looking for and collecting information regarding solar home system before they adopted solar home system. This finding is in line with several previous studies which found that personal innovation is one of the factors that can build interest in technology adoption (Thakur & Srivastava, 2013; Hunafa, Hidayanto, & Sandhyaduhita, 2017; Gu et al., 2021). Many sources can be used to obtain information about solar home systems, such as the internet, peer references, and personal experience. Emotions can influence behavior (Wibisono & Waloejo, 2019), including technology adoption behavior. Intrinsic motivation is described as doing something because the activity can provide pleasure and satisfaction (Hunafa, Hidayanto, & Sandhyaduhita, 2017). However, this study found that most participants felt neither pleasure nor satisfaction from buying and installing solar home systems in their homes. This is because when participants adopt a solar home system, it is not the pleasure or satisfaction they expected. The participants prioritized financial and environmental benefits. This finding is in line with several other studies which also found that intrinsic motivation does not play an important role in the process of direct technology adoption (Fagan, Neill, & Wooldridge, 2008).

## 4) *The environmental context considered in the adoption of solar home systems by the Indonesian society*

Since the implementation of solar home systems is directly linked to national natural resources and state-owned companies, there are many regulations governing the use of solar home systems. Total installed capacity, type of solar home system, supply of components, permits, consumer criteria, service mechanisms, and kWh export-import regulations are some of the things that are regulated by the government, especially in Indonesia. The participants hope that in the future, regulations will not be an obstacle for people to adopt solar home systems, but rather act as an encouragement for people to be able to adopt solar home systems. In other words, it was found that most participants considered regulations in their process of adopting solar home systems. This finding is in



line with previous research regarding technology adoption and regulation (Bandi & Anandarao, 2021). Regulations that are applied can hinder or encourage people to adopt solar home systems (Bandi & Anandarao, 2021).

Solar home systems cannot be acquired from anywhere. The use of solar home systems requires quite a lot of money, correct installation methods, and continuous maintenance. This makes the use of solar home systems inseparable from technology service provider that can provide support for the use of solar home systems. Service providers who can provide support for the use of solar home systems are agents of change, making them have an important role in the adoption of solar home system technology (Karakaya, Hidalgo, & Nuur, 2015).

Most participants considered technical support providers. This finding is in line with the findings of previous studies (Bandi & Anandarao, 2021). However, not all parts of technical support were considered by the participants. Most participants only consider technology support provider in terms of installation. Factors from technology support provider that were considered by the participants were company quality, portfolio, company history, financial capability, proposed installation method, company communications, material quality, and services provided.

### 5) *User views on repurchasing solar home systems*

In the case of solar home systems, repurchases can mean buying solar home systems again or increasing the capacity of installed solar home systems. All participants expressed their interest in repurchasing solar home systems. However, they considered several things before repurchasing solar home systems, including the need or urgency, cost, regulations, technical specifications, and maintenance.

Repurchases of solar home systems can occur when participants feel they need more electricity supply to be able to carry out their daily activities. Therefore, if the participants feel that their current electricity capacity is sufficient, repurchasing a solar home system would not be necessary. Consumers tend to repurchase products when there is a feeling of need (Sutia, Adha, & Fahlevi, 2019).

The participants also felt that the cost of obtaining solar home systems was quite high. With the continued development of technology, the participants hoped that the costs required to obtain solar home systems could be lower. This finding is in line with previous research which found an important role of cost or price in repurchase decisions (Prihatini & Gumilang, 2021; Wibisono & Waloejo, 2019).

Regulations were also a matter to be considered by participants in repurchasing solar home systems. Particularly for installed solar home system capacity limitations and incentives. Several participants stated that the solar home system installed in their homes had reached the maximum capacity limit, so they could not increase the capacity of their solar home system. Other participants hoped the government could provide incentives to owners of solar home systems because they had contributed to the government's program to use environmentally friendly technology, and in turn lower their electricity bills.

The effectiveness of solar home systems comes from the quality of the technology specifications. The better the specifications offered by solar home systems, the more benefits users will receive. Several participants stated that the specification of solar home systems is very important because they can get the same amount of installed solar home system capacity at a lower price. For example, the development of the type of solar panels from Polycrystalline to Monocrystalline can increase the efficiency of solar panels by 5% (Puriza, Yandi, & Asmar, 2021).

In terms of the life span, solar home systems need to get maintenance on a continuous basis so that they can continue to function optimally in the long run. In general, solar home system maintenance is one of the services provided by technology support providers. The better the service provided by the service provider, the more likely it is for repurchase to happen (Aslam & Farhat, 2020). Post-purchase services also play an important role in repurchasing decisions (Aslam & Farhat, 2020)

### 6) *New Model Proposal*

In technological context it was found that perceived simplicity was not considered by the participants, especially for the product that the owner or consumer do not need to do anything during the procurement until the construction process is complete it needs to be changed by another factors. In this case, trust seems to be more suitable. Trust is believed to be able to decrease any unnecessary cost and effort in buying and selling activities.

Based on previous explanations, author proposed a modified T-P-E model for next similar technology adoption process. This modification occurs in the personal context and technological, where the perceived simplicity factor in the technological factor is replaced by trust in personal factor. This modification can produce a framework model like Figure 3 below.



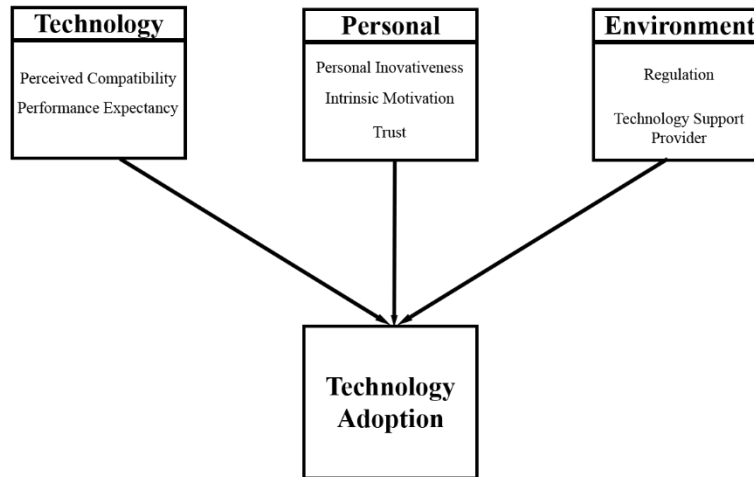


Figure 3. Proposed New Model  
Source: Author (2023).

### CONCLUSION

Within the TPE framework, the aspects of perceived compatibility, performance expectations, personal innovation, regulation, and technology support providers are considered by most participants.

In the technological context, the participants consider perceived compatibility and performance expectations and do not consider perceived simplicity.

In the personal context, the personal innovation and intrinsic motivation believed to play an important role in attracting their interest to adopt solar home systems. However, there is an additional finding that trust is also considered in adopting solar home system technology

Most participants consider all factors in the environmental context, namely regulations and technology support providers.

All participants are interested to make solar home system repurchases. In doing so, they consider the regulations, cost, need or urgency, technology specification, and maintenance.

### RECOMMENDATIONS

The study proposes the following recommendations to solar home system service providers, the government, and future studies.

#### A. Recommendations for solar home system service providers

Additionally, it is recommended that service providers focus on setting targets for consumers who are in areas with optimal solar intensity for solar home systems. Many applications are available to identify the ideal area for solar installation based on the intensity of the sun.

All participants expect that the performance of their solar home systems will benefit them. To increase the perception of the benefits provided by solar home systems, service providers can use advertising media that provide information regarding the benefits of solar home systems or testimonials from previous customers regarding the benefits they have received. Another activity is to work with previous customers to invite their colleagues to install solar home systems. As a token of appreciation for those who have successfully referred others, service providers can give them incentives.

#### B. Recommendations for the Government

The government is expected to be able to encourage people to use solar home systems. To do this, the government can run an incentive program for users of solar home systems who have participated and supported the government's program by installing solar power generation systems. This program has been implemented in various countries.



### C. Recommendations for future studies

This study was conducted using qualitative methods. Future studies can conduct similar studies using quantitative methods to obtain mathematical information regarding the factors considered in the adoption of solar home systems in Indonesian society. It was recommended for further research to using the new proposed models due to the trust became one of the main factor that considered by the participants to adopting new technology.

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*Cite this Article: Andika Nurfajri Raharjo Putra, Dr. Maya Ariyanti, Heppy Millanyani (2023). Considerations in the Adoption of Solar Home System Technology in Indonesia. International Journal of Current Science Research and Review, 6(10), 6503-6514*