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Government Support, Trust, and UTAUT 2 in Willingness to Adopt & Pay Smart Home Indonesia

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ABSTRACT

Smart home is one of the Internet of Things (IoT) currently developing in Indonesia. The research examines the factors determining Willingness to Adopt and Willingness to Pay to use a Smart home in Indonesia. This study uses the Unified Theory of Acceptance and Use of Technology 2 (UTAUT 2), Government Support, and Trust to examine the relationship of influencing factors. Respondents from the study consisted of 353 people who already owned a house/place to live and did not have a smart home device, which was obtained from an online survey. Analysis of research data using Structural Equation Modeling (SEM) with the help of SMART PLS software. The research results show that Facilitating Conditions, Habit, Government Support, and Trust positively affect Willingness to Adopt Smart homes. Social Influence, Facilitating Conditions, Price Value, and Willingness to Adopt positively affect the Willingness to Pay for a Smart home. This research can provide insight into smart home development in Indonesia.

Introduction

The internet has become one of the most essential elements in modern life. Research on internet use's characteristics, behaviour, and impact is becoming increasingly relevant in this information era. Indonesia is presently undergoing a surge in the number of individuals utilising the Internet, along with advancements in providing associated services and products (Seifert, 2016; Leguna, 2021). The number of internet users in January 2023 reached 212.9 million, indicating a growth rate of 5.2% compared to the previous year (Statista, 2023). The term "Internet of Things" (IoT) refers to a network of interconnected electronic gadgets that possess unique identities and have the ability to exchange data information through the Internet (Al-Ameen, Chauhan, Ahsan, & Kocabas, 2021). The advent of the Internet of Things (IoT) has enabled consumers to engage with services autonomously, establish interconnections, and access and utilise them at any given time and location (Chouk & Mani, 2019). The use of IoT in advanced community life is to use it in the integration of urban facilities and infrastructure in the form of a Smart City (Shafiullah et al., 2023).

Smart Cities are now becoming the newest issue in the Southeast Asia region following campaigns on energy efficiency, the use of environmentally friendly energy and efforts to improve community services which have made the government need to implement the Smart City concept (Rohmah et al., 2023; Shafiullah et al., 2023). Smart City is a concept where facilities, transportation, infrastructure and residences in the city are integrated and connected through integrated communications and control systems (Shafiullah et al., 2023). One of the components of the Smart City concept is the Smart home (Balta-Ozkan et al., 2014). Smart homes play a role in supporting energy efficiency and providing convenience in carrying out activities at home (Elian, 2022; Marikyan et al., 2023).

A smart house is a dwelling with an integrated automation system that utilises sensors and telecommunications technologies to connect various electronic equipment (Azis et al., 2023; Mainardi et al., n.d.; Shin et al., 2018). This connectivity is facilitated through user interfaces such as buttons, touch screens, keyboards, and voice and gesture recognition mechanisms. The concept of a smart home encompasses various equipment categories, including smart home appliances, control and connectivity devices, security devices, entertainment devices, comfort and lighting systems, and energy management solutions (Mainardi et al., n.d.; Marikyan et al., 2023; Shin et al., 2018). The Indonesian market presently offers a range of smart home appliances across various categories, including smart refrigerators and washing machines (classified as smart appliances), Google Home Assistant (categorised as a smart control and connectivity device), smart door locks, and integrated CCTV systems (classified as smart security devices), as well as smart TVs and associated equipment (classified as entertainment devices) (Alifah & Kusumawati, 2022; Elian, 2022).

The majority of smart home users in Indonesia are consumers who already own a place of residence or private property. Several motives or reasons for consumers to use smart homes are convenience, social media content, business, or entertainment while at home (Arradian, 2021). The characteristics of an individual who already owns a home or private residence tend to have emotional maturity, both personally and financially, and always consider what decisions will be advantageous or disadvantageous when implementing smart home technology in their dwelling. The integration of novel technology is intricately intertwined with several aspects that influence financial, personal, and external circumstances (Viswanath Venkatesh, 2013). Consumer interest in a particular technology is likely influenced by the perceived positive values associated with its benefits, hazards, and ease of acquisition (Shi et al., 2022). Multiple theories have been proposed to explain the technology acceptance and adoption process to influence consumers' attitudes and motivations to incorporate such technology into their daily lives (Viswanath Venkatesh, 2013). This idea posits various factors to be considered while embracing technological advancements. These factors encompass individual, societal, security, and external variables impacting the acceptance process.

The existing market of smart home users in Indonesia is relatively small compared to the potential revenue that can be realised. The lack of activity and intense competition

within the smart home market in Indonesia can be attributed to inadequate knowledge regarding smart homes and a prevailing dissatisfaction with the existing smart home gadgets in use (Alifah & Kusumawati, 2022). This finding indicates that individuals who utilise smart home technology can be classified as innovators and early adopters since they are willing and able to purchase and embrace novel technologies that have not yet achieved widespread adoption (Rogers, 2003). The adoption of smart home technology in the urban area of Jabodetabek (Jakarta Bogor Depok Tanggerang Bekasi) is affected by its usage's perceived functionality and benefits (Gulton & Asvial, 2020). However, the primary concern hindering its widespread adoption is the potential security threats associated with such systems. The adoption of smart homes in Indonesia is driven by its advantages in promoting environmentally sustainable energy consumption and reducing operational expenses (Elian, 2022). This is achieved through the smart home's ability to monitor the energy usage of electronic devices and facilitate environmental conservation efforts (Elian, 2022).

The primary aim of this study is to investigate the determinants that influence consumers' adoption and utilisation of smart home technology, as well as their propensity to allocate financial resources towards its acquisition. Achieving this primary objective also facilitates organisations in comprehending the essential variables that necessitate consideration before market entry, as well as the preparations that engender consumer willingness to pay for smart home services.

Method

This research employed a descriptive quantitative methodology using a survey method. Descriptive research is a study that examines explicit hypotheses with a structured approach to observe phenomena or characteristics associated with the subject population and estimates the relationships among variables within the population concerning the proportion that possesses specific characteristics (Cooper & Schindler, 2014).

The research sample was selected using a non-random purposive sampling technique, as the respondents were chosen based on criteria established by the researchers (Hair et al., 2019). The respondent criteria include individuals who own a home/private residence and do not yet have smart home devices. The questionnaire was created using Google Forms and contains 45 question items developed from previous research. The questionnaire was carried out in three parts: the first was screening questions to screen respondents, the second was questions related to research, and the last (Shi et al., 2022; Tamilmani et al., 2019) was questions about respondent demographics. This study uses a 7-level Likert scale from "strongly disagree" to "strongly agree".

In this research there are eight variables from UTAUT 2, namely Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, Hedonic Motivations, Price Value, Habit and Willingness to Adopt as well as additional variables namely Government Support, Trust and Willingness to Pay for Smart Home. The research model of the UTAUT 2 framework can be seen in **Figure 1**. Each variable is measured

using questionnaire items that have been modified from previous research. Changes to questionnaire items are required to adapt to the Smart home context (Table 1). The UTAUT 2 variable measurement, Government Support, Trust and Willingness to Pay has four items, apart from Social Influence which has five measurement items (Pienwisetkaew et al., 2023; Shi et al., 2022).

Table 1
Variable Operational Definitions

Variable	Items	Adapted sources
Performance Expectancy (PE)	1. Smart Home will help me in operating electronic equipment at home	Pienwisetkaew, 2023
	2. Smart Home will help me in monitoring electronic use at home	
	3. Smart Home will help me in managing electronic equipment at home remotely	
	4. Smart Home will help me in improving the efficiency of electronic equipment at home	
Effort Expectancy (EE)	1. I will easily learn how to operate Smart Home	Pienwisetkaew, 2023
	2. I will master the Smart Home operation quickly	
	3. I will be able to use Smart Home with the knowledge I have	
	4. I will be able to use Smart Home without excessive business/draining energy	
Social Influence (SI)	1. My family has recommended the use of smart home	Pienwisetkaew, 2023
	2. Someone I respect will be happy if I use Smart Home	
	3. I will get a better social status if I use Smart Home	
	4. Friends/colleagues recommend me using Smart Home	
	5. social media Friends will like if I use Smart Home	
Facilitating Condition (FC)	1. To use Smart Home, I have the required equipment/facilities (internet, mobile phone/tablet, electricity)	Pienwisetkaew, 2023
	2. To use Smart Home, I have the knowledge needed (how to connect, operation and maintenance)	
	3. If I use smart home and face problems, I know the contact of assistance to be contacted	
	4. If I use smart home and face problems, I know the place/location to solve it	
Hedonic Motivation (HM)	1. The use of smart home will be fun	Pienwisetkaew, 2023
	2. The use of smart home will entertain	
	3. The use of smart home will make me calm	
	4. The use of smart home will make me feel happy	
Price Value (PV)	1. Smart Home has a reasonable price	Pienwisetkaew, 2023
	2. Smart Home has a price commensurate on the features offered	
	3. Smart Home has a good feature at the current price	
	4. Smart Home has a reasonable operational cost	
Habit (HB)	1. I feel that the use of Smart Home will be my habit	Pienwisetkaew, 2023
	2. I feel that the use of smart home will be my basic need	
	3. I feel the use of smart home will be my daily life	

	4. I feel that the use of smart home will be a new trend/social habit	
Trust (TR)	1. In my opinion, the use of Smart Home will be trusted	Pienwisetkaew, 2023
	2. In my opinion, the use of Smart Home will be able to fulfill its duties	
	3. In my opinion, the use of Smart Home will be able to guarantee the safety of home/residence	
	4. In my opinion, the use of smart home can be relied upon in carrying out its duties	
Willingness to Adopt (WTA)	1. I am interested in using Smart Home	Pienwisetkaew, 2023
	2. I will try using Smart Home	
	3. I plan to use Smart Home	
	4. I will definitely use Smart Home in the future	
Government Support (GS)	1. In my opinion, government support related to promotion and information is needed to increase the use of smart home	Pienwisetkaew, 2023
	2. In my opinion, government support related to marketing and sales licensing is needed to increase the use of smart home	
	3. In my opinion, government support related to consumer protection regulations and policies is an important consideration in the use of Smart Home	
	4. In my opinion, government support in the form of subsidies/discounts/financing assistance can help increase smart home users	
Willingness to Pay (WTP)	1. I am willing to buy a smart home even though the price offered is quite expensive	Pienwisetkaew, 2023
	2. I am willing to pay more for smart home with better features	
	3. I am willing to buy additional equipment needed to use Smart Home (Internet, Mobile Phone/Tablet, Electricity)	
	4. I am willing to pay premium prices for the use of smart home	

Results and Discussion

Respondent Characteristics

Six hundred eighty-nine respondents took part in the survey. Where valid responses that met the research criteria were 353 people with a rate of 51.2%. The number of respondents has met the minimum required by multiplying the number of indicators by five (Hair et al., 2019). This research uses 45 indicators, so the minimum number of respondents is 225. Table 2 will show the demographic profile of the respondents. The majority of respondents were men (189; 53.9 percent), aged 37-46 years (156; 40.4 percent), domiciled in Jabodetabek (187; 56 percent), had private sector professions (102; 30.5 percent), the amount of expenditure per month is between 2.5 m and 5 m (141;40.4 percent) and for electricity needs at 500 thousand and 1 m (146;41 percent). In terms of education, the majority are undergraduate graduates (175; 44.9 percent).

Table 2
Respondent Profile

Measure	Item	N	Percentage (%)
Gender	Male	189	53.90%
	Female	164	46.10%
Age	27-36	140	35.90%
	37-46	156	40.40%
	47-56	57	21.90%
Domicile	Jabodetabek	187	56.00%
	Outside Jabodetabek (Java Island)	143	37.10%
	Outside Java Island	23	6.90%
Profession	Government Employees	42	12.60%
	Private Sector Employees	102	30.50%
	State-owned Entreprise Employees	91	24.30%
	Enterpreneur	44	10.20%
	Others	74	22.50%
Education	High School or below	21	9.90%
	Diploma	141	40.40%
	Bachelor	175	44.90%
	Master	13	3.90%
	Doctoral	3	0.90%
Monthly Spending	Rp 1.000.000 - < Rp 2.500.000	71	19.20%
	Rp 2.500.000 - < Rp 5.000.000	141	39.50%
	Rp 5.000.000 - < Rp 10.000.000	138	38.30%
	> Rp 10.000.000	3	0.90%
Electricity Related Monthly Spending	Rp 100.000 - < Rp 500.000	134	37.40%
	Rp 500.000 - < Rp 1.000.000	146	41.00%
	Rp 1.000.000 - < Rp 1.500.000	52	12.60%
	> Rp 1.500.000	21	6.30%

Convergent Validity & Reliability

Structural Equation Modeling (SEM) was carried out to analyze the measurement and structural models using SMART PLS 3.2.9 software. The stages that are followed in using the application are the measurement model and the structural model. The measurement model describes the relationship between variables and the measurement items that measure them. The structural model describes the relationship of influence between research variables or research hypotheses that are built (Hair et al.,2017). The

results of the validity test (convergent and discriminant validity) as well as the reliability test of the measurement model can be seen in Table 3.

Table 3
Measurement Model Evaluation

Variable	Indicator	Mean	Standard Devitiaon	Outer Loading	AVE	Composite Reliability	Cronbach's Alpha
Performance Expectancy	PE1	5.88	1.086	0.868	0.702	0.904	0.859
	PE2	5.79	1.206	0.837			
	PE3	5.99	1.113	0.830			
	PE4	5.56	1.265	0.816			
Effort Expectancy	EE1	5.45	1.217	0.853	0.665	0.888	0.864
	EE2	5.40	1.219	0.858			
	EE3	5.56	1.162	0.757			
	EE4	5.66	1.182	0.790			
Social Influence	SI1	4.90	1.442	0.763	0.648	0.902	0.833
	SI2	5.11	1.314	0.812			
	SI3	4.99	1.543	0.784			
	SI4	4.93	1.474	0.840			
	SI5	4.96	1.509	0.825			
Facilitating Conditions	FC1	4.91	1.563	0.780	0.637	0.875	0.810
	FC2	5.43	1.275	0.760			
	FC3	4.82	1.505	0.843			
	FC4	5.03	1.450	0.808			
Hedonic Motivations	HM1	5.59	1.288	0.837	0.74	0.919	0.883
	HM2	5.48	1.221	0.881			
	HM3	5.30	1.319	0.890			
	HM4	5.28	1.307	0.833			
Price Value	PV1	4.86	1.418	0.789	0.722	0.912	0.871
	PV2	5.32	1.193	0.859			
	PV3	5.17	1.234	0.883			
	PV4	4.97	1.348	0.864			
Habit	HB1	5.31	1.384	0.878	0.724	0.912	0.869
	HB2	4.79	1.467	0.896			
	HB3	5.00	1.385	0.907			
	HB4	5.46	1.268	0.707			
Trust	TR1	5.33	1.236	0.845	0.733	0.916	0.878
	TR2	5.40	1.233	0.844			
	TR3	5.33	1.300	0.851			
	TR4	5.45	1.218	0.882			
Willingness to Adopt	WTA1	5.47	1.390	0.881	0.794	0.939	0.914
	WTA2	5.30	1.375	0.906			
	WTA3	5.25	1.368	0.909			
	WTA4	5.16	1.412	0.868			
Government Support	GS1	5.58	1.275	0.862	0.739	0.919	0.882
	GS2	5.60	1.302	0.894			

	GS3	5.55	1.320	0.861			
	GS4	5.46	1.414	0.820			
Willingness to Pay	WTP1	4.55	1.657	0.890	0.807	0.944	0.920
	WTP2	4.93	1.521	0.899			
	WTP3	4.87	1.502	0.888			
	WTP4	4.61	1.600	0.917			

Results of the validity test of the first measurement model through Outer Loading and Average Variance Extract (AVE) statistically (Chin, 2010; Hair et al., 2021). This is done by checking the Outer Loading which has a value of >0.70 and checking the AVE of the observed variable, which has a value of >0.50 (Hair et al. 2021). Next, the Composite Reliability or Construct Reliability (CR) criteria >0.70 and Cronbach's Alpha >0.70 were evaluated (Hair et al., 2019). The results from table 3 show that the model has good convergent validity and good reliability with Composite Reliability values between 0.8 and 0.93.

Discriminant Validity

Discriminant validity analysis was carried out to ensure that each concept from each latent model was different from the other variables. Discriminant validity can be seen from the Fornell-Lacker Test and Heterotrait Monotrait (HTMT). Based on the Fornell Lacker Criterion, the AVE root for each variable is higher than the correlation of other variables so that the discriminant validity evaluation based on the Fornell and Lacker criteria is acceptable. The next thing is the Heterotrait-monotrait Ratio (HTMT) with a value <0.90 (Hair et al. 2021). Based on research by Henseler and Sarstedt (2014) which evaluates the discriminant validity method, HTMT has a level of higher sensitivity than the Fornell Lacker Criterion method. Based on table 4, it is concluded that all variables contained in the model meet the standard requirements with Heterotrait-monotrait Ratio (HTMT) <0.90.

Table 8 encapsulates the outcomes of hypothesized relationships between constructs such as Performance Expectancy, Effort Expectancy, Social Influence, and others with the dependent variables: Willingness to Adopt and Willingness to Pay. The T Statistics column, calculated by dividing the original sample's path coefficients by their standard deviation, enables the evaluation of the hypotheses' statistical significance. In this analysis, path coefficients with associated p-values below the threshold of 0.05 are considered statistically significant, indicating that the independent variables have a substantial impact on the dependent variables.

Tabel 4
Discriminant Validity

Fornell-Larcker Criterion

Construct	EE	FC	GS	HB	HM	PE	PV	SI	TR	WTA	WTP
EE	0.816										
FC	0.625	0.798									
GS	0.478	0.588	0.859								
HB	0.479	0.619	0.669	0.851							
HM	0.647	0.667	0.639	0.613	0.860						
PE	0.634	0.470	0.484	0.387	0.605	0.838					

PV	0.572	0.703	0.586	0.630	0.649	0.474	0.850				
SI	0.564	0.718	0.593	0.668	0.705	0.516	0.657	0.805			
TR	0.550	0.646	0.695	0.710	0.674	0.504	0.677	0.622	0.856		
WTA	0.566	0.680	0.695	0.732	0.668	0.477	0.650	0.644	0.721	0.891	
WTP	0.393	0.634	0.534	0.713	0.489	0.254	0.645	0.581	0.599	0.666	0.899

HTMT Ratio Approach

Construct	**EE**	**FC**	**GS**	**HB**	**HM**	**PE**	**PV**	**SI**	**TR**	**WTA**	**WTP**
EE											
FC	0.765										
GS	0.557	0.693									
HB	0.557	0.736	0.766								
HM	0.751	0.791	0.723	0.699							
PE	0.756	0.566	0.546	0.444	0.691						
PV	0.663	0.832	0.663	0.722	0.738	0.541					
SI	0.655	0.852	0.677	0.771	0.802	0.593	0.75				
TR	0.635	0.765	0.789	0.814	0.765	0.576	0.768	0.711			
WTA	0.643	0.788	0.773	0.822	0.743	0.532	0.724	0.72	0.805		
WTP	0.437	0.731	0.591	0.795	0.54	0.275	0.716	0.65	0.665	0.724	

Table 5 encapsulates the outcomes of hypothesized relationships between constructs such as Performance Expectancy, Effort Expectancy, Social Influence, and others with the dependent variables: Willingness to Adopt and Willingness to Pay. The T Statistics column, calculated by dividing the original sample's path coefficients by their standard deviation, enables the evaluation of the hypotheses' statistical significance. In this analysis, path coefficients with associated p-values below the threshold of 0.05 are considered statistically significant, indicating that the independent variables have a substantial impact on the dependent variables. For instance, the relationship 'Facilitating Conditions -> Willingness to Adopt' with a p-value of 0.006 suggests a statistically significant positive influence of facilitating conditions on the willingness to adopt.

Conversely, relationships with p-values above the 0.05 threshold, such as 'Performance Expectancy -> Willingness to Pay,' are not considered statistically significant, implying insufficient evidence to support the proposed hypothesis of a positive impact of performance expectancy on the willingness to pay. The table also includes a moderation analysis, as indicated by the 'Moderating FC - PE -> Willingness to Adopt' row, which examines the interactive effect of Facilitating Conditions and Performance Expectancy on the willingness to adopt. However, the p-value suggests a non-significant moderating effect.

The results show that H7, H12, H13, and H16 are supported hypotheses with a p-value smaller than 0.05 on the willingness to Adopt a relationship. Apart from that, H6, H8, H11, and H16 have a significant and positive relationship with Willingness to Pay Smart Home.

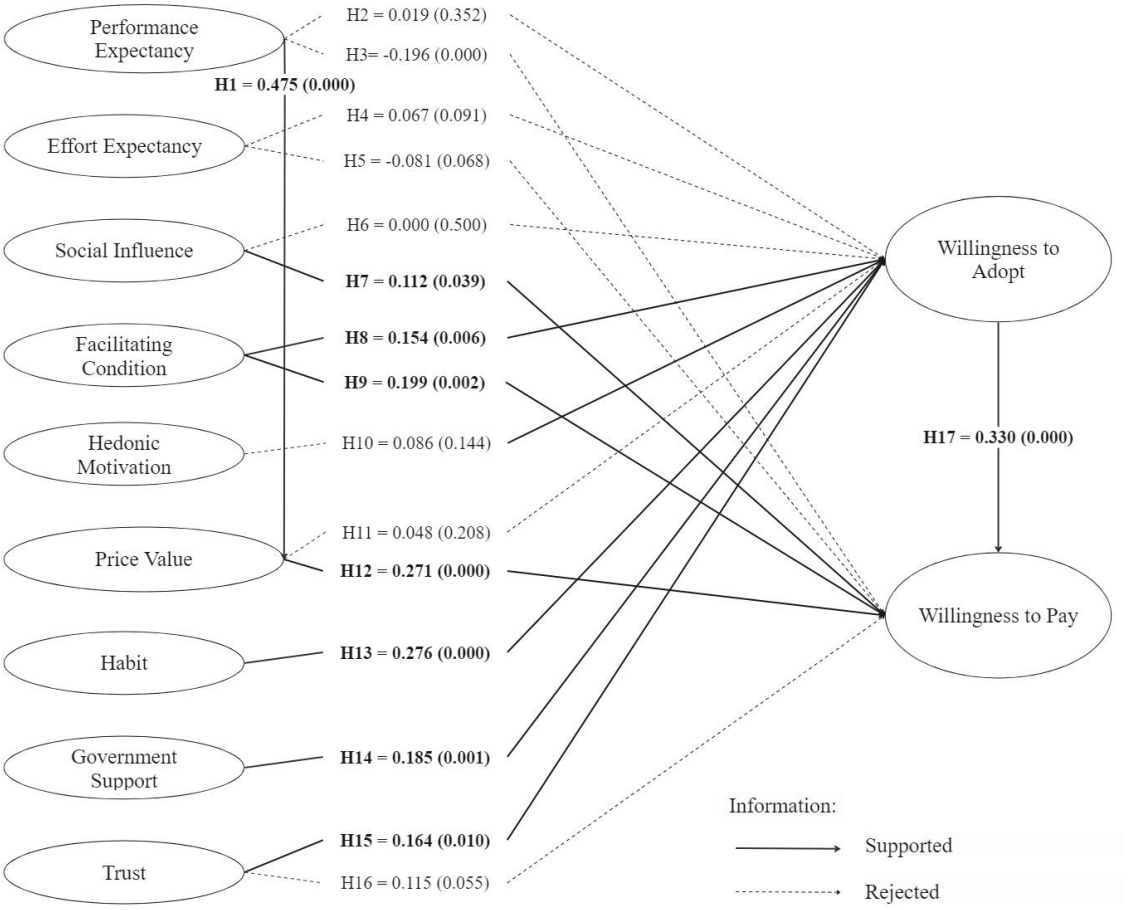

Figure 1. Hyphotesis test results

The results of the hypothesis test show that the relationship between Social Influence and Willingness to Pay has a T Value of 1.750 which is greater than the limit of 1.65. This makes H6 accepted and shows that Social Influence does not have a positive influence on the Willingness to Pay smart home. The results of the hypothesis test show that the relationship between Facilitating Conditions and Willingness to Adopt has a T value of 2.484 which is greater than the limit of 1.65. This makes H7 accepted and shows that Facilitating Conditions positively influence Willingness to Adopt smart homes.

The results of the hypothesis test show that the relationship between Facilitating Conditions and Willingness to Pay has a T Value of 2.923 which is greater than the limit of 1.65. This makes H8 accepted and shows that Facilitating Conditions positively influence Willingness to Pay for smart homes. The results of the hypothesis test show that the relationship between Price Value and Willingness to Pay has a T Value of 3.802 which is greater than the limit of 1.65. This makes H11 accepted and shows that Price Value positively influences Willingness to Pay smart home. The results of the hypothesis test show that the relationship between Habit and Willingness to Adopt has a T value of 3.669 which is greater than the limit of 1.65. This makes H12 accepted and shows that Habit has a positive influence on Willingness to Adopt Smart home.

Table 5. Hypothesis Results

Hypothesis	Path	Path Coefficients	T Values	P Values	Result
H1	PE → PV	0.475	9.331	0.000	Supported
H2	PE → WTP	0.019	0.370	0.352	Rejected
H3	PE → WTA	-0.196	3.892	0.000	Rejected
H4	EE → WTP	0.067	1.326	0.091	Rejected
H5	EE → WTA	-0.081	1.473	0.068	Rejected
H6	SI → WTP	0.000	0.001	0.500	Rejected
H7	SI → WTA	0.122	1.750	0.039	Supported
H8	FC → WTP	0.154	2.484	0.006	Supported
H9	FC → WTA	0.199	2.923	0.002	Supported
H10	HM → WTA	0.086	1.080	0.144	Rejected
H11	PV → WTP	0.048	0.792	0.208	Rejected
H12	PV → WTA	0.271	3.802	0.000	Supported
H13	HB → WTA	0.276	3.669	0.000	Supported
H14	GS → WTA	0.185	3.225	0.001	Supported
H15	TR → WTP	0.164	2.289	0.010	Supported
H16	TR → WTA	0.115	1.613	0.055	Rejected
H17	WTA → WTP	0.330	4.494	0.000	Supported

This research was conducted to determine what factors influence the willingness to adopt and pay for a smart home. This research uses the UTAUT 2 model framework with the addition of Trust and Government Support factors. Several previous studies used UTAUT 2 to look for factors that influence the adoption of new technology. The proposed model is explained using the PLS-SEM statistical analysis method.

The results of the PLS-SEM method show that Facilitating Conditions (FC), Habit (HB), Government Support (GS), and Trust (TR) have a positive relationship with Willingness to Adopt Smart Homes. This is in line with other research which reveals that FC, GS and TR influence technology adoption (Gu & Liu, 2019; Shi et al., 2022). This shows that if there are facilities and government support, it will encourage someone to want to adopt this new technology. New habits in carrying out daily activities can also encourage someone to use technology to make their work easier and trust in this technology to carry out their duties (He et al. 2020).

The relationship between Willingness to Adopt and Willingness to Pay Smart home is significant and positive. This aligns with research by Shi et al. (2022), which states that someone willing to use new technology will be willing to spend money to get it. Apart from that, the results also show that this relationship is dominated by potential users who are in urban areas. In line with Willingness to Adopt which has a significant and positive relationship, namely price value. This shows that someone is willing to pay for a new technology if it is felt to have value commensurate with what customers think. This is in line with research by Zhang et al. (2020), who found that consumers of energy-saving electronic devices have a lot of interest if they feel it is appropriate to the reciprocity they get.

Facilitating Conditions and Social Influence also positively affect Willingness to Pay for Smart Homes. A person is willing to adopt a technology in his life and pay for the technology if the facilities and equipment needed are available and affordable. Apart from that, the influence of someone who is respected or close to someone also influences the willingness to pay for a Smart home. This aligns with research conducted by Gu & Liue (2019) and Go & Heo (2020).

Conclusion

A recent study shows that in the context of technology adoption, willingness to pay has different factors, although there is one factor that can influence both. First, the relationship between facilitating conditions, Habit, Government Support, and Trust factors can influence the Willingness to Adopt a Smart home. Second, facilitating conditions, price value, social influence, and willingness to adopt can significantly and positively influence willingness to pay for a smart home. Finally, facilitating conditions can influence willingness to adopt and pay for a smart home.

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