Electric Vehicle Adoption Intention in Special Region of Yogyakarta and Its Surroundings Using UTAUT2

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Abstract. According to the World Health Organization (WHO), around 80% of urban communities live with air pollution and more than 7 million people die yearly because of this. It is known that vehicles contribute approximately one-quarter of CO2 emissions globally. One way to implement CO2 reduction is use of electric vehicle (EV). Electric vehicles are starting to grow in Indonesia with the issuance of Presidential Regulation 55/2019 concerning battery-based electric vehicles. The public's response regarding the use of electric vehicles is growing good and could be seen by the growth of the electric car market in Indonesia. Jakarta, Bogor, Depok, Tangerang, Bekasi (Jabodetabek) and South Tangerang are the regions in Indonesia that have an outstanding response to using electric cars. The special Region of Yogyakarta and it's surroundings are areas that also have the potential to use electric vehicles like Jabodetabek and South Tangerang, it could be seen from 3 charging stations available in the Special Region of Yogyakarta. Nevertheless, the growth of electric cars in Yogyakarta and it's surroundings is not as fast as in Jabodetabek and South Tangerang. Realizing the importance of implementing the use of electric vehicles in Indonesia which is still in its early stages, especially in the Special Region of Yogyakarta and its surroundings. This research using the Unified Theory of Acceptance of Technology 2 (UTAUT2) to explore the factors that affect the intention to adopt electric vehicles in Special Region Yogyakarta and it's surroundings (Magelang and Klaten) in. Collected data from 95 respondents was analyzed using Partial Least Square Structural Equation Modeling (PLS SEM). In general, the findings show that habit and hedonic motivation had a significant effect on behavioral intention to adopt electric vehicles (EV) while on respondents whose are in age ranging from 30 to 40 years old social influence also had significant effect on intention to adopt EV. This research could take the contribution to the public sector that could increase people's intention to adopt EV and grow their sales on EV and also support the government program that could reducing the emissions released to the air.

Keywords: Electric vehicle, UTAUT2, PLS-SEM, Intention to adopt EV, Indonesia.

1 INTRODUCTION

According to the energy prediction reported by the 2019 World Energy Outlook Series, a serious energy loss will occur by 2040. Therefore, a great step is needed to

M. A. Muflikhun et al. (eds.), *Proceedings of the 10th International Conference on Science and Technology (ICST 2024)*, Advances in Engineering Research 268,
https://doi.org/10.2991/978-94-6463-772-4_49

overcome the limited availability of fossil energy resources and deal with pollution produced by fossil fuel consumption. [1]. Rapid economic and population growth has resulted in high levels of vehicle use, especially in urban areas, where these vehicles produce high levels of air pollution. This pollution will affect the level of public health and cause quite significant levels of morbidity. According to the World Health Organization (WHO), around 80% of urban communities live with air pollution levels that have exceeded the threshold set and more than seven million people die yearly because of this [2]. Several factors contribute to increasing air pollution, one of them is the transportation sector, where it is known that vehicles contribute approximately one-quarter of CO2 emissions globally [3].

One solution offered to overcome this concern in the transportation sector is the use of EVs. Even though the usage of EVs is not completely free from emission, it is known that pollution produced in the EV industry is much less than conventional vehicles [4]. Many studies have been conducted to support the application of EVs use, including the studies about the intention to adopt electric vehicles (EVs). Those studies were conducted in many countries using many theories of human behaviour. Some theories used in previous studies were the Theory of Human Behaviour (TPB) that applicated on research [5], [6], [7]; Technology Acceptance Model (TAM) [8]; Unified Theory of Acceptance and Use of The Technology (UTAUT) [9]; and Unified Theory of Acceptance and Use of The Technology 2 (UTAUT2) [10]. Several studies took place in Indonesia analyze the intention to purchase electric car using TPB [11], [12], [13], considering government policy [12], environmental concerns [12], [13] , and also fundamental motives as well as performance expectancy and beliefs of EV attributes as moderates variable [14]. Meanwhile, this study would like to explore the intention to adopt EVs using UTAUT2 as UTAUT2 is more comprehensive than another theories used in studies took place in Indonesia.

According to data from the Central Statistics Agency of Indonesia (Badan Pusat Statisik), vehicle users in Indonesia in 2021 numbered around 143,797,227 vehicles, consisting of 16,903,094 cars, 246,354 buses, around 5,438,475 trucks and 121,209,304 motorbike [15]. One way to implement CO2 reduction is use of electric vehicle (EV). Electric vehicles are starting to grow in Indonesia with the issuance of Presidential Regulation 55/2019 concerning battery-based electric vehicles [16]. Based on that matter, the government is intensifying the use of green vehicle programs to reduce pollution. People are encouraged to replace gasoline-fueled vehicles with electric vehicles (EV) that are fully powered by electricity, hybrid vehicles that use two energy sources, namely electricity and fuel (internal combustion engine / ICE) or hydrogen fuel cell vehicles. The Indonesian government target for 2025 is the number of electric vehicles are for electric cars reached 2,200 units, hybrid cars reached 711,900 units, and electric motorbikes reached 2,130,000 units while the target for charging stations reached 1000 units [17]. The public's response regarding the use of electric vehicles is growing and could be seen by the growth of the electric car market in Indonesia. The number of electric vehicle users in Indonesia as of September 2020 has reached 2,278 units [18]. Jakarta, Bogor, Depok, Tangerang, Bekasi (Jabodetabek) and South Tangerang are the regions in Indonesia that have a very good response to the use of electric cars in terms

of infrastructure based on data on the Charge.In application there have been 83 charging station spread throughout those regions.

Special Region of Yogyakarta and it's surroundings is area that also have the potential to use electric vehicles such as Jabodetabek and South Tangerang that could be seen that there are 3 charging stations available in Special Region of Yogyakarta. Nevertheless, the growth of electric cars in Yogyakarta are not as fast as Jabodetabek and South Tangerang. Realizing the important implementation use of electric vehicles in Indonesia which is still in its early stages, especially in Special Region of Yogyakarta and it's surrounding. This study took place in Special Region of Yogyakarta and it's surroundings and would like to explore the citizens intention to adopt electric cars, as well as what factors influence people's intentions to adopt electric cars.

2 METHODOLOGY

2.1 Research Population and Sample

In this study, the minimum sample size is determined based on [19] suggests that the sample size should be determined by either 10 times the highest count of formative indicators employed to assess a single concept or 10 times the highest count of structural paths directed towards a specific concept within the structural model. As the structural model contains formative indicators, the minimum sample is 40 respondents. However, total of 95 usable data were collected that surpassed the minimum required sample size. In this research, respondents was restricted to Special Region of Yogyakarta and its surroundings (Magelang and Klaten) residents whose aged are at least 30 years old. The questionnaires were distributed using mobile messaging apps such as Whatsapp and social networking platforms such as Facebook and Instagram.

The collected data comprised of 52% male and 48% female. In terms of age mostly respondent were in the range of 30 and 40 years old that is 72% of all, and respondents whose age more than 40 years old is 28%. The monthly income level of the respondents mostly were in the range IDR 5 million up to IDR 10 million of that was 44% of all respondents; the least was 1% in the range of IDR 50 million up to IDR 100 million; for the rest 9% less than IDR 1,8 million; 27% in the range of IDR 1,8 up to IDR 5 million and 18% in the range of IDR 10 million up to IDR 50 million. All the demographic data could be seen on Table 1.

Table 1. Demographic of Respondents.

Demographic Features	Frequency	Percent (%)
Respondent Gender		
Male	49	52
Female	46	48
Respondent Age Range		
30 to 40 years old	68	72
> 40 years old	27	28
Respondent Monthly Income		
≤ IDR 1,800,000	9	9
IDR 1,800,001 - IDR 5,000,000	26	27
IDR 5,000,001 - IDR 10,000,000	42	44
IDR 10,000,001 - IDR 50,000.000	17	18
IDR 50,000,001 - IDR 100,000,000	1	1

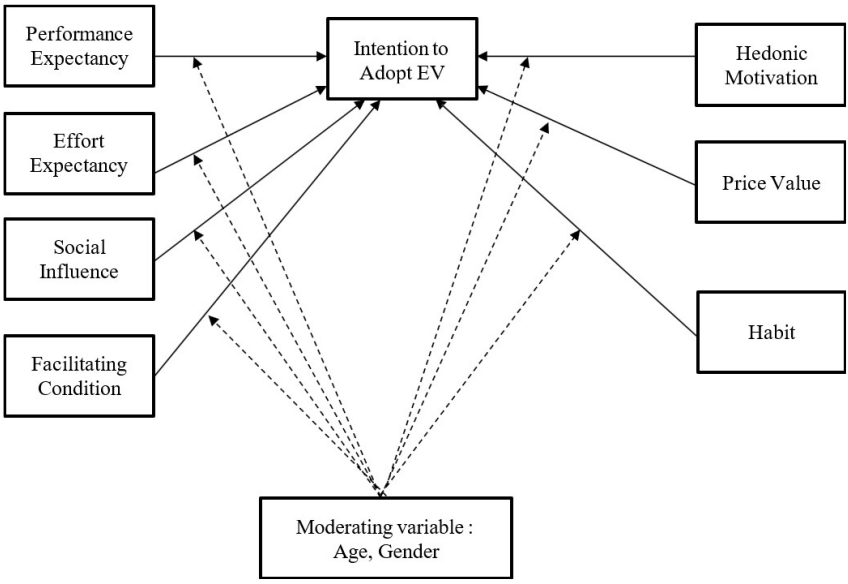

Fig. 1. structural model (based on [20]).

This research focused on passanger car which is electric vehicle car that use battery as energy source. To investigate the factors that affect the adoption intention of EVs in the Special Region of Yogyakarta and it's surroundings (Magelang and Klaten), this study relies on the Unified Theory of Acceptance of Technology 2 (UTAUT2) (Venkatesh, Thong and Xin Xu, 2012). The relationship of variable in this context shown on Figure 1., it is expected that :

Intention to Adopt EV

Intention to adopt EV adapted from [20] in this context refer to a degree when someone would like to purchase an electric car.

Effort Expectancy (EE)

EE refer to the degree of easiness with consumers' usage of technology [20]. In a study explored the intention to adopt electric vehicle among taxi's driver, it is known

that EE contributed to affect on intention to use electric car [21]. A study took place in Malaysia found that EE has a significant relationship to intention to buy EV [22]. Therefore, it is assumed that:

H 1. Effort expectancy has a significant effect on the intention to adopt EV.

Facilitating Condition (FC)

FC refer as the beliefs of necessary held by individuals about technical and organizational resources for utilizing and sustaining a planned system, and as a result there will be no concern to embrace a new technologies [20]. FC contributed to affect on intention to use electric car [21]. A study in India figure out that FC has significant effect on EV adoption intention [23]. A study by [24] found that FC has a relationship to influence a person's intention to adopt EV. Therefore:

H 2. Facilitating conditions has a significant effect on the intention to adopt EV.

Habit (H)

H refers to the instinctive and repetitive human behaviour response acquired through experience without conscious awareness or deliberate thought [25]. H also showed up as a factor that influence usage on imported flash delivery application [26]. Therfore, it is hypothesized:

H 3. Habit has a significant effect on the behavioral intention to adopt EV.

Hedonic Motivation (HM)

HM refers to the enjoyment or satisfaction experienced from utilizing a technology that plays a significant role in influencing a person's willingness to adopt and continue using that technology [27]. A study using Norm Activation Model (NAM) and UTAUT2 found out that HM has a significant influence on EV adoption intention [23]. It is proposed:

H 4. Hedonic motivation has a significant effect on the behavioral intention to adopt EV.

Performance Expectancy (PE)

PE refers to how much an individual's performance expect to their level of confidence that the system they are utilizing will prove advantageous to them [28]. A study took place in India, carried out 309 sample of potential EV's customers and found out that PE has significant effect to EVs adoption intention [23]. A study that explored EV adoption intention among students found out that PE has a positive relation to EV adoption intention [24]. A study based on Technology Acceptance Model (TAM) and UTAUT figured out that PE is the second important factor that influence someone's intention to use electric share-car [29]. Based on those studies, it is proposed that:

H 5. Performance expectancy has a significant effect on the behavioral intention to adopt EV.

Price Value (PV)

PV refers to a person's perception of the benefits gained from using technology in relation to the associated cost [30]. A study took place in India's society found out that PV has important role to influence a person's EV adoption intention [23]. Therefore:

H 6. Price value has a significant effect on the behavioral intention to adopt EV.

Social Influence (SI)

SI refers to measures how much individuals perceive that their close associates think they should utilize a particular technology [31]. A study by [22] figured out that SI has a significant effect to intention. A study using extended UTAUT found out that SI has a positive relationship to EV adoption intention [24]. A study in Netherlands showed that SI is the most important factor that influence a person's intention to use share-electric car [29]. Another study of flash delivery application figured out that SI have significant relation to usage [26]. It is hypothesized:

H 7. Social influence has a significant effect on the behavioral intention to adopt EV.

H 8. Age moderate all the proposed hypothesis (H1 to H7) to behavioral intention to adopt EV.

H 9. Gender moderate all the proposed hypothesis (H1 to H7) to behavioral intention to adopt EV.

In this research, a five - point Likert scale used in the construct's questions ranging from 1 (strongly disagree) up to 5 (strongly agree). All the indicators were adapted from [20]. In this research, path analysis and hypothesis testing were carried out using Partial Least Square (PLS) Structural Equation Model. This research, used two step data analysis in line with [32].

3 RESULTS AND DISCUSSIONS

3.1 Measurement Model

Convergent validity and discriminant validity were used to analyze the research model. Convergent validity was established by considering the average variance extracted (AVE) and outer loadings of the indicators, the suggested outer loading value is higher than 0.70 and the suggested value of AVE is at least 0.50 [19]. The outer loadings value of each indicators used in this research has exceed the value of 0.70 that means all the indicators could be used and no need to eliminate any of them. The AVE value of each construct in this research is higher than 0.50, those value varies from 0.647 to 0.920 that indicates construct could explain more than half of the variance of its indicator. According to [19] the acceptable values of composite reliability are more than 0.70. The composite reliability values of each construct (variable) in this research vary from 0.831 to 0.957. These result can be seen in Table 2. This satisfies that the

measurements are assumed to be reliable in this analysis. The cronbach's alpha values of each construct is higher than 0.70, indicates that the construct is reliable.

Table 1. Measurement Model.

Construct	Indicators	Outer Loading	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
Behavioral Intention	BI1	0.905	0.934	0.935	0.884
	BI2	0.953			
	BI3	0.963			
Effort Expectancy	EE1	0.835	0.869	0.891	0.715
	EE2	0.825			
	EE3	0.851			
	EE4	0.87			
Facilitating Condition	FC1	0.806	0.818	0.831	0.647
	FC2	0.773			
	FC3	0.85			
	FC4	0.785			
Habit	H1	0.703	0.837	0.861	0.672
	H2	0.853			
	H3	0.9			
	H4	0.811			
Hedonic Motivation	HM1	0.97	0.957	0.957	0.920
	HM2	0.953			
	HM3	0.954			
Performance Expectancy	PE1	0.797	0.911	0.912	0.792
	PE2	0.91			
	PE3	0.922			
	PE4	0.925			
Price Value	PV1	0.931	0.895	0.908	0.826
	PV2	0.917			
	PV3	0.877			
Social Influence	SI1	0.844	0.889	0.914	0.818
	SI2	0.929			
	SI3	0.938			

In the discriminant validity analysis cross loading and Fornell-Larcker criterion are used. According to [19] the outer loading of an indicator within a construct should surpass all of its cross-loadings with other constructs. According to the Fornell-Larcker criterion, a construct's square root of the average variance extracted must exceed the correlation with any other construct. In this study on Table 3 the cross loading value of each indicators from a construct is greater than all of its cross loadings with other constructs. While on Table 4 show that square root of AVE (the diagonal value on the table) are greater than the correlation of any other construct. This two criteria satisfies the discriminant validity of each construct.

Table 2. Cross Loadings.

	Behavioral Intention	Effort Expectancy	Facilitating Condition	Habit	Hedonic Motivation	Performance Expectancy	Price Value	Social Influence
BI1	0.905	0.446	0.508	0.685	0.642	0.581	0.426	0.583
BI2	0.953	0.436	0.474	0.666	0.632	0.655	0.553	0.582
BI3	0.963	0.44	0.485	0.671	0.666	0.65	0.502	0.56
EE1	0.485	0.835	0.447	0.376	0.562	0.572	0.393	0.389
EE2	0.332	0.825	0.441	0.23	0.436	0.431	0.278	0.286
EE3	0.305	0.851	0.442	0.207	0.411	0.501	0.314	0.375
EE4	0.411	0.87	0.505	0.28	0.502	0.703	0.418	0.499
FC1	0.381	0.471	0.806	0.274	0.49	0.43	0.288	0.408
FC2	0.401	0.543	0.773	0.23	0.489	0.432	0.34	0.391
FC3	0.496	0.457	0.85	0.394	0.568	0.488	0.507	0.494
FC4	0.376	0.272	0.785	0.307	0.387	0.352	0.241	0.267
H1	0.416	0.173	0.221	0.703	0.235	0.282	0.478	0.186
H2	0.643	0.36	0.312	0.853	0.537	0.464	0.253	0.52
H3	0.666	0.316	0.344	0.9	0.521	0.483	0.357	0.487
H4	0.586	0.225	0.353	0.811	0.402	0.376	0.454	0.36
HM1	0.67	0.602	0.599	0.524	0.97	0.748	0.45	0.517
HM2	0.645	0.495	0.535	0.521	0.953	0.635	0.366	0.515
HM3	0.664	0.564	0.612	0.496	0.954	0.699	0.449	0.436
PE1	0.605	0.564	0.503	0.373	0.701	0.797	0.451	0.496
PE2	0.553	0.635	0.477	0.457	0.67	0.91	0.439	0.546
PE3	0.594	0.565	0.438	0.494	0.606	0.922	0.555	0.549
PE4	0.621	0.602	0.476	0.455	0.599	0.925	0.554	0.606
PV1	0.525	0.338	0.417	0.402	0.366	0.5	0.931	0.476
PV2	0.397	0.381	0.354	0.39	0.308	0.466	0.917	0.354
PV3	0.49	0.44	0.421	0.435	0.511	0.564	0.877	0.484
SI1	0.444	0.323	0.433	0.372	0.383	0.452	0.364	0.844
SI2	0.581	0.47	0.457	0.472	0.493	0.603	0.489	0.929
SI3	0.613	0.451	0.451	0.485	0.496	0.605	0.461	0.938

Table 3. Fornell-Larcker Criterion

	Behavioral Intention	Effort Expectancy	Facilitating Condition	Habit	Hedonic Motivation	Performance Expectancy	Price Value	Social Influence
Behavioral Intention	0.94							
Effort Expectancy	0.469	0.845						
Facilitating Condition	0.52	0.544	0.804					
Habit	0.717	0.337	0.381	0.82				
Hedonic Motivation	0.688	0.578	0.607	0.536	0.959			
Performance Expectancy	0.669	0.665	0.533	0.5	0.724	0.89		
Price Value	0.525	0.424	0.441	0.452	0.44	0.564	0.909	
Social Influence	0.611	0.465	0.493	0.495	0.51	0.619	0.489	0.905

Table 4. Inner Vif.

Variable	Behavioral Intention
Effort Expectancy	1.998
Facilitating Condition	1.862
Habit	1.624
Hedonic Motivation	2.672
Performance Expectancy	3.225
Price Value	1.641
Social Influence	1.87

R^2 or coefficient of determination is used to measure the models predictive accuracy. It's value ranging from 0 to 1, with higher values indicates the higher predictive accuracy. The values of 0.67, 0.33, and 0.19 respectively stated as substansial, moderate, and poor (Chin, 1998). Refer to **Table 6.** the R^2 values of behavioral intention is 0.695 with R^2 adjusted value is 0.670, it is indicating that all exogenous construct (Effort Expectancy, Facilitating Condition, Habit, Hedonic Motivation, Performance Expectancy, Price Value and Social Influence) may explain around 67% of the intention to adopt electric vehicle (behavioral intention). Standardized root mean square residual (SRMR) is used for measuring model fit, according to [34] the recommended value should be less than 0.08, in this study the SRMR value is 0.076 that indicate model is acceptable fit.

Table 5. R^2 Values.

	R2	R^2 adjusted
Behavioral Intention	0.695	0.670

Table 6. SRMR.

	Estimated Value
SRMR	0.076

In this study, the path relationship between exogenous and endogenous variables is presented in Figure 2 as well as the t-value. For determining the relative effect of the predictor construct on the endogenous structure, f^2 or effect size is used. The effect size values of 0.02, 0.15, and 0.35 respectively indicates poor, medium, and great effects (Chin, 1998). The f^2 values shown in Table 8. ndicates that Habit is the only factor which has a medium effect nearly to great effect on Behavioral Intention to adopt electric vehicle that has f^2 value of 0.311, while the rest exogenous construct have poor effect on Behavioral Intention with f^2 values vary from 0.027 to 0.073 with Effort Expectancy has the lowest effect to Behavioral Intention.

Table 7. Hypothesis Testing.

Hypothesis	Relationship	Coefficient	t-value	$f2$	p-value	Supported
H1	EE → BI	-0.041	0.367	0.003	0.714	No
H2	FC → BI	0.053	0.595	0.005	0.552	No
H3	H → BI	0.393	4.973	0.311	0.000	Yes
H4	HM → BI	0.244	2.257	0.073	0.024	Yes
H5	PE → BI	0.163	1.410	0.027	0.159	No
H6	PV → BI	0.069	0.980	0.009	0.327	No
H7	SI → BI	0.151	1.845	0.040	0.065	No

The path coefficient analysis is used to analyze the hypothesis. This analysis using 95% of confidence level. The effect of each exogenous variable to the endogenous variables (BI) is presented on **Table 8**. It is shown that the habit (H3; $\beta = 0.393$, $t = 4.973$, $p = 0.000 < 0.05$) and hedonic motivation (H4; $\beta = 0.244$, $t = 2.257$ $p = 0.024 < 0.05$) had a significant effect on behavioral intention to adopt electric vehicle, while effort expectancy (H1; $\beta = -0.041$, $t = 0.367$, $p = 0.714 > 0.05$), facilitating condition (H2; $\beta = 0.053$, $t = 0.595$, $p = 0.552 > 0.05$), performance expectancy (H5; $\beta = 0.163$, $t = 1.410$, $p = 0.159 < 0.05$), price value (H6; $\beta = 0.069$, $t = 0.980$, $p = 0.327 > 0.05$) and social influence (H7; $\beta = 0.151$, $t = 1.845$, $p = 0.065 > 0.05$) show no significant effect on behavioral intention. Thus H3 and H4 are supported.

Habit and hedonic motivation have been found positively significant affected the intention to adopt electric vehicle. Based on practical perspective, these two findings show the traits and features that positively influence consumers' EV adoption intentions. It is assumed that the 2 factors of habit and hedonic motivation give the biggest affect for someone to adopt electric vehicle. It's indicate the manufacture of EV should take focus on how to make customer enjoy while using EV, obsessed with EV, and getting entertain.

This study also try to configure the hypothesis testing based on the certain groups. The groups used in this matter is based on gender those are female and male and age group that divided into 2 groups, the first one is whose age in range of 30 up to 40 years old and the another is whose age more than 40 years old. In general there are 2 hypothesis that supported those are habit and hedonic motivation have significant effect to behavioral intention. Gender and age based analysis configure that both male and female respondent considering habit as the significant variable that affect behavioral intention so do them whose age more than 40 years old. While, respondents whose age in range of 30 to 40 years old not only considering habit as the variable that affect behavioral intention but also social influence that has effect for someone to adopt electric vehicle.

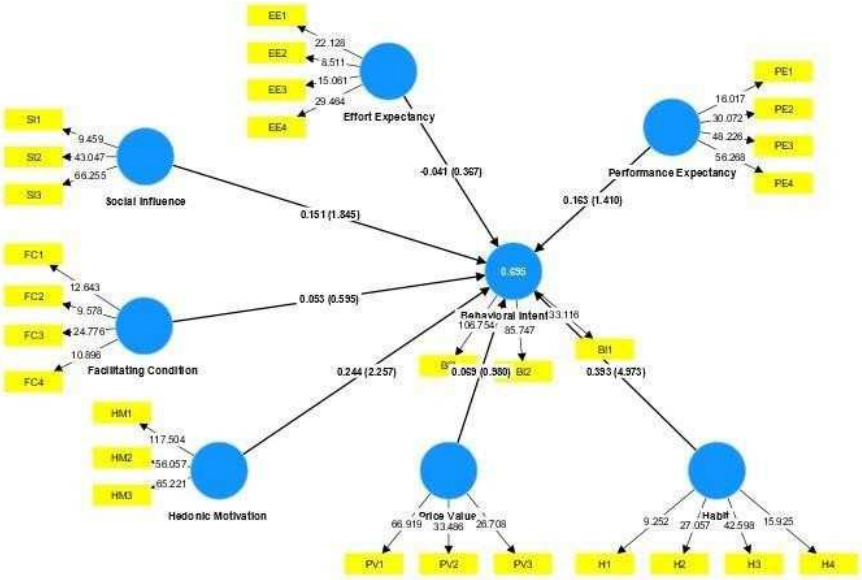

Fig. 2. Structural Model of pls-sem.

3.2 Multi Group Analysis

Table 8. Hypothesis Testing on Male Respondent.

Hypothesis	Relationship	Coefficient	t-value	p-value	Supported
H1	EE → BI	-0.209	1.561	0.119	No
H2	FC → BI	0.173	1.472	0.141	No
H3	H → BI	0.417	3.813	0.000	Yes
H4	HM → BI	0.187	1.293	0.196	No
H5	PE → BI	0.235	1.536	0.125	No
H6	PV → BI	0.088	0.919	0.358	No
H7	SI → BI	0.128	1.244	0.214	No

Table 9. Hypothesis Testing on Female Respondent.

Hypothesis	Relationship	Coefficient	t-value	p-value	Supported
H1	EE → BI	0.322	1.792	0.073	No
H2	FC → BI	-0.110	0.807	0.419	No
H3	H → BI	0.277	2.544	0.011	Yes
H4	HM → BI	0.269	1.487	0.137	No
H5	PE → BI	0.084	0.453	0.650	No
H6	PV → BI	-0.069	0.557	0.578	No
H7	SI → BI	0.215	1.482	0.138	No

Table 10. Hypothesis Testing for 30 – 40 Years Old Respondent.

Hypothesis	Relationship	Coefficient	t-value	p-value	Supported
H1	EE → BI	-0.091	0.692	0.489	No
H2	FC → BI	0.047	0.409	0.683	No
H3	H → BI	0.351	3.605	0.000	Yes
H4	HM → BI	0.184	1.462	0.144	No
H5	PE → BI	0.201	1.498	0.134	No
H6	PV → BI	0.119	1.387	0.166	No
H7	SI → BI	0.223	2.222	0.026	Yes

Table 11. Hypothesis Testing for Respondent Whose Age More Than 40 Years Old.

Hypothesis	Relationship	Coefficient	t-value	p-value	Supported
H1	EE → BI	0.007	0.023	0.981	No
H2	FC → BI	0.219	1.274	0.203	No
H3	H → BI	0.610	4.377	0.000	Yes
H4	HM → BI	0.273	1.056	0.291	No
H5	PE → BI	0.053	0.196	0.844	No
H6	PV → BI	-0.154	0.887	0.375	No
H7	SI → BI	0.041	0.237	0.813	No

3.3 Implications

Based on technology adoption models, this study explores EV adoption intention. UTAUT2 model was used to evaluate this model. The secondary factors such as habit, hedonic motivation and social influence were found to have biggest affect for decision to adopt EV, while the primary factors such economic aspects like price value are not significantly affect the intention to adopt EV. It is in line with information delivered by Wuling and Hyundai sales representative during interview that mostly of their EV consumers used EV as their second car [35],[36]. These findings have important implications for practitioner, EV producers should concentrate on raising awareness and disseminating information about their vehicles. EV managers may promote the benefits of EVs to clients through car expo events as well as other venues such as newspapers and social media platforms. Price value is not found significantly affected intention to adopt EV, a probable reason might be the poor awareness of EV among the society. On the other hand, this research findings could adding the literature in the topic of electric vehicle, it is also could take the contribution to public sector that could increase people's intention to adopt EV and growth their sale on EV and also support the government program that could reducing the emissions release to the air by intensifying citizens to use EV by knowing their factor to adopt EV.

4 CONCLUSION

Taking into consideration support for the government program in intensifying the use of green vehicles, this research employed a UTAUT2 model to explore the factors that affect the intention to purchase electric vehicles. Data was collected from 95 respondents through social media platforms such as Facebook and Instagram and messenger applications such as Whatsapp by distributing the online questionnaire via

Google form. The research indicates that habit and hedonic motivation have a significant and positive effect on behavioral intention to adopt EV while social influence have a signficant effect among 30 up to 40 years old respondent, the rest variables have no meaningful effect on intention to adopt EV. However, this study still has many limitations, for example, regarding the respondents used, the majority of them lack experience in using electric cars, either as passengers or drivers.

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