

FACTORS AFFECTING THE DECISION TO PURCHASE ELETRIC CARS OF THE GENERATION Y

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ABSTRACT

The rapid increase in carbon emissions, including Thailand's report of 243.6 million tons of carbon in 2024, has highlighted the need for cleaner transportation options. In response, electric vehicles (EVs) have gained significant interest, especially in Bangkok, where environmental awareness and efforts to reduce air pollution in congested urban areas are rising. Government initiatives, such as tax incentives and subsidies, have further driven the adoption of EVs.

This study investigates the factors influencing EV purchase decisions among Generation Y in Bangkok. Using a stratified random sampling method, data were collected from 30 respondents via a questionnaire focusing on demographics and purchase influences. Results showed that the primary factors include financial considerations, vehicle safety, performance, and the availability of charging equipment. The analysis revealed that Generation Y's overall perception towards EV purchase was at a high level ($\bar{x}=4.10$, $\bar{x}=\bar{x}$ = 4.10, S.D. = 1.115), indicating a positive reception and potential for increased adoption in the future.

Keyword: EV purchase, Purchase Eletric Cars, Generation Y

INTRODUCTION

Gasoline-powered vehicles emit a significant amount of carbon dioxide. According to statistics, in 2024, Thailand emitted 243.6 million tons of carbon (reported by the Office of Energy Policy and Planning, Ministry of Energy). Electric vehicles (EVs), particularly in Bangkok, are gaining substantial attention due to rising environmental awareness and the need to reduce air pollution in large cities with heavy traffic. People and drivers in Bangkok are increasingly considering eco-friendly alternatives, and government incentives, such as tax reductions and subsidies, have made Evs a more attractive option.

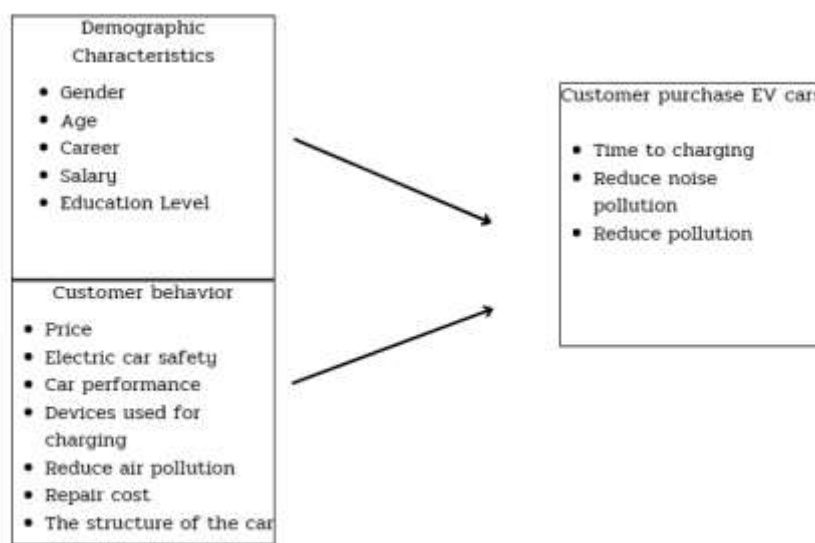
Factors influencing EV purchase decisions in Bangkok include the development of EV-supporting infrastructure, such as rapidly expanding charging stations and advancements in durable, high-performance batteries. Evs also offer energy efficiency and fuel cost advantages, particularly in congested urban areas. Thailand aims to lead in EV production capacity within ASEAN, positioning this sector as a critical component of the country's economic development. This push has led to continuous job creation and advancements in production, marketing, technology, and links to other industries.

Therefore, Thailand's automotive industry must adapt to global trends and the increasing consumer demand for Evs. The Thai government has set a goal to promote EV adoption to reach 1.2 million vehicles in the next 18 years or by 2036 (Warunee Inwana & Porntep Heng, 2018) .

OBJEVTIVE

This study was conducted with main purposes:

- 1.To study the factors influencing the use of electric cars among Generation Y in Thailand.



METHODOLOGY

The target population consists of Generation Y individuals (born approximately between 1981 and 1996) residing in Bangkok, Thailand was 30 customers to purchase electric cars. A stratified random sampling method will be used to ensure representation across different demographics using (Pittayaporn Wongkittiwat, 2016) The research tool is a questionnaire, research collect data from research concept. The two part that factor customer generation Y purchase electric cars: Part 1 age, gender, education level, career, and income. Part 2 survey of factor influence to purchase electric cars Generations Y.

RESULT

Part 1 Result of data analysis of demographic characteristics of respondents. The results of the analysis of demographic characteristics of respondents includes gender, age, education level, career and income

Table 1
Number and percentage Demographic characteristic of respondents.

Gender	N=30	Percentage
-Male	16	41
-Female	20	51.3
-LGBTQ+	2	7.7
Age		
-Age 10-20 years	3	7.7
-Age 21- 30 years	26	66.7
-Age 31 years and over	10	25.6
Career		
-Government	1	2.6
-Private/ State enterprise	12	30.8
-Businessperson	7	17.9
-Another	6	15.4
Salary		
-Less than 10,000 baht	6	15.4
-10,001-20,000 baht	16	41
-30,000 baht and over	17	43.6
Education level		
Bachelor's degree	34	87.2
Master's degree	5	12.8
Doctoral degree	0	0

Part 2 Survey of factor influence to purchase electric cars Generations Y.

Table 2
Average and standard deviation of survey of factor influence to purchase electric cars Generations Y.

Survey Generations Y	$\bar{x}$	S.D.	Meaning
Consideration the money to buy	4.15	1.04	Highest
Consideration of product prices	3.98	1.11	Highest
Consideration of safety	4.43	1.02	Highest

Consideration of vehicle performance	4.40	0.99	Highest
Consideration of Charging equipment	4.08	1.10	Highest
Helping reduces air pollution	3.68	1.33	Highest
Consideration of repair costs	4.00	1.26	Highest
Consideration of the structure of the vehicle	4.08	1.07	Highest
Overall	4.10	1.115	Highest

Form Table 2, result of Generation Y to purchase EV car analysis it found that overall, it was highest level ($\bar{x} = 4.10$, S.D. = 1.115).

SUGGESTION

Enhancing Charging Infrastructure: To support the growing interest in Evs it is crucial to expand the network of charging stations throughout Bangkok and other urban areas.

Policy Development: The Thai government should continue to update policies to reflect global best practices in EV adoption. These could include long-term goals for reducing emissions and integrating Evs into the broader transportation system.

ACKNOWLEDGEMENT

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