

LEVEL 7 ASSESSMENT SPECIFICATION

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HKBM7000

**Approaches to Research and Academic
Communication**

The Marketing and Challenging Issues of Electric Vehicles

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1. Research Problems and Objectives

1.1 Industry background

- Electric Vehicles
- powered by electricity from batteries
- less carbon emissions
- Types of electric vehicles
 - electric vehicle
 - hybrid electric vehicle
 - plug-in hybrid

1. Research Problems and Objectives

1.1 Industry background

- Global market turnover (Singh, 2020)
 - US\$162.34 billion in 2019
 - expected to achieve US\$802.81 billion by 2027

1. Research Problems and Objectives

1.1 Industry background

- Factors affecting market growth
 - manufacturing cost
 - maintenance cost
 - performance
 - infrastructure facilities
 - government regulations and subsidies
 - improvement of technology

1. Research Problems and Objectives

1.2 Definition of Problems

- low market share - electric cars represents only about 1% of cars sold in the USA (Mims, 2017)
- Major marketing problems and challenges
 - high cost
 - limitation in battery charging infrastructure
 - consumer attitude and behaviour (Theory of Planned Behavior)

1. Research Problems and Objectives

1.3 Research Objectives

What are the strengths and weaknesses of the electric vehicle industry?

What are the factors affecting the market growth of the electric vehicle industry?

2. Research Design

2.1 Definition of Variables

- age
- gender
- driving licence
- own a vehicle
- attitude and behaviour

2. Research Design

- Hypotheses testing
 - H1: There is positive relationship between consumers' attitude and their behavioral intention towards electric vehicles
 - H2: There is positive relationship between consumers' subjective norm and their behavioral intention towards electric vehicles
 - H3: There is a positive relationship between consumers' perceived behavioral control and their behavioral intention towards electric vehicles.
 - H4: There is positive relationship between consumers' environmental concern and their attitude towards electric vehicles.
 - H5: There is a positive relationship between consumers' environmental concern and their subjective norm

2. Research Design

- Hypotheses testing
 - H6: There is a positive relationship between consumers' environmental concern and their perceived behavioral control
 - H7: There is a positive relationship between consumers' environmental concern and the government policy
 - H8: There is a positive relationship between government policy and consumers' attitude towards electric vehicles
 - H9: There is a positive relationship between government policy and behavioral intention towards electric vehicles

2. Research Design

2.2 Framework of Relations

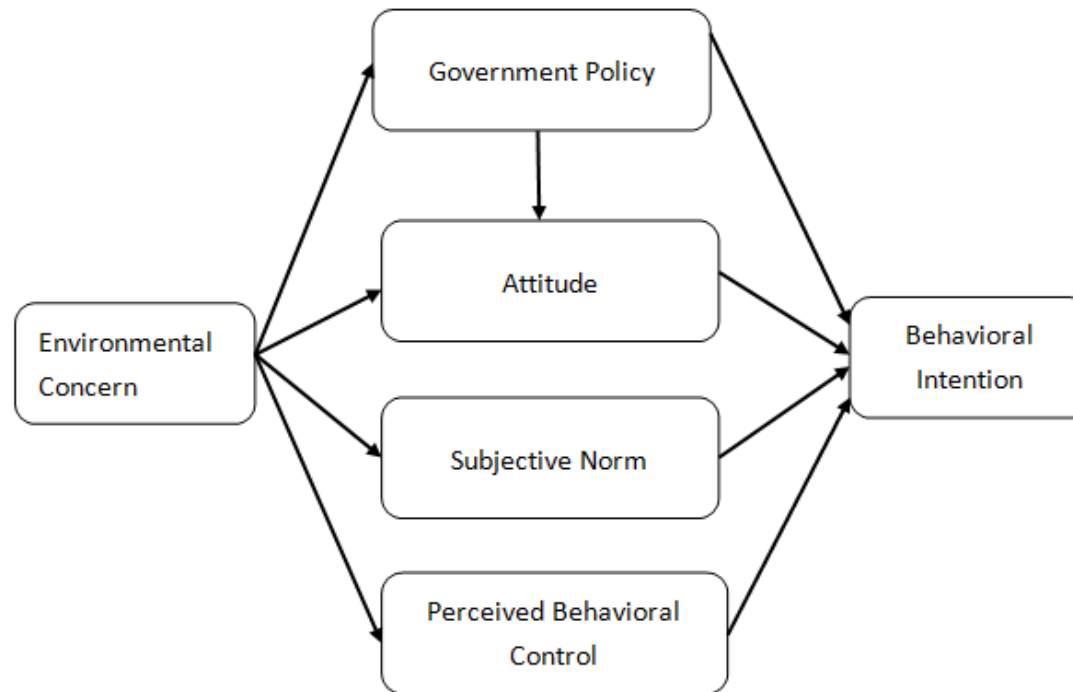


Figure 1: Conceptual Framework

2. Research Design

2.3 Research Method

- Quantitative Research Method
- measurement scales from previous studies
- two-sectioned questionnaire
 - general background of respondents
 - questions about the constructs (i.e. attitude, subjective norm, behavioral control, environmental concern, government policy)
- 5-point Likert-Type scale, from 1 (strongly agree) to 5 (strongly disagree)

2. Research Design

2.4 Sampling

- non-probability sampling
- online questionnaire survey
- target respondents aged between 18-70
- with driving licence

2. Research Design

2.5 Measures

- the construct measurements were adapted from previous studies and were validated
 - attitude
 - environmental concern
 - subject norms
 - behavioral control
 - government policy

3. Data Collection, Analyses and Report

3.1 Proposed Data Collection and Processing

- online questionnaire survey
- target group aged between 18 to 70 with driving licence
- mature
- certain driving experience
- in-depth feedback

3. Data Collection, Analyses and Report

3.2 Data Analyses to be Used

- SPSS
- reliability – Cronbach's alpha coefficient
- strength of association – Pearson correlation coefficient (for small sample size) or multiple regression (for large sample size)

3. Data Collection, Analyses and Report

3.3 Expected Findings and Recommendations

- the factors are correlated with consumers' intention towards electric vehicles
- affect the market growth of the electric vehicle industry
- proposed research to be done within a short period

3. Data Collection, Analyses and Report

3.4 Report and Organization

Week	Task
1	Literature Review
2-3	Set up Questionnaire
2-3	Data Collection & Analysis
4	Draft Report
4	Final Report

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