FACTORS AFFECTING PURCHASE INTENTION OF ELECTRIC VEHICLES IN NEPAL

A Dissertation Submitted to Office of the Dean Faculty of Management in Partial fulfillment of the Requirements of the Degree of Master of Business Studies (M.B.S)

Submitted by:

Gokarna Joshi

Nepal Commerce Campus

Roll. No: 1424/17

Registration No : 7-2-177-72-2012

Kathmandu, Nepal

2023

CHAPTER-I

INTRODUCTION

1.1 Background of Study

Vehicles have been an inseparable part of human life for more than few centuries. It is almost impossible to live a normal life without transportation today. Vehicles have been running using fossil fuel from the past till today. Fuel has always been a topic of interest as there is limited sources of fuel on earth which is decreasing day by day. The users of the personal vehicles are increasing where people prefer to own a vehicle rather than to use public transport. So, an alternative to fuel to power the vehicles was needed, then came the invention of electrically powered vehicles. Electric Vehicles also known as EVs are vehicles which have electrically rechargeable batteries to operate the vehicles with ability to provide similar power and better performance.

EVs first came into existence in the mid-19th century. There were several inventions and development regarding range and power of electric vehicles. From the date from its invention to the present, a revolutionary change is seen with unimaginable developments. In fact, it can be observed that EVs are equally powerful and more advanced than gasoline powered vehicles.

Electric vehicles have existed since the nineteenth century. The first electric car was developed by Parker in 1884. The first car exceeding the speed limit of 100 km/h was the electric “le JamaisContente” developed by Jenatzy in 1899. However, the petrol engine vehicle took over the market in the beginning of the twentieth century. Due to the oil crisis in the 1970s, a renewed interest in electric vehicles was observed. In 1979, nine electric vehicles were used for the Brussels Electric Vehicle Experiment at the VrijeUniversiteit Brussels. New fast chargers were developed using power electronics, and test drives on the open road were soon to follow. This allowed the distance from Brussels to Paris, on the occasion of the EVS symposium in Versailles, to be covered in one haul using intermediate fast charges, Mierlo (2018).

In the 1990s, there was another wave of interest in electric vehicles. Car manufacturers like Renault, Peugeot, and Citroen in Europe and GM in the US

produced tens of thousands of electric vehicles. However, the market was rather “immobile”. Even worse, GM recalled all his leased EVs and crushed them one by one. This is well documented in the film ‘Who Killed the Electric Car?’ But times are changing. In 8 years, lithium battery prices dropped by 80% while the specific energy of the battery increased significantly. As a result, we can expect affordable electric vehicles on the market with a driving range of above 400 km. There seems to exist an exciting e-mobility future in front of us.

1.2 Problem Statement

As we all know that the world is changing continuously day by day technology is changing. After two decades ago, it appeared that there was no effective alternative to conventional fossil fuels such as gasoline and oil, but it turned out with a very effective substitute: electricity.

Electric vehicles are expected to be the next big thing in transportation and technology. They have the potential to change the way energy is produced, utilized, and redirected. Electric automobiles are one remedy to traditional cars' detrimental environmental impact. They have, however, demonstrated that they offer far more societal benefits. The introduction of electric cars has necessitated a reduction in overall energy use and generation. They have demonstrated the importance of finding alternative fuel sources and how they may have a good impact on the environment and society as a whole.

Furthermore, unlike the oil shortages that plague the planet, there will never be a scarcity of solar power. While electric automobiles are more expensive up front than gas cars, they are usually more cost-effective in the long run. In terms of overall cost of ownership, EVs with equivalent characteristics to gas-powered cars are significantly less expensive. Electric cars are becoming increasingly affordable, and battery manufacturing costs are decreasing as well. As a result, electric vehicles will become even more affordable in the future. Maintaining an electric vehicle is much less expensive than maintaining a regular gas vehicle. Furthermore, because EVs do not have an engine, they do not require frequent filter and oil changes. Electric vehicles have ushered in a future where green technology is in great demand (GetGreenNow, 2018).

Electric vehicles (EVs) are presented as a realistic near-term vehicle technology that will reduce reliance on fossil fuels and the accompanying greenhouse gas (GHG) emissions (CVs). Despite the advantages of electric vehicles, various challenges must be addressed before they can be broadly utilized. Consumers tend to resist new technologies that they perceive to be alien or unproven, thus policy decisions that take into account their critical concerns will be more successful.

1.3 Research objectives

The major objectives of the study is to investigate the influential factors affecting purchase intention of electric vehicles in Nepal. The other objectives of the study are:

a. To examine the relation between health consciousness and purchase intention of electric vehicles.
b. To examine the association between consumer knowledge and purchase intention of electric vehicles.
c. To assess the impact of environmental concern on purchase intention of electric vehicles.
d. To analyze the influence of performance on purchase intention of electric vehicles.
e. To assess the relation between price and purchase intention of electric vehicles.

CHAPTER - II

LITERATURE REVIEW

This section presents the related literature and conceptual framework of the study. The literature review examines different national, international s and studies conducted by various researchers to provide a foundation of understanding of the topic and to support the need for research. The conceptual framework then defines a logical relationship between the dependent and the independent variables.

2.1 Purchase Intention

Purchase intentions are a person's conscious strategy to create an effort to buy a product (Spears & Singh, 2004). Morrison 1972 describes purchase intention as the probability that a consumer will purchase a specific product. O'Brien 1971 defines intention to purchase as the extent commitment to a potential action, self-prediction of an expected behavior, or purely, plans. Chang and Wildt 1994 explains that although value perceptions may be created independently of involvement in a transaction, purchase intentions are formed under the supposition of an incomplete transaction, therefore being consideredan indispensable indicator of actual purchase. Usually, practical cost considerations (such as price) and other physical resources are required to make a purchase influence on consumer purchase intentions(Baker, Donthu, & Kumar, 2015).

Table 2.1Summary of Empirical Review year (2002-2020)

Review of Articles		
Authors	Research Topic	Findings, conclusion and remarks
Woodjack, et al.2012	Consumer Perceptions and Use of Driving Distance of Electric Vehicles	People tend to adapt to the product characteristics and make themselves familiar to the product over some time. Experience leads to the proper thought and building an attitude towards the product.
Liao, Molin, & Wee,	Consumer preferences	Experience had as significant favorable

2016	for electric vehicles: aliterature review	effect on general perception of EV and intention to recommend EV to others, but not attitudes and purchase intention
Singer, 2016	Consumer Views on Plug-in Electric Vehicles	There is a general lack of understanding and awareness concerning electric vehicles. American consumers are mostly unaware of any brand or model.
Lingzhi & Slowik, 2017	Literature review of electric vehicle consumer awareness and outreach activities	People with greater experience driving an electric vehicle have more favorable opinions toward e-mobility
McElgunn, 2018	Consumer Awareness of Electric Vehicles and Global Purchasing Patterns Patterns	income, education, incentives, and employment are all important indicators of how likely a consumer is to be interested to purchase an EV
Descant, 2020	EV Options Have Increased but Public Awareness Not So Much	Marketing is necessary to increase awareness among consumers through different sources to increase the popularity and use of electric vehicles to electrify a nation

2.5 Environmental Concern

P. Gisbert defines,"Environment is anything immediately surrounding an object and exerting a direct influence on it."-(Your Article Library, 2020).

As stated by Wiki Didactic(2013),Environment means everything around to a living being. It includes circumstances of life of people or society in their life conditions. It is a system consisting of natural and artificial elements that are interrelated and which are modified by human action.

Governments around the world are implementing policies to promote electric vehicles to reduce dependence on oil, decrease greenhouse gas emissions, and improve air quality. In the past few years, annual global electric vehicle sales have been firmly on the upswing, from just hundreds in 2010 to over 500,000 in 2015 and over 750,000 in 2016. The cumulative global market reached the milestone of 1 million electric vehicles in September 2015, and from there quickly grew to 2 million in January 2017 (Jin & Slowik, 2017).

Research indicates that the electrification of our transport system would generate one million additional jobs in Europe in 2030 and double in 2050. These jobs relate to the production of components for electric vehicles, but they also relate to new services, such as charging infrastructure. Electrification will also reduce our oil dependency. The import of oil costs the European economy one billion euros per day (Cambridge Econometrics, 2013).

CHAPTER – III

RESEARCH METHODOLOGY

The research methodology refers to the method implemented to carry out the entire research process. It is a plan that outlines how the research is undertaken. It is necessary to consider the meaning of research before delving into the methodology. Research is a means of systematically reviewing and interpreting data regarding a research problem.In order to produce new ideas, methodologies and understandings, research is characterized as the development of new knowledge and/or the use of existing knowledge in a new and innovative manner. To the point that it contributes to innovative and imaginative results, which may require analysis and review of previous studies(Western Sydney University, 2021).This section explains details about the methodologies used for the purpose of the study. The discussion is made regarding data collection, sources of data, instruments used for data collection and data analysis.

3.1 Research Design

The overall pattern of conducting a research project is defined by research design, which is a broad framework. It lays out the goals, data collection and analysis processes, time and actions. Research design is the blueprint for data collection, calculation, and interpretation. It illustrates how researchers formulate their problem and objective, as well as how they present their results based on the data collected during the study period. This chapter on research design and methodology presents the roadmap for effective completion of the study.

For this study descriptive research design is used to analyze the data and information. Descriptive design is used in preliminary studies and exploratory studies to assess relevant information on factors affecting purchase decision of EVs. Thus, previous established knowledge on the mentioned fields is thoroughly studied and examined, and on the basis of previous knowledge and understanding, gathered information is summarized, presented and interpreted to develop specific research question, establish dependent variable and independent variables and develop research hypotheses along with conceptual framework.

Methodologies, techniques, instruments, and guidelines are used to perform research. Since the primary aim of this analysis is to learn more about the consumers' views, a quantitative research methodology was used. The research uses a structured questionnaire to examine consumers' perceptions; the primary objective is to learn more about factors affecting purchase intention of EVs.For the purpose of the study, the data is collected from primary source and primary data will be collected by providing questionnaires through google forms to the people of the particular study area. The data is further analyzed using statistical software called Statistical Package for Social Science (SPSS).

3.2 Population and Sample

A population can be described as a large group of people, organizations, objects, and other things that share common characteristics and are of interest to a researcher. For the purpose of the study, population is the total number of individuals of Kathmandu on which research is done. The total number of populations in the selected area is 1.003 million (Census of Nepal,2011).

A sample is a subset of data that a researcher selects from a wider population using a pre-determined process.The sample taken for the study is 200 individuals from the random household. For the sampling, purposive sampling technique is used. The sample taken for the study is both the user and non-user of electric vehicles under the selected area. The respondents are the members of the households of the selected area.

3.3 Data Collection Procedure

In the beginning phase, a pilot test involving 25 respondents representing the sample population was carried out before the start of the actual study. This test was conducted to identify any problems such as unclear wordings, understanding issues, unclear meaning or some other mistakes in the questionnaire and is helpful in making specific correction in the original questionnaire. Thus, after the completion of pilot test, corrected questionnaire is distributed to the respondents to collect their views.

The data is collected by using primary source. Primary data is collected by distributing questionnaire to the individuals through google form. A digital-google-based survey method is used as the mode of administration. The researcher personally contacted respondents through social media in the course of data collection by providing link to the googlequestionnaires to the respondents. The method of data collection began with checking in the research area for potential vehicle owners. People having the interest in owning vehicle currently and in near futurefrom the research area were scanned at random and asked to fill the questionnaire.

3.4Instruments

Instruments refer to a variety of methods that are used for data collection and interpretation during study. Instruments are important in research because they enable data to be quantified in a way that is relevant to the research's goals and objectives. As a consequence, the research project report's performance would be more relatable.For collecting response from the individuals, a structured questionnaire has been prepared and distributed among the respondents.

The questionnaire is further classified into three different section. In the first section, various questions that focus on collecting personal information of the respondents are included; this information is essential in developing minor conclusion based on the demographic factor of the respondents. The second section include the open-end question to collect the subjective view of the respondents. The third section contains close-ended questionnaires by using Five-point Likert scale to make easy way to understand to the respondents. The scale is designed in such a way that 5 being high (strongly agree) and 1 being low (strongly disagree). In the situation, where the

respondents did not know English language, the questionnaire has been distributed in Nepali language in the study area.

CHAPTER-IV

RESULTS AND DISCUSSION

The results of the data analysis are presented in this chapter. The data is evaluated with SPSS tools, and the findings are presented below. Descriptive statistics, correlation analysis, and regression analysis are used to interpret the data gathered.The section presents and interprets the primary data that is obtained from the research questionnaire under the subsections as respondents' profile analysis, descriptive statistics, and other determinants of purchase intention of electric vehicles.

4.1 Analysis of Respondent's Profile

The respondents' profile analysis includes analysis based on gender, age and education level. The specific respondent's profile is thoroughly discussed below.

(a) Gender Profile of Respondents

The table below represents the profile of the respondents of the study which is classified on the basis of gender. Out of the total 200 respondents, 52.1 per cent of the respondents are male and the remaining 47.90 per cent of the respondents are female. However, none of the respondents is from other subgroups. There is not much difference in the number of respondents while comparing males and females. Hence, the interest of males and females are somewhat the same and both are equally conscious with electric vehicles and intention to purchase.

Table 4.1Gender profile of respondents

Gender	Frequency	Percentage
Male	75	52.1
Female	69	47.9
Total	144	100.0

Source: Field survey, 2022

(b) The age profile of the Respondents

Under the questionnaire of the research, the age of the respondents is classified under three sub-groups i.e., below 20 years, 20 years to 40 years and above 40 years. The data and information collected through the questionnaire showed that out of the total respondents, 11.8 per cent of the respondents are aged below 20 years, 61.8 per cent of the respondents are aged between 20 years to 40 years, and 26.4 per cent of the respondents are aged above 40 years. The data collected regarding the age of the respondents are presented below:

Table 4.2Age profile of the respondents

Age	Frequency	Percentage
Below 20 years old	17	11.8
20-40 years old	89	61.8
Above 40 years old	38	26.4
Total	144	100.0

Source: Field survey, 2022

(c) Qualification Profile of the Respondents

Under the questionnaire of the research, data regarding the education level of respondents is collected to determine its impact on decision to purchase electric vehicle. The level of education is classified under 4 levels i.e. illiterate, under graduate, graduate and post graduate. The data and information collected through the questionnaire showed that out of the 200 respondents, 10.4 per cent of respondents are illiterate, 31.9 per cent respondents are under graduate, 34.7 per cent respondents are graduate, and 22.9 per cent of respondents are post graduate. The data collected

regarding the education level of the respondents in frequency and percentage hence are presented below:

Table 4.3Qualification profile of the respondents

Education	Frequency	Percentage
Illiterate	15	10.4
Under Graduate	46	31.9
Graduate	50	34.7
Post Graduate	33	22.9
Total	144	100.0

Source: Field survey, 2022

d) Profile of Level of Income of the Respondents

For the study, the income level of the respondents is classified into three groups that include, high-income group, moderate-income group and low-income group. The age is classified into above Rs 40000, Rs 20000- Rs 40000 and below Rs 20000. Out of the total of 200 respondents, 25.7 per cent of respondents have an income level below Rs 20000, 42.4 per cent of respondents have income level between Rs. 20000 to Rs, 40000 and 31.9 per cent of respondents have income level above Rs 40000. This shows that the majority of the people have moderate income level i.e. Rs 20000- Rs 40000 in Kathmandu. The summary of the data based on income level is presented below:

Table 4.4Income level profile of the respondents

Monthly Income	Frequency	Percentage
Less than Rs. 20,000	37	25.7
Rs 20,000-40,000	61	42.4
Above 40000	46	31.9

Total	144	100.0

Source: Field survey, 2022

4.2Descriptive Analysis

In this study, descriptive analysis was performed on the data collected to identify the factors affecting purchase intention of electric vehicles in Nepal; Health consciousness, Consumer Knowledge, Environmental concern, Performance and Price by studying on Kathmandu. The data characteristics were analyzed using SPSS in terms of minimum and maximum value, mean value and standard deviation of each variable. These values helped to analyze the data concerning frequencies and aggregation to research questions variables. For this purpose, 'Five Point LikertScale' questions were created and administered to the respondents. The Likert Scale ranged from 1 to 5 where 1 is for Strongly Disagree, 2 is for Disagree, 3 is for Neutral, 4 is for Agree and 5 is for Strongly Agree. Therefore, the mean score that is more inclined towards 5 indicates the high impact of selected variables on the satisfaction of policyholders. The total number of respondents for this research was 200, their answers relating to each determinant and their descriptive statistics are presented below:

(a) Health Consciousness

This section presents the descriptive analysis of the variable Health Consciousness

Table 4.5Descriptive Analysis of the variable Health Consciousness

Particulars	Mean	SD	Min	Max
I show more concern towards my health, so I use electric vehicles.	2.15	1.130	1.00	5.00
Unlike petroleum vehicles, electric vehicle doesn't create harmful health conditions.	2.04	0.989	1.00	5.00
Electric Vehicles can be equipped with more safety features and precaution technology.	2.20	1.035	1.00	5.00
Electric vehicles aren't totally good for	2.70	1.269	1.00	5.00

health.

Fresh and healthy air is found for breathing in the environment if electric vehicles are used by everybody.	2.08	1.276	1.00	5.00
	2.24	1.140		

Table 4.5demonstrated the descriptive statistics of the variable "Health Consciousness" and it presents respondents' perceived consciousness towards health related to use of vehicles in daily life. As part of the questionnaire, respondents were asked about the health benefits that can be achieved through the use of electric vehicle. The result shows that the mean value of all the statements lies between 2.15to 2.70. Among thefive statements, the statement "Electric vehicles aren't totally good for health." has the highest mean value of 2.70 with the standard deviation of 1.269, while the statement, "Unlike petroleum vehicles, electric vehicle doesn't create harmful health conditions." has the lowest mean value of 2.04 with the standard deviation of 0.989. Similarly, the analysis also shows that the mean value of all the statements is2.15, 2.04, 2.20, 2.70, and 2.08respectively. The average mean value of all statements for the health consciousness is 2.24with a standard deviation of 1.140.

(b) Environmental Concern

Table 4.6Descriptive Analysis of the variable Environmental Concern

Particulars	Mean	SD	Min	Max
Electric vehicle does not cause any damage to the environment.	2.07	1.008	1.00	5.00
From the point of environment wellness, there is no difference between petroleum and electric vehicles.	2.83	1.128	1.00	5.00
I prefer electric vehicle even if it causes harm to the environment.	2.58	1.266	1.00	5.00
Environment is less polluted by using electric vehicles.	1.95	0.985	1.00	5.00
I think the electric vehicles are helpful for environmental protection.	1.99	0.964	1.00	5.00

2.28	1.070	

Table 4.6demonstrated the descriptive statistics of the variable "Environmental Concern" and it presents respondents' knowledge and concern towards the environment followed by the impact of use electric vehicles. As part of the questionnaire, respondents were asked about benefits and harms caused by electric vehicles and its advantages over conventional vehicles. The result shows that the mean value of all the statements is greater than 2. Among thefive statements, the statement "From the point of environment wellness, there is no difference between petroleum and electric vehicles." has the highest mean value of 2.83 with the standard deviation of 1.128, while the statement, "Environment is less polluted by using electric vehicles." has the lowest mean value of 1.95 with the standard deviation of 0.985. Similarly, the analysis also shows that the mean value of all the statements is2.07, 2.83, 2.58, 1.95 and 1.99 respectively. The average mean value of all statements for Environmental Concern is 2.28with a standard deviation of 1.070.

(c) Consumer Knowledge

Table 4.7Descriptive Analysis of the variable Consumer Knowledge

Particulars	Mean	SD	Min	Max
I know what electric vehicle means.	1.81	0.830	1.00	4.00
I am known to the existing brands of electric vehicles.	2.42	0.979	1.00	5.00
I do understand the benefits of each type of electric vehicle.	2.40	1.123	1.00	5.00
I understand the functionality and features of an electric vehicle.	2.35	0.926	1.00	5.00
Electric vehicle is a better option for everyone.	1.99	0.953	1.00	5.00
	2.19	0.962		

Table 4.7exhibited the descriptive statistics of the variable "Consumer Knowledge" and it presents respondents'knowledge on electric vehicles. As part of the questionnaire, respondents were asked about details of electric vehicles regarding its

usage and types. The result shows that the mean value of all the statements is greater than 2. Among thefive statements, the statement, “I am known to the existing brands of electric vehicles.”has the highest mean value of 2.42 with the standard deviation of 0.979, while the statement, “I know what electric vehicle means.” has the lowest mean value of 1.81with the standard deviation of 0.832. Similarly, the analysis also shows that the mean value of all the statements is1.81, 2.42, 2.40, 2.35, and 1.99respectively. The average mean value of all statements for theconsumer knowledge is 2.19 with a standard deviation of 0.962.

(d) Performance

Table 4.8Descriptive Analysis of thevariable Performance

Particulars	Mean	SD	Min	Max
The driving range is one of the problems of electric vehicles.	1.92	0.743	1.00	4.00
Electric vehicles are loaded with features compared to petroleum vehicles.	2.37	0.834	1.00	4.00
Electric vehicles are cheaper for day to day use as it uses renewable energy.	2.20	0.920	1.00	5.00
Electric vehicle areeco-friendly.	2.10	0.918	1.00	5.00
I don't think electric vehicles provide better power and performance than petroleum vehicles.	2.43	0.951	1.00	5.00
	2.20	0.873		

Table 4.8exhibited the descriptive statistics of the variable “Performance” and it presents respondents’ views regarding the effectiveness and power delivery regarding cost, renewable energy usage and range. As part of the questionnaire, respondents were asked about their views onperformance delivered by electric vehicles. The result shows that the mean value of all the statements is greater than 2. Among thefive statements, the statement “I don't think electric vehicles provide better power and performance than petroleum vehicles.” has the highest mean value of 2.43 with the standard deviation of 0.951, while the statement, “The driving range is one of the problems of electric vehicles.” has the lowest mean value of 1.92with the standard

deviation of 0.743. Similarly, the analysis also shows that the mean value of all the statements is1.92, 2.37, 2.20, 2.10 and 2.43 respectively. The average mean value of all statements for Performance is 2.20with a standard deviation of 0.873.

(e) Price

Table 4.9Descriptive Analysis of thevariable Price

Particulars	Mean	SD	Min	Max
Electric Vehicles are priced based upon its quality.	2.06	0.922	1.00	5.00
Electric vehicle have high maintenance and operating cost.	2.45	0.843	1.00	4.00
I feel the price of electric vehicles are reasonable.	2.26	0.946	1.00	5.00
Electric Vehicles are priced considering its environmental benefits.	2.24	0.968	1.00	5.00
Electric vehicle is expensive.	2.42	1.068	1.00	5.00
	2.29	0.949		

Table 4.9 exhibits the descriptive statistics of the variable “Price” and it presents respondents’ view on the purchase cost, maintenance and operating cost of electric vehicle. As part of the questionnaire, respondents were asked about the effect of price on purchase decision of electric vehicle. The result shows that the mean value of the statement lies between 2.06 to 2.45. Among thefive statements, the statement “Electric vehicle have high maintenance and operating cost.” has the highest mean value of 2.45 with the standard deviation of 0.843, while the statement, “Electric Vehicles are priced based upon its quality.” has the lowest mean value of 2.06with the standard deviation of 0.922. Similarly, the analysis also shows that the mean value of all the statements is2.06, 2.45, 2.26, 2.24, and 2.42 respectively. The average mean value of all statements for purchase intention is 2.29with a standard deviation of 0.949.

(f) Purchase Intention

Table 4.10Descriptive Analysis of thevariable Purchase Intention

Particulars	Mean	SD	Min	Max
I make my own decision while purchasing a vehicle.	2.08	1.186	1.00	5.00
I only buy Eco-friendly products.	2.71	0.989	1.00	5.00
I suggest everyone to purchase an electric vehicle.	2.31	1.034	1.00	5.00
Even if the price of the electric vehicle is increased, I prefer to buy it.	2.79	1.158	1.00	5.00
Purchasing electric vehicles seems costly and impractical.	2.75	1.325	1.00	5.00
	2.53	1.138		

Table 4.10demonstrated the descriptive statistics of the variable “Purchase Intention” and it presents respondents’ intention towards purchase decision of electric vehicles. As part of the questionnaire, respondents were asked about what effects the purchase of electric vehicle. The result shows that the mean value of all the statements lies between 2.05to 2.79. Among thefive statements, the statement “Even if the price of the electric vehicle is increased, I prefer to buy it.” has the highest mean value of 2.79 with the standard deviation of 1.158, while the statement, “I make my own decision while purchasing a vehicle.” has the lowest mean value of 2.08 with the standard deviation of 0.186. Similarly, the analysis also shows that the mean value of all the statements is2.08, 2.71, 2.31, 2.79, and 2.75 respectively. The average mean value of all statements for the health consciousness is 2.53with a standard deviation of 1.138.

4.3 Correlation Analysis

This section analyzes the relationship between purchase intention of electric vehicles and its influencing factors. In this study, Pearson's correlation analysis is done to measure and confirm the degree of relationship between the variables. For the correlation analysis, the value ranges from -1 to +1, where -1 indicates a perfectly negative relationship which means the relationship between variables is such that if one variable increases another variable will decrease and 1 indicate a perfect positive correlation which means the relationship between variables is such that if one variable increases another variable will also increase. The correlation analysis of the purchase intention of electric vehicles about independent variables i.e., Health Consciousness,Consumer Knowledge, Environmental Concern, Performance and Price is presented in the table below. From the result shown in the table below, it shows the relationship between the dependent and independent variables.

CHAPTER-V

SUMMARY AND CONCLUSION

This chapter presents the summary, conclusion and implications part of the study which is based on the research findings. The summary, conclusion and implication part has been discussed in detail and is presented below:

5.1 Summary

The vehicles which run through electricity without using fuel are commonly known as electric vehicles. The chapters provide gradual development of the report from the introduction, related literature and conceptual framework, research methods, results and discussion, to conclusion and implications.

The first chapter presents the general introduction. This chapter introduces the background of the problem, states the problem through problem statement, defines the purpose of the study, identifies the research questions that the research project report will answer, defines scope of the study, the extent of study through limitation section, provides operational definition of terms and finally provides the overall structure of the study.

The second chapter is titled related literature review. To support the literature presented in chapter one i.e., purpose of the study, research question and hypotheses. This chapter dives into a comprehensive review of various related literature on electric vehicles and conceptual framework with references to different factors that makes a vehicle ready for purchase, and also goes in detail regarding variables and their observed effects in previous studies. This chapter develops the relation between independent variables and dependent variable. This chapter is divided into three topics; theoretical review, empirical review.

The third chapter of this study is titled research methods. In this chapter, it presents methods used to accomplish the research objectives in a systematic manner. It provides information on research approach, subjects, instruments, population and sample, procedures, pre-testing of the tools and techniques used for data collection.

The fourth chapter of this study is titled results and discussion. In this chapter, data obtained by use of various instruments is analyzed using tools and techniques mentioned in chapter three. It provides information on data analysis, interpretation, discussion, critical examination and comparison with the past research in the similar field. Furthermore, this chapter includes presentation of data and analysis of the findings using tables, descriptive analysis and statistical tools.

The fifth chapter of this study is titled summary and conclusion. In this chapter, key findings are presented, and conclusions along with implications found in the investigation are highlighted, and recommendations based on it are made. This chapter also provides guidelines for the perspective user, readers and future researchers. Finally, reference and appendix include the sources of information or citation that were referred for the completion of this research work. It further includes the questionnaire that was used to generate data for the entire research work.

5.2Conclusion

This research was conductedto investigate the influential factors on purchase intention towards electric vehicles. For the study, the relationship between different variables such as health consciousness, environmental concern, consumer knowledge, performance and price was studied with the level of purchase intention in the study area. Electric vehicles have always been a topic of interest among Nepali people as there is abundant source of electricity i.e. fast flowing rivers in Nepal and currently a good reputation of Nepal Electricity Authority with bigger scale electricity production and minimized rate on charging stations for EVs. However, only few studies regarding interest in purchase of electric vehicles have been made in Nepal unlike others countries. Also, the studies made in foreign context are not compatible as per Nepal's infrastructure, consumers and the market. Though, it is an important topic to the economy and daily livelihood of Nepali people.

The primary data that is required for the study was collected using the self-administered questionnaire. The questionnaires were distributed among 200 respondents by using a purposive sampling technique in the area of Kathmandu. The study further followed a casual-comparative research design where the effect of health consciousness, environmental concern, consumer knowledge, performance and price was studied with the level of purchase intention.

For the processing and analyzing of data collected, SPSS 20 software was used, and test such as Cronbach's Alpha and correlation analysis was performed to check whether the data is fit for regression analysis. This research examined previous literature and established a base for examining determinants of purchase intention of electric vehicle. Based on previous literature, hypotheses were created and tested. The

findings from the test revealed, variables health consciousness, environmental concern, consumer knowledge, performance and pricehad a significant impact on the purchase intention. Hence, hypotheses H1, H2, H3, H4, H5 all were accepted.