

Identifying Factors Which Lead to Willingness to Buy Towards Automobile Industry

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Abstract

Purpose: - The purpose of this paper is to know how the factors like digital advertisement, product knowledge, environmental concern and attitude of the consumers impacts the decision which leads in willingness to purchase an automobile.

Design/methodology/approach: - A research supported questionnaire was designed for the customers for measuring the factors affecting the independent variable. Around 400 respondents have participated in the research process. The questionnaire comprised of scale sets covering Attitude, Digital Advertisement, Product Knowledge, Environmental Concern and Willingness to Buy. The type of analysis used to conduct the research are Cronbach's Alpha for Reliability Statistics, Path Analysis, Structural Equation Modelling and One-Sample Kolmogorov-Smirnov Test. The medium used to conduct the analysis is through IBM SPSS and AMOS.

Findings: - The results revealed that Attitude, Digital Advertisement and Product knowledge have significantly positive impact on Willingness to buy, whereas Environmental Concern does not have a significant impact on the dependent variable.

Practical Implications: - After analysis the diagrams and the tables seemingly represented a powerful instrument for achieving attitude, stereotype, product knowledge and attitude change. The findings have proved about the importance of the variables which can help in the decision-making process while purchasing an automobile.

Keywords: - Digital Advertisement, India, Automobile, Willingness to Buy, Attitude, Product knowledge, Brand.

1. Introduction

In terms of revenue and the several other industries directly and indirectly touched during manufacturing, that can also be called as the meta market, the automobile industry is a massive economic player on a global scale. Since its humble origins in the 1900s, the United States has been at the forefront of the business. For many years, they have produced more vehicles than any other country; however, this has reversed in recent years, with China and India posing tough competition. Marketing, maintenance, and manufacture are all parts of the car industry. The manufacturing sector alone employed over 13 lakh people in India in 2018. Globally, the industry directly employs about 40 million people and indirectly employs many more. Around 80 million vehicles are produced worldwide.

The automobile industry is a symbol of humankind's technological miracle. As one of the world's fastest growing industries, its dynamic growth phases are explained by the nature of competition, product life cycle, and consumer demand. For an example, in the case of two American corporations, the dynamic interaction of various stakeholders shaped not just the formulation of their codes, but also the measures towards implementation and monitoring (Tulder & Kolk, 2001). A high perception of brand love strengthens the brand's faith, relationship, and trust, and increases consumer (Loureiro et al., 2012). With the rising proliferation of brands in the market, it is both inevitable and difficult for firms to differentiate their brands from competitors (Kaur & Kaur, 2019). Consumer demands for styling, safety, and comfort, as well manufacturing efficiency, are now occupying the global automobile industry. With worldwide mergers and the shift of industrial centres to burgeoning developing economies, the industry is at a crossroads.

Brand management is a technique used by businesses and marketers to create an emotional bond between customers and their products. Over time, brand popularity is thought to be the accumulation of market acceptance and brand goodwill (Kim & Chung, 1997). In a society dominated by consumerism and branding, understanding the relationship between brand equity, product-related features, pricing and finally market dominance is crucial (Fetscherin & Toncar, 2008). Brand management creates a mental image of the product or brand in the mind of the buyer. The effectiveness of the comparison advertising format will vary as a function of consumers' experience with this format, and will be heavily influenced by both the market position of the advertised brand and the type of comparison information that is presented, according to a fundamental premise underlying our cross-cultural research (Nye et al., 2008). This lays the groundwork for attracting new clients and strengthening existing ones' loyalty to the brand. Brand management is also critical for every company because it helps them to evaluate their brand's performance as well as develop and adapt to changing situations

in the industry of automobiles. "Value is always determined uniquely and phenomenologically by the beneficiary," and this premise highlights crucial concerns for customer knowledge and mindfulness of their actions and behaviours (Tregua et al., 2015).

2. Literature review

The automobile sector has a large multiplier effect on a country's growth and is thus capable of being the driver of economic growth due to its extensive forward and backward links with various major segments of the economy. It plays a huge catalytic function in boosting the transportation sector on the one hand and assisting the industrial sector on the other to grow faster and so generate significant employment possibilities. Furthermore, as many nations open their borders for trade and build international road links, the vehicle industry will play a vital role in growing exports and imports (Hussain & Padhy, 2021). Because global scaling is a logic of multinationalization, its emphasis on international operations (vs. exporting) and speed of growth is compatible with the wider multinationalization literature (Reuber et al., 2021). Now in order to sell the automobiles, digital advertising is a critical component in the development of brand trust and loyalty. Aside from the product group and store brand positioning, buyers' propensity to test a new store brand is influenced by other psychological constructs and characteristics of purchasing behaviour (Zielke & Dobbstein, 2007). Artificial intelligence (AI) has dramatically changed the way organizations communicate, understand, and interact with their potential consumers (Rodgers & Nguyen, 2022). Process intermediation between specialised units at numerous locations across time zones gives speed advantages over process concentration in one site (Manning et al., 2015). The features used in digital advertising, such as pattern, texture, inner meaning, or secret message, attract the consumer to a specific brand. Due to the changing buyer and seller relations, companies need to adapt their marketing strategies according to the new digital age (Caliskan et al., 2020). Advertisement using online channels such as websites, downloadable material, and more is referred to as digital advertising. Text, image, audio, and video are all examples of digital ad forms. The goal of digital marketing is to increase the company's business exposure, leads, and sales by reaching out to people who are looking for the appropriate automobiles and services. Personal networks' information and resource features are thought to enhance organisations' financial metrics such as sales and profitability (Zhou et al., 2007). Online marketing is the method of promoting your business online to potential leads and strong customers by itself. The emotions connected with self-image, negative stereotyping, and the desire to safeguard the physical environment were studied in this study. The current study is based on three key lines of theory: theories of SIC with users of a certain product, stereotype transformation, and gamification. The inquiry also considers

theoretical hypotheses about the consequences of environmental concern and product knowledge. Environmental concern is defined as a self-evaluation of facts, as well as one's own and others' attitudes and behaviours in regard to the environment. It has been discovered to be highly dependent on a person's environmental ideals and to have a considerable impact on environmental intentions. A person's self-concept is believed to be rooted in environmental concern. Empirical studies of the possible connection between environmental concern and attitudes to “green” products have typically concluded that there exists a growing awareness among many consumers of the harm being done to the environment and hence that green products are beneficial.

2.1 Objectives

- To examine how willingness to buy is affected by attitude.
- To examine how willingness to buy is affected by product knowledge.
- To examine how willingness to buy is affected by environmental concern.
- To examine how willingness to buy is affected by and digital advertisements.

2.2 Willingness to Buy

Willingness to buy is basically a consumer's behavioural intent to purchase a specific product. Now on the other hand customization plays a vital role in manufacturing of a automobile or a product which seeks consumers attention. Basically, it refers to how consumers perceive firms' use of social media platforms to provide them with personalised products, such as personalised information and services based on their preferences. This can also be said that willingness to buy makes it easier for the advertisement or the emotions to reach customers while also increasing their perception of the brand's worth. Content matched to the tastes of consumers creates individualised brand experiences, increasing brand identification and positive brand knowledge in consumers' minds (Cheung et al., 2021). Advances in social media technologies enable marketers to maintain a dialogue with consumers and discuss topics of personal interest, motivating them to contribute their thoughts and ideas to improve the brand's offerings (Cheung et al., 2021), facilitating value co-creation (Cheung et al., 2021). Interactivity is rooted in two-way communication between brands and consumers, and is considered one of the most critical components in driving consumers' intention to co-create value on social-media platforms. Advertisements shape people's opinions about a certain brand. This indicates that a brand's advertising tactics and strategies are entirely responsible for forming an attitude in the customer's mind that leads them to purchase the brand. Advertisements have an effect on the cognitive state of mind that develops, as well as the attitude toward

the depth of the advertisement, which leads to buy intentions. Corporate brands provide consumers with unique information and increase their purchasing intent for automobiles. Aside from that, when the corporate and product brand images coincide, consumers buying intention increases (Kato, 2021). Advertisers and Marketing executives increasingly view the needs and desires of consumers around the world as ever homogenized (Mueller, 1991).

2.3 Digital Advertisement

Digital Advertisement is a crucial component of strong and effective brands, as it allows them to distinguish their products from those of their competitors. The expanding availability of media programming and advertising around the world is evident when one considers the growing number of broadcasting media sets in use (Smith Speck & Roy, 2008). Brands distribute their social media advertising over several channels, including Facebook, Twitter, Instagram, and YouTube. Because consumers utilise numerous social media platforms, brand communications on one platform may produce engagement within the same platform (direct impacts) and may influence brand engagement on other platforms (Unnava & Aravindakshan, 2021). New digitalized technologies have indeed revolutionized the way firms are conducting their business with buyers abroad, by providing significant help in searching for, targeting, serving and communicating with customers in any part of the (Katsikeas et al., 2019). Marketers regard brand personality to be an important component of brand image, and it is linked to consumer perceptions of brand value. Advertisement, as an important social institution, may play a considerable role in the creation of self-perception (Peterson, 1994). Product-level advertising plays a critical role in providing information to consumers and increasing their knowledge about products in the marketplace during consideration set formation (Miller et al., 2021). New information (for example, brand positioning information) that is congruent with past knowledge (for example, nation schema) reinforces previous prejudices and is seen favourably (Magnusson et al., 2018). This is how an urge to buy something comes into picture that develops into willingness to buy caused by the effect of digital advertisement. As a result, when people associate logos with certain personality features, they begin to form relationships with the companies, which aids in the development of brand image in the minds of consumers. Recent developments in design and manufacturing technologies have made it difficult to differentiate items simply on quality, and design has emerged as a key aspect in assessing product value (Koga, & Aoyama, 2022). As a result of the foregoing, it can be deduced that brand personality mediates the relationship between Brand logo and brand image. Consumer engagement refers to how interested customers are in the offerings and brands, whether they are interested or not, whether they are satisfied with the product description or not; all of this is determined by the user's purchase intent. The better the product, the higher the level of

consumer involvement. Apart from that, celebrity endorsers play a part in this job by attracting clients to them, resulting in increased sales and profit generation for the company. According to several studies, there is a favourable association between celebrity endorsers, brand credibility, and end consumers. To support it, media characterises characteristics to minimise synchronisation with high transmission velocity, that is, the instant or very fast transfer of messages (Tenzer & Pudelko, 2016).

H₁: - Digital Advertisement has a positive effect on willingness to buy.

2.4 Attitude

Attitude towards a behaviour measures the degree to which an individual has a favourable or an unfavourable evaluation of the behaviour being measured (Fatoki, 2021). Out of the total set of consumer attitudes, the mostly researched ones were attitude towards the advertisement, attitude towards the brand and purchase intention. A high correlation has been found between the level of likeability towards the advertisement and the attitude towards the advertisement (Roy et al., 2013). It is also known that the misalignment of a person's actual or ideal self-concept with the image of purchasers of a particular type of product, referred to as "self-image congruence" (SIC) with buyers of that type of product (Zhou, 2004), can influence a person's attitudes toward the product in question. This notion is linked to the brand's attitude, which is followed by purchasing intentions. According to studies, the customer's buying behaviour is influenced by the indirect trip from their attitude about the commercial to their attitude toward the brand. According to this concept, attitude is the most important factor in approving feelings and beliefs about a brand. According to studies, 90 percent of the time, the customer's attitude is favourable until an external influence comes and upsets the customer's perspective. In the real world of purchase decisions, consumers generate an overall perception of their informedness without needing attribute-by-attribute justification (Hochstein et al., 2018). This idea is entirely based on how people feel about commercials and what they want to get out of them. Advertisements shape people's opinions about a certain brand. This indicates that a brand's advertising tactics and strategies are entirely responsible for forming an attitude in the customer's mind that leads them to purchase the brand. Advertisements have an effect on the cognitive state of mind that develops, as well as the attitude toward the depth of the advertisement, which leads to buy intentions. Therefore, a better theoretical understanding of these interactions is required to acquire insights into why and how brand positioning helps the attitude shifts induced by advertising frequency (Heinberg et al., 2017).

H₂: - Attitude has a positive impact towards willingness to buy.

1.3 Product Knowledge

The amount and depth of a person's product-related encounters contribute to this knowledge. It can also include subjective aspects (often deriving from societal norms) that are not based on objective experience or facts. Nowadays customers are very cautious before proceeding to buy a vehicle. When companies issue product recalls and publicly admit to manufacturing flaws, they damage consumer opinions of their products and incur reputational and financial damages (Zhou et al., 2018,). Now advertising scepticism is also a big reason to look out for while observing an advertisement. Advertising scepticism, defined as a general predisposition to question advertising promises, is an important element in this regard (Wilson et al., 2021). So this is a big reason why product knowledge is necessary. Apart from that product quality judgment, which captures a consumer's perception of workmanship, technological advancement, and reliability of products (Harmeling et al., 2015). Product knowledge, regardless of its source, is known to be an important factor in consumer attitudes toward Electronic Vehicles that influences the ways in which people organise, interpret, and explain their thoughts about the product. New product information" and "improves search efficiency" can result in the application of greater discrimination and more intense focus when evaluating the product; and can influence expectations of product performance, characteristics, and level of satisfaction anticipated from using the product, and can influence expectations of product performance, characteristics, and level of satisfaction anticipated from using the product. Customer preferences are vital in product design and development because they assure that the product will be accepted by the market. A customer preference is defined as the fundamental assessment of a product's worth and the subsequent consumer reaction following the value appraisal (Ghazali et al., 2018). As a result, attitudes about the product and a person's sentiments of self-confidence while considering a product purchase are likely to be affected. Consumer knowledge about vehicles might come from television commercials, newspaper or magazine articles, talks with others or simple exposure.

H₃: - *Product knowledge has a positive impact towards Willingness to buy.*

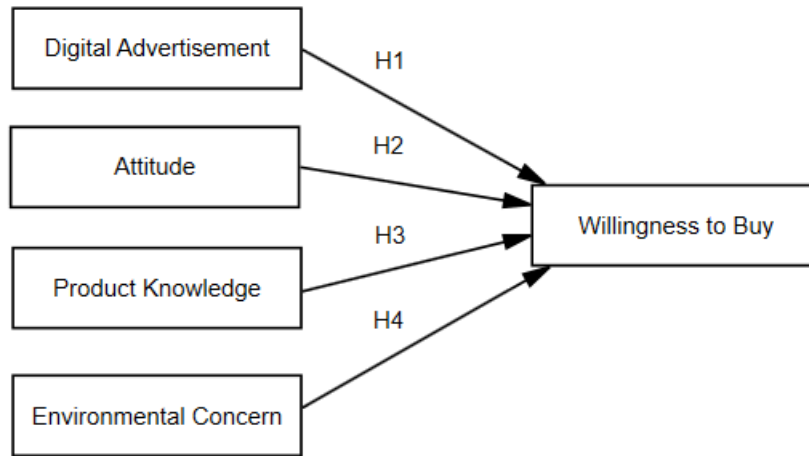
1.4 Environmental Concern

Environmental concern has been characterised as the consciousness of realities, one's personal attitudes and actions toward the nature, along with those of other individuals. Rising concerns of government and non-government organizations and increasing awareness of consumers are also the reason for companies going for eco-friendly products (Punyatoya, 2015). Increase of environmental issues have risen concern among the general public. Growing population and resource depletion are wreaking havoc on the

worldwide ecology. In recent years, increased consumer environmental consciousness has fueled green consumption. To address the global environmental disaster, customers should be permitted to perceive major environmental damage and so modify their shopping behaviour. Green consumption attitudes have a substantial impact on purchasing intent (Tu et al., 2022). This has been proven to significantly depend on a user's environmental practices and to have a considerable influence on intentions connected to the environment and issues linked with sustainability. Sustainability is an extremely important issue that cannot be ignored in the future, and maintaining biological diversity is one of the central issues that ensures sustainability (Aoki, 2014). Evidence based research on the relationship between environmental concern and sentiments regarding "green" items has often come to the conclusion that customers are becoming more conscious of the harm being done to the ecosystem and therefore see the usefulness in sustainable products (Bennett & Vijaygopal, 2018). Various ecological challenges are emerging either nationally and internationally as a result of the advancements in industrialization, research, technology, and urbanization. Mass networking can be employed as a mechanism to effectively spread knowledge of a wide range of contemporary environmental scenario to a big number of individuals within a shorter span of time. The similarities in country environmental conditions positively influence the degree of control (Prieto et al., 2015). Engagement between environmental educators and students or regular people can assist in determining the impact of social media and the importance of environmentally friendly education. Governments around the globe are serious to address environmental concerns through sustainable transport policies including promoting the share of EVs in the market. Consumers' product assessments and purchase decisions may be influenced by sustainability labelling on the front page of a print advertisement (Cho, 2014). The understanding of customers' behavior towards the purchase and usage of EVs will provide a clear insight into how these issues can be battled to save environmental degradation (Ashraf Javid et al., 2021). Presently, consumers use social media to converse with someone else regionally and abroad about from small to large-scale environmental concerns and to incorporate environmental underlying cause. Therefore, it can be concluded that people do care about CSR activities. CSR localization takes into account the necessity to adapt to the local situation in order to generate effective social actions (Zhao et al., 2014).

H4: - *Rise of environmental concern among consumers has a positive impact towards willingness to buy.*

Conceptual Framework:



3. Research methodology

The proposed hypothesis was examined with a help of a survey. For that a research design was created for deriving the proposed hypothesis for the variables which are digital advertisement, willingness to buy, environmental concern, attitude towards purchasing an automobile and product knowledge. Structural equation method, annova, path analysis and descriptive statistics are used.

Data collection and sampling techniques

To collect input for the study, convenience sampling approach was used. When it comes to selecting respondents for a study, this strategy is clear because there wouldn't be any issues with studying data from a specific demographical region. A convenience sample is a type of non-probability sample that is selected from a group of people who are easy to contact or approach. Researchers utilise convenience sampling to collect market research data from a readily available pool of respondents. It is the most commonly utilised sample procedure since it is rapid, easy, and economical. Members are routinely approached for participation in the sample. To collect data, the research instruments were sent to teenagers and young adults. Respondents were chosen from the region of Kolkata. Many additional studies also employed the same methodology. Then, using Google Forms, data was gathered via a self-administered questionnaire survey. The language chosen was English to write the survey. The respondents gave their time voluntarily and were not paid. Before they answered the questionnaire, the researcher gave these people a brief explanation of the study's goals. Nevertheless, 95% of those contacted consented to take part in the study.

The method produced an 82.6 percent response rate from the population that was contacted (87.4 per cent. of those who agreed to participate in the study). 400 Indian people made up the final usable sample.

Measures

Scales that were modified from various earlier studies were employed in the investigation. The intention and awareness toward digital advertisements were assessed using four items. To measure willingness to purchase, attitude toward the brands, product knowledge, and environmental concern for the study, a five-item perceived brand value scale was modified. The items under Digitalization were “App usage improves convenience, allowing easy shopping and reducing consumers’ cognitive, physical, and psychological efforts; Whether or not an app is used, affects the role of hedonic aspects, quality, and satisfaction quality, and satisfaction; App usage affects the relationship between previous digital experience and intention; Apps should be both suitable and pleasant to enhance the shopping experience.; Apps should offer a more accessible and customized shopping; Companies have to focus on the factors that could increase satisfaction, namely the three dimensions of quality information, service, and system.” The items under Environmental Concern are “People worry too much about human progress harming the environment.; It is just too difficult for someone like me to do much about the environment.; I am a person who does what is right for the environment, even when it takes more time or costs more money.; I am willing to pay higher taxes to protect the environment.; We cannot rely on modern technology to solve environmental problems; Threats to the environment are not my business.” The items under Product knowledge are “I believe that purchasing of automobiles is kind of beneficial, attractive.; Government support for the widespread use of EVs is wise.; My attitude towards purchasing of automobiles is favourable.” The items under Willingness to purchase are “I would be very willing to buy a commercial vehicle.; I would seriously consider buying an automobile.; I would be enthusiastic about the prospect of buying an EV.; I would consider it important to think carefully about buying a vehicle.” For the questionnaire a five pointer Likert Scale was constructed which is “Strongly Agree”; “Agree”; “Neutral”; “Disagree”; “Strongly Disagree” where 1 being (Strongly Agree) and 5 being (Strongly Disagree).

Constructs	Item	Coding	Authors
Digitalization	App usage improves convenience, allowing easy shopping and reducing consumers' cognitive, physical, and psychological efforts.	DG1	(Peng, Zhang, Zhang, Dai, & Li, 2014)
	Whether or not an app is used, affects the role of hedonic aspects, quality, and satisfaction quality, and satisfaction.	DG2	
	App usage affects the relationship between previous digital experience and intention.	DG3	
	Apps should be both suitable and pleasant to enhance the shopping experience.	DG4	
	Apps should offer a more accessible and customized shopping.	DG5	
	Companies have to focus on the factors that could increase satisfaction, namely the three dimensions of quality information, service, and system.	DG6	
Environmental Concern	People worry too much about human progress harming the environment.	EC1	(Bennett & Vijaygopal, 2018)
	It is just too difficult for someone like me to do much about the environment.	EC2	

	I am a person who does what is right for the environment, even when it takes more time or costs more money.	EC3	
	I am willing to pay higher taxes to protect the environment.	EC4	
	We cannot rely on modern technology to solve environmental problems.	EC5	
	Threats to the environment are not my business.	EC6	
Product Knowledge	I have little knowledge about vehicles.	PK1	(Bennett & Vijaygopal, 2018)
	I have little experience of EVs.	PK2	
	I am not familiar with commercial vehicles.	PK3	
	I am largely ignorant of automobiles.	PK4	
Attitude	I believe that purchasing of automobiles is kind of beneficial, attractive.	AT1	(Bennett & Vijaygopal, 2018)
	Government support for the widespread use of Evs is wise.	AT2	
	My attitude towards purchasing of automobiles is favourable.	AT3	
Willingness to Buy	I would be very willing to buy a commercial vehicle.	WB1	(Bennett & Vijaygopal, 2018)

I would seriously consider buying an automobile. WB2

I would be enthusiastic about the prospect of buying an EV. WB3

I would consider it important to think carefully about buying a vehicle. WB4

Table: Research Constructs

4. Analysis and results

Interpretation

The demographic information was requested at the beginning of the questionnaire. The respondents were asked their name, age, and gender, which was optional. Aside from that, the respondents were requested to supply two further pieces of information: their monthly income and their occupation. Both fields have to be filled out. The respondents were informed as to why those two fields were required to be completed in order for the research to be carried out *Table: Demographics* can be used as a reference.

S No.	Classification	Category	Frequency	(%)
1.	Gender	Male	223	55.75
		Female	176	44.25
		Total	400	100
2.	Age	Between 24-28	50	12.50
		Between 28- 32	245	61.25
		Between 32- 36	105	26.25
		Total	400	100

3.	Occupation	Employed	117	29.25
		Unemployed	12	3
		Student	203	50.75
		Business	68	17
		Total	400	100
4.	Monthly Income	Less than 10000	135	33.75
		Between 10000-50000	127	31.75
		Between 50000-100000	82	20.5
		100000 and above	56	14
		Total	400	100

Table 1: Demographics

The table 1 lists the 400 respondents demographic data in total. Out of the total responses, it was noted that 44.25 percent were female and 55.75 percent were male. A percentage of 61.25 of the respondents, or the majority, are in the "28-32" age range. "32 - 36" is the second-highest age group, with a percentage of 26.25. The third largest age category, with a percentage of 12.50, is "24 to 28." According to the replies, "50.75%" of them are students, "29.25%" are in the workforce, "17%" are entrepreneurs, and "3%" are unemployed. A percentage of "33.75%" earns less than Rs10,000 per month, "31.75%" percent of respondents earns between Rs 10000 - 50000 per month, around "20.50%" of the respondents earns between Rs 50000 -100000 per month while only "14%" of respondents earns above Rs 100000 per month.

One-Sample Kolmogorov-Smirnov Test

		Digital Advertisement	Attitude	Product Knowledge	Environmental Concern
N		402	402	402	402
Normal Parameters ^{a,b}	Mean	1.4403	1.5108	2.4975	2.2597
	Std. Deviation	.59557	.71404	1.07916	.80770
Most Extreme Differences	Absolute	.302	.345	.146	.153
	Positive	.302	.345	.146	.153
	Negative	-.230	-.237	-.087	-.084
Test Statistic		.302	.345	.146	.153
Asymp. Sig. (2-tailed)		.000 ^c	.000 ^c	.000 ^c	.000 ^c

Table 2: One-Sample Kolmogorov-Smirnov Test

Table 2: One-Sample Kolmogorov-Smirnov Test depicts the results of the descriptive statistics. This Kolmogorov-Smirnov test (P-value > 0.05) for the constructs assured the normality of the data. The results indicated that five variables (digital advertisement, attitude, product knowledge and environmental concern) suggest that the respondents in general agreed with the questions. The standard deviations of all the constructs ranged from 0.5 to 1.07 reflecting significant variability in the data set. Since the P-values are less than 0.05, this means that all the variables are perfectly significant with each other.

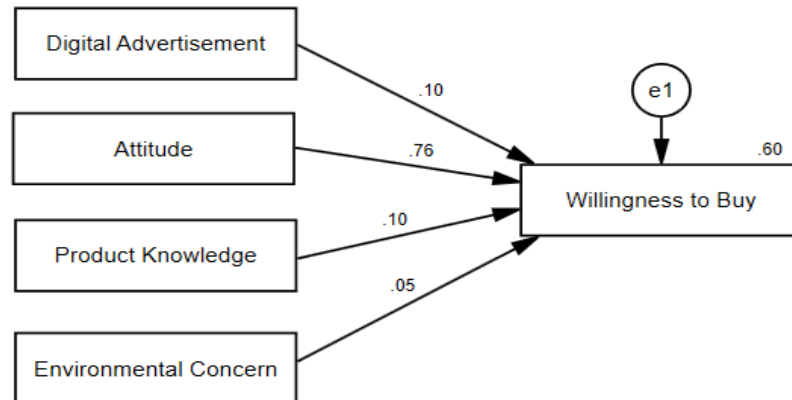


Figure 1: Path Analysis

Path analysis is a method for determining and assessing the impacts of a collection of factors operating on a specified outcome via numerous causal routes. It is an antecedent to and subdivision of structural equation modelling. Path analysis has several advantages that account for its continued popularity, such as providing a graphical representation of a set of algebraic relationships among variables that concisely and visually summarises those relationships and designed to allow researchers to examine not only the direct impact of a predictor on a dependent variable, but also other types of relationships, such as indirect and spurious relationships. Other from just that, it displays weather forecasters appear to have greater, poorer, or no correlations with the dependent variable at a glance. As per the figure 1 of path analysis it can be seen that “Attitude” has the highest level of correlation with the dependent variable which is “Willingness to buy” which is 0.76 which means that it is the strongest and the most significant link to establish the variable. The second variable is “Digital Advertisement” and “Product Knowledge” which has an equal level of correlation of 0.10 towards the dependent variable. The last variable is “Environmental Concern” which has a correlation of 0.5 towards the dependent variable which is the least significant link to represent “Willingness to Buy”. The figure “Path Analysis” is used as a reference for explanation.

			Estimate	S.E.	C.R.	P	Label
WB	<---	DG	0.105	0.032	3.324	***	Satisfied
WB	<---	AT	0.639	0.026	24.257	***	Satisfied
WB	<---	PK	0.056	0.017	3.198	0.001	Satisfied
WB	<---	EC	0.034	0.023	1.445	0.148	Not Satisfied

Table 3: Path analysis estimates

From the *Table 3: path analysis* estimates it can be interpreted that the dependent variable which is *Willingness to Buy* has a significant relationship with the independent variable *Digital Advertisement* as the P-value is below 0.05. The next independent variable which is *Attitude* also has a significant relation with the dependent variable as the P-value is below 0.05. The third independent variable *Product knowledge* also has a significant relation with the dependent variable *Willingness to Buy* as the P-value is below 0.05. The last independent variable *Environment Concern* does not have a significant relationship with the dependent variable with *Willingness to Buy* as the P-Value is 0.148 which is above 0.05.

Reliability Statistics

Cronbach's Alpha		
Based on		
Cronbach's Alpha	Standardized Items	N of Items
.794	.825	5

Table 4: Cronbach's Alpha

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted	<i>Table 5: Item-Total Statistics</i>
Digital Advertisement	7.7518	6.284	.629	.473	.749	As per <i>Table 4: Cronbach's Alpha</i> , the Cronbach's alpha is commonly accepted to
Attitude	7.6813	5.735	.665	.689	.729	
Willingness to Buy	7.7083	5.912	.684	.669	.729	
Product Knowledge	6.6946	5.136	.454	.255	.828	
Environmental Concern	6.9324	5.599	.593	.374	.748	

be 0.7 in order to assure overall testing app every parameter. According to the investigation, all five variables have a desired Cronbach's alpha value (above 0.72), which is 0.794 confirming their reliability.

The item-total statistics in the above *Table 5: Item-Total Statistics* indicate a construct's statement-wise efficiency. It is critical to understand whether all assertions effectively measure a factor. As a result, item-level statistics are computed. The above table shows that the lowest corrected statistics for Product knowledge are 0.454, which may have contributed to lower overall reliability. The Cronbach alpha value of 0.828 for the item deleted confirms this.

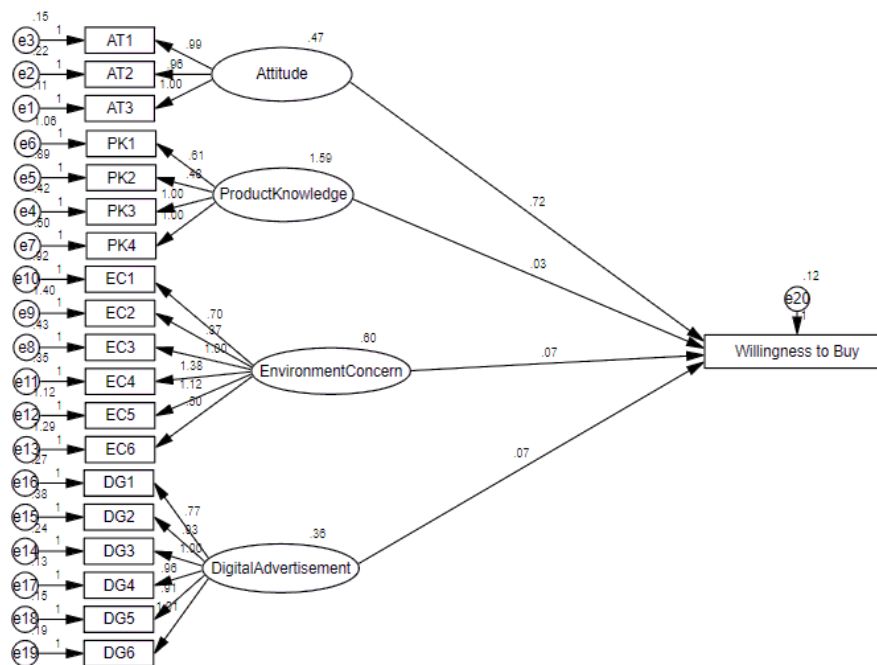


Figure 2: Structural Equation Modelling

Structural equation modelling (SEM) is a study tool that is frequently used in the field of nursing to validate complexities related to numerous themes such as individuals, health, and the environment. It formalises the structural relationships between the variables of interest into an equation system.

	1	2	3	4	5
DG1	0.606				
DG2	0.536				
DG3	0.666				
DG4	0.877				
DG5	0.822				
DG6	0.781				
AT1		0.771			
AT2		0.772			
AT3		0.812			
WB1			0.715		
WB2			0.803		
WB3			0.756		
WB4			0.757		
PK1				0.714	
PK2				0.644	
PK3				0.851	
PK4				0.855	
EC1					0.801
EC2					0.876
EC3					0.55

EC4	0.593
EC5	0.643
EC6	0.425

Table 6: Rotated Component Matrix

5. Discussion and managerial implications

The results have several implications for the marketing of automobile both by EV or petrol/diesel vehicles. After analysis the diagrams and the tables seemingly represented a powerful instrument for achieving attitude, stereotype, product knowledge and attitude change. Further by applying gamification to the stimulation of the mass market for automobiles is therefore to be recommended, as are measures to improve the public stereotype of willingness to buy containing various factors into account. From the data which was collected from the respondents, it was found out that Attitude has the highest level of correlation with the dependent variable whereas Environmental concern is the lowest. So, the managerial implication is that in terms of attitudinal effects and purchasing behaviour characteristics, the specific attitude toward purchasing a vehicle had the most explanatory power. However, the significance of many attitude drivers varies from person to person.

6. Conclusion

This study investigates how internet advertising, product knowledge, and environmental concerns influence a consumer's propensity to acquire an automobile through both search and non-search advertising. The variable data was gathered in order to analyze numerous empirical models. These models were created to represent the link between the independent factors and the dependent variable which is willingness to purchase. The goal of this study is to assess the effectiveness of online advertising in both search and non-search formats, as well as how product knowledge influences the buying decision, which develops into an attitude, and how environmental concerns influence a customer's decision to purchase an EV rather than a regular gasoline vehicle.

7. Limitations and further scope of study

The research has been done with gathering data only from the region of Kolkata. So as a result, the opportunity of the further scope of study is to research about the rest of India and get insights from a large range of customers. Currently a parameter is set for the age which is between 24-36, but further the range of the age limit can be extended to 65 which will give a lot of inputs to this research paper. Apart from that only 4 variables were identified, but further more and more factors could be affecting the purchase decision of the customer which might lead to willingness to purchase an automobile. Lastly only Indian market was studied for this scenario, later globally these factors can be researched which will provide a lot of insights which might lead to a new perspective coming from the consumer.

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