Applicability studies of Mintzberg's Models of Strategic Decision Making in the Development of the Nepalese Automobile Market: An Investigation with Reference to Industry 5.0

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Abstract

The main aim of conducting this research in Nepal's Automobiles Sector is to find out the problems and to recommend the government and the auto dealing apex authority, NADA for its scientific management. Strategic decisions are the handful of decisions that drive or shape most of an institution's activities, are not easily changed, lasting comparatively for a long period of time when once made and have the greatest impact upon organizational performance. Strategy is a grand concept, but it is the individual strategic decisions which matter in the organizational development. Descriptive research design was used taking 257 Samples. SPSS and other statistical design were used to make findings relevant. Having analyzed the Henry Mintzberg's 4 different modes of strategic decision making, (Entrepreneurial, Adaptive, Planning and Logical Incrementalism Mode), primarily it is found the Entrepreneurial and Adaptive incrementalism mode of decision making are found relevant and in practice . Planning mode was found to have comparatively poor application therein. Industry 5.0 concepts are found partially applicable in a country like Nepal where labors are abundantly available and the auto market is labor intensive.

Keywords: Mintzberg's Decision models, Development of Nepalese Automobile Market, Industry 5.0, NADA, Sustainability

Introduction

The choice to "restructure" a cost and project management consultancy is made using Mintzberg et al(1976) general model of the strategic decision process. The study doesn't focus on how the choice was carried out; rather, it focuses on the processes that led to the initial decision to "restructure."

Strategic management is the ongoing planning, monitoring, analysis, and evaluation of all requirements that a business needs to meet in order to achieve its goals and objectives. Organizations will need to

continuously analyze and review their success methods as business circumstances change. The process of strategic planning has five distinct phases: 1. Setting goals or objectives, 2. Analyzing, 3. Formulating, 4. Implementing, and 5. Monitoring a strategy.

Strategic Management is a set of managerial decisions and actions that determine the long term performance of a corporation (Wheelen and Hunger). According to Henry Mintzberg, the strategic decision making models includes the following model.
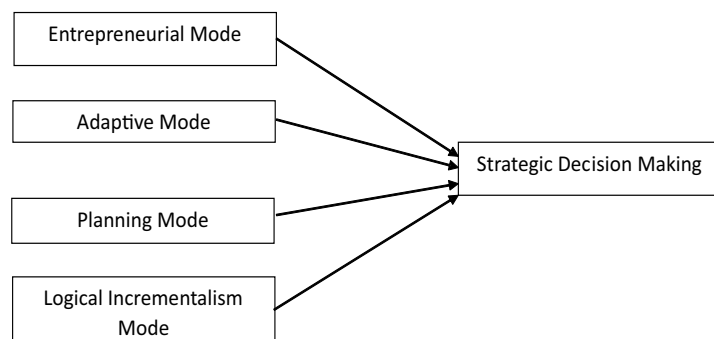
(Theoretical Concepts of Henry Mintzberg's Strategic Decision Model)

Definition of individual model is dealt hereunder (Mintzberg1976)

Entrepreneurial Mode -

- The focus is on opportunities. They think the problems are secondary. The decision maker continuously searches for opportunities. He / She exploit them for the benefit of the organization.

- Decision making is guided by the decision maker's personal vision of direction having brilliant insights. He / She possesses qualities to convince others to adopt his/her ideas.

Adaptive Mode-

- Decision making is characterized by reactive solution to existing problems. That's why it doesn't take a proactive approach to search new opportunities.

- Priority of objectives is not clear and it is decided through bargaining.

Planning Mode -

- It includes proactive search for new opportunities.

- It involves a reactive solution for the problems existing.

- Gathering information for decision making.

Logical Incrementalism Mode-

- The mission and goals of top management are clear.

- Decisions are not made at one go. It is based on small incremental choices. A series of partial commitments are made.

About a century ago, Nepal, a stunning Himalayan nation, witnessed the arrival of its first automobile. Roads had not yet been constructed at the time, and people carried vehicles rather than cars carrying people. When British Prince Edward crossed the border in a car to go tiger hunting in Kasara of Chitwan in 1922, it was the first time an automobile had ever been driven in Nepal. Since there were no roads at the time, it had to be physically carried by porters from Bhimphedi to Thankot due to the passion of Nepal's rulers at the time, the Ranas, for automobiles. To hoist the cars, hundreds of young men from Makwanpur villages were employed. Only in 1957, when the Tribhuvan Highway was finally opened, did the era of scars on human shoulders finally come to an end.

The Nepal Car Dealer Association (NADA) was founded about 40 years ago with the goal of facilitating the automobile industry and bolstering the national economy through the revenue and service sectors, but it hasn't yet flourished. However, the government's initiative to apply the Euro 3 standard is commendable. In Nepal, air pollution can be somewhat addressed by using Euro III. According to a recent research, autos are responsible for 60 percent of the city's air pollution. 180,00,000 of Nepal's 3 million registered automobiles are in the Bagmati zone. (DoTM, www.dotm.gov.np)

Since Tata Motors and Maruti Suzuki Cars joined the market and became a prominent player in Nepal's automobile sector with over 70% of the market share for commercial vehicles and passenger vehicles, respectively,

the automotive industry has experienced a boom. In the 1980s, both TATA Motors Nepal (SIPRADI Trading) and Suzuki Motors (CG Moto Corp) entered the market and have held the top spot ever since. Volkswagen, Ford, Honda, Toyota, Mahindra, and Hyundai are some additional official distributors of passenger and commercial vehicle segments to enter Nepal. These days, they offer everything from hatchbacks to sedans to CUVs to SUVs to premium sedans and luxurious crossovers.2020 really was a roller coaster ride. The automotive industry was also caught in this ride, being one of the worst-hit industries during the pandemic. (Nepal Drives, 2021 Review)

In the Nepalese automotive industry, eight new brands entered the market in 2021. The Shankar Group subsidiary Jagdamba Motors Pvt. Ltd. introduced the Malaysian brand Proton to the Nepalese market. The Saga sedan was the brand's initial vehicle, and the X70 luxury SUV came next.

The SYM NH T200 adventure bike was introduced in the Nepalese market by KG Intercontinental Pvt. Ltd., the brand's authorized distributor for its motorcycles and scooters there. SYM has just returned to Nepal. Similarly, to cater to the cruiser motorcycle enthusiasts in the country,

KTM International Trading Pvt. Ltd introduced two Keeway motorcycles, K-Light 202 and Patagonian Eagle 250 in Nepal. D-lifestyles Pvt. Ltd. launched Super Soco, a premium range of EV bikes and scooters with the slogan "Revolt", in the Nepalese market.

The TVS Ntorq was a well-received entry to the 125cc scooter market when it was unveiled in 2018. The Ntorq 125 scooter checked all the appropriate boxes for a product aimed at young people in terms of fashion, ease of use, performance, and convenience. The scooter had a significant impact on the 125cc scooter market, selling more than 1 lakh units worldwide, including in Nepal. In 2021, TVS Motor Company declared that the TVS Ntorq 125 had reached the milestone of 50,000 units sold in Nepal. Three years after its debut, the scooter reached this sales milestone.

Nepal Motor Vehicles Sales development recorded 21,805 units in Dec 2019, compared with 21,059 units in the previous year. See the table below for more data. The annual growth rate of car selling in Nepal is recorded at 27.89 %. The figure is below (www.ceicdata.com)

Table 1:

Last	Previous	Min.	Max.	Unit	Frequency	Range A.D.
21805 2019	21059 2018	1400 2005	21805 2019	Nos. Unit	Yearly	2005- 2019

Current record shows that 447759 vehicles are registered in Kathmandu valley. Valley has registered 615 electric vehicles. There are 31000 trucks in Nepal. The number of two wheelers are 3.1 million in Nepal. (DoTM, July 4, 2018) .

NADA (Nepal Automobile Dealers' Association) is only the authorized body for the development of the Nepalese Automobile Market. The only national-level organization of automobile dealers, found with the vision of Automobile industry leaders to support the automotive industry, road environment, and authorities in traffic safety, and to contribute to overall National development.

However, in light of above discussion, few objectives have been generated according to Mintzberg's Models of Strategic Decision Making in the Development of the Nepalese Automobile Market. To test the applicability of the Mintzberg's decision making model in the view development of the Nepalese Automobile Industry. find the decision-making model that Nepalese automakers under the umbrella of NADA have adopted. To propose NADA about the possibility of symmetrical adoption of Mintzberg's decision making models keeping in view of concept of Industry 5.0

Theoretical Background

Mintzberg et al.'s (1976) general model of the strategic decision process is applied to the decision to 'restructure' a cost and project management consultancy. The study focuses upon the activities to reach the initial decision to 'restructure' and not the implementation of the decision itself.

Henry Mintzberg (1976) Strategic Management is the ongoing planning, monitoring, analysis and assessment of all necessities an organization needs to meet its goals and objectives. There are five different stages of the strategic planning process : 1. Setting goals or objectives, 2. Analysis, 3 Strategy formation, 4. Strategy implementation, and 5. Strategy monitoring. Strategic Management is a set of managerial decisions and actions that determine the long term performance of a corporation (Wheelen and Hunger).

NADA is only national-level authorized organization of automobile dealers, found with the vision of Automobile industry leaders to support the automotive industry, road environment, and authorities in traffic safety, and to contribute to overall National development (About NADA). When we look at the history of automobiles in Nepal, we have experienced hyper-growth in the past few decades and I believe this will continue. Just a few decades ago there were about 500 to 1,500 vehicles circulating within the entire industry. But just in this past one year a total of 28,000 vehicles got sold and these are all 4-wheelers (Dahal, S.P., 2019). A research conducted by (M.B. Karki & I Ghosal., 2022) on the topic entitled "Brand Management in Nepal Automobile Market with Reference to Consumer Behaviour" and found that the Nepalese auto users has no any brand preference but the price, safety standard, fuel economy and financing facilities affected their brand Choice.

From the above literature review it is clear that the availability of the Nepalese study in this field is almost measure. NADA has also not conducted any research for the development of the automobile industry in Nepal. But some report shows that there is an abrupt rate of increasing auto vehicles - both four and Two- wheeler in Nepal in the last 20 years. About 4,37,614 of auto vehicles have already been registered in the Department of Transportation Management (DoTM,2020) and out of which 3,41,623 are only Two- wheeler (www.dotm.gov.np) and two-wheelers are being added at the rate of 2,00,000 annually. Further, there is a gap of the basic understanding industry 5.0 concept in Nepalese context.

Research Methodology

Research Design

A Descriptive Research Design was used. The Customers / Users of Auto vehicles were considered as population for the study. Convenient and random both sampling were done with the respondents on the road sides, automobile seller points and workshops. For this investigation sample size were selected 257 as per the questionnaire distributed.

Research Tools:

SPSS and suitable statistical tools like averages, percentages, ANOVA, Cronbach's alpha test ,correlations test will be conducted for the validity of the test for the purpose of generalization.

Timing for the Research: For this study researcher have taken 3months whole. The research was initiated in September 2022 and took one month, from October 22 to November 2022, to collect data and conduct a pilot study.

Results and discussions

Table 2 describes the demographic profiles details of the respondents. The sample size of 257

Demographic Variable		Number of Respondents	Percentage
Gender	Male	102	39.69
	Female	155	60.31

Demographic Variable		Number of Respondents	Percentage
Age	20-29	57	22.18
	30-39	61	23.74
	40-49	45	17.51
	50-59	56	21.79
	60 and above	38	14.78
Occupation	Student	41	15.95
	Teacher	102	39.69
	Government Service	90	35.02
	Advocate	24	9.34
Vehicle Used	Own Vehicle (Motorcycles, cars)	124	48.25
	Public transport (Bus, Minibus)	117	45.53
	Taxi	7	2.72
	Office's Vehicle	9	3.50
Monthly Income	20000-29000	108	42.02
	30000-39000	64	24.91
	40000-49000	33	12.84
	50000 and more	52	20.23
Family Size	Single	29	11.28
	1-3 members	77	29.97
	4-6 members	130	50.58
	7-9 members	21	8.17

Table 2 describes the demographic profiles details of the respondents. The sample size of 257 was taken as a standard basis for the study. The female participants were counted as 155 and male participating in the inquiry 102 representing 60.31 and 39.69 percentages respectively. This means female side interestingly participated in the study.

When researcher look into the age variable of the respondents- the results showed that the highest age class (30-39 years) respondents were found 61 representing 23.74 percent followed by age class of 20-29 and 50-59 years as the second and the third age class group representing 22.18 and 21.79 . In the analysis it was also found that the lowest number of the participants were of the age class above 60 years contributing only 14.78 percent of the total respondents. This class is mostly using four wheelers indicating a high standard people in the context.

The results also made it clear that teachers were dominating in the test context coming 102 (39.69 percent) followed by government service holders and students representing 90 (35.02 %) and 41 (15.95%) in numbers. Occupation wise advocates were least (24, 9.34 %) in respondents.

It was found after test results that own vehicles (motorcycles, cars, jeep) users were more than users of general public vehicles (bus, minibus and auto rickshaw) , taxi and office vehicles. The respondents' numbers represented 124, 117 , 7 and 9 in respective order showing 48.25, 45.53, 2.72 and 3.50 in percentage fraction in the same order sequences.

So far as the text contexts respondents' monthly incomes were concerned , the results showed that the highest

number (108, 42.02 %) has fallen under the monthly income of Rs.20000-29000 followed by monthly earning group (64, 24.91%) with the earning of amount of monthly Rs. 30000-39000). Respondents earning more than Rs 50000 were 52 under study (22.23%) and lowest number of respondents (33, 12.84 %) were earning monthly Rs. 40000- 49000.

Family size of the text population was also studied and found that 130 (50.58%) respondents were having 4-6 members in their family followed by 1-3 members of 77 respondents. 21 (8.71) of the respondents were having 7-9 member family and single respondents' number was 21 (11.21%) of the auto users respondents. These results also gave further confirmation to the results of Census report of Nepal. Nepal has 56,43,945 family with family size of 4.32 (https://nepalindata.com)

Table 3 Reliability Analysis

Variables	Cronbach's Alpha	No. of Items
Entrepreneurial Mode	0.762	5
Adaptive Mode	0.844	5
Planning Mode	0.750	5
Logical Incrementalism Mode	0.880	5
Strategic Decision Making	0.790	3

Table 3 measures the internal consistency that is how closely related a set of items in a group and considered to be a measure of scale reliability. The Alpha value greater than or equal to 0.90 is considered as excellent, 0.9 to 0.8 is considered as good, 0.8 to 0.7 is acceptable (https://stats.oarc.ucla.edu) . The researcher's Cronbach's test value for every variable is above the acceptable to higher side of good limit. So, the test is valid and reliable and it is a good scale of measure.

Table 4 Descriptive Analysis of Entrepreneurial Mode

	N	Min.	Max.	Mean	Std. Deviation
Bring new brands	257	1	5	3.49	0.702
Fuel Efficient vehicles	257	1	5	3.65	0.885
Comfort and Safety	257	1	5	4.23	1.091
Price and Financing Schemes	257	1	5	3.60	0.943
Looks and Resale Values	257	1	5	4.12	0.898
Aggregate Average				3. 82	0.9038

Table 4 describes the descriptive analysis of entrepreneurial mode of decision making by the automobile seller authority of Nepal from the view point of auto clients. The highest mean, 4.23 was found with the decision making alternatives comfort and safety that made it clear that Nepalese auto users are more interested In comfort and safety. This is justifiable because most of the roads are rough , muddy , uneven and are not black topped. Looks and resale value is also emphasized by the auto clients (mean of 4.12) because they cannot make good decision and want to change their vehicles soon. Fuel efficiency (mean 3.65) and price and financing schemes (mean 3.60) are also drawing clients' attentions. The results also confirmed that Nepalese auto users are least bothered about new brands of vehicles as it has lowest mean of 3.49 but there is more uniformity in brands concerned auto clients (Std. Deviation of 0.702) in the statement of bringing new brands.

Table 5 - Descriptive Analysis of Adaptive Mode

	N	Min.	Max.	Mean	Std. Deviation
It is more reactive approach to find solution to existing problem.	257	1	5	3.61	0.941
Objectives are not clear and decision is taken through bargaining	257	1	5	3.73	1.402
Decision making is fragmented	257	2	5	3.41	0.680
Decisions are reviewed to adjust the customers need.	257	1	5	3.97	0.311
There is no place for adapting proactive approach to search new opportunities.	257	1	5	4.93	0.379
Aggregate Average				3.93	0.7426

Table 5 Shows the NADA and the government are overlooking the customers' reaction towards finding solution to the existing problem as this statement is having least mean (3.61). The fifth statement there is no place for adapting proactive approach to search new opportunities has the highest mean (4.93) indicating that there is no hearing about the customers and new opportunities are not provided to the auto clients. The second option – "Objectives are not clear and decision is taken through bargaining" has the mean 3.73 which also near to the average mean 3.93 indicating the authority are not clear about their objectives and decisions are taken through bargaining.

Table 6 -Descriptive Analysis of Planning Mode

	N	Min.	Max.	Mean	Std. Deviation
Monitoring is required for information gathering for planning	257	1	5	4.89	0.553
Possible and Feasible alternatives are to be created.	257	2	5	3.91	0.437
Consequences are not bothered.	258	1	5	4.20	1.031
Rational Decision making is prioritized.	257	1	5	3.75	0.870
Decision making behavior also matters.	257	1	5	3.97	1.239
Aggregate Average				4.144	0.826

The above table 6 is concerned with the Descriptive Analysis of Planning mode. The results clearly depicted that the monitoring is required for information gathering for planning as this option has the highest mean value (4.89) with lowest standard deviation 0.553. This also meant that there is uniformity in the auto clients' view regarding necessity of monitoring. In conclusion, after study of the table 6 Planning mode of decision making is least adapted by the auto business agencies.

Table 7 Descriptive Analysis of Logical Incrementalism Mode

	N	Min.	Max.	Mean	Std. Deviation
-Clear Idea of missions and objectives	257	1	5	3.97	0.785
-Debate, discussions and experimentation are required for making favorable decision for automobile users public.	257	2	5	3.93	0.760
-Interactive approach will result in effective decision making	257	1	5	3.74	1.388
- Incrementalism mode of decision making directs organizations to one clear direction.	257	1	5	3.47	1.752
-Partial Commitments are made	257	1	5	4.76	0.641
Total				**3.974**	**1.0652**

Table 7 is about the Descriptive Analysis of Logical incrementalism Mode (the last model of Mint berg's decision making). According to the customers' perspective,

in this model of decision making, the decision makers make only partial commitments as the test mean value is highest (4.76) with the lowest standard deviation of 0.641.

Table 8 - Descriptive Analysis of Strategic Decision Making

	N	Min.	Max.	Mean	Std. Deviation
-I shall make purchase decision if NADA/ government takes care of my requirements.	257	3	5	4.21	0.508
-The auto customers will be interested in taking buying decision if the NADA and the government make use of all the decision making modes in decision making	257	3	5	4.16	0.603
-The Nepalese customer and auto companies (NADA) will be benefited if they can adopt industry 5.0 concepts	257	3	5	3.70	0.697
Total				**4.02**	**0.603**

Table 8 was concerned about the applicability of the Industry 5.0 concepts in the Nepalese Automobile sector in the present context. The result has shown that the first statement "I shall make purchase decision if NADA government take care of my requirements" has the highest mean and lowest standard deviation. This clearly states that the Nepalese auto clients expect caring of their requirements by the NADA and other auto dealing

institutions including government. These values justify that currently the application of Industry 5.0 concept in the Nepalese sector is not advisable as it may further create labor unemployment problem in the Nepalese labor market. But in the near future it will be mandatory for the Nepalese auto sector to slowly manage outgoing labor. Last year only more than 6,30,000 left Nepal for job (https://www.nepalitimes.com).

Table 9 - Correlation Matrix

		Entrepreneur	Adaptive	Planning	Incrementalism	Decision Making
Entrepreneur	Pearson Correlation	1				
	Sig. (2-tailed)					
	N	257				
Adaptive	Pearson Correlation	.140[*]	1			
	Sig. (2-tailed)	.024				
	N	257	257			
Planning	Pearson Correlation	.057	.635[**]	1		
	Sig. (2-tailed)	.362	.000			
	N	257	257	258		
Incrementalism	Pearson Correlation	.088	.763[**]	.777[**]	1	
	Sig. (2-tailed)	.161	.000	.000		
	N	257	257	257	257	
Decision Making	Pearson Correlation	0.110	0.045	0.041	.029	1
	Sig. (2-tailed)	.079	.476	.510	.641	
	N	257	257	257	257	257
*. Correlation is significant at the 0.05 level (2-tailed).						
**. Correlation is significant at the 0.01 level (2-tailed).						

Table 9 Exhibits the degree of positive correlation and significance level of entrepreneurial mode of decision making, adaptive model of decision making, planning mode of decision making and logical incrementalism mode of decision making with Strategic Decision making.

Correlation between Entrepreneurial Model of Decision Making and Strategic Decision Making:

The analysis showed that there exists a positive correlation (r=0.110) between Entrepreneurial Model of Decision Making and Strategic Decision Making. The p-value of Entrepreneurial Model of Decision Making is less than 0.05 level of significance which means that there is a positive relationship between Entrepreneurial Model of Decision Making and Strategic Decision. It means when the degree or level of Entrepreneurial Model of Decision Making is good there is a chance of making good Strategic Decision.

Correlation between Adaptive Model of Decision Making and Strategic Decision Making:

The above analysis showed that there is a positive correlation (r=0.045) between Adaptive Model of Decision Making and Strategic Decision Making. The p-value of Adaptive Model of Decision Making is less than 0.05 level of significance which means that there is a positive relationship between Adaptive Model of Decision Making and Strategic Decision Making. It means the Adaptive Model of Decision Making positively impacts and is required in Strategic Decision Making.

Correlation between Planning Model of Decision Making and Strategic Decision Making:

In the above analysis table it showed that there is a positive correlation (r=0.041) between Planning Model of Decision Making and Strategic Decision Making. The p-value of Planning Model of Decision Making is less than 0.05 level of significance which means that there is a more positive relationship between Planning Model of Decision Making and Strategic Decision Making. It means that more planning is required by NADA in Strategic Decision Making.

Correlation between Logical Incrementalism Model of Decision Making and Strategic Decision Making:

From the above correlation matrix, it is found that there is also a positive correlation (r= 0.029) between Logical Incrementalism Model of Decision Making and Strategic Decision Making. The p-value of Logical Incrementalism Model of Decision Making is less than 0.05 level of significance which means that, though low, there is positive relationship between Logical Incrementalism Model of Decision Making and is required in Strategic Decision Making

Mutual Correlation between dependent and independent variables in Decision Making:

It was also tried to see the mutual correlation between dependent and independent variables. For this purpose, the correlation coefficient value of Strategic Decision Making was determined and it was 1. Yes, it is no doubt that one has perfect correlation with itself. All the independent variables has positive correlation with dependent variables meaning there is positive effects of above all four decision making models in Strategic Decision Making.

Table 10-Model Summary of Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.153ª	.023	.008	1.12728

Table 10 depicts the model summary of regression analysis. From the table, it can be seen that the value of r square is 0.023 which means that 2.3 percent of the variance in the dependent variable can be explained by the independent variable and its constructs and 97.7 percent of variance can be explained by the other variables which this study has not considered. So, other decision model can also be found out by further studies by NADA.

Table 11- ANOVA Table

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	7.643	4	1.911	1.504	0.202
Residual	320.233	252	1.271		
Total	327.875	256			

Table 11 explains about the model to show the fit . The F value is 1.504 and the p-value is 0.202 which is less than 0.202. Therefore, it can be said that the slope of the regression line is not zero and there is a significant linear relationship between the dependent and independent variable.

Table 12- Coefficients Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
(Constant)	13.637	1.004		13.582	0.000
Entrepreneur	-0.064	0.039	-0.101	1.612	0.108
Adaptive	-0.080	0.053	-0.149	1.524	0.129
Planning	0.055	0.043	0.059	0.598	0.551
Incrementalism	0.035	0.039	0.105	0.886	0.376

Table 12 represents the coefficients of the variables under study. From the table it can be seen the p-value of all Entrepreneurial model, Adaptive Model, Planning Model and Logical Incrementalism Model of Mintberg's model of Decision Making are more than 0.05 which means that there is not significant but positive impact of all models in Strategic decision Making.

Furthermore, Planning Model of Decision Making is found to be required as most dominant and important variable followed by Logical Incrementalism Model of decision Making, Entrepreneurial Model and Adaptive Model of Decision Making. The study indicated that planning is lacking in Nepalese automobile industries and mostly adaptive, Entrepreneurial and Logical Incrementalism Model of Decision Making is under practice in these days.

Table 13-Descriptive Analysis of Labor Intensive Market from industry 5.0 concepts

	N	Min.	Max.	Mean	Std. Deviation
-Therefore, a nominal use of Robots and smart machines are to be used till the government formulates the new policies.	257	1	5	4.88	0.540
-The labor should be replaced by machines and Robots	257	1	5	2.19	0.803
-Old labors are replaced by Robots and smart machines.	257	1	5	2.08	0.478
-Slowly, the labors are replenished as per the organizations 'need.	257	2	5	3.96	0.316
-Machines and Robots must not at all be used in a country like Nepal.	257	1	5	3.04	0.310
Total				3.23	0.49

Table 13 is about the descriptive analysis of labor intensive Nepalese market. The first statement has the highest mean value of 4.88. This clearly states that means a nominal means of Robots and smart machines are to be used till the government formulates the new policies. The lowest mean (2.08) is seen in option three that indicates that old labors are replaced by Robots and smart machines slowly without downsizing the employees in the organization which otherwise directly hit Nepalese labor market.

Major Findings

It was found that female participants were actively participating in the inquiry and came forward to respond to our study than males . Teachers were dominating in the test population followed by government service holders and students. Advocates were least. It was also found that own vehicles (motorcycles, cars, jeep) users were more than users of general public vehicles (bus, minibus and auto rickshaw), taxi and office vehicles.

 The general people's income in Nepal is very low that is monthly earning is only Rs.20000-29000. The highest earners are the government higher officials.

Family size of the respondents were having 4-6 members in their family. These results also gave further confirmation to the results of Census report of Nepal. Nepal has 56,43,945 family with family size of 4.32 (https://nepalindata.com).

Nepalese auto users were more interested in comfort and safety. This is justifiable because most of the roads are rough, muddy, uneven and are not black topped. Looks and resale value is also emphasized by the auto clients. Fuel efficiency, price and financing schemes are also drawing clients' attentions. The decision's consequences and brands are not bothered while making important decision.

The decision makers make only partial commitments to the auto customers. They also do not have clear idea of mission and objectives of Auto business.

The result also stated that the Nepalese auto clients expect caring of their requirements by the NADA and other auto dealing institution including government. The auto customers will be interested in taking buying decision if the

NADA and the government make use of all the decision making models in decision making.

While seeing in the applicability of industry 5.0 concepts, currently the application of Industry 5.0 concept in the Nepalese sector is not advisable as it may further create labor unemployment problem in the Nepalese labor market. But in the near future it will be mandatory for the Nepalese auto sector as the number of Nepalese labor to cope with the world context.

There is a positive relationship of all decision making models between with Strategic Decision Making. So, all planning models are to be applied by the NADA and other concerned bodies. There is a more positive relationship between Planning Model of Decision Making and Strategic Decision Making. It means that more planning is required in Strategic Decision Making.

Planning Model of Decision Making is found to be required as most important variable followed by Logical Incrementalism Model of decision Making, Entrepreneurial Model and Adaptive Model of Decision Making.

Considering to see the possibility of the adaptability of Industry 5.0 concept in the Nepalese auto Industry, it was found that a nominal use of Robots and smart machines are to be done till the government formulates the new policies. Old labors can be replaced by Robots and smart machines slowly in the days ahead.

Managerial Implications

The findings of this study will be implied in the Nepalese Automobile Industries for its development. It will also be implied on the benefit of the Nepalese automobile users and help them make rational decisions in purchasing vehicles. The study will also help build trust between automobile entrepreneurs and customers for their mutual benefits.

Recommendations

1. As the female highly participated in the test process, the Nepalese Auto business agencies like NADA and the government should prioritize to import female -friendly automobile in Nepal.

2. The NADA should, therefore, introduce easy financing schemes, small sized, fuel efficient and cheaper vehicles to bring the automobiles within their affordability.

3. Form cost price view it is highly recommended that auto vehicles should be recommended from India only.

4. The clients' problems are to be heard with priority.The NADA should monitor and scan the environment and go for planning to make planning strong and implementable.

5. The commitments made during/ after sells to the customers are to be fulfilled.

6. Planning model of decision making must be made stronger.

7. All the decision making models of Mintzberg should be applied in Automobile Strategic Decision Making.

8. So far as the applicability of industry 5.0 concept is concerned, currently the application of Industry 5.0 concept in the Nepalese sector is not advisable as it may further create labor unemployment problem in the Nepalese labor market. .

9. In Nepal managers must also search some new alternative models of decision making.

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