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A Study on Skill Development under the Skill India Programme in the Automobile Industry

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ABSTRACT

The automobile industry is one of the largest industries in the world. It not only provides substantial employment, but also contributes significantly to foreign exchange earnings. These automobile companies give priority to comprehensive training programs for their employees. Through these automobile companies, employees are systematically integrated with new ideas and production dimensions of improved knowledge and skills. These early initiatives are improving workforce skills and productivity across the industry and the sector's significant contribution to the Skill India initiative is being explored by the automobile industry. A study is conducted on employee perception of previous initiatives taken in this auto mobile industry sector. So below is a study on how the Skill India program is working in the automobile sector and more focus is being given to providing employment to the youth by 2030.

Keywords: Skill Progrmme, Perception of Employees

I. INTRODUCTION

AUTOMOBILE INDUSTRY

Automobile is a company specializing in the production and sale of self-propelled vehicles, encompassing passenger cars, trucks, farm machinery, two-wheelers, and various commercial vehicles. The primary goal of the automobile industry is to fulfill consumers' essential needs by offering products that enable long-distance travel, daily commutes, and shopping excursions. Furthermore, this industry generates substantial employment opportunities and significantly contributes to economic development.

The automobile industry is one of the largest in the world, encompassing a diverse array of companies engaged in the design, development, manufacturing, and marketing of motor vehicles. The Automobile Industry produces the same products and sets up businesses in many locations, such as automobile repair shops and motor gas stations, after non-finalized

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finishing. Automobile companies often play a greater role compared to other industries. The automobile company first appeared in Europe in the nineteenth century. In the twentieth century the United States produced the largest number of automobile vehicles and completely dominated the global industry. The situation changed in the second century as the Automobile Industry became an exporter to Japan and a major manufacturer in Western Europe.

India is a global leader in vehicle exports, showing a growth of 14.5% in the financial year 2019 and a CAGR of 3.5% from 2016 to 2026. The country has been making concerted efforts in both government and the automobile sector to dominate the two-wheeler and four-wheeler market by 2020. The Automobile Industry introduced affordable new cars designed for the average consumer. From the financial year 2009 to 2020, the Indian Automobile Sector experienced a CAGR of 8% in sales. However, in the financial year 2020-2021, vehicle registrations plummeted by 29%, falling from 295.8 million to 221.85 million, largely due to the impact of the COVID-19 pandemic. Despite these challenges, by 2020, India had become the world's fifth-largest automobile industry. Manufacturers expanded their operations globally and multinational corporations invested heavily in the Indian automobile sector.

MARKET SHARE OF AUTOMOBILE INDUSTRY IN INDIA

Automobile Industry was the fifth largest market in India by 2020. The number of passenger vehicles in automobile is 27.11 lakhs. India’s commercial vehicles are 5.69 lakhs. The numbers of automobile three wheelers in India will be2.16 lakhs by 2020, India’s automobile two-wheelers are 1.79 lakhs .An electronic carmaker with registered offices in Bangalore is exploring the establishment of a unit in India. The country's new scrap page policy not only aims to boost demand for new vehicles but also to eliminate old and polluting vehicles from circulation. In a proactive move, the Delhi government has mandated the installation of battery charging points throughout the state, enhancing infrastructure to support electric vehicle sales. The automotive sector in India is rapidly expanding, poised to contribute significantly to the nation's economic and technological progress.

Table 1.1: India Vehicle Segment Share (2021–2025)

YEAR	Two-wheelers	Passenger-vehicles	Three – wheelers	Commercial vehicles
2021	81%	13%	3%	3%
2022	79%	14%	3%	4%
2023	78%	16%	3%	4%
2024	77%	15%	3%	4%
2025	76-77%	17%	3%	4%

Source: automobile.com

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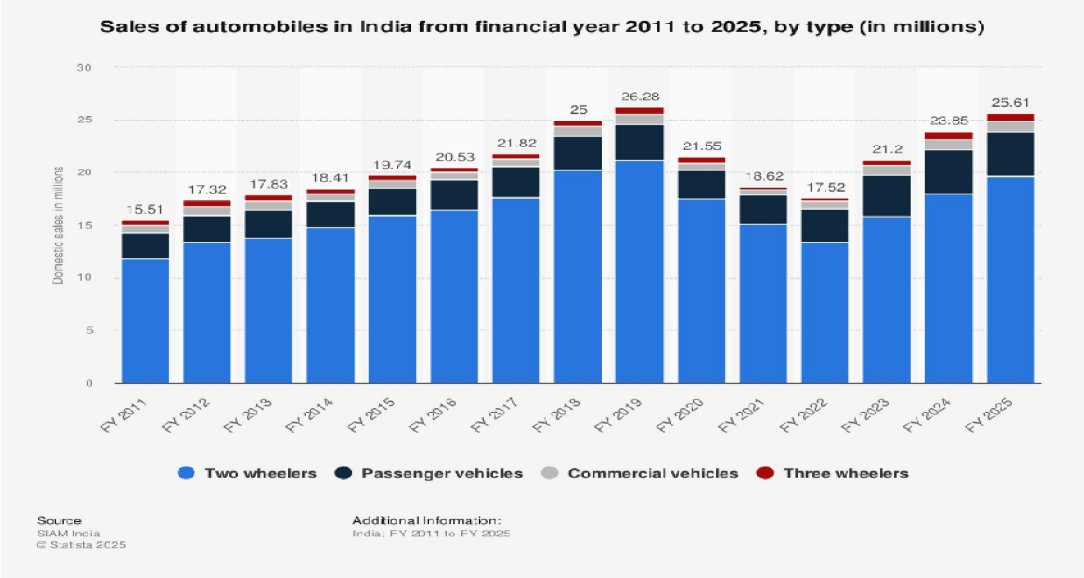

Table No: 1.2: Automotive Finance Market Report Scope (Forecast for the Period 2023-2030)

Report Attribute	Details
Market size value in 2023	USD 276.57 billion
Revenue forecast in 2030	USD 451.71 billion
Growth Rate	CAGR of 7.3% from 2023 to 2030
Base year of Estimation	2022
Historical Data	2017 – 2021
Forecast Period	2023 – 2030
Quantitative units	Revenue in USD billion, CAGR from 2023 to 2030
Report Coverage	Includes revenue forecasts, company market share, growth factors, and emerging trends
Segments Covered	Provider type, finance type, purpose type, vehicle type.
Regional Scope	North America; Europe; Asia Pacific; Latin America; MEA
Country Scope	Specifically covers the U.S., Canada, Germany, U.K., China, India, Japan, and Brazil
Key Companies Profiled	Ally Financial; Bank of America; Capital One; Chase Auto Finance; Daimler Financial Services; Ford Motor Credit Company; GM Financial Inc.; Hitachi Capital;

Source: ACMA

The global automotive finance market was valued at USD 259.84 billion in 2022 and is projected to grow at a compound annual growth rate (CAGR) of 7.3% from 2023 to 2030. This growth is driven by increasing global demand for electric vehicles. According to Experian's State of the Automotive Finance report, electric vehicles accounted for 4.56% of new vehicle financing in Q4 2021, up from 2.25% in Q4 2020 and 1.34% in Q4 2019 in the U.S. The report also highlights that consumers in the U.S. show a preference for purchasing new electric vehicles rather than leasing them. The table below explains the automotive Finance market Report Scope forecasted for the period 2023-2030.

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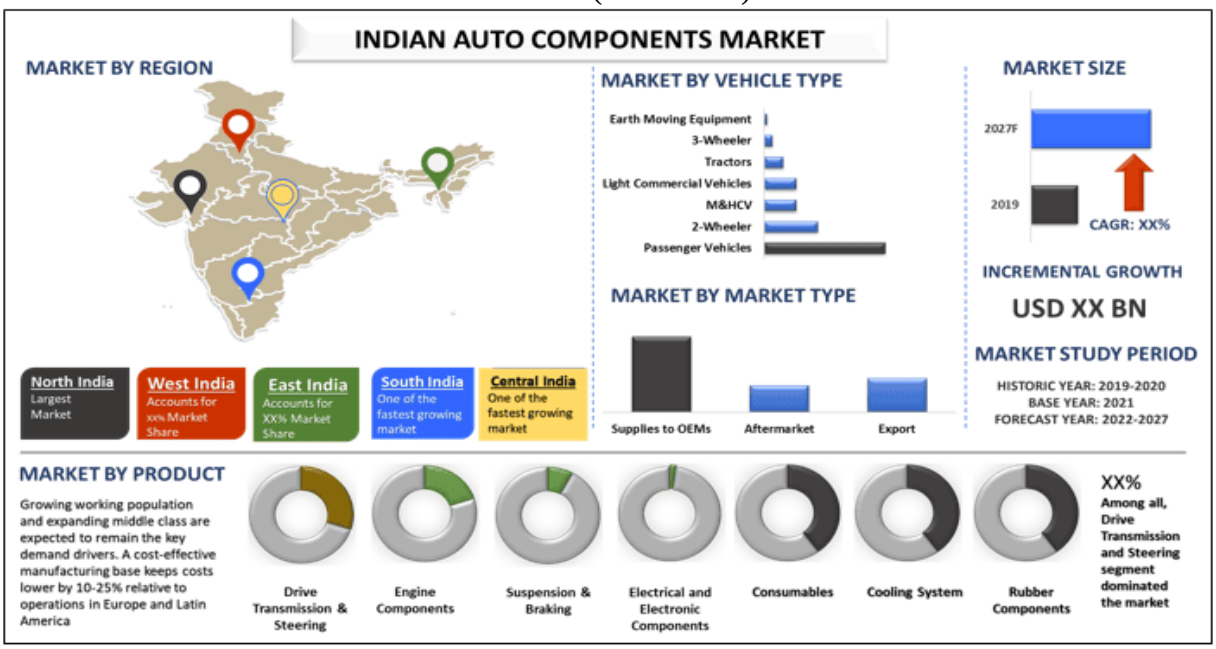
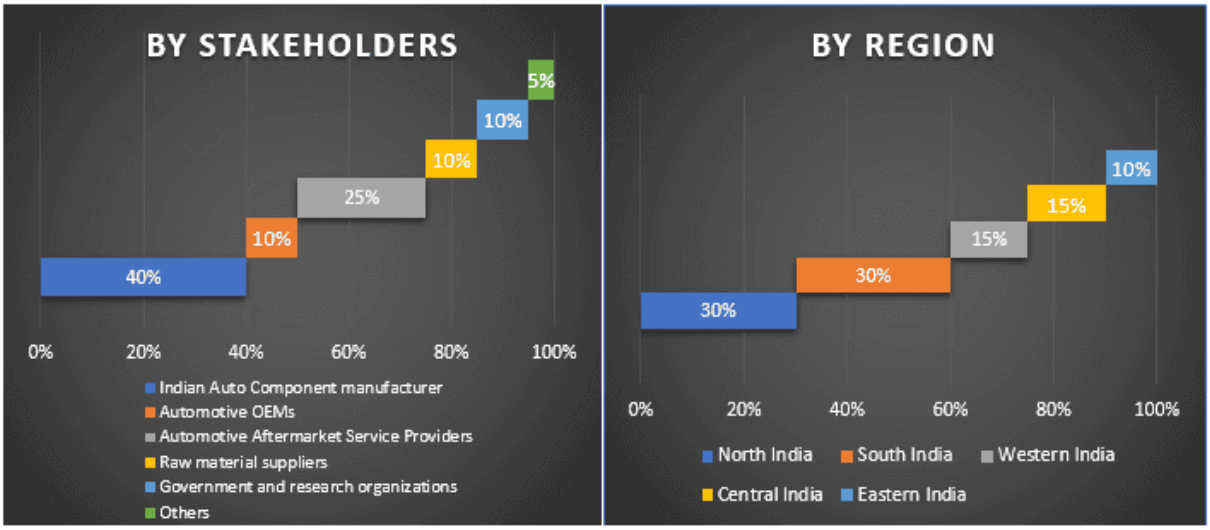
AUTO COMPONENTS MARKET IN INDIA (2023-2030)



Sources: auto componetends.ocm

Indian Auto Components Market is anticipated display a CAGR of around 20.3% over the forecast period (2021-2027). The market witnessed a slight decline in 2020, owing to Covid-19 pandemic. Indian automobile industry is one of the largest employers with an ecosystem of more than 50 manufacturer and supporting ancillaries across different vehicle category. FY2020 was a difficult year for the industry due to Covid-19 pandemic, however, the industry is expected to witness regrowth post 2021. Indian auto component sector generated revenue of US$ 39 billion in 2016 and reached US$ 57 billion in 2019. In 2020, the sector witnessed a decline in sales by almost 11.7% to reach US$ 49.3 billion in 2020.Auto component sector includes supplies to domestic OEMs, aftermarket, and export. India's export of auto components increased at a CAGR of 7.6% between FY2016-2020, in terms of value the market increased from US$ 10.83 billion in FY2016 to US$ 14.5 billion in FY2020.



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Market Engineering

Data triangulation technique was employed to complete the overall market estimation and to arrive at precise statistical numbers of each segment and sub-segment of the Indian Auto Components market. Data was split into several segments & sub-segments post studying various parameters and trends in the areas of product, vehicle type, and market type for major Indian regions.

The main objective of the Indian Auto Components Market Study

The current & future market trends of the Indian Auto Component Market are pinpointed in the study. Investors can gain strategic insights to base their discretion for investments from the qualitative and quantitative analysis performed in the study. Current and future market trends would determine the overall attractiveness of the market at a regional level, providing a platform for the industrial participant to exploit the untapped market to benefit as a first-mover advantage. Other quantitative goals of the studies include:

Analyze the current and forecast market size of Indian Auto Component in terms of value (USD). Also, analyze the current and forecast market size of different segments and sub-segments of the industrySegments in the study include product, vehicle type, market type, and Regions Defined analysis of the regulatory framework for the Indian Auto Components industry.

Analyze the value chain involved with the presence of various intermediaries, along with analyzing customer and competitor behaviors pertaining to the industryAnalyze the current and forecast market size of the Indian Auto Component across the globe. Major regions analyzed in the report include India (Northern India, Southern India, Eastern India, Western India, and Central India) Define and analyze the competitive landscape of the Indian Auto Component sector and the growth strategies adopted by the market players to sustain in the fast-growing market Deep dive regional level analysis of the industry

II.OBJECTIVES OF THE STUDY

- To study the significant contribution to the Skill India programme by the automobile Industry
- To analyse the perception of employees towards initiatives taken by the Indian Automobile Industry

III. RESEARCH METHODOLOGY

Research Methodology serves as a structured approach to resolving research problems. This study employs a descriptive and analytical research design. Its focus is on analyzing financial performance.

Sampling Design

The researcher felt that to achieve the Automotive mission plan companies working with stability and progress can support to come up with skill development, increased production, increased exports, care on eco-system and progress with making India.

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Secondary data

The study was conducted in Chennai which is the hub for Automobile Industry in South India. The public limited automotive companies which have headquarters in Chennai will be taken for the study.

Primary data analysis

The primary data was collected from Executives and Employees .The sample of 100 Respondents from each company will be collected using the questionnaire. Totally 500 samples from the selected five companies will be collected by stratified sampling method.

S. No	Companies	Total No of Employers & Employees	No. of Samples (Experienced Employers & Employees)
1	Ashok Leyland Limited	1461	100
2	TVS Motors Limited	1132	100
3	Sundaram Clayton Limited	1213	100
4	MRF Tyres Limited	1065	100
5	Rane Madras Limited	1324	100
	Total	6195	500

Tools for Primary Data Analysis

- Anova
- Garrett Mean Score
- Factor Analysis

PERCEPTION OF SKILL INDIA PROGRAMME (AMP 2016-2026)

The Automotive Mission Plan 2016-2026 (AMP 2026), a joint vision of the Government of India and the Indian Automotive Industry, was launched in September 2015 at the 55th annual convention of the Society of Indian Automobile Manufacturers' Association. Building on the achievements of AMP 2016, AMP 2026 aims to chart a roadmap for the industry's progress by 2026. It focuses on defining the policies and regulations required to elevate India to a leading position in the global automotive industry.

Table No: 3.1
Perception of Skill India Programme (AMP 2016-2026)
ANOVA TEST

Variables		SS	Df	MS	F	Result
Gender	Between Sample	22769.28	5	4553.85	0.02457	Significant
	WithinSample	74119.68	4	18529.92		
	Total	96888.96	9			
Age	Between Sample	6195.49	6	1032.58	0.01491	Significant
	WithinSample	48467.84	7	6923.97		
	Total	54663.34	13			
Experience	BetweenSample	10527.84	7	1503.97	0.02692	Significant
	Within Sample	44679.04	8	5584.88		
	Total	55206.88	15			
	Between Sample	12820.32	4	3205.08	0.0229	Significant

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Designation	Within Sample	69697.92	5	13939.58		
	Total	82518.24	9			
Monthly Income	Between Sample	41389.92	7	5912.846	0.04100	Significant
	Within Sample	58395.52	8	7299.44		
	Total	99785.44	15			
Educational Background	Between Sample	48916	8	6114.5	0.04604	Significant
	Within Sample	57296	9	6366.222		
	Total	106212	17			
Marital Status	Between Sample	55282.56	5	11056.51	0.08515	Not Significant
	Within Sample	77903.36	6	12983.89		
	Total	133185.9	11			

Source: Primary data

The ANOVA table analysis indicates that the p-value for gender is 0.02, which is below 0.05, showing a statistically significant difference between gender and the skill development program. Similarly, the p-value for age is 0.01, also below 0.05, indicating a statistically significant difference between age and the skill development program. The p-value for experience is 0.02, demonstrating a statistically significant difference between experience and the skill development program. The p-value for designation is 0.02, indicating a statistically significant difference between designation and the skill development program. Lastly, the p-value for monthly income is 0.041, which is below 0.05, indicating a statistically significant difference between monthly income and the skill development program.

Assistance from Central and State Governments

AMP 2026 envisions that by 2026 the Indian auto industry will be among the top three in the world in terms of engineering, manufacturing and export of vehicles as well as auto components and will encompass safe, efficient and environment friendly conditions for affordable mobility of people and transportation of goods in India.

Table: 3.2
Assistance from Central and State Governments

Sl	Assistance from Central and State Governments	Total Score	Garrett Mean Score	Rank
1.	Finance	13,900	37.80	III
2.	Job creation	15,620	21.24	V
3.	Automotive export hub	12,820	35.64	IV
4.	Promoting Technology	18,150	46.30	I
5	Tax Reduction	14,510	39.02	II

Source: Primary data

It is observed from the above table, the Promoting Technology occupied first rank with mean score of 46.30 and Job creation occupied second rank with mean score of 21.24. According to the Tax Reduction is in third rank with mean score of 39.02 and also the fourth rank is finance with mean score of 47.8. Concerning with the fifth rank is automotive export hub with 35.64 mean score. Hence the Garrett ranking techniques results that the Promoting Technology occupied first rank with mean score of 46.30 is the valuable assistance given by government.

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AUTOMOTIVE ECOSYSTEM & EMPLOYEE PERCEPTION

Everybody knows that the automotive industry is going through a huge transformation. Electric vehicles, new advanced driver assistance systems, software-defined cars, and new in-vehicle displays are the main factors taking the driver experience to the next level. Besides the driver experience, digital transformation is also considerably changing the work environment of workers in the automotive industry. To maximize the benefits of digital transformation, automotive companies are well aware that scaling digital transformation initiatives across factories is essential to achieve quick efficiencies. Workforce engagement and change management obviously play an important part in realizing implementations across factories

Table: 3.3

Factors Influencing in Automotive Ecosystem & Employee Perception

Sl.No	Variables
1	Research
2	Design
3	Technology, Testing
4	Manufacturing
5	Imports/Exports
6	Sales
7	Use & Repairs
8	Recycling of automotive vehicles
9	Production Decision Areas
10	Capacity-Plants, Warehouse, Transportation, suppliers
11	Production Planning & Control (Master Production Scheduling, MRPI,MRPII)
12	Inventory Control
13	HR Policies
14	Quality Systems
15	Working Environment is comfortable
16	Communication system is good
17	Employees are treated with due respect
18	Employee’s suggestions and grievances are considered
19	Good Work done is appreciated
20	Fair treatment of employees
21	Better co-ordination among co-workers
22	Transport facilities provided are good
23	Housing Facilities
24	Medical Facilities & Health insurance
25	Free transport
26	Education assistance
27	Work from home
28	Child care
29	Cafeteria/canteen
30	International relocation/transfer

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31	Gymnasium / sports club/exercise room
32	Hospitality
33	Employment opportunity
34	Grievances
35	Stress relaxing programs
36	Others

FACTOR ANALYSIS

In order to analyse the factors influencing in Automotive Ecosystem & Employee Perception, the responses from the customers are collected on 36 statements, included in the questionnaire, on a Five Point Likert Scale. To analyze and interpret the data, mean and percentage for exploratory data analysis and standard deviation, Chi-square and factor analysis for confirmatory data analysis were used.The Descriptive Statistics of various factors influencing in Automotive Ecosystem & Employee Perception has applied in the present study. It is observed that respondents agree with the statement that AMP has transparency in screening process (Mean=3.63, SD=0.86). On the other hand, respondents are neutral with the statement that rigid eligibility criteria (Mean=3.23, SD=0.95).

Table No: 3.4
Descriptive Statistics of Factors Influencing in Automotive Ecosystem & Employee Perception

Sl.No	Variables	Mean	SD
1.	Research	4.4151	0.95662
2.	Design	4.3459	1.00325
3.	Technology, Testing	4.3550	1.06752
4.	Manufacturing	4.6277	0.86557
5.	Imports/Exports	4.5463	0.91694
6.	Sales	4.4140	1.02538
7.	Use & Repairs	4.4100	0.98035
8.	Recycling of automotive vehicles	4.4415	1.04987
9.	Production Decision Areas	4.3876	1.02381
10.	Capacity-Plants, Warehouse, Transportation, suppliers	4.3662	0.98262
11.	Production Planning & Control (Master Production Scheduling, MRPI,MRPII)	4.4537	0.98752
12.	Inventory Control	4.4507	1.04451
13.	HR Policies	4.4832	1.02090
14.	Quality Systems	4.4476	0.97685

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15.	Working Environment is comfort .	4.3683	0.98909
16.	Communication system is good	4.3225	1.02055
17.	Employees are treated with due respect	4.3499	1.02097
18.	Employee's suggestions and grievances are considered	4.4466	1.40226
19.	Good Work done is appreciated	4.2604	1.00271
20.	Fair treatment of employees	4.2523	0.96022
21.	Better co-ordination among co-workers	4.2787	1.01397
22.	Transport facilities provided are good	4.3683	0.99831
23.	Housing Facilities	4.3428	0.98330
24.	Medical Facilities & Health insurance	4.2645	1.00773
25.	Free transport	4.2686	0.94292
26.	Education assistance	4.2279	0.95465
27.	Work from home	4.3906	0.92707
28.	Child care	4.3428	1.02488
29.	Cafeteria/canteen	4.3408	0.99122
30.	International relocation/transfer	4.3093	1.00608
31.	Gymnasium / sports club/exercise room	4.2930	1.00792
32.	Hospitality	4.3937	1.01247
33.	Employment opportunity	4.2777	1.02374
34.	Grievances	4.2981	1.00996
35.	Stress relaxing programs	4.2808	0.96397
36.	Others	4.2238	1.00445

Source: Survey, Data processed through SPSS 21.0

Further to know the factors, which are very important for the factors influencing in automotive ecosystem & employee perception, the data reduction technique *i.e.* factor analysis was applied. The correlation between the variables was checked and Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy statistic is also used to test the appropriateness of factor analysis technique. The test statistics for sphericity is based on a Chi-square transformation of the determinants of the correlation matrix. A large value of the test statistic favours the rejection of the null hypothesis. Further, KMO compares the magnitude of the observed correlation coefficients to the magnitude of partial correlation coefficients. Small value of KMO statistic indicates that the correlation between pairs of

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variables cannot be explained by other variables and the factor analysis may not be appropriate. A value greater than 0.5 is desirable for the test statistic generally.

Here, it can be seen that the null hypothesis i.e. the population correlation matrix is an identity matrix, is rejected by Bartlett's Test of Sphericity. The approximate value of Chi-square statistic value is 9650.59 with 630 degree of freedom, which is significant at 5 percent level of significance. The value of KMO statistic (0.907) is also large (greater than 0.5). The matrix is constructed from the data obtained from the customers in the form of the responses about the factors influencing in automotive ecosystem & employee perception.

IV. HYPOTHESIS

- There is no notable correlation between the contributions of the selected companies and the Skill India program.
- There is no significant relationship between the perceptions of employeesϖ towards initiatives taken by the Indian automobile industry.

V. LIMITATIONS

- The study is not covered with Private Limited Automotive Companies in Chennai
- The sample Automobile Companies focus mainly on Skill Development Programme as a coin to achieve the Automotive Mission Plan.
- Primary data is collected from top executives and senior employees' cadre. Hence, the study does not cover the perception of lower-level employees.

VI.CONCLUSIONS

This study explains to us that the selected automobile companies are being implemented by the Skill India program. The Automotive Mission Program 2016- 2026 is being studied to provide employment to many youth. The Skill India program is expected to grow the most in automobile companies. It is planning various projects to achieve its target by 2030. Setting up of new factories, setting up of auto spare parts and improving its economic growth is being implemented by the Government of India. The study tells us that the Automotive mission program is expected to reach its target by 2016-2026 through the automobile program, and through Skill India programs across India. Therefore, the results of this research found that automobile companies will grow more.

REFERENCES

1. Chenoy, D. (2015). Skill Development in India. Oxford University Press.
2. Pilz, M. (2016). Vocational Education and Training in India. Springer.
3. Sahu, R. K. (2012). Human Resource Development and Skill Development. Himalaya Publishing House.
4. Singh, K. (2011). Automobile Engineering Fundamentals. Standard Publishers.
5. Gupta, R. B. (2013). Automobile Engineering. Satya Prakashan.
6. Chenoy, D., Skill Development in India: Challenges and Opportunities," *International Journal of Training Research*, Vol. 11, Issue 3, pp. 208–220.
7. Mehrotra, S., "The Skill Development Challenge in India," *Journal of Education and Work*, Vol. 27, Issue 6, pp. 629–650.

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ISSN: 2791-0881 (Print), ISSN: 3079-0565 (Online), Volume-06, Issue-01, May, 2026
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8. Agrawal, T., Vocational Education and Training Programs in India," *Economic and Political Weekly*, Vol. 48, Issue 28, pp. 92–100.
9. Pilz, M., "Skills Development in the Indian Automobile Industry," *International Journal of Training and Development*, Vol. 18, Issue 3, pp. 190–205.
10. King, K., "Skills Development Policies and International Cooperation in India," *Journal of International Development*, Vol. 24, Issue 7, pp. 887–906.
11. www.smallb.sidbi.in/sites/default/files/...base/.../automotive_components.pdf