

**As automakers struggle with rising repair and associated insurance costs, they continue to invest in electric cars (EVs) in an effort to decrease production costs. EV startups are probably going to consolidate as the EV market grows.**



## Overview

The average cost of a new electric model is less as compared to previous years, while the average cost of a used model has also dropped. EV costs have been declining. However, prospective purchasers are more likely to be faced with high EV repair costs and insurance claims, which are still significantly higher than those associated with ICE vehicles. Moreover, the repair of EVs is more time-consuming in comparison with ICE vehicles. The high-voltage battery management, which necessitates de-energization and frequent total removal to protect it during collision repair and refinishing procedures, is probably the cause of the additional EV labor hours.

Thus, this extra time adds significant cost to EV repairs, as the average mechanical labor rate in the U.S. and Canada is over USD 100 per hour. Many insurers are choosing to write off many EVs as totaled because it's less expensive to replace the car, even if it was only involved in a minor accident because many new EVs are equipped with more expensive sensors than the typical ICE vehicle and require specialized skills to maintain. As a result, EV claims result in a total loss. Dropping prices in the EV industry is contributing to the surge in total-loss claims and destroyed EVs, along with high repair expenses, since dropping automobile prices make replacing a car less expensive than it was a year ago. Some consumers are becoming more concerned about low EV resale prices and are choosing to lease electric vehicles rather than purchase them completely to protect themselves from the unfavorable resale market. Despite such drawbacks, still, several EV manufacturers have announced record-breaking sales.

## Client Challenges

The client is a manufacturer of electric vehicles and wanted to resolve or minimize the cost in several areas, including auto components, repair, and others, for which they needed analysis of this overall scenario. The following are the requirements asked by the client:

- List of tier 1 and tier 2 companies of top 10 companies on regional level
- Key factors affecting the adoption of auto component
- Regulatory requirements and standards on the country level
- Current and future technological trends
- Insurance policy in relation to the electric vehicle
- Pricing analysis of top products and models preferred by automotive companies
- Company comparative analysis of both leading players and market disruptors
- Investment data on a regional level

## DBMR Approach/Research Methodology

The Data Bridge Market Research approach involved the usage of both primary and secondary research methodologies to estimate, analyze and validate the data. For this, we have applied basically the bottom-up approach wherein we have tracked down varied vendors, including SMEs offering on the country level. This helps us to position different companies in terms of revenue, geographically, and application. Additionally, pricing lists for different components as per tier I and tier II are listed accordingly. Apart from this, other pointers incorporate the adoption of advanced technologies, customer demand and service quality analysis in the region, availability of financing options & insurance scenarios, and investment data, among others.

For this, we conducted a literature survey where we referred to different secondary sources such as the company's annual report & SEC filing, whitepapers, government associations, press releases, journals and others. We also considered data from various paid sources such as Hoovers, Factiva, and others. The entire secondary study has been bifurcated into market assessment, technology assessment and company assessment. Finally, data validation was done through primary research, which involves e-mail interactions, LinkedIn and telephonic interviews with others to finalize the number. Moreover, an exhaustive questionnaire and discussion guide were prepared, which covered both structured as well as unstructured data points in order to conduct a discussion based approach.

Hence, by following the approach mentioned above, market insights were provided to the client accordingly.

## Outcome and Business Impact

Following are the outcomes found while analyzing the different pricing aspects of electric vehicles, insurance costs and related competitive scenarios:

- **DBMR** has suggested both the reasons and solutions for the increased insurance cost of EV. The reason for the high cost is owing to multiple reasons, including higher replacement and repair costs, which contribute to increased premiums, additional coverages, shortage of skills and capacity to fix EVs, and higher insured declared value (IDV), among others. In addition, it has been witnessed that in extreme circumstances, insurers are writing off entire cars for minimal physical damage to battery casings. EVs typically contain a higher percentage of difficult-to-repair components, such as aluminum or composites. If such components are damaged in a collision, they are likely to need replacement. The lack of defined repair procedures, in general raises the overall insurance expenses connected with EVs compared to ICE vehicles. Thus, explicit instructions from the vehicle manufacturers must be required in their repair manuals that state what type of damage is permitted. In the next years, the launch of a consumer-friendly energy storage device manufactured from used EV batteries can also add some benefits. As the electric vehicle market grows, there is a tendency towards reduced car values and repair costs, which might have a favorable impact on EV insurance rates.
- From a technological point of view, Telematics data from EVs could help personalize insurance prices based on driving habits. While there are issues with data privacy, if drivers are willing to share their information, it has the potential to transform how insurance is customized and priced. The advanced technology in EVs generates a plethora of data that, if accessible, has the potential to drastically alter insurance prices.
- In the case of repair/servicing cost, battery prices are also a huge barrier, accounting for more than half of the total worth of the vehicle. Though manufacturers typically provide persuasive assurances on the longevity of EV batteries (such as 8 years from Jaguar, Nissan, Renault, and Tesla), Even battery degradation has been a major concern for many people concerning electric vehicles. While individual automobile manufacturers' results vary slightly, general evidence from the real world suggests that the rate of deterioration is substantially lower than anticipated and some manufacturers are now anticipating their batteries to outlast the whole of the vehicle.
- Thus, our report has helped our customers to create leading-edge auto components for electric vehicles and also gain insights in relation to the competitive advantage in this quickly changing industry. DBMR also suggested forming strategic alliances with certified Tier I and Tier II companies of the electric vehicle ecosystem for new commercial prospects. This would help the client not only in stimulating innovation but also in expanding the market penetration and growth opportunities.

## Conclusion

Data Bridge Market Research has provided in-depth insights in relation to the pricing analysis and other data for EV components to cater to each requirement. Adding to this, the report's factual and consolidated information will help the client to evaluate the company's growth and can also be further utilized for decision-making and future planning. Apart from this, the client can even access/capture the business opportunities from the reports' information.