



**ABHISHEK JAIN**  
is Managing Director at PPAP Automotive

## WINNING THE NEXT DECADE

The automotive industry has been at the forefront of driving technology changes. The revolution of the industry started way back in the 80s, when one of the key Japanese OEM decided to invest in the Indian market to produce reliable and quality vehicles with the purpose of achieving customer delight. The industry, at that time, did not have customer-orientation in mind. Breakdowns and quality defects were a normal thing. You were supposed to be lucky, if you did not send your car to the garage at least once a month.

The automotive industry has indeed come a long way from those days. Today, the entire industry is aligned with customer needs and all the practices and strategies are governed by what the customer wants. Over the past three decades, the auto industry has been a pioneer in implementing organised manufacturing practices and has undergone many reforms. We have learned the concepts of benchmarking and implementing global best practices in our respective operations and strive to make them the best in their respective classes. Companies have reformed their quality systems, human resource management systems, production systems, etc. In order to ensure customer delight, we have learned Japanese best practices and adopted them suitably in our operations.

Today, India has become the 4th largest automotive market. The automotive industry provides livelihood and a reason to live with respect to over 37 lakh people in the country. It contributes around 50 % to the country's manufacturing GDP and contributes 7.5 % to the nation's GDP.

### ENVIRONMENT PRESERVATION

Apart from the operation reforms brought about by the adaption of Japanese best practices, the auto industry has also focussed on preservation of the environment through adaption of materials, which are safer and promote recycling as well. The operating plants are required to adopt water as well as energy consumption measures, in order to minimise the environmental footprint.

The adoption of plastic, thermoplastics and plastic composites brought about a new revolution in the industry. Use of these materials enabled lightweighting of vehicles, which resulted in improved fuel efficiency. These materials offer flexibility for designers to deliver innovative concepts, while achieving the necessary durability and strength to withstand harsh environmental conditions. While the use of plastics was limited to interior solutions, now engineers are adopting these flexible solutions for exterior of a vehicle. A few applications, which require withstanding high temperatures in the engine compartment, are also being developed.

The automotive industry is now undergoing a paradigm shift towards reducing fuel consumption, connected car concepts as well as evaluating alternate energy solutions. Over the next decade, the industry will revolutionise the concept of vehicles. There may be a paradigm shift in fuel intake systems, emissions and exhaust systems due to adoption of alternate fuel technologies like CNG, hybrid and electric vehicles or hydrogen-powered vehicles.

### CONCLUSION

The industry is a highly competitive industry, where one is competing with local as well as global players. It is imperative that in order to survive, each one of us must invest in innovation of technology as well as manufacturing processes.

At the back end, the auto industry is also pioneering the adoption of the next industrial revolution. The industry will again be at the forefront of adopting Industry 4.0 as a critical strategy for reforming the way the operations are run and managed today. All decisions will be based on data and ultimately the machines are going to talk to each other to calibrate themselves with the changing conditions. Various companies are trying to introduce solutions in the fields of safety, quality system, logistics, production systems, etc. Virtual factories and virtual performance will become the new normal. Companies that invest in these solutions will be the winners in the next decade!



Read this article on  
[www.autotechreview.com](http://www.autotechreview.com)