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BEST PRACTICES

AWARDS

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2020 BEST PRACTICES AWARD

Tech
Mahindra

2020 INDIAN AUTOMOTIVE DIGITAL TRANSFORMATION SOLUTION PROVIDER COMPANY OF THE YEAR AWARD

Contents

Background and Company Performance

Industry Challenges

The automotive industry is undergoing a massive ecosystem transformation. Advanced connectivity, autonomous vehicles, and electrification are shifting how automakers and their suppliers look at value chains, data analytics, and manufacturing itself.

Ever-increasing amounts of software and electronics content create new challenges for automotive OEMs: the availability of a wealth of new data means that they must find new ways to draw out meaningful insights. Ensuring product integrity (consistency, quality, safety, and reliability) also means ensuring that performance meets or exceeds customers' expectations. OEMs will have to restructure their organizations in order to be ready to respond.

Digital transformation in the automotive industry will involve the convergence of products and services in order to grow value, revenue, and efficiency through digital technologies. Digitization will enhance efficiencies, reduce costs, and provide opportunities for collaboration and innovation across the entire automotive value chain, from design and production to distribution and retail. The automotive business model will be reshaped through the consideration of data, connectivity, and cybersecurity. The pace of this transformation is being set by advances in connectivity technology, changes in consumer behavior, the emergence of new business models, and (most importantly) regulatory practices. This will have a positive effect on research and development, procurement, assembly, marketing, and parts and services.

Visionary Innovation and Performance/Customer Impact

Growth Performance

Tech Mahindra is a Pune-based IT company with an international reach. It caters to the needs of clients in banking and financial services, healthcare, manufacturing, and transportation, and other industries. The company is seeing great potential in India as manufacturers invest in new products and digital transformation to improve business models and processes; in fact, its more than 131,000 employees work with more than 925 clients in the country. The company has experienced 13% revenue growth in 2019 compared to the previous year.

Frost & Sullivan confirmed during its industry research that Tech Mahindra's large footprint in India with strong investments in labs and centres of excellence and proven solutions has elevated it to become the go-to partner in addressing the needs of the Indian marketplace. The company's deep capabilities across verticals and a diversified client base have allowed it to develop unmatched expertise in digital transformation and a collaborative approach in the partner and start-up ecosystem.

Competitive Differentiation

Tech Mahindra is a leading digital transformation provider across the automotive industry, with a focus on both core and digital engineering aspects. Its in-depth industry knowledge includes best practices imbibed from the world's top automotive manufacturers and suppliers. More than 18,000 of its associates work for the manufacturing industry contracted out to specific automotive clients to help them in digital transformation initiatives.

In the past few years, innovation has become a core focus, enabled by a robust infrastructure of labs, hardware and software, a third-party ecosystem for incubation, and a centre of excellence in digital technologies. Investments in each area help the company create platforms and solutions aligned with automotive industry trends and unmet needs. For example, CoVe is its Connected Vehicle Platform, which has created new revenue generation models that are often sold as software as a service based on usage and business outcomes delivered to customers. The solution connects in-vehicle systems with enterprise computational platforms to provide meaningful insights that benefit the driver, dealer, OEMs, Tier I suppliers, and insurance providers. As the industry embraces new connectivity services, OEMs must enhance the consumer experience while remaining mobile network operator (MNO) agnostic using Embedded Universal Integrated Circuit Card (eUICC) SIM. With Tech Mahindra's CoVe platform, OEMs can manage service definitions, bundle service using cataloging capabilities, and manage new eUICC and conventional SIMs and MNO subscriptions. Safety and reliability will improve as vehicles evolve to include features such as real-time emergency calls and road hazard warnings.

Tech Mahindra has strengthened its digital portfolio and increased its customer base through mergers and acquisitions for what Frost & Sullivan considers to be a distinctive edge over competitors. For instance, the acquisition of Italian automotive design firm Pininfarina (known for its work with Ferrari, Maserati, and Rolls-Royce) has given Tech Mahindra the advantage of extending its engineering and design expertise to these firms.

Product Portfolio and Technological Innovation

Tech Mahindra's automotive services extend across the entire value chain: product development, manufacturing, and after-sales services. Its solution portfolio is aligned with a unique vertical strategy that revolves around building factories of the future, creating Internet of Things (IoT) software electronics, and improving product reliability. Solutions improve worker productivity, lessen carbon footprint, and digitize supply chain management. It is developing 6 client-specific solutions for an Indian automaker to improve operations at the customer's domestic and international production plants.

Tech Mahindra has a unique competitive advantage in the automotive industry in that it is a subsidiary of Mahindra & Mahindra, which is one of the largest vehicle manufacturers in India. A reliable aftermarket service platform leverages the convergence of social, mobile, analytics, and cloud technologies and the IoT to help manufacturers enhance traditional after-sales areas such as maintenance, service, and spare parts. As an example, Tech

Mahindra implemented a warranty and parts catalogue for a leading construction machinery manufacturer in Asia. It is helping the manufacturer trace parts and their warranty using blockchain, allowing field engineers to get services right with effective spare parts management.

Tech Mahindra offers a wide portfolio of artificial intelligence (AI) offerings across the automotive value chain, including predictive analytics and drone-enabled inspection for assembly lines; and facial recognition for driver authentication and distraction detection, and gesture and emotion recognition; It enables over-the-air software updates for connected and autonomous vehicles using mobile edge computing that will consume 5G data, and has rolled out a customer retention solution that provides a privacy-focused, personalized experience throughout ownership and a next-generation car buying experience.

Tech Mahindra's GAiA is an AI platform built upon the open-source Acumos lifecycle management platform for an enhanced, end-to-end customer experience. Tech Mahindra and AT&T created Acumos in collaboration with Linux Foundation. The enterprise AI/machine learning platform facilitates faster monetization of intelligent solutions. With these services, Tech Mahindra is helping automotive enterprises increase productivity and efficiency, and improve visibility and traceability. Tech Mahindra's in-house collaboration platform for self-service predictive analytics, called PRISM, is being used for product optimization during the engineering design phase.

Tech Mahindra's end-to-end autonomous vehicle development offerings will reduce time to market and development costs by enhancing the connected experience across the customer lifecycle. It is integrating augmented reality technology in diagnostics, and offering a warranty management solution for Tier I suppliers to help them with the processing of warranty claims and part returns to reduce turnaround time and conform to industry standards.

Vision Alignment and Customer Service Experience

Tech Mahindra's 3-4-3 strategy for customers leverages 3 trends (the explosion of intelligent devices, the power of new technologies, and the exponential growth of content consumption) and 4 so-called "big bets" (AI, 5G, blockchain, and cybersecurity) for 3 outcomes: to run better, change faster, and grow greater.

Tech Mahindra has numerous partnerships in place, including IBM, Toshiba, and BOSCH for IoT platform; CISCO, IBM, and Microsoft Hololens for security and augmented/virtual reality; Salesforce, Google Cloud, AWS, and Microsoft for cloud; SAP, IBM, Microsoft, and Tableau for data and analytics; IBM Watson and Microsoft Cognitive Services for AI; Power Ledger and KrypC for blockchain; and Rockwell Automation, Siemens, and Honeywell for robotics automation.

Tech Mahindra helped a leading truck manufacturer whose legacy systems made it difficult and time consuming to adjudicate warranty claims. The cumbersome workflow resulted in

dissatisfied customers. Tech Mahindra automated more than half of the client's claims processing for a 10% cost savings.

Tech Mahindra also helped a leading auto OEM consolidate all connected car data in a data lake to generate insights for internal business. The goals were a better user experience, better after-sales service, and a new revenue stream with data analytics and business intelligence reporting for connected cars.

Conclusion

Tech Mahindra commitment to its automotive clients is reflected in its 3-4-3 strategy that optimizes IT spend and makes a portfolio digital ready with the help of an unmatched partner ecosystem. Tech Mahindra's automotive services extend across the entire value chain: from product development to manufacturing and after-sales services. Its solution portfolio is aligned with the factory of the future concept, creating IoT software electronics, and improving product reliability. Frost & Sullivan concludes that the company is dedicated to innovation and giving its customers a robust connected experience.

With its strong overall performance, extensive reach, and differentiated offerings, Tech Mahindra has earned Frost & Sullivan's 2020 Company of the Year Award.

Significance of Company of the Year

To receive the Company of the Year Award (i.e., to be recognized as a leader not only in your industry, but among non-industry peers) requires a company to demonstrate excellence in growth, innovation, and leadership. This excellence typically translates into superior performance in three key areas—demand generation, brand development, and competitive positioning—that serve as the foundation of a company's future success and prepare it to deliver on the 2 factors that define the Company of the Year Award: Visionary Innovation and Performance, and Customer Impact).

- Acquire competitors' customers
- Increase renewal rates
- Increase upsell rates
- Build a reputation for value
- Increase market penetration

- Earn customer loyalty
- Foster strong corporate identity
- Improve brand recall
- Inspire customers
- Build a reputation for creativity

DEMAND

BRAND

Company of the Year

COMPETITIVE POSITIONING

- Stake out a unique market position
- Promise superior value to customers
- Implement strategy successfully
- Deliver on the promised value proposition
- Balance price and value

Understanding Company of the Year

Driving demand, brand strength, and competitive differentiation all play critical roles in delivering unique value to customers. This three-fold focus, however, must ideally be complemented by an equally rigorous focus on Visionary Innovation and Performance to enhance Customer Impact.

Key Benchmarking Criteria

For the Company of the Year Award, Frost & Sullivan analysts independently evaluated each factor according to the criteria identified below.

Visionary Innovation and Performance

        Criterion 1: Addressing Unmet Needs

        Criterion 2: Visionary Scenarios through Mega Trends

        Criterion 3: Implementation of Best Practices

        Criterion 4: Blue Ocean Strategy

        Criterion 5: Financial Performance

Customer Impact

        Criterion 1: Price/Performance Value

        Criterion 2: Customer Purchase Experience

        Criterion 3: Customer Ownership Experience

        Criterion 4: Customer Service Experience

        Criterion 5: Brand Equity

Best Practices Award Analysis for Tech Mahindra

Decision Support Scorecard

To support its evaluation of best practices across multiple business performance categories, Frost & Sullivan employs a customized Decision Support Scorecard. This tool allows research and consulting teams to objectively analyze performance according to the key benchmarking criteria listed in the previous section, and to assign ratings on that basis. The tool follows a 10-point scale that allows for nuances in performance evaluation. Ratings guidelines are illustrated below.

RATINGS GUIDELINES

9–10 Excellent

7–8 Good

4–6 Fair

1–3 Poor
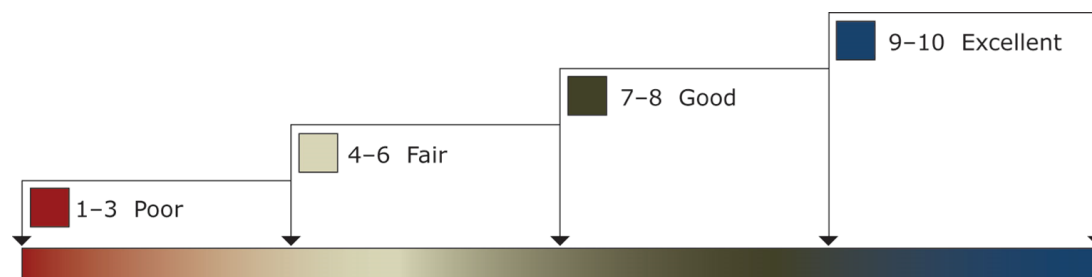
The Decision Support Scorecard considers Visionary Innovation and Performance and Customer Impact (i.e., the overarching categories for all 10 benchmarking criteria; the definitions for each criterion are provided beneath the scorecard). The research team confirms the veracity of this weighted scorecard through sensitivity analysis, which confirms that small changes to the ratings for a specific criterion do not lead to a significant change in the overall relative rankings of the companies.

The results of this analysis are shown below. To remain unbiased and to protect the interests of all organizations reviewed, Frost & Sullivan has chosen to refer to the other key participants as Competitor 1 and Competitor 2.

Measurement of 1–10 (1 = poor; 10 = excellent)			
Company of the Year	Visionary Innovation & Performance	Customer Impact	**Average Rating**
Tech Mahindra	**9.4**	**9.2**	**9.3**
Competitor 1	9	8.4	8.7
Competitor 2	8	8	8

Visionary Innovation & Performance

Criterion 1: Addressing Unmet Needs
Requirement: Implementing a robust process to continuously unearth customers' unmet or underserved needs, and creating the products or solutions to address them effectively.

Criterion 2: Visionary Scenarios through Mega Trends
Requirement: Incorporating long-range, macro-level scenarios into the innovation strategy, thereby enabling first-to-market growth opportunity solutions.

Criterion 3: Implementation of Best Practices
Requirement: Best-in-class strategy implementation characterized by processes, tools, or activities that generate a consistent and repeatable level of success.

Criterion 4: Blue Ocean Strategy
Requirement: Strategic focus on creating a leadership position in a potentially uncontested market space, manifested by stiff barriers to entry for competitors.

Criterion 5: Financial Performance
Requirement: Strong overall business performance in terms of revenue, revenue growth, operating margin, and other key financial metrics.

Customer Impact

Criterion 1: Price/Performance Value
Requirement: Products or services offer the best value for the price compared to similar offerings in the market.

Criterion 2: Customer Purchase Experience
Requirement: Customers feel they are buying the optimal solution that addresses both their unique needs and their unique constraints.

Criterion 3: Customer Ownership Experience
Requirement: Customers are proud to own the company's product or service and have a positive experience throughout the life of the product or service.

**Criterion 4: Customer Service Experience**

Requirement: Customer service is accessible, fast, stress-free, and of high quality.

Criterion 5: Brand Equity

Requirement: Customers have a positive view of the brand and exhibit high brand loyalty.

Decision Support Matrix

Once all companies have been evaluated according to the Decision Support Scorecard, analysts then position the candidates on the matrix shown below, enabling them to visualize which companies are truly breakthrough and which ones are not yet operating at best-in-class levels.
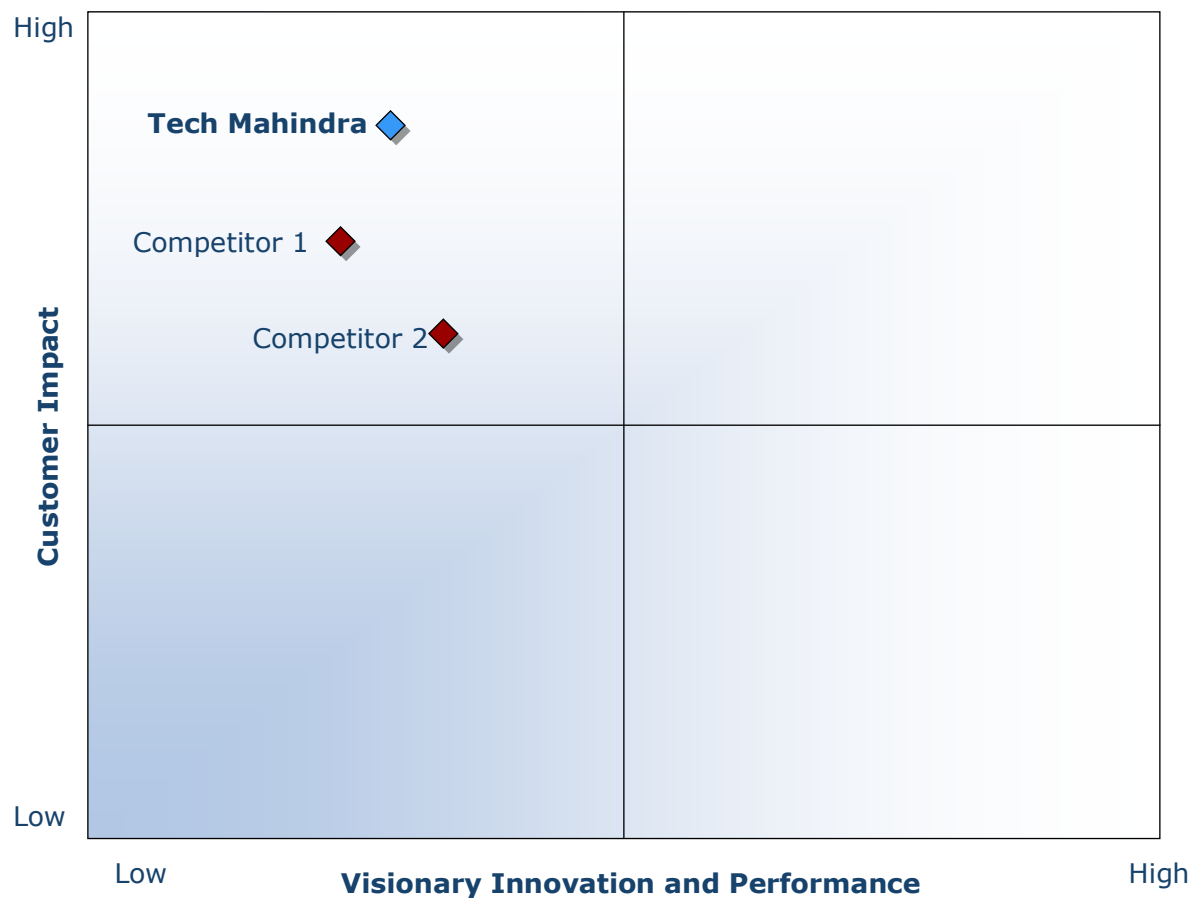
Best Practices Recognition: 10 Steps to Researching, Identifying, and Recognizing Best Practices

Frost & Sullivan analysts follow a 10-step process to evaluate award candidates and assess their fit with select best practice criteria. The reputation and integrity of the awards are based on close adherence to this process.

STEP		OBJECTIVE	KEY ACTIVITIES	OUTPUT
1	Monitor, target, and screen	Identify award recipient candidates from around the world	• Conduct in-depth industry research • Identify emerging industries • Scan multiple regions	Pipeline of candidates that potentially meet all best practices criteria
2	Perform 360-degree research	Perform comprehensive, 360-degree research on all candidates in the pipeline	• Interview thought leaders and industry practitioners • Assess candidates' fit with best practices criteria • Rank all candidates	Matrix positioning of all candidates' performance relative to one another
3	Invite thought leadership in best practices	Perform in-depth examination of all candidates	• Confirm best practices criteria • Examine eligibility of all candidates • Identify any information gaps	Detailed profiles of all ranked candidates
4	Initiate research director review	Conduct an unbiased evaluation of all candidate profiles	• Brainstorm ranking options • Invite multiple perspectives on candidates' performance • Update candidate profiles	Final prioritization of all eligible candidates and companion best practices positioning paper
5	Assemble panel of industry experts	Present findings to an expert panel of industry thought leaders	• Share findings • Strengthen cases for candidate eligibility • Prioritize candidates	Refined list of prioritized award candidates
6	Conduct global industry review	Build consensus on Award candidates' eligibility	• Hold global team meeting to review all candidates • Pressure-test fit with criteria • Confirm inclusion of all eligible candidates	Final list of eligible award candidates, representing success stories worldwide
7	Perform quality check	Develop official award consideration materials	• Perform final performance benchmarking activities • Write nominations • Perform quality review	High-quality, accurate, and creative presentation of nominees' successes
8	Reconnect with panel of industry experts	Finalize the selection of the best practices award recipient	• Review analysis with panel • Build consensus • Select winner	Decision on which company performs best against all best practices criteria
9	Communicate recognition	Inform award recipient of recognition	• Announce award to the CEO • Inspire the organization for continued success • Celebrate the recipient's performance	Announcement of award and plan for how recipient can use the award to enhance the brand
10	Take strategic action	Upon licensing, company able to share award news with stakeholders and customers	• Coordinate media outreach • Design a marketing plan • Assess award's role in strategic planning	Widespread awareness of recipient's award status among investors, media personnel, and employees

The Intersection between 360-Degree Research and Best Practices Awards

Research Methodology

Frost & Sullivan's 360-degree research methodology represents the analytical rigor of the research process. It offers a 360-degree view of industry challenges, trends, and issues by integrating all 7 of Frost & Sullivan's research methodologies. Too often companies make important growth decisions based on a narrow understanding of their environment, resulting in errors of both omission and commission. Successful growth strategies are founded on a thorough understanding of market, technical, economic, financial, customer, best practices, and demographic analyses. The integration of these research disciplines into the 360-degree research methodology provides an evaluation platform for benchmarking industry participants and for identifying those performing at best-in-class levels.

360-DEGREE RESEARCH: SEEING ORDER IN THE CHAOS

About Frost & Sullivan

Frost & Sullivan, the Growth Partnership Company, helps clients accelerate growth and achieve best-in-class positions in growth, innovation, and leadership. The company's Growth Partnership Service provides the CEO and the CEO's growth team with disciplined research and best practices models to drive the generation, evaluation, and implementation of powerful growth strategies. Frost & Sullivan leverages nearly 60 years of experience in partnering with Global 1000 companies, emerging businesses, and the investment community from 45 offices on 6 continents. To join Frost & Sullivan's Growth Partnership, visit http://www.frost.com.