



PARTNERING WITH THE
AUTO INDUSTRY
TO AUGMENT SKILL
ASPIRATIONS



SNAPSHOT 2018-19

188
JOB ROLES

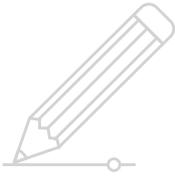
79145
CANDIDATES
ASSESSED

474
TRAINING
PARTNERS

543
TRAINERS
CERTIFIED

815
TRAINING
CENTRES

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MESSAGE FROM

CHAIRMAN

MR. NIKUNJ SANGHI



The Indian automotive industry is witnessing a significant transformation due to its sustainable growth and profitability. The industry accounts for 7.1% of total GDP and approximately 49% of manufacturing sector, with 32 million in direct and indirect employment. The automotive industry is known to be highly dynamic with innovations and disruptions from all over the world and is changing the face of mobility, as we know it. The industry is at the cusp of various structural changes, including stricter emission and safety norms – changeover to BSVI directly from BSIV being the most immediate one.

Industry growth, changing technology, growing economy, larger disposable income and lower first-hand life of cars have triggered requirements for fresh skilling and upskilling in the sector. The realities of continued disruptions at a rapid pace have resulted in increased turbulence. The education system has not been able to keep up in modifying the curriculum and aligning it with the changing technological advancements. The Indian automotive sector would suffer a huge skill mismatch if proper initiatives are not taken to bridge the growing skill gap. As a key initiative undertaken in 2018 – 19, ASDC partnered with E&Y to conduct a skill gap study for the automotive industry till 2026.

Cutting-edge technologies like Amplified Vehicle Security through machine learning – based cyber security, Augmented Reality to ensure driver's safety, Vehicle Sharing through Ola, Uber, Lyft, and self – driving cars and more are revolutionising the automotive industry. This will further accelerate the rate and quantum at which new employment opportunities emerge in this sector. These jobs, however, will be far more evolved, and need newer skilling requirements.

To cope with such a huge transformation, it comes as no surprise that there is a need for skilling, reskilling and upskilling of the workforce related to the sector. The new jobs, however, are likely to move away from traditional manufacturing profiles and instead be in the area of IoT, Mechatronics, Robotics, 3D Printing, AI Machine and Deep Learning, Analytics, Additive Manufacturing, Connected Systems and Computational Thinking – in a combined manner being termed as Industry 4.0.

ASDC has always strived to develop and upgrade automotive skills for higher value additions to the rapidly – evolving industry. As a current initiative, ASDC is in the process of framing new job roles to address the policy initiative in moving away from Internal Combustion Engine (ICE) to Electric Vehicles (EV) as outlined in the current FAME II initiative of the government. The initial Qualification Packs on Industry 4.0 are being validated with the support from the industry.

ASDC is working closely with TCS iON to understand the dynamic workforce requirements of the industry and accordingly develop classroom and digital learning modules based on its unique 'Phygital' learning methodology. The Digital Assessment platform will help conduct knowledge and skill assessments and an intelligent algorithm will carefully match the skilled youth to the right jobs. TCS iON also brings ASDC's training partner ecosystem onto the same platform and help the council manage affiliations, enhance quality of delivery, and improve transparency. This digital learning, assessment and process management platforms will help impart skills at scale and address the national priority to create a skilled workforce and generate employment.

As upskilling and reskilling is imperative to prepare the workforce for demands that the future might bring, it is important to train a significant section of the workforce to keep pace with the current technological environment and the disruptions caused by such technological innovations. The journey to transform the skill landscape has been initiated. I am confident that a strong support from the entire industry is helping ASDC address the constantly changing needs of the industry.



MESSAGE FROM

CEO

MR. ARINDAM LAHIRI



Automotive Skills Development Council (ASDC), a joint initiative of Government of India, Society of Indian Automobile Manufacturers (SIAM), Automotive Component Manufacturers Association (ACMA) and Federation of Automobile Dealers Associations (FADA), is the first Sector Skill Council of India.

As there is a substantial mismatch between the skills that the industry expects and the skills that India's young workforce possesses, ASDC was established to build a sustainable skill development ecosystem to ensure adequate availability of quality, job-ready workforce to meet the automotive industry requirements.

ASDC aims to continually develop and upgrade automotive skills for higher value additions through skilling, in order to facilitate capital creation. This, in turn, would lead to more economic activity and consequent additional jobs. In addition, ASDC attempts to make skills aspirational and integrated with academic pathways and celebrate the skilling achievements. In order to make the nation self-sufficient in skilled manpower in the automotive industry, ASDC has embraced digitalisation to help identify potential candidates, equip them with the necessary skills and match them with appropriate job opportunities in the automotive sector.

ASDC is involved with creation of standards for job roles (QP / NOS), model curriculum & learning content, assessments & certification and training of trainer & assessors. It has been ASDC's constant endeavour to focus on the efficiency and transparency of the entire process to support all partners and stakeholders.

During 2018-19, ASDC has taken several significant steps to focus on digitalisation of all processes in partnership with TCS iON and primarily on launching a rigorous digital assessment process to make it evidence-based, human-intervention-free and rubric-driven. The alignment of assessment with learning objectives and skill competencies has been made to minimise the gap between the industry expectation and the skill set of the trainee.

Our engagement in the training ecosystem and industry partners has increased significantly to ensure constant communication. This is even more relevant in context of the constant technological changes and disruptions that are an integral part of the automotive sector now.

I take this opportunity to sincerely thank each one of our industry partners, experts from the industry, training partners, assessment agencies and all other partner organisations for extending support to all the members of ASDC. I look forward to your continued support.



GOVERNING

COUNCIL 2018-19

In order for ASDC to work effectively, it needs to have industry connect, coordination with the government / NSDC representatives and other partners in skill ecosystem (training partners, assessment agencies, etc.). To cover this huge gap, significant improvement has been made over the past 2 years. During this period, some of the major initiatives undertaken include, but are not limited to:

- Engagement of TCS in digitalisation of the internal processes, e-learning portal and rigorous assessment practices
- Commissioning and completion of a detailed Skill Gap Study for the industry in association with E&Y
- Enhancing engagement with the industry in expert groups for standards, training and placement linkages
- Extending industry support for conducting IndiaSkills and WorldSkills

ASDC continues its journey to meet its stated objectives to enable the industry to train and hire skilled manpower as per the requirements.



GOVERNING

COUNCIL MEMBERS



ASSOCIATION	MEMBER NAME	DESIGNATION	ORGANISATION NAME
FADA	Mr. Nikunj Sanghi	Chairman, ASDC and Managing Director	J. S. Fourwheel Motors Pvt. Ltd.
SIAM	Mr. Kenichi Ayukawa	Vice Chairman, ASDC and Vice President, SIAM and Managing Director and CEO	Maruti Suzuki India Ltd.
ACMA	Mr. F R Singhvi	Treasurer, ASDC and Joint Managing Director	Sansera Engineering Pvt. Ltd.
DHI, MOHI	Mr. Pravin L Agrawal	Joint Secretary (Auto)	Dept. of Heavy Industry, MOHI
DHI, MOHI	Mr. Anand Kumar Singh	Director (Auto)	Dept. of Heavy Industry, MOHI
DHI, MOHI	Mr. R K Jaiswal	Development Officer	Dept. of Heavy Industry, MOHI
MoRTH	Mr. Ramandeep Choudhary	Deputy Secretary	Ministry of Road Transport and Highways
ACMA	Mr. Ram Venkataramani	Director	India Pistons Ltd.
ACMA	Mr. Deepak Jain	Managing Director	Lumax Industries Ltd.
ACMA	Ms. Shradha Suri Marwah	Managing Director	Subros Ltd.
ACMA	Mr. Vinnie Mehta	Director General	ACMA
FADA	Mr. Ashish Harsharaj Kale	Managing Director	Provincial Automobile Co. Pvt. Ltd.
FADA	Mr. Vinkesh Gulati	Partner	United Automobiles
SIAM	Mr. N V Balachandar	President - HR	Ashok Leyland Ltd.
SIAM	Mr. Vijay Sethi	CIO and Head - CSR	Toyota Kirloskar Motors Pvt. Ltd.
SIAM	Mr. A K Tomer	Executive Director - Corporate Planning	Maruti Suzuki India Ltd.
SIAM	Mr. Atsunori Komiei	Vice President (HR)	Toyota Kirloskar Motors Pvt. Ltd.
SIAM	Mr. Vishnu Mathur	Director General	SIAM
NSDC	Mr. B K Chaturvedi	Nominee	National Skill Development Corporation

Tractor and Mechanization Association, Hero Electric and Kinetic Green Energy & Power Solutions Ltd. have been invited to be a part of ASDC GC for 2019-20.



MR. RAJAN WADHERA
PRESIDENT, SIAM

“ Original equipment manufacturers and auto component manufacturers of the automotive segment make for some of the largest manufacturing industries in India. **With the advent of Industry 4.0, the manufacturing segment is undergoing a massive paradigm shift that entails automation of processes, which in return warrants reconsideration of jobs and repurposing of employee.** Given the background, with a firm finger on the market pulse, ASDC has rightly identified the pressing need for upskilling and upgrading automotive skills.

Establishing its far-sightedness, ASDC recently published Skill Gap Analysis of the Automotive Sector, (2019-26). **The insights shared in the report corroborates ASDC's constructive take towards the future and its focus on future needs and preparing well in advance for these.** We would like to congratulate ASDC for its futuristic vision to transform the job market over the next 7 years and insulate the segment from the anticipated post economic slowdown impacts. Furthermore, the report also aids the industry to better comprehend the amount of recalibration required and the advised course of action to achieve the same. ”



MR. RAM VENKATARAMANI
PRESIDENT, ACMA

“ I congratulate ASDC for its untiring efforts towards upgradation and development of skills for the automotive industry in India. **ACMA, as a stakeholder of ASDC, is committed to extend its support for ensuring a steady supply of job-ready skilled workers for the components manufacturing industry.** In the recently published report, 'Skill Gap Analysis of the Automotive Sector (2019-26)', ASDC has presented an overview of the impact of evolving job markets and other market forces on the automotive industry in the next seven years. This would certainly help the industry gear up for the future and fine-tune the skill requirements in accordance. ”



MR. ASHISH HARSHARAJ KALE
PRESIDENT, FADA

“ ASDC is on the right path to reach the pinnacle of continuously developing and upgrading automotive skills for higher value additions, thus making skills aspirational and integrated for the Indian auto industry. It needs to further its capabilities of ensuring job ready skilled manpower for the dealership community. **As one of the stakeholders, FADA is completely committed towards the success of ASDC, so that it can ensure credibility, reliability and robustness of the Skill Assessment Process.**

The just-released Skill Gap Analysis of the automotive sector (2019-26) is a testament that ASDC is focussing on tomorrow's need well in advance by providing a vision of the change in job market over the next 7 years, thus offering a consolidated view of the impact that various market forces are expected to have on the automobile industry. **This report will help the industry prepare well in advance and give a leeway to recalibrate our workforce requirement.** ”



MR. MANISH KUMAR
CEO, NSDC

“ I commend the efforts undertaken by ASDC, the first Sector Skill Council of India, to work towards enhancing the skills of the nation's workforce in the automotive sector. I congratulate them for undertaking initiatives such as the Skills Gap Study, insights from which have been instrumental in underlining various market forces that are expected to have an impact on the automobile industry. **I am also delighted to see ASDC leading the way in providing the much-needed digital impetus to achieve scale and speed through the recently launched Skill Hub with TCS.** I wish ASDC all the best and look forward to provide support for its continued success. ”



VISION

MISSION



v

VISION AND MISSION

- To continually develop and **upgrade Automotive Skills** for higher value additions (higher value addition through skilling will facilitate capital creation, leading to more economic activity and consequent additional jobs)
- **Making skills aspirational** and integrated with academic pathways
- Honouring and **celebrating the skilling achievements**

To be achieved through:

- Complete **commitment of the Industry** (SIAM, ACMA and FADA) who are already contributing a lot in skilling on their own
- Ensuring **updated Auto Industry Value Chain aligned job roles**
- **Skill competitions**



VI

AUTOMOTIVE

SKILL GAP STUDY

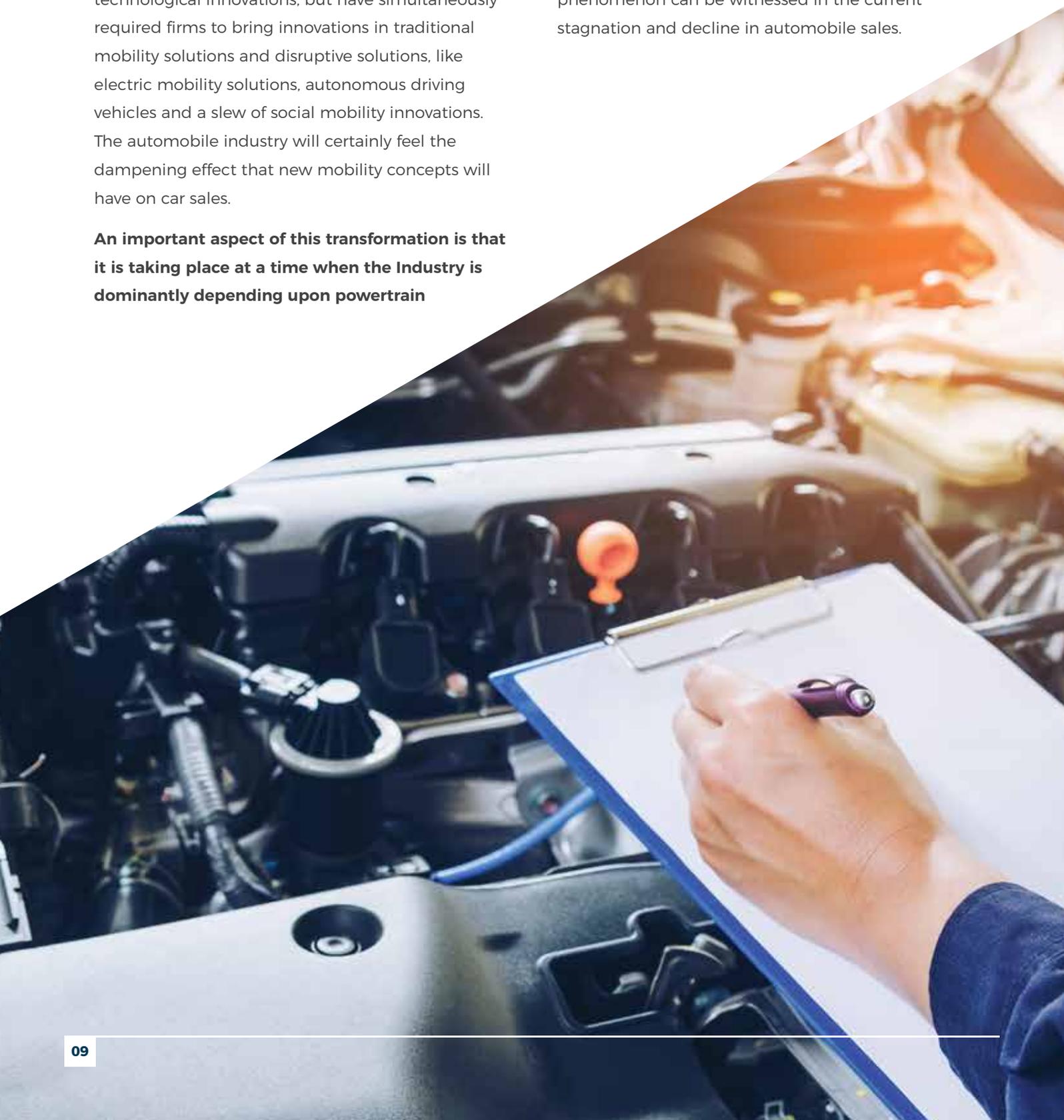
The present workforce does not possess the skills that will be required with the arrival of new industrial trends. The limited option that industries has is to turn to robots / automation or reskill the existing workforce. **The most pertinent aspect of sustaining the high growth of the sector is to create a future ready workforce** by bridging the gap that exists on the demand and supply side of manpower, addressing the scale and quality paradigms.

Global automotive market is undergoing a rapid transformation and India is not oblivious to this phenomenon. **The sector is getting impacted by a diverse set of forces—demand for environmentally sustainable mobility solutions, changing consumer preferences, digitalisation across automotive value chain and emergence of Industry 4.0 technologies.** These trends have not only enabled firms to improve efficiency and technological innovations, but have simultaneously required firms to bring innovations in traditional mobility solutions and disruptive solutions, like electric mobility solutions, autonomous driving vehicles and a slew of social mobility innovations. The automobile industry will certainly feel the dampening effect that new mobility concepts will have on car sales.

An important aspect of this transformation is that it is taking place at a time when the Industry is dominantly depending upon powertrain

technology, i.e. combustion engine and the gears.

In the new emerging models, the share of powertrain is either reduced or even vanished completely. Together with changing consumer preferences, this emergence of new mobility solutions, such as car sharing, bike sharing and dynamic car-pooling, are significantly impacting the growth prospect of the sector and its human resource requirements. An evidence of this phenomenon can be witnessed in the current stagnation and decline in automobile sales.



The future of automotive industry in India will be determined by the sector's response to the inevitable impact created by the interplay of three key trends of the Indian market:

MANUFACTURING TRENDS

Exponential technologies are touching each element of the value chain in the automotive sector. Industry 4.0 technologies, such as Autonomous Robots, 3D Printing, Industrial IoTs, Machine Learning and Artificial Intelligence started to revolutionise the automotive sector. These technologies have dramatically driven the industrial productivity. **In India, impact of one specific Industry 4.0 technology that is being felt is Industrial IoTs.** The system is promoting rise of connected factories wherein the machines can interact with one another, configure themselves and adapt to changes. Industrial IoTs, along with other technologies, are integrating entire automotive value chain and bringing significant productivity gains. An impact has been greater automation, displacement of lower skilled human resource and requirement of higher-skilled labour for managing these exponential technologies.

POLICY INITIATIVES

A consensus has emerged with the policy arena and among consumers that automobile players need to become environmentally sustainable through innovations in mobility solutions that reduce greenhouse gas emissions. **The demand for a clean environment and the stringent sustainability norms are bringing a glaring change in the composition of automobiles as well as their manufacturing processes.** The key trends observed due to this megatrend in the industry are as follows:

- Electric Vehicles
- Stringent pollution and other environment related norms

Regulators and Judiciary have become proactive in regulating the environmental impact of the automotive sector. **The migration from BS IV emission levels to BS VI, FAME policy and CAFÉ norms are examples of policy initiatives disrupting the automotive sector in India.**

CHANGING MARKET DEMAND

Launch of smart, connected vehicles means that there are more electric parts in newer vehicles. OEMs / Auto component manufacturers now require both mechanical and electric engineers, IoT specialists and data analysts. However, not many threatened job roles are anticipated due to this trend as vehicles are still largely mechanical. Further, with population increasingly shifting to urban cities and people becoming more cost conscious, shared mobility and ride sourcing platforms have acquired a rampant development pace.

These trends are expected to give way to changes in the production process, emergence of new business models, newer sales and service delivery models along with reconfiguration of workforce strategies. Further, there are a lot of negative sentiments in the market around the job losses on account of adoption of Industry 4.0. Towards this, it is necessary to remind ourselves that there is a distinction between potential of Industry 4.0 automation and actual adoption of Industry 4.0. **While a significant part of vehicle production process has the potential to be automated, the actual adoption will depend upon the interplay of a host of complex factors**, including the supply of cheap labour in the Indian market, skill level of current and future workforce, policy intervention of automation and associated job losses, labour laws, availability of ancillary infrastructure and society's perception towards technological innovations.

The shift from Internal Combustion Engine (ICE) to Electric Vehicles is being viewed as a market disruptor. This shift is expected to have a major change in the nature of jobs throughout the automotive value chain. Some job losses are expected since the manufacturing process for ICE based cars differs significantly from the Electric Vehicles that require fewer parts. This will have a major impact on the business of auto-component manufacturers as they will have to make a major shift from their current business of supplying gearbox, exhaust pipes, fuel injection mould to battery, electric motors, etc. This will lead to the emergence of new players in the value chain. It is believed that there will be a net increase in the number of jobs in the sector on account of three reasons: new technology infusion in the sector providing additional high-quality jobs, jobs emerging from the development of associated infrastructure and human resource for maintenance. **Our analysis suggests that the current employees will have to be skilled to match the automotive sector's evolving requirements.** Electric Vehicles will have a profound impact on the mix of automotive workforce at OEMs and auto-component manufacturers.

One of the major transformations is being witnessed in the dealership segment. The rise of digitalisation and increasing population of millennials is trying to reshape the automobile sales experience and firms have responded with commitment to increase the digital footprint and attempting to shift their focus to individual customer needs, prioritising retention and relationship management. More than ever, customer retail interaction is becoming one of the key aspects of dealership development. Today, personalisation is becoming critical to consumers who need personalised relationship management or concierge. As a result, it is expected that value creation will shift towards creating capabilities at customer interface and less towards manufacturing the physical product. This has led to automotive players building a seamless omnichannel presence, exploiting data analytic capabilities, utilising top-up digital services and skilling employees to become trusted advisors to the customers. The skilling of the dealership workforce needs to be taken at an unprecedented pace with the rapid change in the customer service expectations and increased awareness. The dealership workforce needs to be trained not only of the nuances of emerging technologies, such as connected cars and IoTs but also on how to personalise the customer purchasing journey. The customer-facing employees shall be appraised of the critical nature of customers' needs, desires and character, even before the start of their interaction.

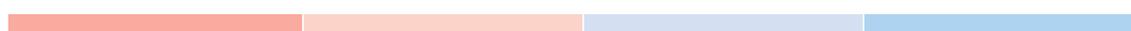
The road transport segment is getting impacted by the rise of shared mobility. Despite its late start, shared mobility is becoming common and is emerging as a viable employment provider for the driver segment. The rise of shared mobility is also transforming the nature of automotive market by offering consumers an option against personal ownership of vehicles.

The road transport sector comprises of the majority of the workforce in the automotive sector. However, despite constituting a major share in employment, this segment has been least focussed by industry and government alike. The sector has often demanded the pressing need to frame better human resource policies to create competent workforce and attract people to join the sector. The working conditions of the drivers can be described as pathetic, with drivers subjected to long driving hours away from home over an extended period. They often do not have proper access to basic facilities which dehumanises the job of drivers and makes it unattractive. Further, research suggests that due to non-transparent driver licensing system, drivers joining the workforce are not adequately skilled. Industry executive have voiced their concern on driver training infrastructure being highly inadequate.

Survey of the Indian automotive sector indicated that on account of massive inefficiencies across the automotive value chain, India has a high potential for automation. However, majority of the value addition takes place in auto component sub-sector which engages relatively low skilled to unskilled workforce. This makes a strong case for suggesting that it is unlikely that Indian automotive sector will experience a massive job loss because of adoption of Industry 4.0 technologies. Further, the supply of low-cost labour force will continue to hold the pivot for Indian automotive workforce against any disruptive adoption of exponential technologies. However, the jobs within the OEMs are expected to see a change in the skill set due to its organised nature and potential for automation. Therefore, given the above background there is an immediate requirement to skill / upskill the workforce or the country may “automate before they educate”, leading to jobless growth.

FIGURE 1-TRENDS AFFECTING EMPLOYMENT AND VALUE CHAIN OF THE AUTOMOTIVE SUB SECTORS

	POLICY AND REGULATORY INTERVENTIONS	ELECTRIFICATION OF VEHICLES	AUTOMATION AND INDUSTRY 4.0	CHANGING MARKET DEMAND
MANUFACTURING OEM	High	Low	Low	High
MANUFACTURING AUTO COMP	Low	High	Low	Low
DEALERSHIP SALES	High	Low	High	Low
DEALERSHIP SERVICE	Low	High	Low	Low
ROAD TRANSPORT	High	Low	High	Low



HIGH

LOW

In this report, E&Y brings together:

- Primary research through extensive interactions with industry personnel
- Secondary research through detailed review of industry reports, news articles and expert opinions
- Numerical evidence through rigorous analysis by E&Y internal team of experts, to present a comprehensive report on the skill gaps in the Indian automobile industry

The report is divided into four sub-sectors to accurately explore the technological and market trends that each sub-sector faces and the respective skill gap that must be bridged. We also track the demand-supply dynamics of each sub-sector to provide a better guide towards long-term planning.

THE SUB-SECTORS ARE:

- Manufacturing and R&D (OEM, auto component manufacturers and raw material suppliers)
- Dealership sales
- Dealership servicing
- Road transportation

Summary of new, endangered and reskilling jobs in various sub-sectors of the automotive industry

SUB-SECTORS OF AUTOMOTIVE INDUSTRY	NEW JOBS	ENDANGERED JOBS	JOBS REQUIRING MAJOR RESKILLING
<p>Manufacturing and R&D (OEM, auto component manufacturers and raw material suppliers)</p>	<ul style="list-style-type: none"> ▪ Electromechanical technician ▪ Electronics technician ▪ Networks and computer system applications ▪ Operators to manage robots and programming ▪ Equipment maintenance technician ▪ Operations and maintenance data analyst ▪ Industrial machine builder, mechatronics ▪ Motor control engineer 	<ul style="list-style-type: none"> ▪ Routing and simple assembly job ▪ Routine machine loading/unloading ▪ Logistics- internal material transfer and storage ▪ Paint application ▪ Manual spot welding ▪ Packing executive ▪ Welding assistant ▪ Production (forging) ▪ Tool room operator ▪ Production machining 	<ul style="list-style-type: none"> ▪ Machining ▪ Maintenance (mechanical and electric) ▪ Assembly and fitter (aggregate) ▪ Welders and body process ▪ Assembler and fitter ▪ CNC machining and casting
<p>Dealership Sales</p>	<ul style="list-style-type: none"> ▪ Home sales consultant ▪ Sales consultant digital marketing ▪ Digital content writer ▪ E-outlet sales consultant 	<ul style="list-style-type: none"> ▪ Accessories manager ▪ Sales person ▪ Washing boy 	<ul style="list-style-type: none"> ▪ Sales consultant
<p>Automobile Service (OEM authorised service centres and roadside mechanics)</p>	<ul style="list-style-type: none"> ▪ Auto expert technician ▪ Advance paint technician ▪ Battery technician ▪ Electric vehicle technician ▪ Predictive analyst 	<ul style="list-style-type: none"> ▪ Engine repair technician ▪ Service technician ▪ Sanding and priming jobs 	<ul style="list-style-type: none"> ▪ Service technician
<p>Road Transport (EV charging station)</p>	<ul style="list-style-type: none"> ▪ Charging attendant / Station supervisor ▪ Car washer / Tyre inflator / Puncture repair ▪ Security guard ▪ Field failure analysis engineer ▪ Customer support engineer 		
<p>Road Transport (New skills required by commercial vehicle and cab drivers as a complementary skill to driving)</p>	<ul style="list-style-type: none"> ▪ Hospitality ▪ Loading / Unloading ▪ Handling hazardous materials ▪ Basic mechanics ▪ Tablet computer training ▪ Financial management ▪ Vehicle detailing ▪ Self-motivation training ▪ Transportation management training 		



VII

FUTURE

SKILLS

The rapid pace of technological advancement is fundamentally changing the skills needed for the jobs of the future. With the onset of the Fourth Industrial Revolution, better known as Industry 4.0, and moving towards the notion of 'green mobility', India is expected to encounter a number of challenges related to the skill level of their workforce. The skills which are important today will cease to be so in the future and the workforce will be expected to possess new skills. **In the scenario where new technologies are being widely adopted, ASDC has undertaken the initiative to promote skill development to equip today's youth with the essential skills and experience.**

A. INDUSTRY 4.0

With the rise of the new digital industrial technology, there is a transformation that makes it possible to gather and analyse data across machines, enabling faster, more flexible and even more efficient processes to produce higher-quality goods at reduced costs. This manufacturing revolution will increase productivity, shift economics, foster industrial growth and modify the profile of the workforce - ultimately changing the competitiveness of companies and regions. When computers were introduced in Industry 3.0, it was disruptive, thanks to the addition of an entirely

new technology. Now, as Industry 4.0 unfolds in the future, computers are connected and communicate with one another to ultimately make decisions without human involvement. **A combination of cyber-physical systems, the Internet of Things and the Internet of Systems make Industry 4.0 possible and the smart factory, a reality.** Advanced digital technology is already used in manufacturing, but Industry 4.0 will transform production. It will lead to greater efficiency and change traditional production relationships among suppliers, producers, and customers as well as between human and machine. Nine technology trends that form the building blocks of Industry 4.0 are:

- Additive Manufacturing
- Augmented Reality
- Big Data and Analytics
- Autonomous Robots
- Simulations
- Horizontal and Vertical Integration
- Industrial Internet of Things
- The Cloud
- Cyber Security



APPLICATION OF INDUSTRY 4.0 IN TODAY'S SCENARIO

While many organisations might still be in denial about how Industry 4.0 could impact their businesses or struggle to find the talent or knowledge to know how to adopt it for their unique use cases, several other **organisations are implementing changes today and preparing for a future where smart machines improve their business.** Here are just a few of the possible applications:

- **Identify opportunities:** Since connected machines collect tremendous volume of data that help in maintenance, performance and other issues, as well as analyse that data to identify patterns and insights that would be impossible for a human to do in a reasonable time frame. Industry 4.0 offers the opportunity for manufacturers to optimise their operations quickly and efficiently by knowing what needs attention.
- **Optimise logistics and supply chains:** A connected supply chain can adjust and accommodate when new information is presented. If a weather delay ties up a shipment, a connected system can proactively adjust to that reality and modify manufacturing priorities.
- **Autonomous equipment and vehicles:** There are various manufacturing industries and warehouses that are leveraging autonomous vehicles and cranes to streamline material movement operations.
- **Collaborative robots:** Once possible only for large enterprises with equally large budgets, robotics is now more affordable and available to organisations of every size. Now the robots are becoming smart and are also collaborating with humans for effective working.

In the past, **ASDC had 18 Qualification Packs in Research & Development domain.** With the latest technology shift and Industry 4.0 coming in, ASDC is tirelessly working with the industry and academia on Robotics Process Automation, 3D Printing and Big Data Analysis.

11 of these existing QPs are getting enhanced and modified by ASDC Expert Group, consisting members from industry. These QPs are based on Robotics Process Automation and 3D Printing. A new QP is getting developed for Big Data Analysis.

ASDC participated in a conference organised by CII on the Future of Automotive Manufacturing, New Product Development and Globalisation. Mr. Arindam Lahiri, CEO, ASDC, moderated a panel discussion on the 'Impacts of Industry 4.0' and 'Green Manufacturing in Automotive Manufacturing'. In this session, he emphasised on the importance of skilling the workforce now, so that we become ready for this technology shift.

CHALLENGES

Despite the enormous economic potential of Industry 4.0, SMEs in industry remain relatively cautious about it. It is not easy for small and medium-sized enterprises, due to lack of resources, to assess the technological maturity of the relevant solutions and their business uses. Managements lack a methodical approach towards its implementation. Lack of standards and norms with regard to interface technologies is another reason why investments in the integration of digital IT systems with the traditional old manufacturing machines and systems are either not carried out or being delayed.

B. ELECTRIC VEHICLE

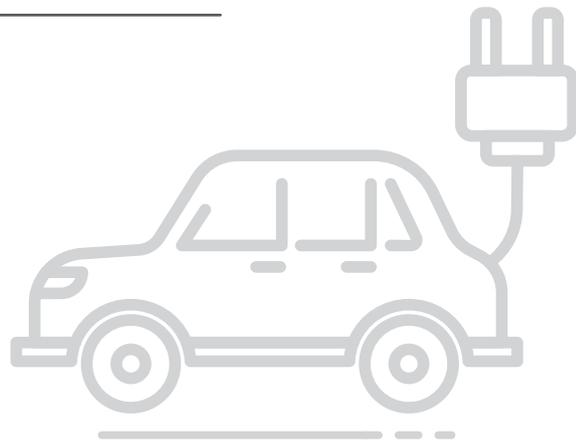
As air pollution and fuel prices show an upward trend, the Indian automobile industry is poised to take the electric route. Electric Vehicles not only signify a move towards urban mobility that is clean, connected and convenient, but also tend to be the future of mobility. The EV proliferation is generating many non-traditional jobs, for which skilled workforce is not readily available. As of now, employers in the EV value chain are relying upon in-house training in order to prepare a skilled workforce. Thus, **there is a need for appropriate planning of skill development to develop an EV skilled workforce, which would provide impetus to the EV uptake.**

Electric Vehicles can be classified into:

- Hybrid Electric Vehicles (HEVs)- Powered by both petrol and electricity.
- Battery Electric Vehicles (BEVs)- Have an electric motor in place of combustion engine and use electricity from the grid stored in batteries.
- Plug-in Hybrid Electric Vehicles (PHEVs)- Use batteries to power an electric motor and liquid fuel internal combustion engine.
- Fuel Cell Electric Vehicle (FCEVs)- Using a fuel cell in combination with battery to power on-board motor.

The Indian EV market is expected to grow at CAGR of 28.12% over the forecast period of 2017-2023.

EV sales has grown to 6-7 million from a mere 56000 for electric (2W and 3W) rickshaws, cars and electric buses.





ASDC organised various expert group meetings on Electric Vehicle, with members from ARAI, Autobot India Pvt. Ltd., Mahindra & Mahindra Ltd., Prudentia, Tata Motors Ltd., Tata Trusts, Maruti Suzuki India Ltd., Revolta Motors Pvt. Ltd., Okaya Power Group and Ansys Software. **The agendas of these forums are development of new QPs for the Electric Vehicle domain**, such as manufacturing, service, charging station, driving, sales, etc. During the sessions, priority QPs were identified based on the demand and technology change in Electric Vehicles. ASDC is currently developing 8 new QPs for the EV domain to make sure that skilled manpower is available when Electric Vehicle production starts with volume vehicle.

To develop an EV skilled workforce in the sector, ASDC, along with KPMG and the Department for International Development—a department of the UK Government responsible for overseas aid—conducted a study to identify the new job roles across various domains, e.g. research & development, telematics for both OEM and authorised centres.

ASDC was also a part of the coveted ET Auto Conclave, which involved engaging with the industry experts and manufacturers to deliberate upon building value proposition in the Electric Vehicle segment. At the conclave, Mr. Nikunj Sanghi - Chairman, ASDC and Mr. Arindam Lahiri - CEO, ASDC highlighted the need for skilling in the sector and discussed how the dynamic environment would open new models of business propositions and opportunities, which would attract further investment in the industry.

In Lucknow, at a workshop on “Supporting e-mobility in India - Uttar Pradesh”, Mr. Raman Kumar Sharma, Senior Advisor, ASDC engaged with various dignitaries of Government of Uttar Pradesh (Departments of Urban Development, Road Transportation, Infrastructure & Industrial Development), Energy Efficiency Services Limited, UNEP India, NITI Ayog, Okaya Power Group and PwC. Based on the findings of the study that was conducted, Mr. Sharma emphasised on the urgent need for the skilling and upskilling of manpower in the Automotive Ecosystem and how ASDC will play a critical role in bridging the gap between industry, academia and the government for future development.



VIII

QUALITY

ASSURANCE

To have an effective skill development mechanism that bridges the gap between the industry requirements and educational qualifications, ASDC has brought together the academia, industry and the government under its Quality Assurance model. In order to assure quality in every aspect, the model involves developing content and curriculum aligned with ASDC / industry standards, assessment mechanisms for trainers and students, developing certification framework as per the standards, and training the trainers and assessors accordingly.

A. TECHNOLOGY ENABLEMENT

ASDC has partnered with TCS-iON for Digitalisation and Standardisation of Assessment process.

The key highlights of this partnership are:

- Focussing on standardisation of learning content by digitalising the content and making it available / accessible to all TPs, trainers and learners. Focus on enhancing competencies and accountability of trainer and assessor by providing digital solutions and access to learning content through classroom and digital learning modules based on its unique 'Phygital' learning methodology.
- Complete digitalisation and real-time process for affiliation of Training partner and Training centre, resulting in complete transparency and accountability.
- Complete re-imagination of the assessment process focussing on digital assessment with less human interference, resulting in credible assessment process and quality output. Creating global industry benchmark assessments which focus on certification of the skill level and job readiness of the learner, thus helping industry in resource planning and designing competency development of employees.
- Bringing skilled candidates closer to industry and providing insights of skilling process of candidate to the industry. Real-time inventory of skilled workforce will be available to industry by providing them access in the TCS iON listing platform.

At the ASDC Annual Conclave 2019, TCS iON's Skill Hub was launched by Dr. Mahendra Singh Pandey, Minister for Skill Development & Entrepreneurship, Government of India as a step towards digitalising the automotive skill learning and assessment processes to provide wider access. **This digital portal provides affiliation management and standardised industry-relevant digital content and helps enable outcome-based skilling, digitalised assessments, leading to a job listing portal for gainful employment.**

ASDC's partnership with TCS iON addresses the challenges faced through digital transformation in the following key areas:





Challenges that were resolved through the ASDC and TCS iON Collaboration

- Training Partners (TPs) used content developed by themselves. ASDC aimed to go for standardised content to be used by all TPs that would ensure quality delivery. Earlier, ASDC's role had largely been limited to creation of QP / NOS / job roles.
- Possibility of manipulations and inadequate systems controlling these in both Part A and Part B assessments. Part B (Practical) assessments were completely dependent on assessors.
- There was no system available to track skilled candidates employment.
- Low participation from industry as they did not trust capabilities of trained candidates, resulting in low recruitment of these candidates.

I. E-LEARNING

ASDC utilised TCS iON digital learning platform to fulfil their aim of continuous development and skill upgradation for higher value additions in the automotive ecosystem. Automotive Skill Hub was created and embedded in the ASDC website, which features online courses, assessments and events for all skilling and upskilling needs. Educators and trainers deliver self-paced blended modules, enabling users to effectively learn at their own pace and place of choice and get certified.

ASDC aims to collaborate with industry and content experts to further contribute content on the e-learning platform. This platform was launched by Hon'ble Dr. Mahendra Singh Pandey, Minister for Skill Development & Entrepreneurship, Government of India. Currently, we are developing 18 job roles as e-content, out of which 4 job roles will be uploaded on e-learning hub by the end of November 2019.



II. ASSESSMENT AND CERTIFICATION

ASDC digitally transformed assessments for government-funded programmes like PMKVY. ASDC deployed TCS iON Digital Assessment Platform to conduct credible Automotive Skill Assessment. TCS iON conducted PMKVY assessments across all states in India. The pilot phase was completed with very promising and satisfying results.

With road safety being one of the biggest concerns in the world, especially in India, **ASDC has started an initiative with TCS iON to ensure or assure driver's road readiness and safety.** The drivers were assessed and certified based on their knowledge, responsiveness and behavioural maturity for safe driving. The candidates enrolled for online courses and cleared tests to earn the Safe Driver Badge.

The assessments were conducted in two parts. Part A comprised of theory to test the knowledge of the driver, while Part B comprises of a practical test. The theory tests were conducted at TCS iON centres across the country, while practical tests were conducted in existing simulation set ups at TCS iON or partner centres.

CANDIDATES

The first batch of PMKVY assessments for the job role of Auto Service Technician (2 and 3 wheelers) witnessed a digital involvement. ASDC, in association with TCS iON, carried out the assessments digitally, wherein the assessors didn't have to visit the centre and the entire assessment process was done remotely with the help of the video tools developed for this portal. Till date, assessments have been carried out for 1,744 candidates pan India.



ASSESSORS

ASDC puts utmost importance on quality of trainer and assessor to ensure that the certified candidates are skilled and can be gainfully employed. The whole skilling ecosystem falls short of quality assessors due to lack of regulatory and quality framework. In order to overcome this issue, **ASDC, along with TCS iON, carried out seamless transparent assessments for Training of Assessors.** Both the domain and platform skills for sales, service and driving job roles were being covered in the assessments.

ASDC conducted 4 TOA programmes, wherein 150 assessors were assessed in 17 cities across India in sales, service and driving domains. The final assessments for the programme were completely done online, without any manual intervention. ASDC aims to cover the manufacturing domain soon in the upcoming assessments.



B. STANDARDS

To make skill an enabler of auto sector's growth in India, ASDC must continuously obtain industry requirements and use that information to activate the ecosystem for delivering required number of trained and certified candidates. Towards this purpose, it is imperative that the industry takes the lead. In line with this approach, **ASDC Expert Groups (AEG) were formed, with experts from relevant industry domains.** Together, the following AEGs cover the entire value chain of the automotive sector:

- AEG - R&D - from SIAM and ACMA members
- AEG - Manufacturing - from SIAM and ACMA members
- AEG - Sales - from SIAM and FADA
- AEG - Diagnostics and Servicing - from SIAM and FADA
- AEG - Driving (Road Transportation) - from SIAM, NGO and government departments

It was further proposed that wherever necessary, the AEGs could decide to have sub-committees to focus on specific areas within a domain. Broadly, the role of an AEG was to guide ASDC in the following activities as related to its respective domains:

- Identifying the need for developing new skill standards
- Facilitating requisite approvals from industry on newly developed standards
- Maintaining currency of already developed National Occupational Standards / Qualification Packs (NOS / QP)
- Approval of curriculum / content-based on NOS / QP
- Finalisation of norms for facilities and infrastructure required for Training Delivery Centres
- Finalisation of norms for trainers / assessors
- Approval of ASDC assessment process
- Supporting ASDC in recruiting trainers / assessors from the industry
- Guide ASDC in areas of:
 - Emerging industry trends that would impact skilling needs
 - Skilling impact of product and process innovations and emerging best practices
 - Selection of international collaborators

AEG members were expected to attend meetings likely once in a quarter or on SOS basis as per any specific agendas.

In order to upgrade Qualification Packs (QP), ASDC conducted multiple meetings with major automobile manufacturers and auto component manufacturers, like Maruti Suzuki India Ltd., Mahindra & Mahindra Ltd., Tata Motors Ltd., Kia Motors India Pvt. Ltd., TVS Motor Co., Hero Motocorp, HELLA India Automotive Pvt. Ltd., Honda Cars India Ltd., Subros Ltd., Eicher Motors Ltd., Sandhar Technologies, etc. to discuss the merging, upgradation or deletion of Qualification Packs. Following number of job roles were under the process of upgradation for the period under review:

R&D - 18 | Manufacturing - 76 | Sales - 38 | Diagnostics & Servicing - 41 | Driving (Road Transportation) - 18





C. AFFILIATIONS OF TRAINING PARTNERS

Skilling and reskilling of the workforce is the need of the hour in the automotive industry. ASDC has been on a mission to make skills aspirational and integrate them with academic pathways. Towards this purpose, a strict policy of affiliation is in place for all Training Partners (TP) / Training Centres (TC). **The policy is a requisite to get formally associated with ASDC, so that the training for specific job roles is aligned with National Skill Qualification Framework (NSQF).**

An affiliated TP / TC gets access to a number of benefits, including the following:

- Only accredited and affiliated TP / TC are allowed to commence NSQF aligned training programmes
- Trainees of the affiliated TP / TC are entitled to receive government authorised certificates post successful completion of training and assessment

For getting affiliated to ASDC, the prospective training partner needs to register through NSDC 's portal. The training partner needs to upload all the necessary information regarding infrastructure, equipment, trainer details and other relevant documents. NSDC validates the physical existence of equipment and infrastructure. ASDC will evaluate the application on job role basis and affiliate the respective centres.

At present, we have 28 industry partners such as Maruti Suzuki India Ltd., Hero Motocorp, Honda Cars India Ltd. and Hyundai Motor India Ltd. onboarded. We are planning to onboard prestigious companies like Audi India Pvt. Ltd., Toyota Kirloskar Motors Pvt. Ltd., Axalta Coating Systems Pvt. Ltd. and Renault India Pvt. Ltd..

To strengthen the collaboration between the industry and academia, an MoU was signed between ASDC and Bharatiya Skill Development University. The partnership focussed on assuring credibility and reliability to the skill assessment process. Going forward, **ASDC plans to form expert groups consisting of members from industry, academics and skill institutes to take forward and strengthen the components of the skill ecosystem.**

D. TRAIN THE TRAINERS

The trainers who would eventually impart training have to go through periodic Training the Trainer programmes across the country, in order for ASDC to ensure that the trainers are absolutely updated in the current technologies and techniques that are required to carry out any specific task in the automotive ecosystem. ToT programmes are held for 10 days, which cover 3 days of domain training and 7 days of platform training.

Domain Training- For this training, certain years of training and industry experience is required. This training is to brush their domain skills as well as meet the ASDC standards.

Platform Training- Once they meet the ASDC standards, they are further trained to deliver effective training to candidates

To align the trainers with the National Skill Qualification Framework (NSQF) and competency enhancement, 630 out of 911 trainers were certified at 40 TTT programmes, organised across the country during the period under review.



IX

DELIVERY

MECHANISM

A. SCHEMES AND INITIATIVES

RECOGNITION OF PRIOR LEARNING (RPL)

RPL is defined as the process of recognising previous / prior learning, often experiential, towards gaining qualification. This programme assesses and certifies those who have acquired their skills informally with hands-on experience over the years in a particular trade. **This not only recognises their skills, but also helps them access future job opportunities in the formal ecosystem.**

OBJECTIVES

- To **recognise the existing skill sets and prior experience** of the beneficiaries gained through informal means
- To **provide certification** in line with the National Skills Qualification Framework
- To **develop equipped and skilled workforce** at hand
- To **identify skills gap** that allows further focussed training

PROCESS FLOW

- Sensitisation and onboarding of eligible employers
- Identification of employer assessor and employees
- Project submission and approval
- Orientation of the employer assessor
- Assessment
- Co-branded certification

CURRENT STATUS

- **ASDC had received 50,610 target approvals from NSDC**, dated 11th Jan 2019, including ANI Technologies Pvt. Ltd. (OLA), JS Fourwheel Motors Pvt. Ltd., Tata Motors Ltd., Victora Automotive Inc., Roop Automotive Ltd., Mitsuba Sical India Pvt. Ltd. and Best Koki Automotive (P) Ltd. for implementing the projects.
- **Total enrolment of candidates under this project is 23,089** and 19,256 have already been assessed as of now.
- **Reward money has been paid to 6,939 candidates** till date by NSDC.
- Employers such as Uber India Systems Pvt. Ltd., Subros Ltd., Talbros Automotive Components Ltd., Metalman Micro Turners and DTC will be **implementing RPL for their workforce**.

FEATURES

- No assessment and certification fee
- Certified candidates receive monetary reward of INR 500
- Three-year accidental insurance to candidates
- Skill Certificate to provide recognition for their skill set



NATIONAL APPRENTICESHIP PROMOTION SCHEME (NAPS)

Identifying the challenge to scale-up various skill development initiatives, Shri Narendra Modi, Prime Minister of India, launched a national mission under the Ministry of Skill Development and Entrepreneurship (MSDE) on 15th July 2015. **Branded as Skill India Mission, the programme focussed on apprenticeship training as one of the key elements towards creating a large pool of skilled manpower.**

Since the launch of Skill India Mission, MSDE made significant reforms to the Apprentices Act, 1961, making it easier for the industry to hire apprentices. To further catalyse apprenticeship training across the country, Ministry of Skill Development & Entrepreneurship (MSDE), Government of India, launched National Apprenticeship Promotion Scheme (NAPS). **The scheme not only incentivises the corporates to train and hire apprentices, but has helped them meet their long-term workforce requirements by creating a pool of skilled manpower across different sectors. The scheme aims to facilitate apprenticeship training for 50 lakh candidates by 2020 in all sectors.**

Benefits for the Industry / Employer

- Employers can engage apprentices up to 2.5% to 10% of the total manpower strength
- Industry can opt for in-house basic training or can outsource
- Automated processes and ease in hiring and reporting requirements with a dedicated apprenticeship portal
- Financial benefits to employer for hiring apprentices
 - A. Reimbursement of 25% of prescribed **stipend** to employers with respect to all apprentices, subject to a maximum of INR 1,500/- per month per apprentice
 - B. Sharing the cost of basic training with respect to fresher, limited to INR 7,500/- per apprentice for a maximum duration of 500 hours / 3 months
- Introduction of short term training creates a fresh pool of talent, trained as per the industry requirement
- Proactively address hiring requirements by training the apprentices as per the industry norms
- Recognise talent based on performance delivered
- Candidates start contributing productively after a couple of months of training
- Apprentices are not employees, hence no obligation to hire them
- Direct contribution to nation building through partnership with Skill India Mission
- Submission of returns, other information and contract of apprenticeship through apprenticeship portal, which has further provisions for time-bound approval
- Employers who engage apprentices under the Apprentices Act, 1961 are exempted from contribution of EPF and ESI for apprentices engaged by them
- Earn social goodwill and improve brand image as a socially responsible company



ACTIVITIES DURING THE YEAR

- **Industry would be able to create opportunity or generate contract on the NAPS portal**, once ASDC uploads model curriculum online. NSDC started populating ASDC's approved job roles on the NAPS portal (from 24th July).
- **14 apprenticeship curriculums were approved** and made available on the apprenticeship portal.
- **ASDC is interfacing with SIAM, ACMA and FADA members for skill-aided capital creation**, which in turn would lead to higher economic activity. All efforts are being concentrated towards propagation and awareness about NAPS amongst all OEMs / suppliers / dealerships in manufacturing, sales, service and allied / support services.
- Establishments such as JS Fourwheel Motors Pvt. Ltd., Lumax Industries Ltd., Honda Motorcycle and Scooter India Pvt. Ltd., Metalman Micro Turners, Minda Industries Ltd. - Lighting Division, Minda SAI Ltd., Bharat Seats Ltd., etc. have registered themselves at www.apprenticeshipindia.org





B. RECRUITMENT AND PLACEMENT

On successful completion of assessment and certification, ASDC is continuously working with all the stakeholders to facilitate employment opportunities for the candidates.

A total of 67 Job Melas were conducted by ASDC across the following locations- New Delhi, Rajasthan, Gujarat, Maharashtra, Karnataka, Tamil Nadu, Odisha, Madhya Pradesh, Uttar Pradesh, Bihar, West Bengal, Assam and Haryana. These Job Melas witnessed participation of 8,336 candidates, out of which 186 candidates got placed. Hirings were done for specific job roles, including Automotive Service Technicians L4 (mechanical and electrical), Service Advisor, Bodyshop Advisor, AST 2 and 3 Wheelers, Automotive Sales Executives, CRE, Welders and CNC Operators.

In order to strengthen the MSME ecosystem for the Auto Component Manufacturers, ASDC successfully organised a recruitment drive at R.D. Tata Technical Education Centre's campus, Jamshedpur. Brakes India (Auto Component Manufacturer) and Dealers of Tata Motors Ltd., Maruti Suzuki India Ltd. and Mahindra & Mahindra Ltd. participated in the recruitment drive. MSME Indo Danish Tool Room, NTTF and ASDC mobilised 620 candidates, out of which 107 candidates were shortlisted and called for final round of interview at their respective locations.

During the period under review, ASDC successfully conducted two recruitment drives in Ghaziabad and Mumbai. These were held at Ajay Kumar Garg Engineering College and Ramniranjan Jhunjhunwala College respectively. There was an active participation by the industry and LOIs were distributed to the shortlisted candidates. ASDC successfully organised a recruitment drive at the Placement Cell of Govt. ITI Aliganj, Lucknow to offer employment opportunities to aspiring candidates from different ITIs, Polytechnic Institutes, and UPSDM Training Centres, while strengthening the MSME ecosystem for auto component manufacturers. Eight automobile dealers participated in the recruitment drive, where 59 candidates out of 300 were selected for the final interview.

The Job Melas witnessed active participation by Volvo Eicher Commercial Vehicles Ltd., Tata Motors Ltd., Maruti Suzuki India Pvt. Ltd., Royal Enfield (Eicher Motors Limited), Mahindra & Mahindra Ltd., Indo Autotech Ltd., Jay Bharat Maruti Ltd. and Hero MotoCorp in these events. **More than 4,500 aspirants participated in these Job Melas and 1,600 of them were shortlisted for opportunities in the auto industry.**

CHALLENGES FACED DURING THE ACTIVITY

Candidates

Less participation

Candidates reluctant in relocating

Salary disparity

Employers

Less participation

Offered less than minimum wages specified by the states

Demand and supply mismatch

TCS iON's LISTING PLATFORM FOR JOBS

ASDC, in association with TCS iON, is creating a Listing Platform for certified candidates and employers in order to list job vacancies. This will **bring skilled candidates closer to the industry and provide insights of skilling process of candidate to the industry**. Real-time inventory of skilled workforce will be made available to the industry by providing them access to the Listing Platform. The Listing Platform will be Live soon.





X

STAKEHOLDER

OUTREACH

To make skills aspirational, it is extremely important to have industry partners conducting ASDC certified trainings as they enhance the value of the certificates and eventually add skilled manpower in the automotive ecosystem. Towards this crucial purpose, Maruti Suzuki India Ltd., Hyundai Motor India Ltd., Grindwell Norton, Honda Cars India Ltd., Jay Bharat Maruti, Sandhar Technologies Ltd. and SKF India Ltd. have been onboarded as industry training partners. We are about to onboard Audi India Pvt. Ltd., Toyota Kirloskar Motors Pvt. Ltd., Axalta Coating Systems India Pvt. Ltd. and Renault India Pvt. Ltd. in the coming months.

A. INDUSTRY OUTREACH

SKF India partnered with ASDC for six of their Automotive Skilling Centres across India to skill the nation's youth. **SKF India's YES programme was initiated in 2015, which aimed to prepare underprivileged youth to work at various automotive OEMs, dealer service networks and workshops. It also helped in imparting entrepreneurial skills** to enable them to set-up their own vehicle service stations in the future.

ASDC participated in the FADA Vyapar Karnataka to engage with dealers regarding the 3 critical resources – digital, financial and human resources – for the transformation of auto dealership. An engaged panel discussion saw more than 100 dealer participants, deliberating on the challenges faced and efficient use of these resources.

ASDC also engaged with the participants at Honda SRHRC Office Bearers' Meet and briefed them on various skilling options - National Apprenticeship

Promotion Scheme (NAPS), Recognition of Prior Learning (RPL) and Skills Universities. Under NAPS, organisations are now free to hire apprentices in optional trades beyond 259 designated trades under Apprenticeship Act, 1961. Employers also have an option of designing their own curriculum in optional trades, based on their own needs and get it approved from ASDC. **At the meet, participants were encouraged to leverage ASDC-based mechanism to fulfil skilling needs of their organisation / industry.**



B. INDIASKILLS AND WORLDSKILLS

The journey of WorldSkills Competition-2019 (WSC) started from January, 2018 with a series of workshops conducted by ASDC for the capacity building of the various states.

All the regional competitions finally led to 'IndiaSkills National Competition-2018', which was held from 2nd to 6th October 2018 at Aerocity Grounds, New Delhi. **400+ competitors participated in the event, representing 27 participating states, across 45 skill categories,** including 4 automotive skills: Automobile Technology, Autobody Repair, Car Painting and Prototype Modelling.

ASDC's Cross Functional Team (CFT) jury members from all across the industry, such as Maruti Suzuki India Ltd., Tata Motors Ltd., Mahindra & Mahindra Ltd., Toyota Kirloskar Motors Pvt. Ltd, Hyundai Motor India Ltd., Renault India Pvt. Ltd., AkzoNobel, Axalta Coating Systems, BASF, PPG Asian Paints Pvt. Ltd.,

Nippon Paints and Car-o-Liner India Pvt. Ltd. worked tirelessly towards the objective of shortlisting the best candidates to represent India at WSC-2019 Kazan.

Mr. Tushar Phadhatore from Maharashtra (Tata Motors) bagged Gold in the Automobile Technology Skill Category, Mr. Suraj from Uttarakhand (Maruti Suzuki India Ltd.) won the Autobody Repair Competition, Mr. Govind Kumar Sonkar from Uttar Pradesh (Maruti Suzuki India Ltd.) won Gold in Car Painting category and Mr. Abhishek AN from Karnataka (Toyota) topped the Prototype Modelling Category.



SKILL COMPETITIONS AT STATE LEVELS

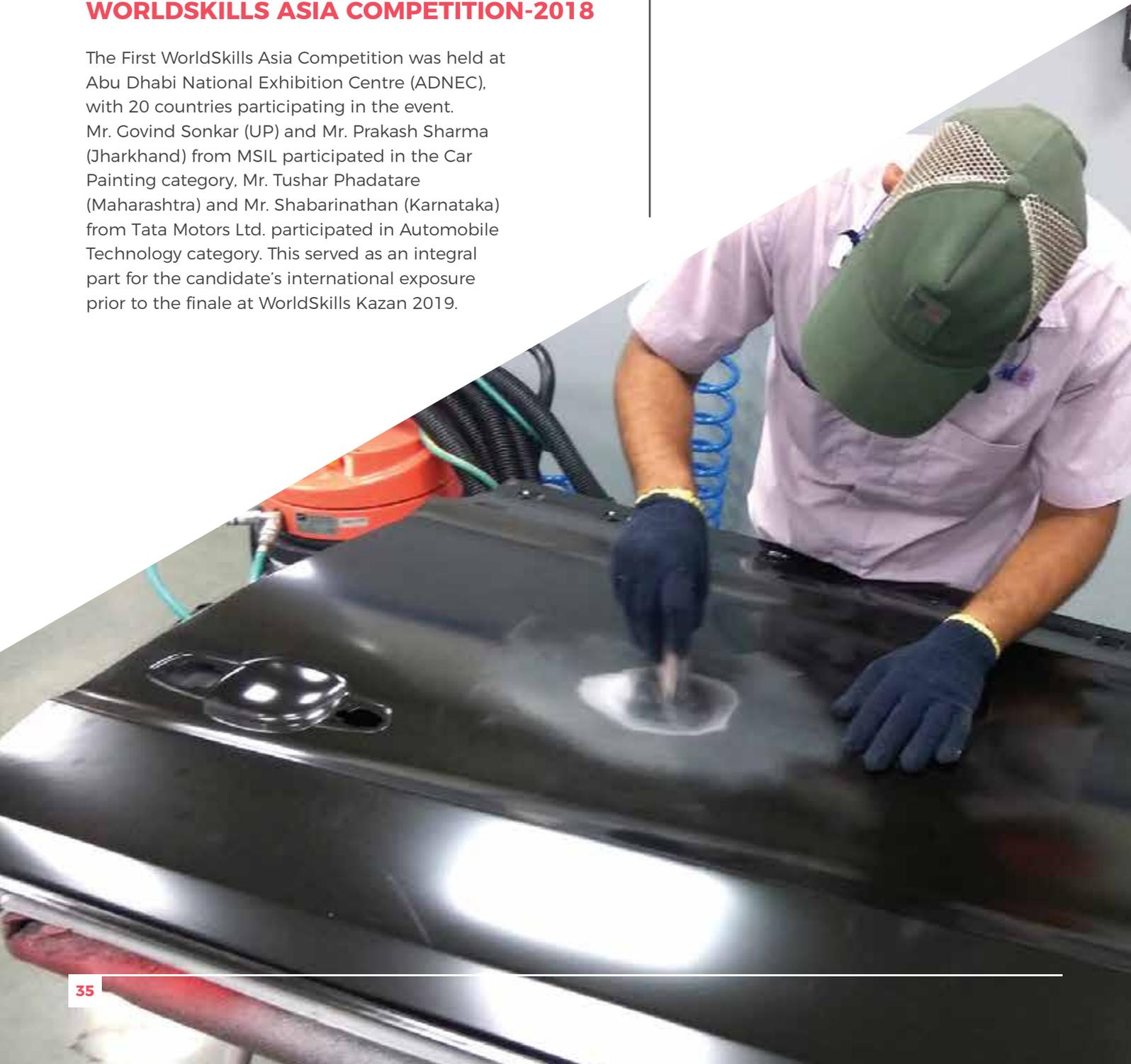
One of the best ways to recognise talent and skills is to organise a competition! ASDC supported the Government of Jharkhand in organising the Zonal and State Skills Competition in December 2018, which showcased three different skill categories: Automobile Technology, Autobody Repair, and Car Painting. ASDC joined hands with the Government of Jharkhand to execute a seamless competition and identified the competition venue, test project, marking criteria and jury members from various organisations. **The Government of Jharkhand felicitated the efforts and support that was extended by ASDC for the competition.**

WORLDSKILLS ASIA COMPETITION-2018

The First WorldSkills Asia Competition was held at Abu Dhabi National Exhibition Centre (ADNEC), with 20 countries participating in the event. Mr. Govind Sonkar (UP) and Mr. Prakash Sharma (Jharkhand) from MSIL participated in the Car Painting category, Mr. Tushar Phadatare (Maharashtra) and Mr. Shabarinathan (Karnataka) from Tata Motors Ltd. participated in Automobile Technology category. This served as an integral part for the candidate's international exposure prior to the finale at WorldSkills Kazan 2019.

WORLDSKILLS COMPETITION

Moving ahead, **ASDC facilitated training for the winners of the 4 skill categories: Autobody Repair, Painting, Automotive Technology and Prototype Modelling**, both in India and abroad. After returning from Skill Competition in Brazil and getting adequate exposure for WorldSkills Competition-2019, Kazan (Russia), the competitors are set to leave for further training in Thailand.





C. COMMUNICATION AND ADVOCACY

WEBSITE

Having a website and online presence allows organisations to effectively market themselves online. It significantly affects how target audiences view an organisation and potentially turn them into acceptors / customers. As such, developing a website design that has an impressive user interface accounts to a better performance. To revamp, upgrade and remain aligned with ASDC objectives, Interactive Bees Pvt. Ltd. was hired to develop a purposeful, integrated and content-rich website. The website is LIVE now and this has surely impacted the way the stakeholders communicate with the council.

DIGITAL MARKETING

ASDC's primary function is to bridge the gap between industry demand and skilled manpower available in the ecosystem. To meet these objectives, ASDC interacts with the Industry (SIAM, ACMA and FADA members), NSDC, various ministries and the state governments / Skill Missions on a regular basis to take its agenda forward. These interactions are critical in aligning ASDC's activities and output with the industry needs, government's plans and targets, and also to participate in government schemes for skilling and employment. To be able to achieve these objectives, we need to continually strengthen interaction with the target audience on a regular basis and keep them informed and updated about ASDC.

Towards this objective, **Adfactors PR was hired as the Digital Marketing Agency to promote ASDC and its initiatives and engage with the ecosystem** by suitably using online promotions and platforms like Facebook, Twitter, LinkedIn, Instagram and YouTube. There has been a notable difference in terms of the reach and penetration that ASDC has had with all of its stakeholders ever since.

CASTROL SUPER MECHANIC CONTEST

ASDC was a part of Castrol Super Mechanic Contest, which was powered by Zee Networks, where the Interactive Voice Response round enthused close to 130K car and bike mechanics to participate from across the country. Over 6,000 mechanics participated in the skilling sessions conducted across 20 cities. **With support from ASDC, this contest helped to reaffirm the commitment of ZEE and Castrol in upgrading and elevating the skills of the mechanic community,** while giving a recognition to their talent. It is an acknowledgement of their efforts and role to keep India moving.





XI

SKILL

CHAMPIONS

MADHU

SERVICE CALLING EXECUTIVE

J.S. Fourwheel Motors Pvt. Ltd.

“ I got to know about ASDC from my friend, when I did not have a job. Then, I finally decided to visit this place and joined the course. I was trained well for the job of a Sales Consultant. I would suggest everyone to go for this ASDC course and have a better career ahead. ”

TUSHAR PHADATARE

AUTOMOTIVE SERVICE TECHNICIAN

Tata Motors Ltd.

“ After completing my 10th grade from my hometown-Pune, I started a full-term Apprenticeship Course in 2016 at Tata Motors, Pune, in Mechanic Motor Vehicle (MMV) trade. Being well-trained in various skilling techniques, covering mechanical and electrical aspects, I was given an opportunity to work on various cars, which helped me polish my skills. The experience at Tata Motors further boosted my confidence to give my best in IndiaSkills Competition 2018, where I won a gold medal. I am looking forward to repeat the success story at Kazan. ”

SHABARINATHAN V

AUTOMOTIVE SERVICE TECHNICIAN

Concorde Motors Ltd. (Dealership of Tata Motors Ltd.)

“ I am from Bengaluru, working with Concorde Motors (Dealership of Tata Motors) as a Technician. My biggest achievement so far is winning a silver medal at IndiaSkills 2018. I have worked hard for this achievement and I strive to do much more in the near future. In my profession, learning is a continuous process and every day is a new learning at the workshop. IndiaSkills provided me a great opportunity to showcase and execute my learning on cars and I hope to climb the ladder of success all the way to Kazan and be able to represent my country on an international platform. ”

DEEPAK BAGHEL

ASSISTANT ELECTRICIAN

Shiv Power Technology

“ Even after having a Diploma in Electrical Engineering, I was not able to land a decent job. For the ones that were available, I was either over-qualified or under-skilled. When I visited IIS, I was happy to be a part of the high-quality training provided by them to job-seekers like me. The state-of-the-art institute has labs that resemble the workplace environment to help trainees easily adapt to the work environment after placement. It was the training that empowered me and gave me the necessary confidence to face the world. I thank Petrofac and IL & FS Skills who helped me realise my dreams. ”



ABHISHEK MAHATO

AUTOMOTIVE SERVICE TECHNICIAN

EDP Service- Maruti Suzuki Dealership

“Life's a struggle when one has to earn their bread and butter. My father works hard to earn a living by starting his day at 6 in the morning. I've always wanted to support him and other members of my family. I heard about Orion Edutech and the Automotive Course when I shared my problems with a school teacher of mine. The teachers groomed me perfectly as an automotive service technician. After completing the 3 month course at Orion Edutech, I got a job at EDP Service - Maruti Suzuki Dealership, with a salary of INR 13,000/- per month. It is not merely a job for me, but is the key to my family's happiness.”

ANIT KUMAR DAS

AUTOMOTIVE SERVICE TECHNICIAN

Mahindra Dealership

“I belong to a very small town in West Bengal. After completing my graduation, I had no job in hand. Frustration, stress and failure completely cornered me. My relatives left no gap in comparing me with their young ones, which made me feel worthless. A friend of mine told me about the training provided by Orion Edutech and their skill development course which guarantees placements. Working with gears, engines, clutch, transmission-chain system, brake system and electric system, we learned everything - both theoretically and practically. Today, I am successfully working with Mahindra Dealership, earning INR 10,258/- per month. I owe Orion Edutech all my happiness today.”

SHUBHAM GIRI

AUTOMOTIVE SERVICE TECHNICIAN

Mahindra Dealership

“After completing my graduation, I was searching for opportunities that would help me lead a dignified life. I heard about Orion Edutech from my friend who was pursuing a course from there. It reflected good placement records in the past years. Even though the first few classes were difficult to understand, the lectures and handouts provided to us helped to clear my doubts. Theory and practical classes were accompanied by industry visit sessions, which made lessons easier and also briefed about the working of an automotive industry. Demo interview sessions were organised, which prepared us for the forthcoming interviews. I am now working with Mahindra Dealership, withdrawing INR 10,258/- per month as my salary. I am thankful to all my teachers for helping me reach where I stand today.”

AMIT KUMAR

WELDING ASSISTANT

Hi-Tech Enviro Systems Pvt. Ltd.

“Belonging to an economically weaker strata of the society, my father could not afford to feed the family and send me to school at the same time. During my 10th grade, my father lost his job and I was to take care of my family. My friend recommended me IL & FS Institute of Skills in Delhi, which has a good reputation in skill training and guarantees placements. After being trained as a welder and upon completion of my training, I was placed at Hi-Tech Enviro Systems, manufacturers of industrial machines and plants, at Gurugram, at a salary of INR 15,500/- per month. My training has immensely benefited me.”

Automotive Skills Development Council

Sat Paul Mittal Building, 1/6, Siri Institutional Area,
August Kranti Marg, Khel Gaon Marg, New Delhi - 110049