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FICCI

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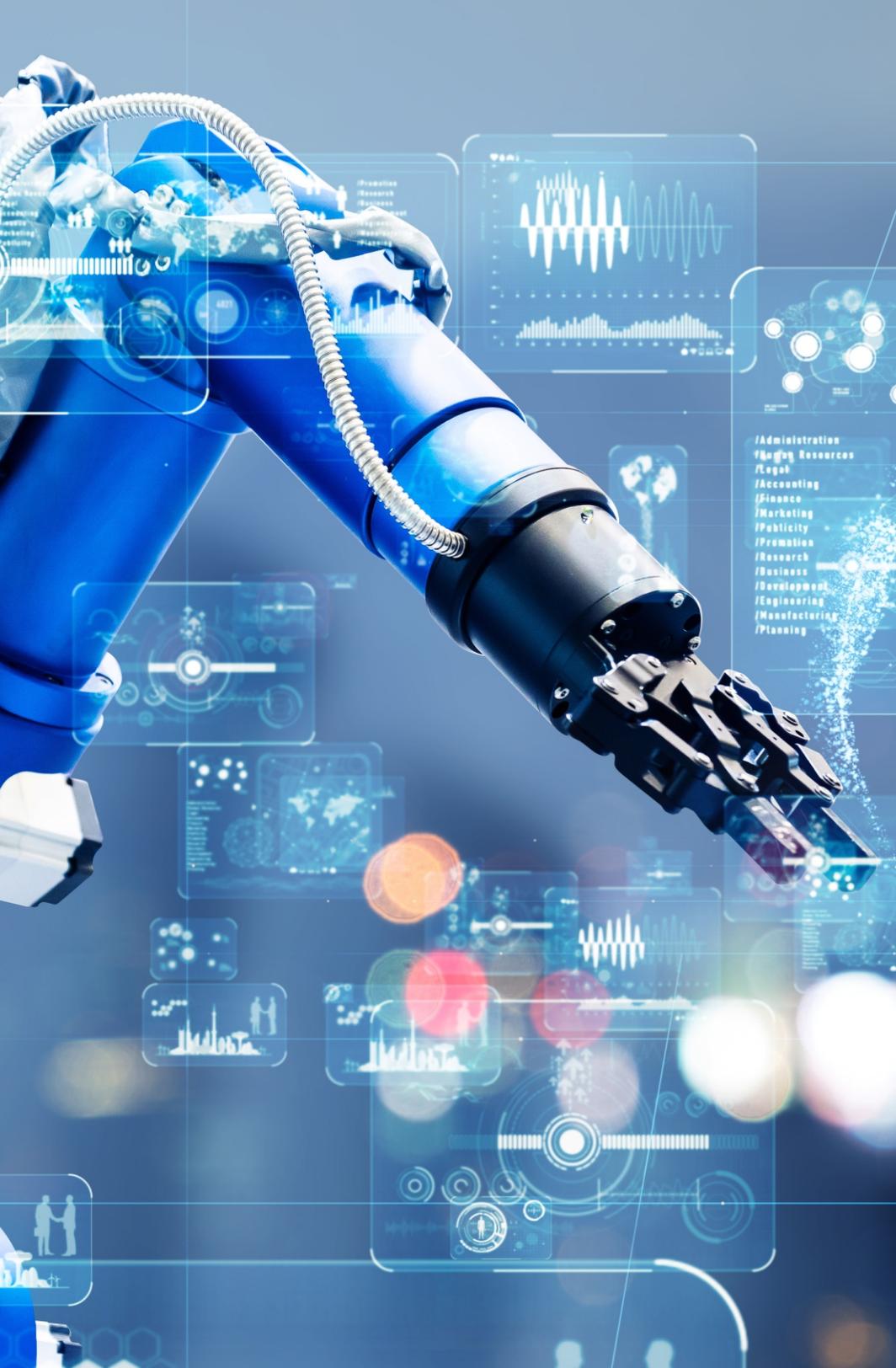1st FICCI
INDUSTRY 4.0
AWARDS

Contents

INDUSTRY 4.0

ABOUT THE AWARDS

F ICCI is happy to announce its first edition of Industry 4.0 Awards. It provides a platform to the industry for showcasing successful digital transformation use cases. It is country's first of its kind Industry 4.0 Awards. FICCI Industry 4.0 Awards is an initiative of FICCI Industry 4.0 Committee to promote sophisticated Digital Systems and impart knowledge on adoption of digital ecosystem. The scope of the awards covers sectors like Manufacturing (inclusive of oil & gas), Mining, Construction, Power, and Services.

Firms and companies that display high performance digital systems and stand through a rigorous three-tier evaluation process are felicitated with these awards. The purpose of the awards is to benchmark successful digital practices along with robustness of the digital systems to enable domestic industry and MSMEs to stand up to emerging global challenges in the area of Industry 4.0. Sharing the best practices of awardees with other applicants and with the wider industry, would motivate and act as a catalyst to encourage the industry to adopt robust digital systems.

The awards are in two major categories with six sub-sectors for below mentioned organisations:

- Large size organization (organization having either turnover or investment excluding working capital of more than Rs 500 crore)

- Medium size organization (organization having either turnover or investment excluding working capital between Rs 100 crore to Rs 500 crore. If any one of the parameters crosses the limit of Rs 500 crore then the organization goes into large size organization

- Small size organization (organization having turnover & investment excluding working capital both less than Rs 100 crore)

Two Major Categories

Overall digital transformation program	Focused digitalization projects	
Business case **IT-OT integration** **Business Excellence journey** **Digital twin, value add** **Data monetization strategy** **Holistic security approach**	**Smart Product** **(Intelligent product)** Smart Product	**Smart Services** Smart services, remote support, predictive maintenance, AI
	Smart Operations m/c shop, operation, maintenance, quality, cybersecurity in OT	**Smart Supply Chain** Inbound/ Outbound supply chain
	Smart Customer Experience Digital marketing, enabling, Distributors	**Smart Business Functions** HR, Finance, SCM

THE AWARD PROCESS

The award process was started in 2021. FICCI Industry 4.0 award process has 3 qualifying stages:

- Document Assessment of all applicant units

- Virtual site Audit for shortlisted units based on Document Assessment

- Jury Presentation to finalize the Awardees

Details of this process are as follows:

- Design and finalization of application for the awards with the support of industry

- Circulation of application amongst the industry

- Application forms received by FICCI

- Empanelment of auditors/assessors for the evaluation from the industry based on prescribed eligibility criteria formed by the Working Group under FICCI Industry 4.0 Committee

- Finalization of checklists for application evaluation and virtual site audit by the Working Group under FICCI Industry 4.0 Committee

- Applications evaluated by the assessors and marks allotted along with feedback for each application

- Presentation of document evaluation results to the FICCI Working Group on Industry 4.0

- Virtual site audit by auditors for shortlisted units by FICCI Working Group on Industry 4.0

- Presentation of virtual site audit results to FICCI Working Group on Industry 4.0

- Presentation of further shortlisted units to the Hon'ble Jury of the Awards

- Selection of Awardees by Hon'ble Jury

- Announcement of Awards in the Conference

- Feedback to the applicants.

JURY PROFILES

Mr. Shyam Bang
Former Chairman
NABCB & Former Executive Director
Jubilant Life Sciences Limited

Mr Shyam Bang is a post graduate chemical engineer and has been associated with chemical and pharmaceutical industries in India and other countries for over 45 years. He was Member of Board of Jubilant Life Sciences Limited and responsible for operations of the company.

Besides that he is,

- Past Chairman of National Accreditation Board for Certification Bodies
- Past President of Indian Institute of Chemical Engineers
- Chairman of FICCI Task Force for Manufacturing Excellence
- Member of Governing Council of National Safety Council
- Member of Governing Council of Indian National Academy of Engineering

Mr Bhaskar Mandal
Former Head - Digital Industries
Siemens Ltd

Bhaskar is the former Head of Digital Industries, Siemens India and a member of the Executive Management team of Siemens Ltd India. At Digital Industries, he was responsible for driving the digital transformation of manufacturing enterprises in the discrete, hybrid and process industries by integrating automation, software and cutting-edge technologies.

He has more than 36 years of experience in the Industry covering R&D, Manufacturing, CIO, Strategy & Consulting, Sales & Marketing and CEO functions. He holds an Electrical & Electronics Engineering (Hons.) degree from BITS, Pilani and is an alumnus of IMD, Switzerland.

Bhaskar is former Chairman, FICCI Industry 4.0 Committee and a past Executive Council member of CII, Western region. Also, in his various interactions with Governmental bodies, Trade & Industry associations, Bhaskar plays an active role in helping the industry adapt to emerging technologies especially Industry 4.0, Digitalization and Automation.

Prof. Amaresh Chakrabarti

Senior Professor and Chair-Centre for
Product Design and Manufacturing
Indian Institute of Science, Bangalore

Prof. Amaresh Chakrabarti is a Senior Professor at and current Chair of the Centre for Product Design and Manufacturing, Indian Institute of Science, Bangalore. Prof. Chakrabarti has a BE from IIEST, Shibpur (Topper in Mechanical Engineering), ME from IISc, Bangalore (Topper in Mechanical Systems Design), and PhD in Engineering Design from University of Cambridge, UK. After PhD, he led for ten years the Design Synthesis group of the EDC – a Centre of Excellence in engineering design at the University of Cambridge, before returning to IISc as an Associate Professor.

Prof. Chakrabarti has made several outstanding and original contributions in engineering design and manufacturing research. He is widely recognized as a pioneer for design research in India. His research interests include design synthesis, creativity, sustainability, AI, informatics, and Industry 4.0. He has published seventeen books and over three hundred peer-reviewed articles and has eleven patents granted/pending. The Design Research Methodology 'DRM', co-developed by Prof. Chakrabarti, is widely used as a framework for design research. He is enlisted as one of the top 2% of researchers in 'Design Practice and Management', based on a study by Stanford University on the global scientific impact of researchers in each subject area; he is the highest cited researcher from India in this area.

In 2006, Prof. Chakrabarti initiated 'ICoRD' – India's first international conference series on research into design. In 2014, with funding from Boeing, he co-initiated India's first Smart Factory, expanding this in 2019 into a Common Engineering Facility Centre under the SAMARTH Udyog Bharat 4.0 Programme, Department of Heavy Industries, Government of India. He co-initiated the MTech in smart manufacturing and Ph.D. in advanced manufacturing at IISc in 2019. In 2021, he co-initiated a PG level certification

programme in 'Digital Manufacturing and Smart Factories' for training industry professionals in Industry 4.0. In 2019, he co-initiated 'I-4AM' – an international conference series on Industry 4.0 and advanced manufacturing. With funding from the Government of Karnataka, he co-initiated CPDMED, India's first Technology Business Incubator in elderly healthcare. He also heads the IISc-TCS Innovation Lab, IISc Press, and the Springer International book series 'Design Science & Innovation'. He chairs the Smart Manufacturing Standards Subcommittee of the Bureau of Indian Standards and has been a member of the Advisory Board and Board of Management of the Design Society, UK, the CII National Committee on Design, and CII Smart Manufacturing Council.

Prof. Chakrabarti is a recipient of the prestigious Jawaharlal Nehru Doctoral Fellowship for Cambridge University, UK (1987), Overseas Research Students Award by the Committee of Vice-Chancellors, UK (1987), Lundgren Award, University of Cambridge, UK (1991), Morgans-Grampian UK Manufacturing Industry Achievements Commendation Award, UK (1994), Heiwa-Nakajima Visiting Fellowship, Japan (2007), Royal Society Visiting Fellowship, UK (2010), Cambridge Reciprocal Visiting Fellowship, UK (2014), and ASEM-DUO Visiting Fellowship, Korea (2021). He was recognized as the "Most Outstanding Researcher" in the field of Decision Sciences during 2015-17 with the 2018 Careers360 Outstanding Faculty Award from the then Hon' Union Minister of HRD, Shri. Prakash Javadekar. Sixteen of his papers won top paper awards in international conferences. He is the recipient of 2022 the Alumni Award for Excellence in Research in Engineering.

In 2011, Prof. Chakrabarti was awarded an Honorary Fellowship of the Institution of Engineering Designers (IED), UK – its highest honour; Prof. Chakrabarti was the first person outside Europe/USA to receive this honour. Prof. Chakrabarti serves on the editorial boards of numerous journals. Since 2017, he has been the Editor-in-Chief (EiC) of AI EDAM (Artificial Intelligence for Engineering Design, Analysis and Manufacturing), an international journal of Cambridge University Press. Prof. Chakrabarti has been the first EIC from outside USA for the journal in its 35-year history.

Mr Pranjal Sharma

Economic Analyst
Advisor and Author

Pranjal Sharma is an economic analyst, advisor and writer based in New Delhi, India who focuses on technology, globalisation and media.

He has written and edited books, reports and papers on economic development. His latest book is India Automated: How the Fourth Industrial Revolution is Transforming India published by Pan Macmillan. The preface has been written by Peter Voser, Chairman of the Board, ABB Ltd. This follows his previous book Kranti Nation: India and The Fourth Industrial Revolution. Prof Klaus Schwab, Founder, World Economic Forum, wrote the preface for the book.

Pranjal is a frequent speaker at events run by leading chambers of industry on policy advocacy and leads public discourse at several platforms in India and abroad. He served as a member of the Global Agenda Council at WEF for eight years. He is now a member of WEF's Expert Network. He is visiting and guest faculty at post graduate schools.

Previously was the Editor of Bloomberg TV in India. He writes opinion pieces for Business Standard newspaper, The Sunday Guardian newspaper among other publications. He is a regular speaker on news TV debates on economy and globalisation.

Mr. Suprakash Chaudhary

Executive Vice President & India
Country Head – Digital Industries
Siemens Ltd

Suprakash is the Head of Digital Industries, Siemens India and a member of the Executive Management team of Siemens Ltd, India. At Digital Industries, he is responsible for driving the digital transformation of manufacturing enterprises in the discrete, hybrid and process industries by integrating automation, software and cutting-edge technologies. Over his 28 years of cross-industry experience, Suprakash has been helping businesses of all sizes increase their digital resilience by transforming them into digital enterprises.

Suprakash has been associated with leading global technology and consulting companies like EY, SAP and Oracle where he has built and grown sustainable businesses through unrelenting focus on customer success and empowering high performance. He was previously a Partner with EY India's Advisory business and was engaged with manufacturing & consumer companies helping them drive business outcomes by leveraging technology. Prior to joining EY, he served as the Managing Director, SAP Indian sub-continent, and a member of the Asia-Pacific Leadership Team; leading the company's acceleration in the Indian market. Before SAP, Suprakash held numerous sales management and leadership positions in Oracle and was instrumental in establishing the Oracle Applications business in India.

Suprakash is currently the Chairman, FICCI Industry 4.0 Committee and plays an active role in helping the industry adapt to emerging technologies especially Industry 4.0, Digitalization and Automation. An engineering graduate and a post-graduate in Business Management from IMT Ghaziabad, Suprakash started his career with Mastek Ltd. As an avid sportsman, Suprakash has competed in national soccer tournament representing his school and university.

Mr. Rajeev Singh

Partner Consulting
Deloitte India

Rajeev Singh is a Partner with Consulting team and has worked across Automotive, Consumer and Industrial Products. He leads the Core Business Operations Practice for Consulting and is also the Automotive Sector Leader for Deloitte India. Rajeev also drives Operations Transformation practice across the APAC geography.

Rajeev brings over 22 years of experience and the areas of his expertise are Market Entry Strategy, Target Operating Model, Business Transformation, Digital Customer Experience, Industry 4.0, Supply Chain & Cost Reduction.

Some of the key assignments led by him are:

* Designed the India market entry strategy, brand & communication strategy, product portfolio, target operating model & high-level business plan for multiple players across Automotive, Consumer Electronics & Industrial Products

* Led multiple Direct Material Cost Reduction initiatives across PV, CV, 2 wheelers and Agri Equipment players

* Led Dealer Profitability Improvement programme for multiple players across PV & 2-wheelers and consumer electronics players

* Developing Industry 4.0 blueprint for an Auto Component manufacturer including opportunities for 3DP

* Assisting merger of two large OEM's brands in India covering business case, synergy benefits, execution roadmap

* Led a Customer Service Excellence Improvement initiative for a large German PV player

Rajeev is the currently the co-chair for Industry 4.0 committee of FICCI (Federation of Indian Chambers of Commerce & Industry). He is also active with SIAM (Society of Indian Automobile Manufacturers), ACMA (Auto Component Manufacturers Association) and other Industry led associations.

Prior to joining Deloitte, Rajeev worked with another leading consulting firm and started his at Tata Motors.

Auditors / Assessors for the Awards

Following auditors were finally selected for the award process basis the eligibility criteria defined by FICCI Industry 4.0 Working Group:

1. Mr. Manojkumar Belgaonkar, Head – Regulations, Standards and QM, Siemens Limited

2. Mr. Atul Vij, Director, TExM2 Consulting.

3. Mr. Amol Lovalekar, Digital Transformation of SC & Network Design, Hindustan Unilever Ltd

4. Ms. Ashita Mittal, Planning Director South Asia, Unilever

5. Mr. Nitin Nair, General Manager, Digital Enterprise & Digital Services, Siemens India

6. Mr. Sachin Kulkarni, Chief Manager, Siemens Ltd.

7. Mr. Sameer Prakash, General Manager - Head Digital Enterprise, Siemens Ltd.

8. Mr. PL Muthusekkar, Former Managing Director, Nord Drivesystems India Pvt Ltd

9. Mr. RG Satyakumar, Sr Manager - Business Development / Electronics, Nord Drivesytems Pvt Ltd

10. Mr. Chandan Pawar, Deputy Manager - Electronic Service & Support, NordDrivesystems Pvt Ltd

11. Mr Partha Sarathi Roy Chowdhary, Chief Product Expert, SAP Labs India Pvt Ltd

12. Mr. Sudhir Dembi, Software Business Leader, Schneider Electric India

13. Mr. Avinash Singh, Director – Consulting, Deloitte India

14. Mr. Shridhar Kamath, Partner, Deloitte Touche Tohmatsu India LLP

15. Dr. Guruprasad Kuppu Rao, Director - Faculty of Design, Dr Vishwanath Karad MIT World Peace University, Pune

16. Mr. Ravi Narayan Mishra, Software Business Development Manager-Asia Pacific, Schneider Electric India

17. Dr. M.A. Narasimha Murthy, Senior Director- Quality Management, Infineon Technologies

18. Mr. Rajiv Mandke, Principal Consultant, RMM Consulting

19. Mr. Mangesh Vinay Nawarange, Sales Director- Digitalization, ABB India Limited

20. Mr. Ramkrishna Patra, Hardware Services Delivery India Lead, Nokia Solutions and Networks India Pvt. Ltd.

21. Mr. Joy Rajarshi Banerjee, Vice President, Head of Business Development, Process Automation Digital CoE, ABB

22. Mr. T D Vaidyalingam, Chief Digital Officer, L&T Heavy Engineering

Eligibility Criteria for Assessor / Auditor for Empanelment to FICCI Industry 4.0 Awards

1. Qualification

    � Bachelor's Degree in Engineering, Post Graduate would be added qualification

2. Experience

    ☰ Total Minimum 10 years' of Industry experience in at least two of these areas:

        ❖ Implementation/knowledge of Change management in shop floor/workplace

        ❖ Experience of handling Data science, Data analytics and Business excellence programs

        ❖ Experience in designing and launching digital platforms

        ❖ Proven track record of leading successful digital transformation projects

        ❖ Understanding core business processes and associated technical solutions

        ❖ Managing/leading a digital team

Note: The Qualification and Experience mentioned above is essential in the assessor/auditor and the next criteria is preferable.

3. Additional or Preferable

    ☰ Management System Auditor

List of Awardees: Category-wise

Categories	Platinum Award	Gold Award	Silver Award
Overall Digital Transformation	JK Paper Mills Limited, Unit JKPM, Rayagada	Larsen & Toubro Limited, Heavy Engineering	Bosch Automotive Electronics India Pvt. Ltd
Smart Operations	L&T-MHI Power Boilers Pvt. Ltd.	ITC Ltd. - Bangalore Cigarette Factory	L&T Defence – Hazira Unit
Smart Product	m2nxt	Gainwell Commosales Private Limited	Somany Home Innovation Limited
Smart Customer Experience	Gainwell Commosales Private Limited		

Certificate of Appreciation Recipients

1. Larsen & Toubro, Transmission Line Tower Works (Transmission Line BU, Power Transmission & Distribution IC), Madhya Pradesh

2. Adani Electricity Mumbai Limited – Distribution Business, Mumbai

3. Jay Bharat Maruti Limited, Gurugram

4. BASF India Ltd., Gujarat

5. Haldia Energy Limited, West Bengal

6. Larsen & Toubro Limited, Heavy engineering IC, Surat (Focused Category)

7. Dalmia Cement (Bharat) Limited, Ariyalur, Tamil Nadu

8. Mondelēz India Foods Pvt. Ltd, Himachal Pradesh (Smart Operations)

9. Larsen & Toubro Ltd. - Water & Effluent Treatment IC, Tamil Nadu

10. Godrej Electricals & Electronics, Mumbai

Awardees of 1st Edition and their Best Practices

Awardees in Overall Digitalization

PLATINUM AWARD

Name of the Organization: JK Paper Mills

Location: Rayagada, Odisha

About the Organization:

JK Paper Limited, part of USD 4.3 bn JK Organization, is a leading Indian Pulp and Paper manufacturer. JK Group's Paper business started in 1938 and is the pioneer of branded paper in India. Presently, it is the leading player in Office paper, Coated paper, and Packaging Board in the country. Its existing Pulp and Paper Mills are located at Rayagada (Odisha), Songadh (Gujarat) and Sirpur (Telangana). Company's manufacturing capacity stands at 7.61 Lac MTPA, which includes the recently commissioned 1.7 Lac MTPA of Packaging Board at its unit CPM (Songadh, Gujarat). Over the years, Company has transformed to wood- and carbon-positive status, planting more trees than harvesting. The Company has developed short-rotation clones to enhance yields and income per hectare for the farmers, who as engaged through social-farm forestry programme. The Company is FSC certified, which indicates that it is using wood from responsible and well managed plantation.

JK Paper Mills (JKPM) at Rayagada was commissioned in 1962 with an integrated Pulp and Paper plant with 0.18 Lac MTPA installed capacity. Over the years, production capacity has been enhanced to 3.0 Lac MTPA. JKPM has been at the forefront of introducing and adopting modern technology across Pulp and Paper manufacturing, which has helped the unit achieve "scale economies" as well as drive "resource conservation" especially in

energy (power consumption) and water usage on per unit basis. The newer Paper machine at JKPM, PM VI, possesses state of art technology in all the areas, such as Fiber line, Paper machine, Power block, A4 converting and packaging line etc.

Key Features of the Digital Systems

JK Paper defined a vision for their industry 4.0 transformation journey which is to 'become a dynamic benchmark and drive sustainable competitive advantage through adoption of digital technologies along the value chain'.

To achieve this, JK Paper adopted an approach of strengthening the core (people & technology) and building the periphery (advanced analytics led use cases driven by a Digital Center of Excellence).

The key features of the programme include:

Top Management sponsorship: The programme is monitored and reviewed at the highest level in the organization. The programme has also been assigned EBITDA improvement target to keep it focused on outcomes.

People involvement: The focus is on involving large number of employees across the company in various projects. Each project has 8 to10-member squad. Squad members have defined roles – they own the project and drive project execution. Several of the squads are cross-functional. The programme has a Reward & Recognition system in place to acknowledge 'right' behaviors.

Digital Center of Excellence: A Central Digital Entity that governs the digital strategy and provides required talent to functions for digital interventions across the plants and head office.

Capability building: Development/upgradation of digital capabilities of our employees is critical for driving and sustaining transformation. For this purpose, employees are exposed to curated course material, relevant online/distance learning programs, etc. JK Paper is also setting up inhouse Digital Center of Excellence to build relevant skills.

Experimentation and Co-creation of solutions: Several industry-first solutions are being envisaged that require co-creation with solution providers and as well as willingness to experiment with the art-of-possibilities.

JK Paper first focused on improving our data maturity. A thorough assessment for sensorization of critical parameters was carried out across the plant and SBUs.

Prioritization of the sensors was done using Moscow (Must Have-Could Have-Should Have-Will Not Have) framework, and the Must Have sensors were ordered basis the return on investment from the sensors.

Next the OT systems coverage (DCS and PLCs) were evaluated and enhanced to above 97% of areas.

In parallel, SAP H4 Hana was implemented to cover 100% business functions, including: Plan to produce, Order to Cash, Record to Report, Procure to Pay, Maintain to Perform and Project systems

With this underlying IT & OT infrastructure, an ITOT platform was deployed to create an integrated data lake on which multiple advanced analytics led use cases have been deployed across organizational functions.

For example:

- Marketing & Sales:
    - demand sensing tool to estimate Paper demand at granular pin-code level,
    - mass customization of trade promotion schemes at reseller level,
    - Chatbot for customer engagement, order enquiry & campaign roll-out
- Manufacturing:
    - Man-less bleaching through advanced ML based prediction of brightness and pH for bleaching chemical reduction

- ❖ Closed loop control of LFB to enhance steam production and reduce coal consumption
- ❖ Digital twin for paper machine to improve paper stiffness and tear strength while simultaneously reducing paper breaks

- ⚙ Logistics
  - ❖ Standardization of freight contracting and sourcing across plants being enabled through Transport Management System
  - ❖ Packaging material optimization and standardization through multi-disciplinary and inter-mill collaboration
  - ❖ New ways of selling scrap through e-auction across all 3 mills to bring savings & transparency; selling-off retiree reject material through e-auction process

With the above 360-degree interventions involving People, Process and Technology, JK Paper, unit Rayagada has been able to achieve significant improvement in business KPIs including capacity utilization, consumptions, energy efficiency and profitability and evolved as the most profitable paper manufacturer in the country with highest market share in copier paper.

GOLD AWARD

Name of the Organization: Larsen & Toubro Limited, Heavy Engineering IC

Location: Hazira

About the Organization:

Larsen & Toubro is an Indian multinational operating in over 50 countries worldwide, engaged in Engineering, Procurement and Construction (EPC) Projects, Hi-Tech Manufacturing and Technology Services. A strong,

customer focused approach and the constant quest for top-class quality have enabled L&T to attain and sustain leadership in its major lines of business for eight decades.

Headquartered in Mumbai, L&T is one of the largest and most respected companies in India's private sector having unmatched capabilities in all its areas of operation.

L&T Heavy Engineering

L&T Heavy Engineering Independent Company (L&T HEIC) is recognized as one of the world's top three Engineered to Order Heavy Equipment Fabricators, having state-of-the-art manufacturing facilities at Hazira (Surat) & Ranoli (Vadodara). We custom design, fabricate and integrate critical equipment and piping solutions for core sector process plants and Nuclear Power projects across the globe. Our dedicated Engineering, Procurement, Project Management and Construction teams for Modification, Revamp and Upgrade (MRU) business offer technology-driven, quick turnaround solutions for Process Plants. We manufacture equipment conforming to international standards of quality and safety, to meet stringent delivery schedules.

Our 'A. M. Naik Heavy Engineering Complex' at Hazira is a globally benchmarked, state-of-the-art, fully integrated, digitally enabled manufacturing facility. It continues to contribute to the "Make in India" mission. All L&T Heavy Engineering facilities are well equipped with Industry 4.0 solutions for engineered-to-order manufacturing.

Key Features of the Digital Systems

L&T HEIC embarked on a digital transformation journey in 2017 to enable sustained revenue growth and profitability in a highly competitive market. Meanwhile in 2018, our market intelligence identified huge potential CAPEX investment in the Oil & Gas sector, due to the MARPOL regulation in the international market and the BHARAT- VI clean fuel standard implementation in India. To encash this opportunity, L&T HEIC designed and implemented a mega transformation program 'Doubling the Speed' reinforcing our digital dreams.

Transformational opportunities were identified across value chain and a high-level roadmap was formulated to prioritize and implement the ideas in a phased manner. To ensure the organisational readiness for this journey, a large-scale cultural transformation program was implemented across the organisation with the help of a HR consultant. Design thinking concept was rigorously implemented while developing solutions to ensure buy-in of all stakeholders and arriving at the best of the class solutions.

The key focus areas for our Digital journey were Office Automation, Integrated PLM (IEMQS), Smart Manufacturing and Advanced Metrology.

Office Automation

All manual processes were digitized & automated across the value chain. Portals & Apps were developed for better visualisation and mobility. Some of the systems implemented includes Customer Relationship Management, Enquiry Management System, Estimation Automation, Full-Kit Management System, DigiEye, Critical Resource Exploitation & Monitoring System, Partner Space, Partner Space, Supplier Relationship Management, Vendor Assessment & Performance Measurement System, Digital Warehouse & Digital Planning. All these systems are integrated with the Enterprise systems like ERP- LN, IEMQS, Concerto, etc to facilitate seamless data flow.

IEMQS

IEMQS is an in-house developed comprehensive enterprise PLM solution for Engineering, Manufacturing and Quality functions. Integration of the same with other Enterprise software ensure seamless data flow.

Smart Manufacturing

More than 100 IIOT Welding stations were developed and implemented across Manufacturing Centres of L&T HEIC. IIOT Welding stations are connected machines with features like Welder Authorization, Consumable Request & Validation, Welding Parameter locking & logging, Maintenance Entry, Common Console, Ergonomic Airconditioned Operator cabin, etc. Using digital technologies like vision system & laser profile measurement we have moved from three operator manning one welding station to one

operator manning three stations. Our FIGGY system deliver few tonnes of hot welding flux (consumable) to the stations without any mix-up. SAMPATTI-Asset Lifecycle Management System on-boards and manages few thousand assets used in our manufacturing facility.

Advanced Metrology

First of its kind use cases were developed using technologies like Laser scanning, Laser Projection Technology and Laser tracker. Digital inspection, which was not part of ASME codes for Heavy fabrication has been added as a Code Case in ASME after our successful implementation.

Results

With successful implementation of all these initiatives throughput of our manufacturing facilities has more than doubled and all operation lead indicators like Ontime Delivery Performance, First Time Right Index, Manhour Cost/Ton, etc. has shown quantum improvement.

Performance of financial KPIs are as follows,

Performance of financial KPIs are as follows, **KPI**	**CAGR (Last 4 years)**
Order Inflow	16 %
Sales	15%
PAT	29%
ROCE	13%

Our digital transformation journey has been recognised & awarded in various forums like ET Now Manufacturing Excellence, SGCCI Digital Transformation Award, L&T Technology Conclave, Pi Awards, etc.

Name of the Organization: Bosch Automotive Electronics India Pvt. Ltd. (NhP1 Plant)

Location: Karnataka

About the Organization:

Bosch Automotive Electronics India Pvt. Ltd. (RBAI) is a 100% subsidiary of Robert Bosch GmbH . Established in 2009, in Naganathapura - Bengaluru, RBAI is primarily focused in manufacturing electronic products for the automotive sector. RBAI has consistently added an average of one product every year resulting in a wide range of products comprising – Engine Control Units (ECU) for both 4W and 2W, Body Control Modules (BCM), ECUs for ABS, DC-DC Converters, iTraMS (Intelligent communication control unit) to name a few. RBAI also produces products for eMobility like MCU (Motor control Unit), C-Box (Communication Box), VCUs (Vehicle Control Unit), Central gateway modules and is geared up for other futuristic products. RBAI with its diverse portfolio, not only caters to local markets, but also exports products to all major global customers. The Naganathapura Plant (NhP1) is seen as a benchmark in Operational Excellence in AE and Bosch India , using an integrated approach of Bosch Production System (BPS) and I4.0. With a young and agile team, RBAI's mission statement 'Be RBAI' (Be Reliable Benchmark Agile Innovative) is a testament to our commitment in providing best in class products and services for its customers.

Key Features of the Digital Systems

Factory of the future is a strategic focus point defined in our plant mission which is top-down approach confirming the management vision and involvement towards it. Digital systems are well managed across application level and system level across source, make, deliver. Having our Bosch

production systems as strong fundamentals FOF is strategized with big picture and key enablers focusing on smart technologies, Artificial intelligence and Internet of things, big data and advance analytics, Robotic process automations, Connected solutions, paperless, IT+Platforms+Data management and governance. Continuous and sustainable improvements towards digital transformation keeping people as key players to enable the future fit competencies + decision making decisively.

Project management fundaments are followed right from charter, user requirements, conceptualization, solution architecting, savings evaluation, solution development, User acceptance test, implement and handover. Every project is evaluated with return of investment and also return on people's interest to ensure the solutions are made sensible to the plant and use it efficiently and effectively improve the processes and systems, also relating to the relevant plant KPIs like Quality, Cost, Delivery, Digitalization, Connectivity etc.. few of our recent accolades are Platinum certified by Frost & Sullivan in 2018, Platinum award from CII in 2021 and 2022 and furthermore to continue….

Awardees in Smart Operations Category

Name of the Organization: L&T–MHI Power Boilers Private Limited

Location: Faridabad

About the Organization:

L&T–MHI Power Boilers Private Limited (formerly known as L&T-MHPS Boilers Private Limited) is a 51:49 Joint Venture between Larsen & Toubro Limited (L&T), India and Mitsubishi Power, Ltd., Japan (MPW). The organization has clocked over USD 2.7 Bn. in orders since its inception in 2007.

It engages in the business of designing, engineering, manufacturing, selling, maintenance and servicing of Supercritical/Ultra-Super Critical Boilers, Coal Pulverisers, Selective Catalytic Reduction Systems and Heavy Castings.

The manufacturing plant of the organization is situated at Hazira, near Surat, in the state of Gujarat.

The plant houses state-of-the-art machinery and capability stack, spread across 90 acres of land. The plant has a capacity of manufacturing 24000MT of critical pressure parts, 36 nos. of coal pulverisers and 1920MT of high-grade casting, per annum.

A unique thrust on Operational Excellence is evident in deployment of emerging technologies like IIOT, AI/ML, RPA, Mobility etc. - making the factory a flag-bearer of Industry 4.0 movement. The use of latest Digital and Data Analytics technologies at the facility help towards making all processes 'Lean', 'Smart' and 'Intelligent'.

Key Features of the Digital Systems

Program management for driving the industry 4.0 movement at the plant:

- A framework was developed keeping in mind the intention of upscaling the 'Lean' principles of 'Wastage Minimization', christened 'Lean marries Digital'.

- Creation of an umbrella Initiative coined, 'DELTA' which stands for Digitalization, Efficiency, Learning, Training and Automation – to act as a single banner under which various projects relating to Industry 4.0 are taken up.

- The DELTA framework urges people to:

  - Think of ways of Digitizing and then Digitalizing their processes.

  - Push for the factory to have an infrastructure suited to a 'Digital Factory'.

  - Create process maps and think of ways for doing more with less in all high volume, high-effort processes using digital.

  - Upskill on the new age digital technologies and undertake action learning projects.

  - Smartly evaluate automation technologies (eg. Robotics) before finalizing their induction in the factory.

- The on-roll, unionized workmen are taken through a detailed, 3-module long 'Digital Culture Building' program enabling them to be more flexible and future-ready.

- With this initiative in place, projects are discovered, cross-functional teams are formed, requirements are gathered and documented, and solutions are developed – either with internal resources or by engaging external professional assistance – projects are deployed and tracked there on for efficacy.

- Software development' component of the project – if it involves one – is developed through Agile methods.

- Feedback is gathered once the project is rolled-out from the end user and subsequent phases are planned.

- Benefit Realization is tracked using an F&A Approved template for every project.

Areas of Deployment of I4.0 Solutions in the Plant:

- Procurement

- Material receipt

- Quality control

- Manufacturing Operations

- Outsourcing and Subcontracting

- Finance & Accounts

- Central and Shop Planning

- Maintenance

- Calibration and Testing Labs

- Safety and Facility Management

- Logistics and Warehouse

- Human Resources

The Benefits:

- Descriptive, Diagnostic, Prescriptive analytics, driving databased decision making leading to quicker turn-around times.

- Elimination of paper-based processes.

- Cutting down of errors and improvement in accuracy through document automation.

- Saving in manhours on account of not having to conduct the activity and span time in reporting the very incident in multiple mediums and formats.

- Smart load-balancing and monitoring of utilities like Gas, Electricity and Compressed leading to savings.

- Optimization through algorithm-based parameter recommendations leading to savings in material cost, machine hours and reduction in defects.

- Quantifiable benefit realisation of over ₹230 Lac per annum – recurring.

GOLD AWARD

Name of the Organization: ITC Cigarette Factory

Location: Bangalore

About the Organization:

ITC is one of India's foremost private sector companies with a Gross Sales Value of ₹ 74,979 crores and Net Profit of ₹ 13,032 crores. ITC has a diversified presence in FMCG, Hotels, Packaging, Paperboards & Specialty Papers and Agri-Business. Under FMCG portfolio, we have many diversified presences such as Foods (Chips, Atta, biscuits etc), Agarbatti, Classmate stationary, personal care, Tobacco Division etc. ITC's aspiration to be an exemplar in sustainability practices is manifest in its status as the only company in the world, of its size and diversity, to be carbon, water and solid waste recycling positive. In addition, ITC's businesses and value chains create sustainable livelihoods for more than 6 million people, a majority of whom represent the poorest in rural India.

About ITC Cigarette Factory Bangalore

Under FMCG's Tobacco division, ITC Bangalore cigarette factory is ITD's flag ship manufacturing facility having word class infrastructure, contemporary technologies, imported high end automated manufacturing machines. ITC Bangalore is located near Bangalore Airport having total area of 116.5 Acres. This plant is full of green plantation spread in Trees - 39.51 Acres (34%), Lawn - 8.00 Acres (7%), Shrubs - 6.00 Acres (5%). We have cigarette manufacturing licenses capacity of 60 Billion cigarettes per year. We at ITC Bangalore produces more than 100 different SKUs to cater Indian and outside Indian market. These cigarette SKUs are ranging from different length size brands, flavour etc.

Key Features of the Digital Systems

At ITC Cigarette factory we have latest digital system used across factory. Brief best practices in each area is below.

1. **Manufacturing Process**: we have latest automation machines procured from European countries are highly automated with high end Programmable logic controls system with HMI (human machine interfaces) which enables operation to meet best productivity and efficiency. Following contemporary digital system has been built over the advanced machines.

   ☼ **Automated Guided vehicles**: These AGVs are made inhouse by converting the battery-operated trucks to automated Guided vehicle to move the finished goods from shop floor to finished go down. This enable seamless operation of machine and increase manpower productivity.

   ☼ **Cobot**: To improve the manpower productivity, transfer of cigarette tray loading and unloading is done using Cobot in all the cigarette maker machines.

   ☼ **Robot**: Robot is installed in primary manufacturing department to load incoming leaf to machines.

- **Centralized Data Collection System:** All the machine performance data is being collated centrally in server to carry our analysis on efficiency, waste and downtimes.
- **Condition based monitoring system** to predict machine health using edge devices

2. **Quality Compliance System**:

- **RFID System for Cigarette tracking:** RFID system are used to track the cigarette production and integrity of brands.
- **Flavour Integrity System:** To ensure correct flavour amount and type used using load cell, flowmeters etc
- **Industrial Vison Sensors:** high end inspection Camera based vision system are used to check the product and raw material to meet the quality. Some of examples are PCT vision, capsule vision and NTRM vision system.
- **Online dash boards:** all the machines are equipped with online dash boards to monitor the product quality and deviation to work upon.

3. **Utility Process**: 100% utility is covered with digital system such as

- **Utility Management System:** Centralized dash board is used to monitor the electrical, thermal, compressed air and water energy of entire factory
- **Machine learning model** to predict the HVAC operation to optimize the chiller run using weather forecast and shop floor condition
- **Water management:** monitoring of borewell operation, water level is done online. Operation of ETP, RO plant is automated and dash board created.

4 **EHS System**: we have mobile app-based system to manage log incidents, observations and monitor the closure. Training and case study sharing is done using the app.

Name of the Organization: Larsen & Toubro Ltd - Defence Engineering IC

Location: Hazira

About the Organization:

L&T Defence is involved in delivering state of the art systems to armed forces and ISRO. It clocks revenues of >3700 Cr / Year. Hazira Defence factory contributes to over 1/3rd of these revenues. Hazira Manufacturing Complex (HZMC), spread >750 acres is amongst the best manufacturing & vertically integrated facilities in world. With new government policies, mega defence programs are anticipated to be executed in future.

Hazira delivers state of the art, high technology equipment to armed forces. The product portfolio is summarized as below. This is one of its kind factories in world, rolling out such a wide variety of products from a single factory.

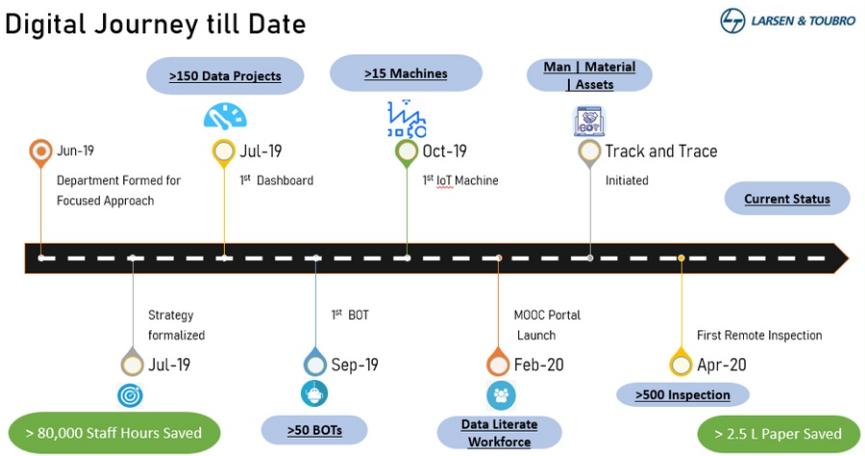| Naval Platforms	Armoured Systems	Weapon Systems
Tactical & Assault Bridging Systems	Interceptor Boats	Multi-barrel Missiles & Rocket Launchers

Key Features of the Digital Systems

Summary of digital initiatives, and key features are displayed below

Digital Journey till Date — LARSEN & TOUBRO

Leadership Commitment: Digital Strategy for L&T is promulgated by L&T Group CEO which gets drilled down to Location Digital Strategy by Unit Heads (Document available in main submission). Leadership commitment is also evident from fact that Digitalization Targets are taken in form of Business Unit Objectives and Group Objectives which narrows down to individual objectives and appraisal process.

Data Skills Democratization: A MOOC based learning program was launched which enabled employees to up-skill in various areas of digitalization such as Data Analysis, Robotic Process Automation, etc. Reward scheme is woven around this learning with involvement of HR Team, to encourage employees to implement learnings at work place. Till date, >45% of employees have learnt atleast one data skill and participated in atleast one digital project.

Digital Projects Governance: IT smart systems are used for digital project governance. Ideation of business challenges, finding suitable digital solution, managing aspects of digital projects such as risk management,

budgets, benefits management, etc. are managed through IT systems, giving visibility into gambit of projects.

Process governance is ensured by following CMMI (L3), SDLC and Agile Methodologies.

KPMG Cybersecurity assurance framework is leveraged to validate the fitness of digital endeavours such as IT-OT Integration, IoT security, RPA, etc. in terms of information security. ISO 27001 is leveraged for framing the Information Security Management System for ensuring cyber safe operations.

Sustainability of Digital Endeavours: Digital Endeavours are sustained by predominantly three a) Leadership Team b) Citizen data enthusiasts + Data Literate workforce / leadership, who are essentially people in functions with zeal for digitalization c) Dedicated Digitalization team consisting of Data Engineers and Technology experts. Structured brainstorming sessions for project generation and detailed periodic reviews ensure identification of right initiatives, getting to logical conclusion, and sustaining the benefits.

Digitalization started at DEIC Hazira with Industry 3.0 Artefacts. Technology has been at center of focus for Defence projects from start. With dawn of digital era, our leadership articulated the digital ambition clearly. This was also backed by making resources available to achieve this vision. Capabilities and competencies were developed at locations and objectives were clearly defined. With challenges emerging from mega Defence programs, this digital might was used to achieve something never achieved before. We speak about before time delivery from On Time Delivery. The journey continues.

Awardees in Smart Product Category

PLATINUM AWARD

Name of the Organization: Bharat Fritz Werner Ltd. - m2nxt Solutions

Location: Karnataka

About the Organization:

m2nxt Solutions is a wholly owned subsidiary of Bharat Fritz Werner Ltd. (BFW), India's leading solution provider in the area of machine tools & other devices in the shop floor formed to offer complete smart manufacturing solutions using both cyber-physical system & physical automation solutions at an affordable price.

m2nxt has "Five" Line of Business verticals to support Nobel Manufacturing challenges, namely:

1)   Machine Tool **Manufacturing Process Automation by** Smart Fixturing, Tooling & Fixture Automation.

2)   **Physical Automation** offers affordable automation solutions like Cobot loading/ unloading, Robot loading/unloading, Robot Welding, Gantry automation, AGV's, Integrated iloT, etc.

3)   **A Cyber Physical system** IRIS Enterprise Platform for IT/OT is an in-house developed iloT SaaS offering. Available on cloud Hosted, on Private Cloud Hosted, on local On Prime. Hosted & Hybrid Hosting. Ensuring Higher level of security in all levels of the implementations with the state of art, "Secure my state" Security policy method.

4) In **Additive Manufacturing**, we build, deploy the End to End process for customers looking for Metal 3D print Machine, Process, DFAM, R&D, Prototype, Component printing & machining, we are there to support.

5) AGV [Automated Guided Vehicle] we build, deploy the End to End process for customers looking for industrial Logistics with integration with automation systems & multiple AGV's. We provide Indoor fleet management platform which can connect to customer ERP/MIS for dynamic scheduling & inrush order prioritization. The Health monitoring & iIoT for the AGV platform is integrated to ensure the high uptime & best in class BMS Battery management system.

Key Features of the Digital Systems

m2nxt IRIS is an integrated software platform for iIoT, Industry 4.0 developed by BFW & m2nxt in 2016 & Launched by 2017 January. IRIS features cross platform web based deployment technology. Independent modules provide separate functionality in any or all of the platform components. IRIS iIoT modules provide features such as: Real-Time Status Control, Alarming, Reporting, Data Acquisition, Scheduling, MES & Mobile App's.

IRIS received many awards for its very core competency & unique technical approach, best in class for the affordability for its software & hardware platforms.

IRIS has different modules for handling the entire manufacturing value chain, starting from building the Machines till the End of the Machine life cycle.

IRIS SMS – Shop floor Management System, This manages the entire machine building process from the order to Delivery, from the Machine building perspective. 100% all machines build process, Inspection, Build Time, Build Quality, QC test & reports, etc,.. This ensures 100% backward tractability of Material, Man, Process when it comes to customer complaints or Warranty.

IRIS fleet – The QC passed machines are tracked attached with the IRIS GPS HW & monitored on the IRIS fleet management service till reaches the

customer & good to go for commissioning. Ensures customers **On Time Delivery** of the machines.

IRIS PMS – The machines once digitally commissioned will get into the customer Shop floor, then Production Monitoring System will start the **machine near Real time status, performance monitoring, OEE, Machine Downtime Predictions, Alarm management**, etc,… Both Cloud / Local hosts offered.

IRIS Shock - A Captain to safeguard machines from accidents in less than 2 Milli sec. This is a very critical & important feature on any machine tool as one accident will cause the machine accuracy & cost of repair is very high. The IRIS Safe Captain is a real-time Physics engine monitors machine spindle & Axis to alert, Hold or Stop the machine when any abnormal event on the machine.

GOLD AWARD

Name of the Organization: : Gainwell Commosales Private Limited

Location: Kolkata

About the Organization:

Gainwell Commosales Pvt. Ltd, formerly known as Tractors India Pvt. Ltd(TIPL) an Company has been supporting India's growth for the last 78 years since 1944, we have our footprints across various infrastructure and transportation projects built over last few decades. We are ISO 9001 and Great Place To Work certified organization having more than 110 touchpoints across India. Our group turnover for CY 2021 touched INR 2590 Cr.

We have been partner company for Caterpillar Inc. USA in India since 1944 and today work with 10 global partners (OEMs) to provide comprehensive solutions to our customers.

We have around 3000 employees most of whom are skilled engineering talents supporting nearly 35000 active infrastructure equipment population in this country (www.gainwellindia.com) and with our latest state of the art additional manufacturing facilities in the east of India. Incidentally, based on technology transfer and licensing by Caterpillar one of our group companies (www.gainwellengineering.com) is manufacturing underground mining equipment and is slated to take up manufacturing of material handling equipment for a range of industries. We will also soon start manufacturing of large track maintenance equipment for Indian Railways market, too. Our plan is to become a major capital goods manufacturer for Indian market and help the nation to reduce import dependency.

With foundational values of Customer Centricity, Collaboration, Caring, Entrepreneurship, Excellence and with a vision of providing innovative, diverse and sustainable solutions to our customers, we have been creating long term value for all our stakeholders and the society at large.

Key Features of the Digital Systems

Like every vibrant and growing Industry segment as on today's scenario, Gainwell manufacturing division in no different in realising the importance of Digitalization and implementation of Digitized features in its products and systems. Gainwell introduced lot of digitization features in Highwall Miner machine.

Following is a brief of some key digitization features in Highwall Miner:

a.   SIEMENS **S7-1500 PLC Control System** controlling all Miner functions

b.   **Touch Screen** HMI as Operator interface eliminating hardwired controls

c.   State-of-the-Art **Fiber Optic Gyrocompass** based Navigation Control

d.   Real Time **Oil Quality Monitoring** System

e.   **Variable Frequency Drives** for all major applications

f.   **Intelligent Motor Controller** for Cutter Module electric drives

g.   **Live CCTV feed** from Miner in operation

h. **Automatic Fire Detection & Suppression System** with in-built controller

i. **Asset Monitoring from Remote** for data acquisition and analysis

j. Power quality monitoring @ incoming through **data bus communication** of incoming meter

Since installed, the advantages of features e.g. Oil Quality Monitoring, Fibre Optic Gyrocompass and Asset Monitoring have been multi-fold. The BEST PRACTICES realised over a year-old operation with such systems are summarized below:

1. **Quicker Engineering Changes** – By analysing real time data, as available from miner, important engineering decisions have been undertaken in a faster way. For an example, by monitoring incoming Power Quality from customer, failure to start-up dual 150kW cutter motors could have been pin-pointed and as a result UPS was introduced to resolve the problem effectively.

2. **Preventive to Predictive Maintenance Approach** – Unlike offline means, online monitoring of real time process data has led to discovery of imminent maintenance scenarios which has then been communicated to Maintenance Team in time. For an example, interlocking belly chain tension with chain start-up has resulted in unplanned stoppage due to failure in belly chain. At the same time, online monitoring of oil quality has ensured in-time filter replacement and increased life of hydraulic components.

3. **Value-added Solution development** – Prerequisite to develop any value added solution is to capture and analyse process data in all operating product conditions. Asset monitoring system of High wall Miner machine helped to capture all required data from machine. For an example, in one of our KPI's we have shown how data analysis helped us to develop right operating module of the machine which in turn

resulted into higher machine productivity and faster recovery of capital invested.

4. **Operational Safety Aspects** – With the incorporation of Fiber Optic Gyrocompass, critical operational safety aspects have been ensured e.g. adjacent hole crossover did not happen which could otherwise result in roof collapse or water ingress from adjacent hole.

   Also during a specific function in the miner called TRAMMING, operator can move out of the cabin to make a go-around the miner and ensure there is no unsafe condition before giving TRAMMING command through mobile interface.

5. **Better Management of Assets** – With complete visibility to real time process parameters through Asset Monitoring, critical aspects e.g. Operational errors, Maintenance planning etc. were accurately planned and executed. An expert has been monitoring the data continuously from a remote location and any resulting outcome is being communicated to concerned function. This way asset(s) could have been managed during extreme situations like pandemic conditions. Further improvement with auto generated "SMS" and "email" alerts is underway through analytical software.

SILVER AWARD

Name of the Organization: Somany Home Innovation Limited

Location: Haryana

About the Organization:

Somany Home Innovation Limited is a leading Home appliances company in India. Home to the iconic brand Hindware, the company is listed on both the

National Stock Exchange (NSE) and Bombay Stock Exchange (BSE). It houses an array of premium products ranging from water heaters and water purifiers to air coolers, air purifiers, extractor fans, and kitchen appliances, which are all relevant in the modern consumer lifestyle of today, with each contributing to make better homes a reality in India. In addition to it, the retail business under the brand Evok, a complete home solution player with a range that includes furniture, home décor and furnishings, wall fashion, modular kitchens and wardrobes.

Our Leading categories in Market Share

Hindware holds 18% MS in overall chimney business and is the top 2nd player overall, however in the ecommerce business Hindware Kitchen appliances is leading with 40% market share. (Source: Market estimates)

In water heaters, Hindware Atlantic holds 7.3% overall MS with a growth of over 70% in Trade over last year. In case of Ecommerce, Hindware Atlantic owns 12.3% MS and is among the top 3 players. (Source: GFK report H1 FY 20-21 & market estimates)

In Air coolers business, Hindware owns 6.7% overall market share. Ecommerce business in Air coolers also holds 16% MS (H1, FY 20-21) and is among the top 3 air cooler brands being sold online. (Source: GFK & Market Estimates)

Our organizational vision is to be a thought leader, growing through innovation and expertise, thus bringing consumers delight by making their lives easier. In a way we would like our consumers our customers adopt a comfortable, luxurious and sustainable lifestyle while fostering innovation.

Key Features of the Digital Systems

Internet of Things (IoT) is driving innovation and is changing the way consumers interact with devices. Hence, with an aim to deliver a delighted 'Consumer experience', Hindware Appliances forayed into IOT segment in Dec 2019, with the launch of multiple Smart products i.e. 'Achelous Premium iPro' water purifier, 'Optimus iPro' chimney and 'Ondeo Evo iPro' water heater and has recently strengthened its IOT portfolio with the addition of 'Elara iPro' water purifier, 'Agnis ipro' air purifier and 'Spectra iPro' Air Cooler.

Key Features

Our IOT Eco System "Hindware Konnect" is one of the most powerful IoT Ecosystems with very advance features.

1) We offer Remote Access through Hindware Appliance App, Voice Control (Google and Alexa), Geo Fencing, Wi-Fi Direct etc.

2) Our IOT Eco System is integrated with SVC CRM system, thus delivering breakthrough innovations like 1-Touch SVC Request & Auto SVC Request.

3) We can also monitor and troubleshoot our appliances accurately through product heatlh data received in our IOT Ecosystem. We also manage and process this data and convert it into relevant information for our consumers and internal stakeholders.

4) Data security is essentially focused to prevent any loss of our consumer's information.

Key Highlights

1) We are probably first one to launch Smart Water Purifier & Chimney in India.

2) With 06 Smart Product categories and multiple SKU in each category, we have one of the largest range of Smart Appliances and soon we are going to add many more.

3) Unlike other competitor's in India we offer control of all smart appliances through a Single App.

Hindware Appliances have a vision to lead the industry in the domain of Smart Appliances by continuously developing one of the most advanced ecosystem. We aspire for an Open Ecosystem, which can integrate with external ecosystem as well as internal business systems thus delivering an unimagined Consumer Experience. So far we have almost 110K+ downloads of our Hindware Appliances App, over 10K Smart Products are produced and billed. Over 2K products are connected through our Hindware Konnect Ecosystem.

Awardees in Smart Customer Experience Category

PLATINUM AWARD

Name of the Organization: Gainwell Commosales Private Limited

Location: Uttar Pradesh

About the Organization:

At Gainwell Commosales Private Limited (GCPL) we have strived to create and deliver outstanding value with integrated solutions and service excellence since 1944. We are primarily a major supplier of Caterpillar Construction, Mining and Power Solutions in north and east India, as well as Nepal and Bhutan.

For nearly eight decades, our rich heritage has revolved around an impressive array of equipment that represents some of the finest in design and technology. With a focus on establishing ourselves as a globally recognized, technology-driven world-class solutions provider, rebuilder, product support and project executor, we have graduated from our core business of machine, engine and parts sales and have expanded the horizons by enhancing our value addition. We engage with multiple OEMs globally today to complete our offerings to our customers in Construction, Resource and Energy and Transport industries. We have also moved into Railways, Defence business, City Gas Compression, Coal mining operations and have established ourselves as a manufacturer of high-end machines for global markets. Providing end-to-end and full-spectrum maintenance services to customers across various sectors and with state-of-the-art facilities spread across India, our highly skilled and trained service team delivers unparalleled support to help customers build a new India. In pursuit of business

excellence, we have focused on improving our processes and systems and have been accredited with the ISO 9001: 2015 Certification for a majority of our operations and locations. Our integrated facility in the north is a LEED Platinum building reflecting our commitment to the socio-ecological needs.

Key Features of the Digital Systems

A fantastic digital customer experience ensures that they feel valued and understood, at each juncture of their customer journey, irrespective of the platform or channel they reach us through. Gainwell has always put emphasis on creating digital solution platforms to provide an enhanced end to end digitised customer journey, thus building a competitive advantage in the industry. Making our product support offerings available at the fingertips of our customers for an efficient, effective and seamless experience has been our top example of digital advantage in the market. We followed the roadmap strategy by first identifying the customer's pain points, developing digital platforms and encouraging a cultural shift with both internal and external customers. Focusing on digitised customer journey, we identified four areas of work - Predictive Maintenance, Remote Service Request, Online Parts Purchase and Customer Loyalty. The Equipment Management Solutions provides real-time status on performance and quality of over 13,000+ connected assets by triggering fault code alerts in advance thus avoiding major breakdowns. Field Service Management mobile application integrated with enterprise resource planning provides an ease of doing business to customers by booking service requests in just few clicks and reducing the response time by our Service Engineers. Online Parts Sales web-based application provides a one-stop solution to the customers by covering over 1.4 million machine parts. Customers can check parts availability, price and shop 24x7 with doorstep delivery and easy online payment gateway options. Lastly, to reward and retain our loyal customers, we introduced the Gainwell Samriddhi Club wherein customers earn reward points every time they shop with us. These reward points can be redeemed against CAT merchandise or parts vouchers. All these programmes have worked in favour of building Gainwell as a brand providing seamless experience to our customers.

EMPOWERING GUJARAT FOR
THE NEXT TECHNOLOGICAL
REVOLUTION

Shri Bhupendra Patel
Hon'ble Chief Minister of Gujarat

Shri Narendra Modi
Hon'ble Prime Minister of India

Gujarat IT/ITeS Policy 2022-27

Salient Features:

CAPEX support up to INR 50 Cr for IT/ITeS units and up to INR 200 Cr for Mega Projects

OPEX support up to INR 20 Cr per year for IT/ITeS units and up to INR 40 Cr per year for Mega Projects

Employment Generation Incentive (EGI) upto INR 60,000 per employee

Atmanirbhar Gujarat Rojgar Sahay – up to 100% reimbursement of employer's contribution of EPF

Direct Benefit Transfer (DBT) up to INR 50,000 for every youth towards IT Skills Enhancement

Fiscal and Non-Fiscal incentives for development of IT Cities / Townships up to INR 100 Cr

Rental subsidy up to INR 10,000 per month per seat under Government facilitated infrastructure & empanelment model

Interest Assistance on term loan up to 7% of the principal loan amount

100% reimbursement of Electricity Duty

R&D Center / Institutes: CAPEX support upto INR 5 Cr

Data Centers: CAPEX support up to INR 150 Cr and power tariff subsidy

Cable Landing Station (CLS): CAPEX support up to INR 20 Cr and power tariff subsidy along with other Non Fiscal Incentives

Facilitation for land allotment

Online investor Facilitation platform

First of its kind - Bundled incentive scheme : CAPEX - OPEX model

Early mover advantage to first three IT/ITES companies under Mega Projects

Facilitating futuristic IT cities to promote Walk-to-Work culture

Gujarat AI school at GIFT City - Placing Gujarat at the frontier of technological innovation

Fostering Cloud:
Bringing Cable Landing Station (CLS) to Gujarat
Special focus on Data Centre

Nurturing grassroots - Digital literacy & technology awareness programs

Enabling creation of state-of-the-art Co-working IT office spaces

The IT/ITeS Policy will place Gujarat amongst the top performers in the IT sector and create employment opportunities for over 1 Lakh youth in the State.

Shri Jitubhai Vaghani
Hon'ble Minister of Science & Technology,
Education (Primary, Secondary and Adult),
Higher & Technical Education
Gujarat State

About FICCI

Established in 1927, FICCI is the largest and oldest apex business organisation in India. Its history is closely interwoven with India's struggle for independence, its industrialization, and its emergence as one of the most rapidly growing global economies.

A non-government, not-for-profit organisation, FICCI is the voice of India's business and industry. From influencing policy to encouraging debate, engaging with policy makers and civil society, FICCI articulates the views and concerns of industry. It serves its members from the Indian private and public corporate sectors and multinational companies, drawing its strength from diverse regional chambers of commerce and industry across states, reaching out to over 2,50,000 companies.

FICCI provides a platform for networking and consensus building within and across sectors and is the first port of call for Indian industry, policy makers and the international business community.