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INDUSTRY 4.0

SUCCESS Insights India

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THE SAILOR FOR ENTERPRISE SOLUTIONS

IN MY VIEW

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PVM INNVENSYS

IMPLEMENTING THE BEST OF INDUSTRY 4.0 FOR 22 YEARS

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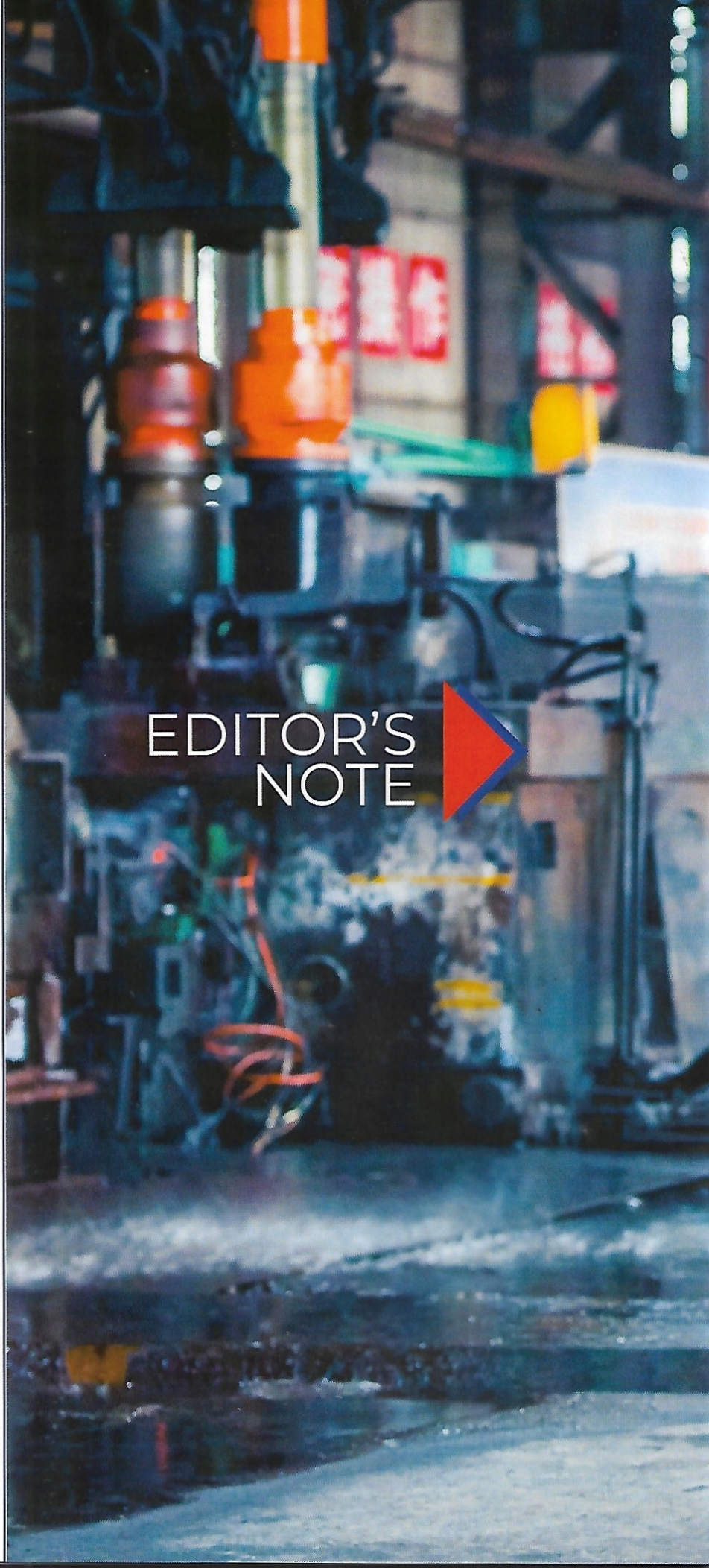

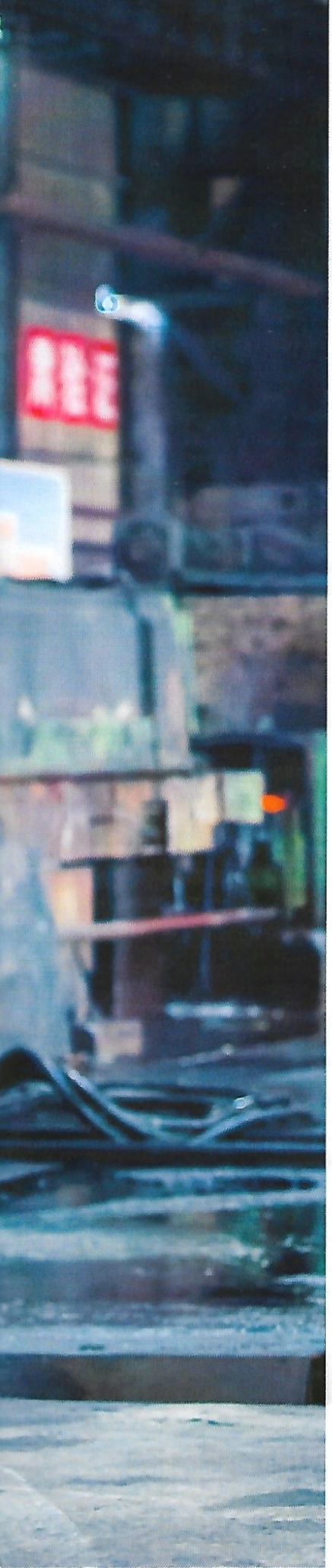

Industry 4.0 and its Endless Opportunities!

In 2022, the GDP growth in most OECD countries is projected to rebound to 4.5%. Especially after the onset of COVID-19 pandemic, the complex concept of Industry 4.0 has started seeping into various realms in India such as manufacturing, real estate, IT-ITes, and many more while witnessing huge levels of adoption. In fact, the country is at the verge of plunging into a new revolution under the Industry 4.0 concept as young talents play crucial roles in their start-ups and organizations seamlessly adopt advanced technologies to stay ahead of the burgeoning competition.

It is indeed the era of connected technologies like Artificial Intelligence, Big Data, Mass Automation, Industrial Communications, Robotics, 3D Printing, and Cloud Computing as well as data-driven insights. In the present times, the innovative concept of Industry 4.0 is extensively being deployed in the heavy and light engineering industries, automobile and auto components, and many others. Yet, the future demands greater application of Industry 4.0 across organizations wherein newer business strategies, policy reforms, and government initiatives must also be adhered to!

Thanks to Indian government's initiatives like "Make in India" and "National Policy for Advanced Manufacturing", most organizations envision higher rates of adoption of Industry 4.0 in the years to come. We, at SUCCESS Insights India, have curated a list of such organizations that have seriously adopted Industry 4.0 across their products & services portfolio – '10 Best Industry 4.0 Solution Providers - 2022'. Peruse the rest of this edition to learn more about these organizations and their varied expertise.
We are always happy to know your thoughts and suggestions!

Jeevitha J,
Managing Editor

PVM INNVENSYS

IMPLEMENTING THE BEST OF INDUSTRY 4.0 FOR 22 YEARS

In recent years, many organizations, large, medium and small have drawn ambitious plans to embrace Industry 4.0 and bring in efficiencies across their manufacturing activity. The objective is to transition manufacturing activity into an agile, resilient, innovative and standards-based practice, in their product offerings and customer services across the enterprise value chain.

Industry 4.0, is a phrase coined in Germany to prepare German engineering and manufacturing companies to transition to the next level of industrial revolution and

NAGA RAMANESHWAR,
FOUNDER DIRECTOR & CEO

be highly competitive globally, but has today made inroads globally. The Government of India through the Ministry of Heavy Industries and Public Enterprises embarked on an ambitious vision for Industry 4.0 under SAMARTH Udyog Bharat 4.0 with the vision:

"To facilitate and create an ecosystem for the propagation of Industry 4.0 set of technologies in every Indian manufacturing enterprise by 2025, be it large, medium or small-scale factory."

WHAT IS INDUSTRY 4.0?

Industry 4.0 empowers enterprises to design and develop innovative manufacturing processes, take control of complex industrial manufacturing processes, meet individual customer specific product requirements and secure the future of manufacturing of every enterprise. It conceptualizes data-driven, AI-powered, networked and hyper-connected "Smart Factories" – with concepts like Cyber-Physical Systems, Smart Factory, Industrial Internet of Things (IIoT) and Internet of Services (IoS) bringing in an era of data analysis & insights into the manufacturing industry.

Technologies like Low-cost sensors, High-tech analytics, Artificial intelligence, Cognitive manufacturing, Networked systems, Big data analysis and Machine-to-machine communication, have all increased the visibility that manufacturers need, to increase production and reduce downtime.

Indian manufacturing industries are also looking to embrace Industry 4.0 in a big way especially given the impetus by the Indian Government with its Make in India initiative.

Embracing Industry 4.0 will help Indian manufacturers in making Indian products compete with imported ones and also expand Indian business to compete in the global markets. Industry 4.0 is making inroads mostly in newly setup manufacturing units, though with the onset of the pandemic, there has been a steep rise in the digitization across all departments and functions in an enterprise, including manufacturing.

With Industry 4.0, companies, departments, functions and capabilities will become much more cohesive as cross-company, universal and data-integration networks evolve and enable truly automated value chains. A connected manufacturing enterprise would be more competitive to utilize the available resources – man and machine – more productively, efficiently and effectively, especially in processing, packing, storage & warehouse management, outbound supply chain, logistics & distribution, quality control inspection and warranty & service management besides increasing shop-floor accountability.

PVM INNVENSYS IN EARLY DIGITIZATION AND CURRENT SMART FACTORY DEPLOYMENTS

Poised perfectly in the digital industrial technology space is PVM Innvensys, a technology solutions company having engineered and executed successful projects in Control Automation & Supervisory Control and Data Acquisition (SCADA) applications, Material Handling Automation Systems, Warehouse Management and Automation Systems, Indoor and Outdoor Positioning Systems, Supply Chain Management, Outbound Distribution Automation and Last Mile Delivery technology verticals.

PVM INNVENSYS KICK-STARTS THE PROCESS BY PROVIDING THE INITIAL INPUTS TO THE ASPIRING MANUFACTURING ENTERPRISES, BY UNDERSTANDING THEIR INDUSTRY 4.0 VISION

The latest additions to its portfolio are Industry 4.0, Industrial IoT, Smart Manufacturing, Smart Work Force, Digital Work Instructions, Production-Process-Product Traceability as well System Integration technologies and solutions for manufacturing enterprises.

The company stands tall in the market with a whopping 22+ years of rich, diverse experience in control automation, process engineering, real-time systems and applications development and deployment, besides executing enterprise scale end-to-end Industry 4.0 projects.

UNPARALLELED EXPERTISE

Naga Ramaneshwar, Founder Director & CEO, PVM Innvensys, asserts, "We empower manufacturing enterprises to embrace Industry 4.0, Industrial IoT, M2M, Control Automation, Advanced Machine & Process Data Analytics and Vision Technologies, to become smart manufacturing enterprises". An Information Technology professional and entrepreneur for over 20 years with rich experience in multiple technology domains and industry verticals, Naga has held core technology and cross-functional positions in many strategic nation-wide and global ICT adoptions and implementations.

Since every manufacturing enterprise is unique in their Industry 4.0 journey, PVM Innvensys will assist these enterprises to transition to Industry 4.0 in a phased manner, by possibly starting with digital work instructions in their shop-floors, and by reskilling and upskilling the shop-floor human resources to be a smart workforce.

The digital technology platform deployed by PVM Innvensys will serve as a single-point, integrated, digital manufacturing interface on various core shop-floor metrics of the enterprise, with the ability to integrate to other functional departments i.e., raw material, work-in-progress, processes, production, engineering, quality, maintenance, packing, finished goods and logistics.

PVM Innvensys kick-starts the process by providing the initial inputs to the aspiring manufacturing enterprises, by understanding their Industry 4.0 vision. A detailed questionnaire is prepared to know the present enterprise manufacturing landscape and infrastructure, including various equipment deployed, processes, procedures, quality assurance, quality control, overall documentation and systems followed.

Based on the responses and manufacturing site visit by the engineering team, PVM Innvensys prepares a detailed roadmap for the Industry 4.0 transition, in a phased manner, to transform into Smart Factories that use digital work instructions, with digitized production traceability, besides connecting the shop-floor directly with supply chains in real-time.

DIGITAL WORK INSTRUCTIONS

As Industry 4.0 develops globally, manufacturing processes are becoming smarter while also increasing in complexity. Digital Work Instructions is one area that enables manufacturers to create standardized step-by-step procedures that guide workers through their daily tasks while increasing their quality output. The practice can be seamlessly integrated with the present ERP systems, equipment and tools, even using Bluetooth and Wi-Fi. Employees perform the right work in the right way because they have the best process knowledge at their fingertips.

Digital Work Instructions platform also collects key performance data through Smart Forms and automating the processes, enabling valuable data to be readily available for those who need it most, rather than being lost in paper-based records.

Today, PVM Innvensys takes pride in transitioning the shop-floor of various industries, covering minting operations, beverages, food & beverage, dairy, alco-beverages, tax-stamps and so forth. The company has multiple years of experience in working with chemical, cement, defence, metallurgy, FMCG and other industries while understanding the complexities involved in manufacturing systems integration.

LEADERSHIP PAR EXCELLENCE

Behind this vast expertise lies an ace leadership team comprising of professionals turned entrepreneurs with over two decades of deep domain expertise in implementing niche industry technology solutions in the chosen field of expertise.

Ramaneshwar adds, "We strive to excel in every product that we develop and every solution that we build for our customers". Since most of the applications and systems are developed in-house by our software development and engineering teams, PVM Innvensys ensures rigorous training is provided to them on each technology area of expertise in Industry 4.0 and in manufacturing systems integration.

With a vast presence in the Indian market, the company has served customers of all sizes ranging from small, medium and large; private, Government and MNCs; and has built applications by integrating with different programmable logic controllers and manufacturing applications.

PVM Innvensys is also spreading awareness and benefits of Industry 4.0 to the industry through various online platforms, besides doing regular digital campaigns and digital outreach programs and industry-specific webinars (every Thursday for 2 hours) to reach out to manufacturing enterprises and to explain the importance and applications of the former.

FUTURE PLANS

For the road ahead, PVM Innvensys envisages expanding its operations across various major industrial hubs in the sub-continent with focus on Indian MSMEs, enhancing its outreach through the digital platforms, by aggressively driving the Industry 4.0 adoption, starting with the digital work instructions vertical, connecting shop-floors to its cloud technology based platforms, integrating manufacturing metrics and ERP into unified Industry 4.0 dashboards.

Ramaneshwar concludes, "We believe there are a lot of opportunities out there in the Industry 4.0 space in India by way of SAMARTH Udyog Bharat 4.0 initiative by the Indian Government. Through the right integration of manufacturing systems with digital technologies, combined with the right upskilling and reskilling of shop-floor workforce, we aim to make great strides in the Industry 4.0 realm in the coming years and serve the industry's transition into the 4th industrial revolution."