Optimise manufacturing with digital and industry 4.0
OPTIMISE MANUFACTURING WITH DIGITAL AND INDUSTRY 4.0

AD FEATURE
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Venkata ‘Raj’ Parchuri, AVP of manufacturing, explains HCLTech’s digital readiness frameworks and leveraging partnerships for industry 4.0 technology insights

Organisations want productivity, particularly in the manufacturing industry where quality, efficiencies, and increased capacity utilisation are high on the business agenda. But there is more to this than mere standardisation: manufacturers require agility in the wake of industry 4.0. Digital technology goes hand-in-hand with industry 4.0, and HCLTech is committed to showing firms exactly how combining the two can provide benefits that exceed the confines of their production equipment. Digital solutions offer businesses better ways to optimise their manufacturing processes through the use of data and artificial intelligence (AI), along with other products that can be implemented to minimise downtime and increase their potential.

One of the major challenges of digitalization is implementation. And HCLTech prides itself on being one of the leading providers of digitalization solutions and consultation. But what makes the IT firm stand out from the rest are its vast applications of digital technology in the manufacturing landscape as well as other industry verticals. Focusing particularly on the implementation of digital services and cloud, Venkata ‘Raj’ Parchuri, AVP of Manufacturing at HCLTech, explained to me how the organisation’s strategy is aligned with client needs, changing the way they look at digital transformation.

A critical offering of HCLTech is its MVision—a framework that aids the client’s digital journey and showcases the financial benefits, starting with their bottom-line income.
“ESG HAS BECOME A CRUCIAL MEASURING FACTOR FOR ANY ORGANISATION’S SUCCESS AND, MORE IMPORTANTLY, IN THE MANUFACTURING SEGMENT”

VENKATA PARCHURI
AVP OF MANUFACTURING,
HCL TECHNOLOGIES

“WHAT IS HCLTECH’S MANUFACTURING INDUSTRY STRATEGY?”
RP: “HCLTech’s manufacturing industry strategy encompasses everything from infrastructure modernization to building hyper connected enterprise of the future. Our strategy helps manufacturing companies navigate the current dynamic landscape to deploy cutting-edge solutions that help them innovate and ensure profitability by improving the bottom line and creating an avenue to increase the topline.

“Supporting our manufacturing strategy is HCLTech’s MVision framework, which is built for organisations preparing for the future. We are building hyper-connected enterprises by helping them re-imagine, remain resilient, and continuously reinvent, while being resistant to embrace any future uncertainties.”

“WHAT DOES INDUSTRY 4.0 LOOK LIKE FROM HCLTECH’S PERSPECTIVE?”
RP: “From HCLTech’s perspective, industry 4.0 is the foundation built to empower the manufacturing clients so they can benefit from unprecedented levels of digital adoption for scaling effectively and becoming data-driven and insightful organisations.

“Manufacturing clients have set forward actions to rapidly adopt industry 4.0 technologies such as the Internet of Things (IoT), immersive technologies like Augmented Reality (AR) or Virtual Reality (VR), AI and machine learning (ML), cloud, and 3D printing. The goal is to not only effectively collect, but to analyse and act on vast troves of data coming in from both physical and business systems. Manufacturers are also looking to use these technologies to improve on current
processes and optimise further to become more competitive, productive, and profitable while ensuring business continuity.”

“What does the future look like for digital and industry 4.0?”
RP: “Digitisation of the end-to-end value chain leads to greater productivity, growth, and sustainability. Digital and the industry 4.0 technologies are helping our manufacturing clients redefine their products and the process of making them. The way manufacturing clients design & engineer products, how products are sourced and supplied, how products are manufactured, and how products are serviced and renewed are changing with digital and industry 4.0.”

“Overall, industry 4.0 and digital are paving the way for increased revenue through higher productivity while ensuring the quality of the products—and all this is achieved by improved resource utilisation, higher employee throughput and reduced overall costs. This helps manufacturers take advantage and stay ahead of the curve.”

From this discussion, it seems organisations are yet to discover the benefits of digital transformation in relation to their productivity, as well as the overburdening sustainability agenda that businesses care to address.

The MVision framework, which is powered by MVision Nucleus, allows manufacturers to be ahead of the curve by leveraging services like Digital Foundation, Digital and Analytics, Digital Process Operations, Products and Platforms, and Cybersecurity, to name just a few and becoming data-driven organisations.

These solutions can be tailored towards a diverse range of different manufacturing processes. Enabling cloud services allows companies to utilise data and perform functions that keep them one step ahead of their operations. Meanwhile, the same services facilitate real-time adjustments to companies’ processes to maintain quality and productivity in the wake of new operational circumstances.

An example of this is predictive monitoring and analytics. Digital and cloud services create a real-time data stream—often in the form of digital twins—sharing insights such as machinery output, condition, and data to optimise performance. The ability to access these insights will not only alleviate immediate production issues, but also ensure that companies remain resilient in the face of any unforeseen and uncontrollable changes.

“HCLTECH’S MVISION FRAMEWORK IS BUILT FOR ORGANISATIONS PREPARING FOR THE FUTURE OF HYPERCONNECTED ENTERPRISES”
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TAKING INDUSTRY 4.0 TO THE CLOUD

“How is HCLTech helping enterprises realise their digital potential?”
RP: “We help design and build key platform components of clients’ digital technology footprints to power their digital transformation journeys.

“Our team of design-thinkers and industry-process experts help our clients break down barriers by combining deep knowledge of business processes with user centric design principles—to truly visualise the potential of digital technology. HCLTech brings its entire gamut of expertise—from consulting to implementation—to ensure clients become digital-ready from shop floor to the top floor.”

“What are the digital trends you are seeing among your clients?”
RP: “HCLTech’s clients are adopting digital and are building on a nucleus of industry 4.0 technologies to deploy profitable and innovative cutting-edge solutions. Examples include smart manufacturing, where asset management is a core aspect of smart manufacturing, transforming this process through remote monitoring control, and predictive analytics serving as the foundation for operational resilience. Not only to benefit from the unprecedented levels of digital adoption.
Supply chain resilience allows our clients to react more quickly to both internal and external events, speeding up ‘time to recovery’ for larger disruptions as well as product and service innovation. With this, the offerings that our clients can bring to market are transforming as well. A top focus for many clients is the incorporation of digital technology into products and the development of new value-added services.

“How is HCLTech strategically placed to prepare clients for digital?”
RP: "In 2021, HCLTech was recognized by the Everest Group as a leader in talent readiness and digital talent capability. HCLTech was recommended for its robust strategy and ecosystem of digital talent development, structured go-to market and branded offerings for talent related themes, investments in building agile workspaces, full employee lifecycle, and identifying next generation IT skills.

“We have 20,000 employees trained on the latest SAP S/4 HANA intelligent ERP. We also provide experts that are trained and certified with our hyperscale partners AWS, Microsoft, Google, and other partner technology OEMs.”

As mentioned by Parchuri, the ability of HCLTech to understand the ‘ins’ and ‘outs’ of its partners’ solutions gives the organisation a competitive advantage and it also provides a large, skilled workforce for managing client demands in these areas. Credit must be given to HCLTech’s extensive work maintaining strong partnerships with providers like SAP, AWS, Microsoft, Google, and many others. These long-term collaborations help leverage HCLTech’s products and deepen the understanding to optimise them for manufacturing purposes.

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“How important is ESG when choosing business partners?”
RP: “ESG has become a crucial measuring factor for any organisation’s success, especially, in the manufacturing segment. First of all, we publish our ESG scores. We’ve been rated the highest among all service providers based in India and, for some time, HCLTech has been engaging with its clients across manufacturing, automotive, mining, healthcare, and life sciences as a digital sustainable partner.

“To achieve our ESG goals, it’s important that our partners are also aligned to them so we can gain a powerful insight into making more sustainable sourcing decisions and enable proactive supplier engagement. We continuously monitor, engage and incorporate suppliers’ own sustainability goals.”

As HCLTech continues to highlight the great achievements to be made with digital solutions and the opportunities available to its clients, the main opportunity that Parchuri envisions lies in the use of data. Data can be used for ESG transparency, revitalising manufacturing processes to make them more adjustable to changes and supply chain disruptions, and to share the latest products and services with industrial clients to optimise their performance.

Sustainability is not only a driver of change but can also facilitate the necessary changes in organisations to achieve higher production outputs and reach unforeseen revenues. HCLTech is well-versed in digital trends, formalising business-ready frameworks to make adoption a seamless process.