

# V connect

Vol. 23, No. 2

The Employee Communication Newsletter of L&T Valves

April 2023

*shape  
the  
future  
together*



New Year Special



## From the Editor

Dear Friend,

It's good to reconnect, again.

The April issue of V-connect is a bumper issue that covers the major milestones and events of the past year - and 2022-23 was quite a busy year. We integrated our manufacturing operations, launched an organisational development intervention and crossed a few records in order inflow. I had a great time putting together this issue and I thank everybody who contributed content, advice, company and an ear for my rants.

We have stories that need to be told, ideas that need to be shared and perhaps a quarterly newsletter is not the right media in today's hyperconnected world. V-connect is looking for a team to conceptualise and implement the nextgen internal communication solution.

If you are passionate about connecting, communicating or content creation, drop a mail/ call me, let us reinvent our newsletter again.

Thanks,  
**Babu**

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# Message from the Chief Executive

Dear Colleague,

I thank you for your hard work and dedication in the past year.

In 2023-24 we are making a new beginning powered by our integrated facility at Kancheepuram and I request your wholehearted support.

The theme we have chosen for the year is 'Shape the Future Together'. In other words, we want to go beyond integration and transform ourselves into unified lean and agile organisation - and turn our dreams and aspirations into reality.

I would like to reiterate the key mantras that would guide us in this journey of transformation:

- Trigger your thought process. We need to unleash our potential to find better ways to do things and orient towards a growth mindset.
- Try big things. Boundaries exist only in our mind. We need to push ourselves outside our comfort zone. Every effort you make, no matter how small, plays a vital role in our success.
- Trust in Trust. 'We will make L&T Valves the most trusted valve company in the world' is our vision. We need to focus on our core and re-establish our credibility.
- Treat every challenge as an opportunity. The strategic direction we have chosen poses many challenges. Stay focused, every problem we solve, every task we complete, every project we deliver will contribute to our overall progress.
- Trim the inventory. We need to continue our efforts to bring the inventory to our targeted levels.
- Triple the output and transcend into the future.

The future is exciting. Let us work together to shape our best future. All the best.

Regards,

**S Kalyanaraman**

# Anil V Parab



AVP is a Mechanical Engineer from VJTI, Mumbai (1982). He acquired Senior Executive Management Education from the London Business School & Indian Institute of Management, Ahmedabad.

AVP possesses vast experience in technology, business development and manufacturing. During his career he created many new global benchmarks in nuclear and process plant manufacturing. He successfully started the new business line - Modification, Revamp & Upgrades (MRU) of process plants - and implemented the latest Industry 4.0 Digital manufacturing at AM Naik Hazira Manufacturing Complex.

Anil V Parab is Chairman of the Capital Goods & Strategic Skill Council of India (CGSC), promoted by Dept. of Heavy Industry, GOI & FICCI. He is Co-chair of FICCI, Capital Goods & Public Procurement National Committees. AVP is a Fellow of the Indian National Academy of Engineers (INAE) and a member of Programme Advisory Committee of the Department of Science & Technology. AVP is also a Senate member of IIT Jammu.

**Anil V Parab (AVP)**  
Whole-Time Director &  
Sr. Executive Vice President -  
Larsen & Toubro Limited,  
(Heavy Engineering & L&T Valves)

*AM Naik Hazira Manufacturing Complex*



# Valve World

The global magazine for valve and  
actuator users, suppliers and specifiers  
Vol. 28, Issue 2, March 2023

Oil & Gas

- 16 A look inside JIP33  
with Rachel Manley  
of Aker Solutions
- 21 Pressure Class in  
valves and flanges
- 36 Optimisation of ball  
valves for upstream  
pipeline applications

**Cover Story:**

## L&T Valves – Celebrating 60 years, focusing on the future

[www.valve-world.net](http://www.valve-world.net)

## COVER STORY

L&T Valves celebrates its diamond jubilee this year. It is marking the milestone with investments in people, products, processes and plants, powered by a revolutionary strategy for the future.

By Joanne McIntyre



The green campus of L&T Valves at Kancheepuram.

# L&T Valves – Celebrating 60 years, focusing on the future

**T**o find out more, Valve World met with Chief Executive Mr Kalyanaraman, Head of Global Sales Mr Venkatesh, and Head of India Sales Mr Krishna Kumar. Mr Kalyanaraman began: “L&T Valves is the subsidiary of Larsen & Toubro, a global major engaged in EPC projects, high tech manufacturing and services. We had started small but grew consistently to become the market leader in India not only in terms of size, but also technology, quality, customer service and trust. We entered the international market three decades ago and were the first Indian manufacturer to get approvals from the global oil majors. Today our name is synonymous with reliable flow control

in the industry. As we celebrate our 60th anniversary I would like to thank all the customers, partners and employees who made this journey possible. At this joyful occasion, our focus is on the next phase of growth and expansion and our transformation into a globally trusted brand.”

### Five pillars of excellence

Five strategic pillars underpin the company's future strategy, explains Mr Kalyanaraman. “Our primary goal is enhanced value proposition to our customers. Our focus is on offering engineered solutions such as large size, high-pressure and high alloy valves, automated and digital solutions as well as



"We are accelerating our efforts to ensure our manufacturing operations - as well as our products - do not harm the environment. We are re-engineering our processes and products to consume lesser resources and energy. Our plants meet ISO 14001 and 45001 and already zero-discharge units. We strive to increase the green cover and last year planted a Miyawaki forest of 2500 saplings at our plant in Kancheepuram. Also, our products such as low emission valves and HIPPS contribute to a greener world by reducing harmful emissions and discharges to the atmosphere."

"Technology is our fourth pillar. We continue to develop smart, IoT-ready solutions that enhance safety, reliability and efficiency, leveraging automation and digital technologies. We are also reimagining customer interfaces to reduce response time and enhance satisfaction. We are sure these would help us exceed the expectations of our global customer base." "The fifth pillar is global expansion. We currently export around 60% of our products, and the share of international business is growing."

#### Global expansion

Mr Venkatesh, Head of Global Sales, outlined the company's vision for global expansion. "Our core strategy can be summed up as 'moving closer to the customer' - not only in terms of sales teams but also service, manufacturing facilities and warehouses."

"In 2022 we started a new manufacturing facility in Saudi Arabia. The plant is already approved by the major end users in the country and meets in-country value-addition requirements. Saudi plant, as well as other new facilities planned



Mr Kalyanaram, Chief Executive: "Our name is synonymous with reliable flow control in the industry."

to address value addition requirements, will form supply hubs for our Middle East customers. The Middle East is a key territory for us and we have sales managers located across the region."

"Last year a new facility and warehouse were opened in Houston, USA. Ideally located, the warehouse supports our North American distribution network with short delivery times and quick modifications and upgrades. The Houston facility will also help us make inroads into Latin America. There is significant interest in our products in Argentina, Mexico, Peru, which are virgin territories for us."

"In Europe, a new office in Paris was opened in September 2022 and Asia-Pacific customers will soon enjoy increased service from our new sales manager located in Singapore."

These developments bring L&T Valves closer to its customers, providing timely technical and commercial support. In addition, L&T Valves offers after-sales support starting from installation and

aftermarket support. These offerings will reinforce our unique position in the minds of our customers as a flow-control partner rather than a supplier."

"Secondly, people are the prime movers in our company, and this remains one of the mantras driving our business. We lay great emphasis on developing young minds for the leadership roles of tomorrow. We have recently launched a companywide organisational development programme to revitalise our culture of high performance and create an environment that is a pleasure to work in."

In February 2023, the company successfully completed an audit for ISO 30414, the first international standard that allows an organization to get a clear view of the actual contribution of its human capital. "We may well be the first Indian engineering company that has embarked on this journey," smiles Mr Kalyanaram.



Mr Venkatesh, Head of Global Sales: "We plan to diversify beyond the conventional energy domain."



Mr Krishna Kumar, Head of Indian Sales: "Customers consider us a one-stop shop for flow control equipment."

## COVER STORY



An 8x6 inch Class 600 cryogenic trunnion-mounted ball valve.

commissioning to maintenance support and emergency response. "We are expanding our product portfolio and application base also," Mr Venkatesh continued. "We are a major player in oil & gas and power sectors and plan to diversify beyond the conventional energy

domain. We are pursuing opportunities in allied industries leveraging our expertise in customised solutions."

### Expansion in the Indian market

Mr Krishna explains the company's future-focused strategy for the Indian market. "Our team of engineers are spread right across the country. With over forty distributors country-wide and a large inventory, customers consider us a one-stop shop for flow control equipment. We have an extensive product portfolio and new products are regularly being developed, with axial flow check valve being a recent addition. The passion and dedication of our design team is worth highlighting here."

Water has emerged as a significant market for L&T Valves in India, particularly for desalination and irrigation. "We recently supplied butterfly valves measuring 132 inches," explains Mr Krishna. "Such developments reflect the success of value co-creation with customers, which energises our product development initiatives. This cooperation extends to mission-critical projects in oil & gas and power as well as defence and aerospace."

### Integrated manufacturing plant

L&T Valves has two large manufacturing facilities in south India, at Kancheepuram and Coimbatore. To be future-ready, the company has taken a strategic move to integrate all manufacturing operations at the Kancheepuram plant by 1 of April 2023. The plant is located close to the national highway and is 80 km from Chennai port.

"The Kancheepuram facility is almost 30 years old with established systems and a highly experienced and skilled workforce which is comparable to the best in the world," explains Mr Kalyanaraman. "The plant also has a host of approvals from our global customers."

"Output from the new entity, post-debottlenecking and capacity addition, is projected to exceed the combined output from the standalone plants. The plant will future-proof our business while embodying our five pillars of excellence: value addition, people focus, environmental responsibility, technology-driven, and with a global focus. This strategic move will combine all manufacturing activities under one roof while greatly improving customer service."



Cladding using Automated Welding Machine



“By integrating our manufacturing under one roof, we will reap the benefits of a modern facility which is agile, system-driven and staffed by an expert workforce. It will offer faster response to customers, be more competitive and ultimately provide better customer service. Kancheepuram will be a showpiece for the global market and a significant investment for the future in our diamond jubilee year.”

### Wide-reaching support

“Customers look to L&T Valves to solve any issues they face, and we are happy to utilise our expertise to develop reliable solutions,” continues Mr Krishna Kumar. “After-sales support is vitally important to our end users. Our service team has expanded to ensure customers are supported during installation, commissioning or for any maintenance requirements during the lifetime of their valves. Our engineers also support customers during shutdowns and plant turnarounds which are high-pressure, time-sensitive operations.”

L&T Valves also trains local partners to ensure our customers can access immediate support - in most cases, within 24 hours. Aftermarket operations are being expanded across regions.

### Expanding focus

L&T Valves has traditionally been a major player in the oil & gas and power sectors. However, it is now expanding its activities in industries such as renewables, hydrogen, and speciality chemicals.



20 inch Class 3500 High Pressure Gate Valve



L&T Valves, Saudi Arabia

“Our portfolio of gate, globe, check, ball and butterfly valves is ideally suited for these sectors,” explains Mr Kalyanaraman. “We continue to diversify into sectors where our experience and products are a good fit.”

Within the energy sector, the company is leveraging its extensive experience to drive new product development. We are a leader in cryogenic gate, globe and check valves having supplied over 50,000 valves in the last 20 years to LNG projects across the world.

“In recent years, we have expanded our range of cryogenic ball valves and cryogenic triple offset butterfly valves. Based on the positive market response to these valves, production is ramping up significantly. We aim to become a total solution provider for LNG, offering solutions for all applications from liquefaction to transportation to receiving terminals, providing technically competent products at competitive prices.”

### Hydrogen valves

The vital role of hydrogen in the energy transition is abundantly clear, and L&T Valves is well-positioned to provide this application with high-quality flow control solutions, according to Mr Venkatesh. “L&T Valves is confident of offering valves for the entire gamut of hydrogen applications - liquid hydrogen (LH<sub>2</sub>), green hydrogen, and hydrogen to produce ammonia - in the near future. Our engineers are currently developing valves for LH<sub>2</sub> applications suitable for use at -254 degree C. Our expertise in successfully developing

cryogenic valves is tremendously useful in this initiative. We are also collaborating with customers to create specific LH<sub>2</sub> products and a range of globe valves for hydrogen in the testing phase.”

For green hydrogen and ammonia, L&T Valves already has a full product range (ball valve, gate globe check valve, and butterfly valves) that can be customised to address the new requirements. The company is currently working with multiple contractors and end users to realise some of the world's largest hydrogen projects. As the hydrogen industry is still evolving, L&T Valves is collaborating closely with end users and contractors to help develop global standards and specification for this application.

### Active in developing standards

“Over the years, L&T Valves has been at the forefront of key new developments, working closely with the various standards agencies. We are a member of the API, and our teams contribute to the ISO working standards and IOGP standards. Our design and product teams share their experience and knowledge with end users also. We believe this is essential work; the manufacturer's perspective is important to ensure that when standards are released, they can be implemented correctly and completely,” signed off Mr Kalyanaraman.

For many decades to come, L&T Valves will continue to influence and help raise the bar within the global valve industry. Happy Anniversary to Team L&T! ■



## Going Beyond INTEGRATION

*L&T Valves is greater than the sum of its parts. This mantra has guided our manufacturing integration and the quest to alloy ourselves into a unified powerhouse.*

On 1 April 2023, KPM hosted Transcend 2023 to welcome the financial new year and launch the theme for the year, 'Shape the Future Together'. All KPM employees enthusiastically participated in the event and outstation employees joined the meeting virtually.

SKN in his keynote address traced the evolution of the theme, from 'Shape the Future' of the Sales Conference at Kochi to 'Shape the Future Together' of Transcend. He reiterated the need to leverage synergies in order to maximise performance. He also touched upon the need to stay positive and empathetic during the transformation journey.

The Valves Xcellence Awards for the year 2023-24 as well as long service awards were presented at Transcend. SKN also launched the distribution of the new year gifts.

A highlight of the event was the groundbreaking ceremony for B Building Office.

J Suresh, Manufacturing Head, L&T Valves proposed the vote of thanks.





# How I plan to implement **Shape the Future Together** in my day-to-day work

*Feedback from a cross-section of employees at KPM*



“

By achieving 85% overall equipment efficacy in the centralised machine shop by involving people and training them in new technologies, innovation, IOT, etc.

**Anbazhagan R**



“

Through ongoing learning and development, I can holistically better the organisation and myself

**Aswin Kumar T**



“

To maintain adequate working capital, I will make sure that payments are collected on time

**D Chandrasekharan**



“

I will focus my attention on the right places by creating appropriate plans and goals

**Dhamini K**



“

I will work towards achieving the company's vision and motivate others to do the same

**Dhinakaran**



“

I will be agile and lean and well-adjusted to handle dynamic conditions.

**Ezhilarasan P**



“

I will concentrate on the weak areas, deal with bottlenecks and strengthen my ability to take on new challenges

**Harikrishnan N**



“

By carrying out actions sincerely and effectively, so that the next process or person is not slowed down

**Jehana V**



“

By completing my daily tasks on schedule and assisting my colleagues

**Kota Venkata Pavan Teja**



“

Ensure on-time delivery and a high customer satisfaction. Effective utilisation of available resources.

**G Kumaran**



“

By encouraging a culture of collaboration, having a compassionate attitude and appreciating cross-functional teams

**Rajkamal R**



“

By coming up with new ideas, sharing them with others, and imparting knowledge to everyone

**Ravichandran S**

# Shape the Future Sales Conference

*The seeds for 'Shape the Future Together' theme were sown at the Sales Conference in August 2022. We present a report of the 3-day conference in God's Own Country.*



L&T Valves sales conference was held at Taj Malabar Resort and Spa, Kochi from 26 to 29 August 2022. The participants included sales, pre-sales and service engineers from across the globe, the key contacts from operations including product and project management team as well as the leadership team led by S Kalyanaraman, Chief Executive and Director. The guest of honour was Anil V Parab, Whole-Time Director & Sr. Executive Vice President (Heavy Engineering & L&T Valves).

Kalyanaraman in his address outlined the conference theme, Shape the Future. He spoke about the valve industry, our

legacy of 60 years, our business model and the importance of cash. He spoke at length about people and teams and urged each employee to help fulfil the goals, mission and the purpose of their teams and ultimately the company. He concluded by exhorting the team to resolve, team up, contribute, lead the way, prepare, envision and plan to shape the future.

S Venkatesh, Head of Global Sales, spoke about the global market scenario and the new strategic initiatives. R Krishna Kumar, Head - Domestic Sales presented their plans to L.E.A.P. into the future and D Basavarajappa,

Head - Operations explained how they are gearing up to address the market requirements.

The MCs, Neha Shrivastava and Pappu Malik, kicked off the technical presentations with their account of how tech conclaves kindled the joy of learning. V Sriram and Syed Imran of Aftermarket spoke about their grand ambitions for the business and Praveen Krishnaswamy and Madankumar S of the Middle East team took us on a Saudi Arabian safari and explained their plans to green the desert.









Anil V Parab in his keynote address complemented the team on its energy and expressed confidence that L&T Valves will regain its past stature with the right strategic choices and business decisions. In his motivational address he stressed upon the need to improve business performance, reduce cost, anticipate the future, innovate and digitalise. He opined that Indian economy and the manufacturing sector are slated to grow rapidly in the future and urged the L&T Valves team to think big and make the most of the opportunities.

At the conference, long service awards for three valve veteran, SP Rajanish, R Krishna Kumar and MS Rajaraman, were also presented.

The sales conference was a perfect mix of business and pleasure - the technical sessions were followed by backwater cruises, treasure hunts and evenings of song and dance - both traditional and contemporary.

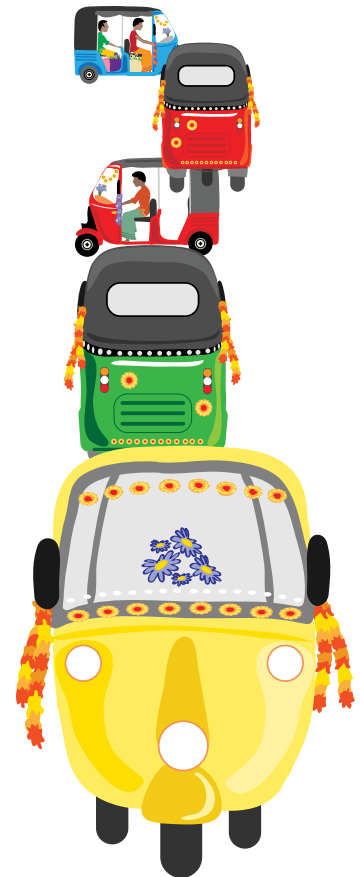
By the last day, the energy and camaraderie of the team was palpable and the 94 individuals who had checked into the hotel 3 days earlier had merged into ONE TEAM with ONE DREAM.

Success is achieved when sales and design teams work together to develop creative solutions. The sales-design combinations of Rahul Rudy - Raj Kamal and Poonam Mane - Sumith S spoke about the new cryogenic ball valves and HIPPS, the high integrity pressure protection system, respectively. P Sankar and Nagaraja P proudly recounted the many innovations that made the 132" butterfly valve - the largest valves in its class - possible. MS Rajaraman and Arun Babu of Special Projects, our own version of the Skunk Works, spoke about their specialised solutions for niche applications. Prasanth Prasad of Middle East and Deepak Kumar KV of India Distributor Sales presented their plans for the channel business.





# A Tuktuk Treasure Hunt



# We Change – Why and How



Namratha A  
HR

The idea for an Organizational Development (OD) intervention first came up when it became increasingly apparent that there was a need to address the connections between departments, the ability to adapt to change and the gap between legacy and new employees. There was also no formal forum for the employees to voice their opinions. The objective of the OD intervention was thus to improve the organization's effectiveness and employees' job satisfaction.

After discussions with L&T Corporate L&D team and external OD facilitators we selected Appreciative Inquiry (AI) approach to facilitate OD in our company. This approach is a positive strengths-based approach that helps the participants uncover existing strengths and opportunities in themselves, their teams and in the organization. The approach also introduces a new way to analyze – moving from a SWOT (Strength, Weakness, Opportunity, Threat) to a SOAR (Strength, Opportunity, Aspiration, Result).

## Workshop 1

A three-day workshop was held in July 2022 with 26 identified participants and the OD facilitators at L&T Leadership Development Academy (LDA) at Lonavala. During this workshop, the need for the intervention was shared with the participants. Mock discussions and role plays were conducted to understand the parameters to look out for and how to conduct a one-on-one AI discussion with their assigned employees. A tentative roadmap and timeline were also charted. Participants were also made to understand how to group the data that they collected after the discussions. A core team was formed to identify the employees to be interviewed and assign these employees to the 26 participants to take the intervention forward.







### **OD Programme Launch**

On 28 July 2022, S Kalyanaraman S, Chief Executive of L&T Valves communicated to all employees about this OD intervention and launched the V-change logo.

### **The AI Interviews**

An AI discussion schedule was prepared for the 26 facilitators and after the discussions started, a dip-stick study was conducted with the external OD facilitator to understand the effectiveness and progress of the discussions. The AI phase was completed on 8 December 2022, and a total of 379 employees were interviewed by the facilitators. A feedback analysis revealed a positive rating from majority of the respondents and this report was circulated among the respondents.





### Workshop 2

All the data collected during the discussions were consolidated in the SOAR format and a two-day workshop was conducted in December 2022 with the 26 participants (plus around 10 potential leaders) and the external OD facilitator to discuss, decide and finalize the focus areas/ flight paths for further implementation.

At the end of this workshop, five flight paths were identified namely, Joy @ Work, Globally Trusted Brand, Business Excellence, Sustainable Growth and Fostering Innovation.

We will soon announce the next phase in our V-change journey.





The L&T Valves Organization Development Intervention aimed at discovering the positive core of L&T, through the stories told by employees in the organization. A shared dream for the future was then articulated and a set of specific actions to live the dream as a reality was arrived at by a core team.

The core of this change process is aptly indicated by the slogan 'V-Change'. This indicates that Valves as an organization will change when each and every employee brings about change in their thoughts and actions. All the participants who attended the first workshop and all those they interviewed are all committed to being the change that they wanted to see in the organization.

This spirit of internalizing the change, rather than waiting for others to change is the primary driver of this OD process. The CE, Kalyan identifies himself as one of the change agents and provides leadership to this process.

It has been a pleasure to be associated with L&T Valves and witness the energy, passion and commitment to change in all members. We will continue to support this process as required and wish the organization all success in living its dream.

**Dr Wasundhara and R Sankarasubramanyan**  
ChangeWorks



# Miracle in the **DESERT**

*The story of L&T Valves Arabia is as enchanting as a fable from the Arabian Nights. Twists and turns, invisible enemies, insurmountable odds and fearless princes riding Fortuners...*

The dream of an L&T Valves manufacturing facility in Saudi Arabia is more than a decade old. In January 2020, after many missteps, L&T Valves Arabia started operating from L&T's integrated manufacturing campus in Dammam - Jubail Highway in Al Jubail. Unfortunately (or fortunately, in hindsight), in September 2020 it was decided to close the facility and relocate it to Al Jubail off the Dammam - Abu Hadriyah highway. Then Covid hit.

For close to 2 years, L&T Valves Arabia managed with a skeletal team led by MA Ravichandran, the epitome of optimism and perseverance. Slowly the pieces clicked into place, location was identified, statutory clearances were obtained, plant construction started, machinery was installed, personnel were added and...in 2022, L&T Valves Arabia Manufacturing LLC began its actual journey.

ISO 9001 was obtained in January 2022, API certification in June 2022 and in October 2022 L&T Valves Arabia was approved by Saudi Aramco for the supply of Gate, Globe & Check Valves.

To be continued...





#### QUICK FACTS:

- Incorporated in the Kingdom of Saudi Arabia in October 2019
- Proud partner in Saudization and iktva Programmes
- Subsidiary of L&T Valves
- Based at Abu Hadriyah, Al Jubail
- Land area: 5200 sq.m. | Built area: 3500 sq.m.
- Approved by Aramco



132" Butterfly Valve



# Designing a Smile

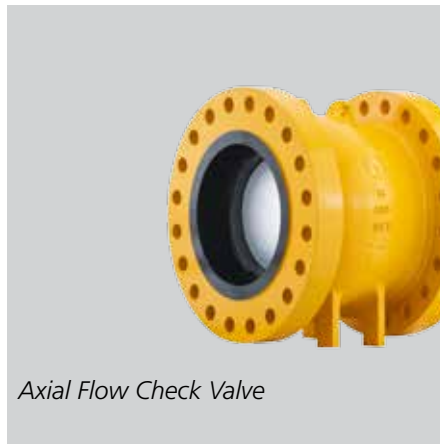
*There are various ways to measure R&D productivity, effectiveness and intensity, but L&T Valves believes that no measure is more important than a happy customer. Year after year, our Design team has provided reliable solutions to process problems leveraging innovation, technology and plain old ingenuity. We present the 2022-23 Hall of Fame...*



*Titanium Ball Valves  
For Petrochemical Plants*



*20" #3500 F92 Gate Valve*



*Axial Flow Check Valve*



*Bellows-sealed Gated Valve  
Pneumatically-operated*



## Expo Update

*Exhibitions and conferences provide unmatched access to decision-makers and hence form a key component of our media-mix. 2022-23 was the year of the exhibitions - 4 in India and 4 overseas.*

### Domestic

- Defexpo, Gandhinagar
- IEW, Bangalore
- FCE, Mumbai
- Chemtech, Mumbai

### International

- Valve World, Germany
- Gastech, Italy
- SaudiMET, KSA
- AOG Energy, Australia

### Upcoming Events

- Valve World USA, Houston | 7-8 June
- Valve World USA, Singapore | 26-27 Oct
- ADIPEC, Abu Dhabi | 2-5 Oct

# Quality Milestones

## Achievements

- L&T Valves Arabia obtained the API monogram licenses for 600, 594 and 6D
- The plant also secured Aramco approval for Gate, Globe & Check valves range
- L&T Valves became the first manufacturing enterprise in India to secure ISO 30414:2018 certification which provides guidelines for human capital reporting

## Key Customer Audits

- EIL - Full Range
- Aramco - Large-size Valves
- Total, France - General Service Valves
- EDF, France - Nuclear Application Valves
- Air Products, USA - Oxygen Service Valves
- MRC, USA - General Service Valves
- AVA, Germany - General Service Valves
- The 17 customers audits accounted for a total of 35 mandays

## Surveillance Audits

- Yearly surveillance audit for ISO 9001:2015, ISO 14001:2015, ISO 45001:2018, API, PED, UKCA, ATEX and SIL were successfully conducted at our plants
- Independent certification/assessment agencies such as BVIS, DNV, TUV and NAMC conducted 17 audits/assessment spending a total of 59 mandays at our works

# ISO 30414 : 2018



The effectiveness and productivity of people management inside a business in relation to revenue and profit are rarely disclosed in traditional financial reporting.

ISO 30414 Human Capital Reporting (HCR) Standard, released in 2018, fills this gap by recommending the disclosure of a set of measures that are globally recognized and encompass all aspects of personnel management. The certification provides guidelines for internal and external HCR.

The standard covers specifics for measuring, evaluating, and formatting data. The main purpose is to consider and to make transparent the human capital contribution to the organization to support sustainability of the workforce.

The ISO 30414 guidelines includes 58 metrics divided into 11 main categories such as Compliance and ethics, Costs, Diversity, Leadership, Organization

Culture, Organization, Health, Safety, and Well-being, Productivity, Recruitment, Mobility and Turnover, Skills and Capabilities, Succession Planning and Workforce Availability

ISO 30414 certification assists in internal process standardization and HR process benchmarking and drives the organization to remain at the top of the class in terms of intellectual capital.

A good reporting system that assures high levels of measurement, transparency, usage, equality, diversity, and productivity is a key element in our people strategy.

To quote SKN, "We are the first Indian engineering company that has achieved this milestone. We are positive that this certification will help us stay ahead of the curve in terms of performance and employees satisfaction.

# On the Growth Path

*A quick chat with Suresh J, Head of Manufacturing, about his experience at L&T Valves (which spans 33 years), his vision for the integrated Kancheepuram plant and his thoughts on the future of manufacturing.*

Suresh J, Head of Manufacturing, began his career at L&T Valves in 1990 at the Manapakkam plant. Over the years, he has handled several critical assignments, and recorded many achievements to his name, including the manufacture of various large-size valves, including a 72" gate valve in 2015, then the largest cast steel gate valve made in India. JS played a key role during the integration and under his leadership the output from the integrated plant is expected to exceed the combined output of the standalone plants.

## **Tell us about your educational qualifications**

I completed my diploma in mechanical engineering in 1986, BE from Anna University in 2005 and MBA (Finance) from Madras University in 2009

## **Take us through your career path– from the 1st job to L&T Valves**

I joined the L&T valves business in 1990, at the Manapakkam plant, as a Production Planning Engineer. For about five years, I worked with various products and handled production shops as well. Then, I moved on to material planning and was a MRP Controller for a couple of years. This was followed by supply chain assignments for four years.

I headed the GGC production planning & materials in 2005 and headed both the GGC & LSV planning & materials from 2007 to 2009. From 2010 onwards, I was the product head of LSV, and in 2011-12 I moved to the Maraimalai Nagar plant to establish and scale up the LSV product. I became product head for GGC & LSV in 2012 and in 2015, I moved to KPM for GGC production ramp-up and LSV set-up. I was appointed the plant head of KPM in 2019.

## **What are your greatest strengths?**

I view planning, resource mobilisation and execution as my key strengths, with domain knowledge, being a team player and leveraging synergy as complementing the former.

## **What are some of the biggest achievements of your career?**

- Establishment of LSV products and scaling up at the MMN plant to 100 valves /month (2011-12)
- At MPK, reaching an all-time high sales of INR 333 crore in GGC & LSV products, with 51% increase over the previous year, with an OTD of 92% (2014–15)
- Establishment of LSV ranging from 48" to 72"
- Making of 72" gate valve – the largest in India (2015)
- Making of the largest cryo valves - 54"/ 300 and 48"/ 600
- Establishment of LSV valves at KPM (2016-17) and making INR 100 crore in sales in the first year
- Establishment of the E Building for large-size valves

## **What is the secret of KPM's on-time delivery performance?**

A set of inter-connected factors, including proactive planning approach, identifying risks and timely mitigations, creating synergy across all domains and working as a team towards the common objective '100% OTD & ZERO LD', which I have been driving at all levels.

## **What are three things that you wanted to change when you took over as the Head of the Kancheepuram plant?**

The top areas where we achieved change – and thereby improved our production performance were: 1. Customer satisfaction through timely delivery, better quality of products, quick response to customers, 2. Improvement in the safety culture at the plant to ensure a safe workplace and 3. Enhancement of in-house resource utilisation.

## **What was the prime reason behind establishing the integrated plant? What is your vision for manufacturing at the integrated KPM plant?**

Integration was a strategic decision to help the company improve efficiencies and achieve the growth and customer satisfaction targets. This integrated KPM plant will help achieve and sustain success in the long run.



With Kanchipuram being closer to the port, it fits in well into our plans for the export market – with exports forming over 50% of the business, proximity to the ports provides a logistical advantage for the company.

The vision and goal for the integrated plant is to achieve a greater synergy in terms of use of talent, facilities and materials - thereby producing more output than the combined output of the old Coimbatore and Kanchipuram plants.

#### **How do you see the future of manufacturing?**

The world is fast changing, perhaps at a greater rate than we have ever seen before, with lot of uncertainties and challenges – and, at the same time, with lot of opportunities emerging from those challenges.

Many companies worldwide have successfully combined automation, AI and IoT to improve quality and productivity. The various innovations in manufacturing industries include 3D printing, advanced robotics, large scale factory digitisation, etc. In my opinion, the future of manufacturing will be shaped by advanced robotics, 3D printing and digitised operations.

#### **How do we make a career in manufacturing exciting for fresh engineers?**

The technological advancements mentioned above will make it an exciting one for young engineers who have the passion to adapt and use these latest technologies.

#### **Tell us about your interests outside of work**

I enjoy listening to music.

#### **Tell us about your family**

My mother Jayalashmi is 87 years of age and lives with us. My wife Bhuvaneshwari is a school teacher. We have two sons, both engineers, Sairam doing post-graduation at University of Texas and Shriram working with an MNC in Chennai.



# Long Service Awards

## Our Congratulations to the Awardees

35



SP Rajanish

30



MS Rajaraman

30



Ramesh Srinivasan

25



R Krishna Kumar

25



K Ramajeyam

# Building KPM, Brick by Brick

## 1994

- *A Building commissioned*
- *ISO 9001 certification*
- *Product portfolio includes Floating Ball Valves and GGC*

## 1998

- *B Building added*
- *CE Marking*
- *GGC production expands*
- *KPM started exports*

## 2003

- *Exports grow*
- *C Building created for Painting, TPI and FG stores*

## 2005

- *Growth and expansion accelerate*
- *TMBV manufacturing begins at D*



## 2016

- *E Building becomes the hub for large-size valves*

## 2023

- *Groundbreaking for B Office Building*

# When in Kanchipuram...

Located on the banks of the Vegavathy and Palar Rivers, the former capital of the Pallava dynasty, and once a part of the Vijayanagara empire, Kancheepuram is believed to have been an annexe of the Dravida kingdom, the legendary mythical dynasty mentioned in the *Mahabharata*. During Pallava rule, Kanchipuram flourished as a centre for Hindu and Buddhist learning. In fact, when the Chinese traveller Xuanzang (also known as Hsiuen Tsang) visited Kanchipuram in 640 AD, he was all praises for its people, culture, and traditions.

Today, Kancheepuram has earned fame as the 'land of a thousand temples' and 'city of silk'. It is visited year-round by native and foreign travellers alike. Moreover, many families preparing for weddings come here to pick up the bridal trousseau.

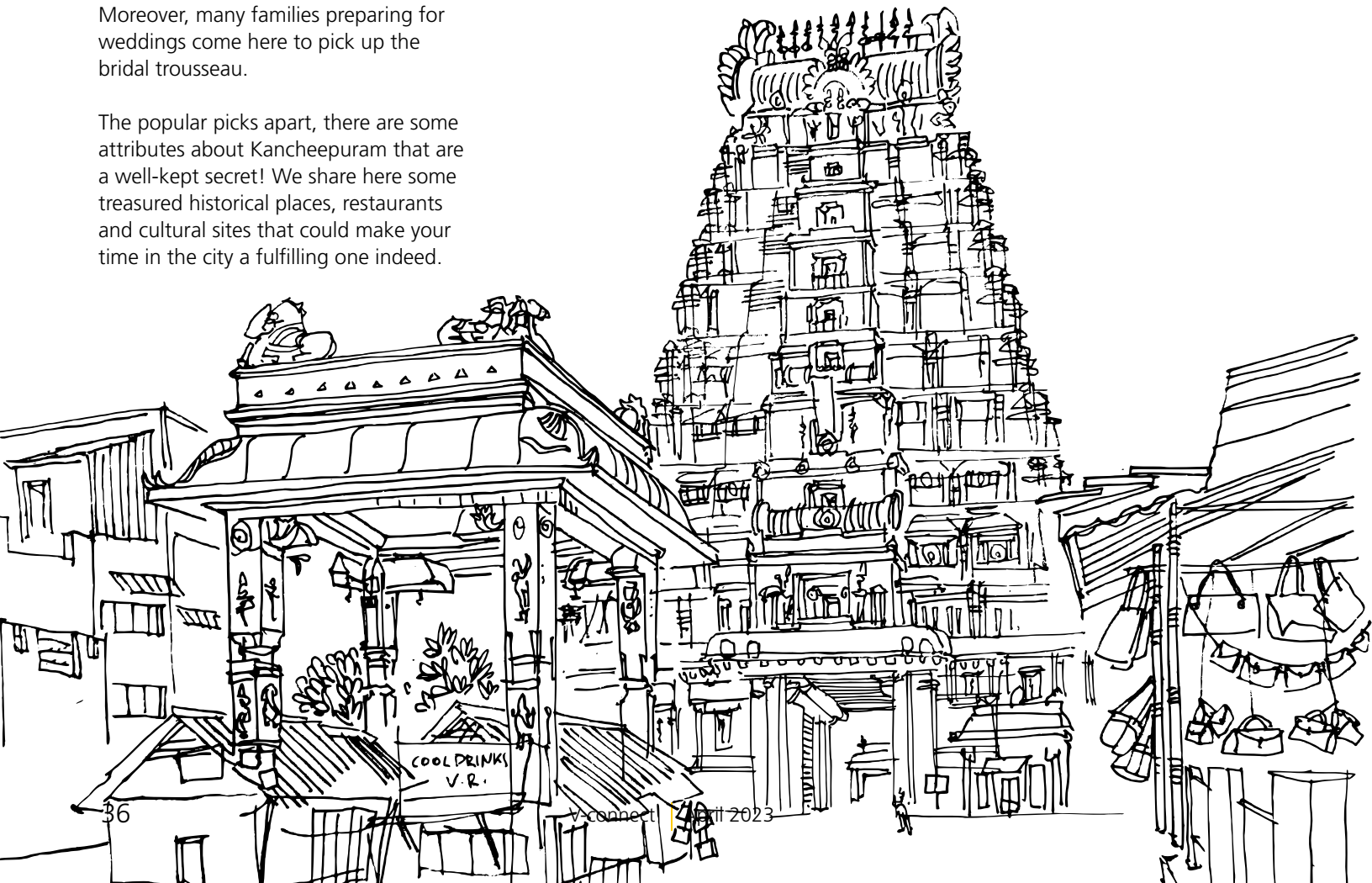
The popular picks apart, there are some attributes about Kancheepuram that are a well-kept secret! We share here some treasured historical places, restaurants and cultural sites that could make your time in the city a fulfilling one indeed.

## The Kamatchi Amman Temple

Constructed by the Pallava Kings, this is regarded as one of the most important temples in the Shakti tradition. The original golden statue, which showed the goddess with two hands, adorning a parrot in her right hand, was replaced with the current panchaloha idol during an invasion.

The word 'Kamakshi' comes from the conjunction of three words – Ka, Ma & Aksh. Ka means Saraswati, Ma means Lakshmi and Aksh means eyes - meaning She whose eyes are Lakshmi & Saraswati.

A legend associated with this temple is that it was here that King Dashratha, father of Sri Rama, performed the 'Putra Kamechha Yagna' here and prayed for a son - one of the defining events of the 'Ramayana'.





### Kanchi Kudil

Kanchi Kudil, an ancestral residence that is almost a century old, has been converted into a museum and houses several antiques, ancient artefacts, paintings and sculptures from the numerous kingdoms that have ruled over this famed city. This property, which was formerly a traditional home, provides a glimpse of yesteryear life and culture in the city. Everything, from the food to the furniture, provides guests with a first-hand historic experience. On display are wooden swings, rocking chairs, and furniture as well as old paintings and photographs of women wearing traditional jewellery – placed alongside a century-old lamp. The museum also has a rock-floor kitchen with exhibits of traditional crockeries and utensils.



### Varadaraja Perumal Temple

Said to date back to 1053 AD, the Varadaraja Perumal temple is regarded as one of the 'Divya Desams' (the 108 temples of Vishnu believed to have been visited by the 12 poet saints, known as 'Azhvars'). For visitors, there is an added point of interest as well – the 'prasadam idli', the specially made offerings of soft, fluffy, steamed delicacy. Unlike the typical idli of South India – the bland, spice-less version that is a breakfast favourite – the 'kovil (temple) idli' or 'Kanchipuram idli' (as it is referred to) is spiced with cumin, pepper and ginger powder. In the temple, the idlis are made as per tradition – steamed in bamboo baskets that are lined with the leaves of the bauhinia plant. Each idli is so large that a couple of them can easily suffice for three people. A must-have if you are on a visit to Kancheepuram.



### Weavers of Kanchipuram

Kancheepuram is well-known for its handwoven silk sarees in jewel tones with exquisite zari (silk threads dipped in liquid gold and silver) embroidery. Traditional weavers continue to thrive, even as they wrestle with the advent of power looms and other modern manufacturing methods. Three single threads of silk yarn and zari are used in the distinctive feature weaving method of a Kancheepuram silk saree. The designs use plain gold lines, gold dots and motifs inspired by the designs seen in South Indian temples.



### Mannar Military Hotel

Known for its sumptuous mutton biriyani, Mannar Military Hotel has been frequented by Tamil Nadu's famed politicians. The restaurant specialises in authentic biriyani made with jeeraga samba rice, as well as its exquisite mutton and chicken delicacies. It is said that Dr. C.N. Annadurai dined here with his fellow statesman, and popularised the biriyani with his appreciation for the dish.



*Kanchivaram (2008) tells the tale of a silk weaver in Kancheepuram. The Tamil-language period drama, was directed by Priyadarshan and stars Prakash Raj and Shriya Reddy. The movie depicts the sad state of silk weavers – with focus on one weaver whose aim is to make a silk wedding sari for his daughter. The film won the Best Film and Best Actor awards for Prakash Raj at the 55th National Film Awards.*

# The Road to Productivity Revolution: An AI-Enabled Journey

Ever wondered how emails are automatically filtered to the spam folder? Or how apps like Uber and Ola show different prices at different times of the day?

This is all courtesy of artificial intelligence. Uber/Ola use dynamic pricing supported by AI and ML, to determine prices based on factors such as availability, distance, and demand. This is also used in Google Maps to accurately predict how much time you will be stuck in a traffic block.



Sreelakshmy S  
CMT

Artificial Intelligence is one of hottest topics of last year, with revolutions such as ChatGPT taking over the headlines. From something as simple as autocorrect or autocomplete to complex applications like autonomous vehicles, AI has seen tremendous growth and widespread application over the last few years.

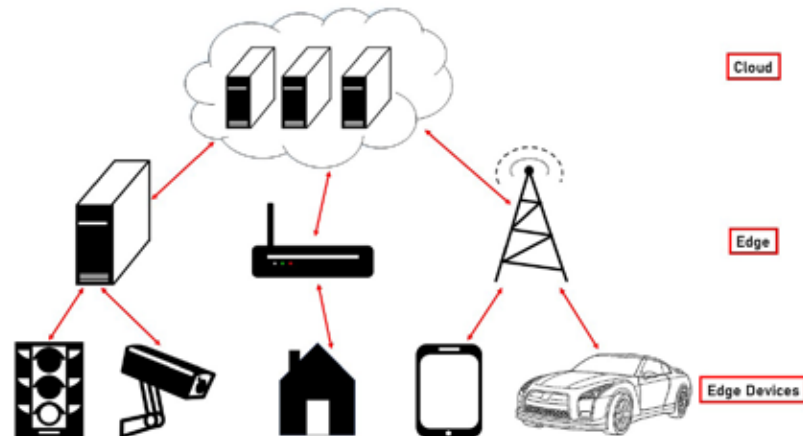
As per the 2023 Gartner Emerging Technologies and Trends Impact Radar, technologies have been divided into 4 categories - Critical enablers, Productivity Revolution, Smart World, and Transparency & Privacy.

Productivity is one of the major concerns across industries today. Taking the example of our firm, our strategic integration of both manufacturing facilities is followed by the need for a productivity revolution, to ensure that we utilize our production capacity efficiently.

Considering the importance of productivity in our daily life, we shall explore two AI trends that have the capability to revolutionize productivity - Edge AI and Generative AI.

## Edge AI

Edge AI an application of AI that aims to reduce restrictions due to speed and enables devices to react quickly without the need to access cloud. To understand edge AI better, let us first take a look at edge computing.



Cloud computing is a widely employed technology, which delivers services over the internet. In contrast, edge computing systems operate on local devices such as IoT or a dedicated edge computing server and are not connected to a cloud.

So, why are we reducing our dependence on cloud? We have always been on the quest for faster, more accurate results. With edge computing, we are not affected by parameters such as latency and bandwidth, or even downtime, all of which are critical when we depend on cloud.

Edge AI is a combination of Edge Computing and Artificial Intelligence, where AI algorithms are run on edge computing devices. Operations occur locally and data can be sent to the cloud once internet connection is established.

Now, one might think, in a time when internet is so widely available, what is the relevance of Edge AI?



There are several reasons why we prefer Edge AI, and it is not all about internet availability. For example, computing on the edge ensures that only relevant, processed data is sent to cloud. Since volume of data is reduced, the time is reduced considerably.

Edge AI is also useful in areas with frequent network disruptions, and situations that require quick decision-making. An example is that of self-driving cars that need to detect obstacles on their path and make the right decisions. Here, we cannot afford limitations like bandwidth, latency, and disruptions.

A study was conducted to analyse the performance and scalability of edge computing, using it to read a QR code and send data to the edge server, which took 16.22 ms. The same

process would take 80 ms if the data was sent to the cloud, giving us a clear idea on how fast edge operations are.

Now that we have an idea of Edge AI, let's see how this can be implemented in manufacturing operations:

## Applications of Edge AI

### 1. Quality Control

The cost of poor quality can impact profitability significantly. But to ensure the best quality, there is huge requirement for qualified personnel and regular inspections. Even so, we, as humans are prone to errors. Recently, several manufacturing firms are shifting towards computer vision. Computer vision is an application of edge AI, where we train the technology using images of defective and defect-free products. Based on this training, computer vision can inspect every sample available within a restricted manufacturing space and identify defects quickly and accurately.



One of the benefits of this application is the ready availability of data. All inspection data is automatically uploaded to system and can be easily accessed. Further, this data can be used for assessing defect patterns and statistics for better process control.

### 2. Predictive Maintenance

Preventive maintenance is used to avoid equipment failure and downtime. AI controllers available in the market utilize adaptive intelligence to observe and analyse patterns in machine operations, recognize variations, and use edge devices for predicting failures and prolonging equipment life. It allows manufacturers to avoid unplanned downtime by using edge AI to accurately assess material condition.

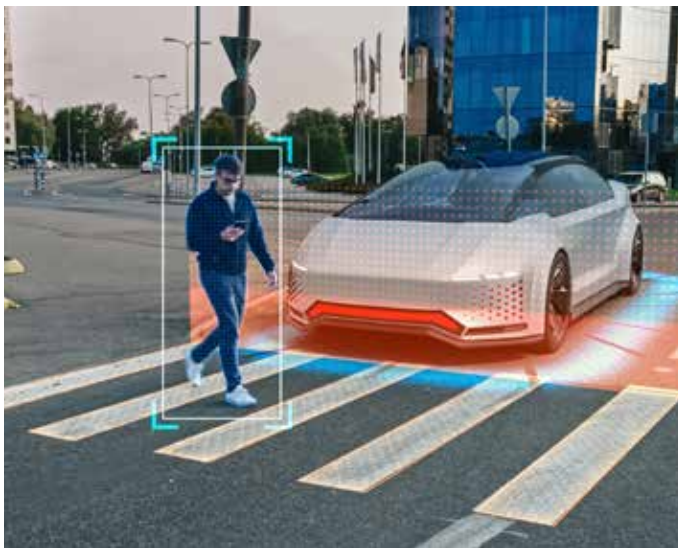
### 3. Factory Optimization

Moving towards a lean and agile environment, factory layout optimization is of utmost importance. Through Edge AI, manufacturers can identify the various movements that occur in the factory and understand how well their space is being utilized. The information is processed using edge AI and made available to supervisors, who can analyse to identify ideal movement of materials and people across shopfloor.



### 4. Safety

Safety is the most important part of our lives, be it personal or professional. Safety at the workplace is essential to both employees and employers. Sensors and video cameras that use AI-enabled video analytics can identify unsafe conditions and unsafe acts, and raise alerts. The low latency allows the technology to take quick, remedial actions in such conditions, such as raising an alert on the situation. The data can also be easily recorded as there is no need for manual entry.



### Generative AI

Moving on, let us now explore one of the hottest technologies of last year, Generative AI.

It is a technology that allows us to generate a wide variety of output by analysing and learning patterns from existing data. Output can be images, videos, text and even music. Needless to say, GenAI is going to drastically change the content creation space, and we shall see how.

One of the most popular foundation models that applies GenAI is ChatGPT. There is no introduction required for this text-based AI tech that has taken over the internet ever since its launch in November 2022. Within 5 days of its launch, ChatGPT had more than 1 million users, which went up to 100 million users in just 2 months of its launch.

So, what makes ChatGPT so different from regular chatbots or search engines? ChatGPT stands out with its versatility. While it can take a conversational tone, it can also frame emails, business pitches, complex essays, and write computer programs. They're different from search engines, which can give us information from their huge database but cannot generate new/unique content.

Now, Generative AI has not only influenced the written content, but it has also seen massive developments in the realm of visual content.

DALL-E is a model developed by OpenAI that can be used to create images and variations of existing paintings through text input. A similar technology is generative design, which uses AI algorithms to evaluate specific input parameters such as weight, material, design, and fabrication method to generate multiple permutations of designs, which can be then be analysed and selected.

Using generative design does not have to be restricted to just iterations of a design with same input. The prototypes generated can be fixed with sensors to get real-time data on their performance. This data can be fed back into the system and the software redesigns with this newly added input to optimize the design. A recent example is the collaboration between GM and Autodesk to produce a seat bracket that is 20% stronger and 40% lighter than the existing component.

Now, let us see how generative AI can contribute to our journey of productivity revolution.





## Applications of Generative AI

### 1. Customer Service

Customer service is one of the most important areas for any firm, and service for prospective customers is equally important. The most common example of AI used for customer service is chatbots. Most websites use chatbots to answer customer queries, however, they are limited to a small set of questions. To enhance these areas in our business, we can train AI GPTs on datasets specific to our business.

Customers can have conversations with our customized chatbots that have been trained on a repository of knowledge on our product groups. Over a course of time, we can add features that can support order enquiries and help give quotations to customers.

### 2. Chatbots for Internal Knowledge Management Systems

Chatbots using AI can also support employees as an internal database of information. They can be trained with past order records, customer and supplier details, and information on different specifications. Employees can then use the chatbot to -

- Clear their queries on products and specifications.
- Easily get information on specific clauses or verify whether project specifications are in line with standards.

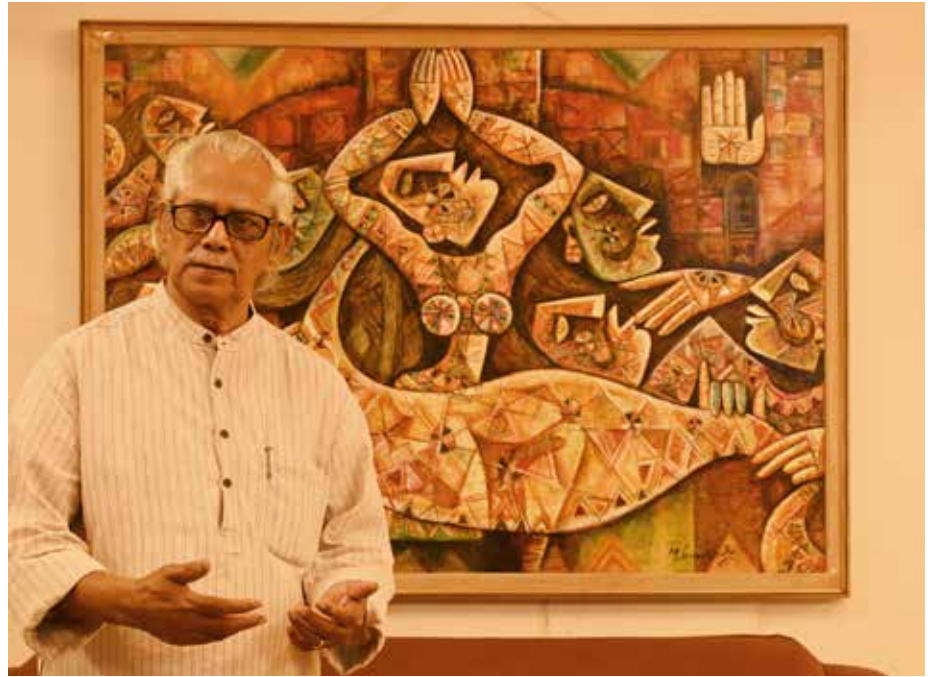
- Get consolidated and relevant information on past orders, based on parameters specified by the enquirer.

With the ability of AI to learn and adapt, there is a huge scope for growth and application in the future. We can use them for framing emails, marketing copies, and even graphic designing for social media posts.

“Investing in Tomorrow’s Technology Today is More Critical than Ever.” - Bill Gates

As we move forward, we need to invest in technology that is going to make our operations smoother and more efficient. With widespread availability of AI that presents both ease of use, access, and potential to improve processes, we can shift our focus to other areas of improvement and simplify workload. Together, we need to drive the productivity revolution and set an example to the world.

# An Afternoon with M Senathipathi



Our office in Manapakkam had a Senathipathi sculpture on the wall, a creation of 4 feet that depicted Krishna and friends stealing butter. One lazy afternoon I Googled for Senathipathi and was stunned to know that the artist was a stalwart of the Madras Movement, a Cholamandalam pioneer and a world-renowned artist.

Over the years I got to know the characters in the sculpture pretty well, studying them during phone calls and coffee breaks, admiring the simple supple lines, looking for hidden meanings and the significance of the various elements. Then in 2015 we moved office and our tiny art collection of one Nandagopal and a few Senathipathis went into storage.

2023. The Senathipathis are back in our office, and I decided to get in touch with the artist. And last week he invited us to his studio at the Cholamandalam Artists Village.

“Can you guess what this is?” Senathipathi asks, pointing to a large painting hung on the wall in the centre of his studio. It shows a woman raising her hands, while she is surrounded by multiple faces. “This is Draupadi – when she asks for help. See the hand over there...” He points to the hand on the top right corner. “That would be Krishna.”

Senathipathi's style is distinctive – his use of symbols is subtle yet not so abstract as to completely befuddle the art lover. He seems to favour the reds and cobalt blue, but there are also black-and-white

ink drawings in his oeuvre. Canvas and handmade paper are the preferred media.

“I used to work with metal until 2000, but I stopped working with that material because of advancing age” says Senathipathi, when he looks at the colour prints of his sculptures that are a part of L&T Valves collection.

Mythological scenes seem to be a favourite in his repertoire – going by the representations of Jatayu's slaying, Rama marching to war, Krishna and Radha in an embrace...Not really, says Senathipathi. “It is a representation of life in all forms.”

He draws our attention to other paintings in his studio. ‘Hide and Seek’ shows happy tangle of hands, faces and



*Shakti  
Mahishasura Mardini*



*Bheem*



*Murugan*

feet. 'Dream' shows multiple worlds nestled inside a face. A recurring theme is 'Mother and Child', with maternal attachment being shown in varied postures and forms.

"I am preparing for my next exhibition, Senathipathi mentions. "I need a really large number of artworks for that." He points to his easel, where a painting is underway, and a blank canvas that holds the first pencil lines marking the beginning of a new creation.

We can't wait to see the many more facets of life that will be captured in Senathipathi's canvas.

## CHOLAMANDALAM ARTISTS VILLAGE

The Cholamandalam Artists Village, the largest artists' commune in India, was established by famed artist, KCS Paniker (1911–1977) along with a group of fellow artists (including M Senathipathi) in April 1966. Many of the artists who joined the commune were students of KCS Paniker, who was the Principal of the Madras School of Arts.

Located on ECR in Chennai, the village houses several artists from the Madras Movement of Art (1950s–1980s), which is credited with bringing modernism to art in South India. The aim of forming the commune was to help artists find a forum to practice their art with the required support.

Popular artists who were part of the Village included J Sultan Ali, KM Gopal, S Kanniappan, K Ramanujam, M Reddeppa Naidu, SP Jayakar, KR Harie, PS Nandan, Akkitham Narayanan, Namboothiri, Paris Viswanathan, D Venkatapathy, Haridasan, S Nanda Gopal, SG Vasudev, K Jayapala Panicker, Gopinath, M Senathipathi, MV Devan and Richard Jesudas. Their paintings and sculptures are displayed in the art gallery located at the entrance of the Village.

www.Lntvalves.com



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L&T Valves Arabia, a subsidiary of L&T Valves incorporated in the Kingdom of Saudi Arabia, has been approved by Saudi Aramco for supply of Gate, Globe & Check Valves. We are a signatory of Saudi Aramco central purchase agreement (CPA) and a proud participant in the iktva programme, and this approval will inspire us to reach greater heights in value creation and customer satisfaction.

Our quality management system complies with ISO 9001:2015 and we are licensed to use API 600 and API 594 monograms of the American Petroleum Institute.

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