

# V connect

Vol. 21, No. 3

The Employee Communication Newsletter of L&T Valves

July 2021



## Breaking Paradigms

To Achieve  
Breakthrough Results



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The logo for V-connect features a stylized white 'V' with a yellow speech bubble integrated into its top curve, followed by the word 'connect' in a white, lowercase, sans-serif font. The entire logo is set against a dark blue rectangular background.

# V connect

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## From the Editor

Dear Friend,

Ever wondered why people read editorials?

My college hostel had two types of people: Those who read *The Hindu* editorial to build their vocabulary and those who read the editorial to summon sleep. Little did I imagine then that a few decades later I would be fighting sleep and hitting Shift+F7 to write an editorial.

The theme of the current issue is 'Breaking Paradigms'. Though V-connect themes have always been abstract and complex, the current cover story sets a new benchmark. My dependable team of contributors refracted the concept through the prism of their expertise to present a spectrum of rich content. Happy reading!

This issue celebrates the second anniversary of the current avatar of V-connect. We thank all advisors, HR co-ordinators, writers and artists who made the journey worthwhile.

We invite all employees to contribute their ideas and articles to V-connect. Let us work together to create a newsletter that breaks records – in terms of quality, variety and style.

Stay safe.

Wear Mask | Maintain Distance | Sanitise | Vaccinate

Thanks,

**Babu**

Edited by Babu Kuriakose for L&T Valves, L&T Campus, Manapakkam, Chennai 600089.

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## Message from the Chief Executive

Dear Colleague,

Breaking Paradigms is the theme of the current issue, and in these pages, writers representing various departments have presented their take on the theme. I would like to approach paradigms from a different angle.

We all know that creative problem solving is important for companies that want to establish a competitive advantage. Elspeth McFadzean, a British academician, has proposed that creativity can be enhanced by changing a person's paradigm - in other words, the way a person perceives the world - and suggests 3 categories of techniques.

*Paradigm Preserving* techniques, such as brainstorming sessions, are ideal for situations that do not require revolutionary ideas or solutions. *Paradigm Stretching* uses unrelated stimuli and forced association to come up with new ideas. *Paradigm Breaking* techniques involve toying with ideas, rearranging them in new combinations and looking at them from different perspectives. This is often disruptive, but the

results are more novel and powerful. Very evidently, paradigm breaking techniques force us out of our comfort zones to unleash breakthrough ideas.

The course to the future will be charted by original thinkers and risk-takers. We have launched initiatives such as TRIZ and Technology Conclave to nurture a culture of innovation at L&T Valves. I am confident that the stories of paradigm breaking highlighted in this issue will complement that.

Let us Think Different and Achieve Bigger.

Regards

A handwritten signature in blue ink that reads "S. Kalyanaraman". The signature is written in a cursive, flowing style.

**S Kalyanaraman**

# To Break a PARADIGM

*Whether or not they encountered stiff resistance and violence, breaking paradigms have mostly been tumultuous, rarely silent and always profound. In this article, we look at significant acts of breaking paradigms in modern history that deserve our understanding to appreciate life better.*

**Y**esterday's marvel is today's ubiquity. And, as every 'innovation' strikes the market with fancy advertising taglines as 'breakthrough', 'paradigm shift', or 'quantum leap', we have to think about what a paradigm is, how it is broken, and why we should, in the interest of society, break some.

Before we go any further about counting the stars in our paradigmatic galaxy, let us briefly see what the word 'paradigm' actually means. Many of us have been using the word 'paradigm' loosely to mean several things in our lives, peppering the term in our many corporate presentations.



American philosopher of science, Thomas Kuhn, in his seminal work, *The Structure of Scientific Revolutions* (published in 1962), used the word 'paradigm' first, to mean 'exemplar': The defining way of doing something. So, a paradigm shift simply means any shift of human thinking or behaviour from an established paradigm. For example, Einstein's theory of relativity that furthered physics from the classical approach was a paradigm shift. The Internet is a paradigm shift in information sharing.

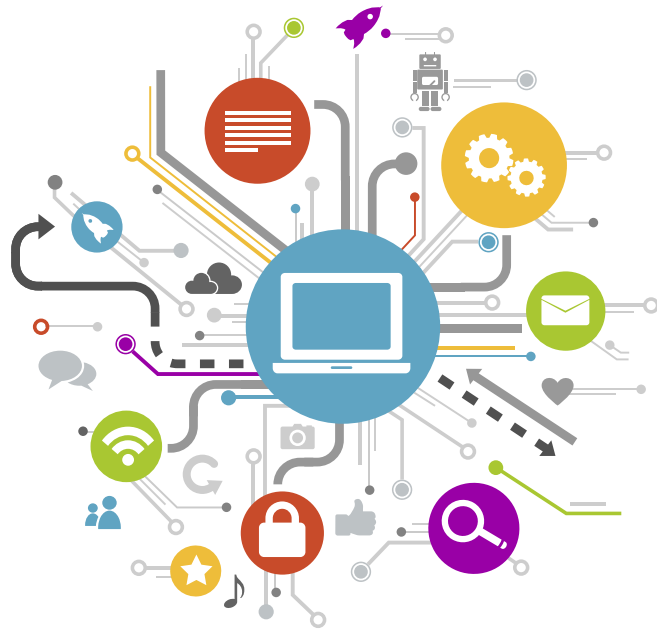
### Breaking Paradigms

Breaking paradigms to create new ones has been the marker of progress throughout humanity's course. Any invention that cuts across the old way of working, any discovery and understanding that changes perspectives, and significant shift in cultural mores that furthers progress, are all paradigm shifts that benefited humanity.

Paradigms are therefore exemplary and widely accepted laws that go on and on in our society, and are replaced by a drastic, different, and a remarkably new paradigm. A paradigm shift occurs when a major change in this underlying system of laws is proposed and when that change is accepted and adopted by the members of that discipline. Let's view the major paradigmatic shifts in the technological, economical, geographic, and political realms.

### Technological Realm

Technology means the application of science, and the best applications of science address pressing societal problem in the most empathetic manner, backed by sound judgement, and an out-of-the-box thinking. A technological breakthrough is useless unless such a mind finds a scheme - a way of working things through to create a marked difference.



As the 20th century dawned, Henry Ford, in Michigan, worked to reverse the method of manufacturing cars to create the moving assembly line. While cars were traditionally assembled by moving workers, in Ford's workspaces, workers equipped with the tools and spares fitted parts to a car frame on a moving conveyor belt, eventually completing a full car at the end of the line. This catapulted productivity. Importantly, it reduced the cost of cars and made them affordable even to the workers.

The huge spurt in manufacturing potential, the pathbreaking power of the Internet, and the transnational collaboration that ensued helped the world develop a mass consumerist 'monoculture'. Also, the opening of the Suez and Panama canals cut cross-continental shipping time by half. More importantly, the latter part of the 20th century freed human beings from wires to stay forever connected, with the mobile phone revolution. Put the financial revolution on top of it - with core banking, credit cards, and electronic transactions, we now have a world that is truly flexible and location agnostic.

In the technological realm, another paradigm shift that created a sea of a change in people's thoughts, and the one that heralded the birth of the Internet, and further, with many egalitarian, empathetic, and innovative software solutions is this: Open Source. Moving away from centralised, protected, walled-gardens approach of proprietary software, Open Source lets everyone copy, edit, own, and innovate the source code of a program to suit any emerging need.

Today, Open Source is the base of Google's pathbreaking Android phone systems that run more than two-thirds of the world's smartphones, and has takers even at Microsoft.

### Economic Realm

Economic theory and practice have changed course to tackle socio-political pressures, with brilliant minds leading the world towards a better tomorrow. In modern economic history, the 1929 Wall Street crash led to the Great Depression, with high unemployment rates, hunger, suffering and unrest. This led to a paradigm change from

classical economics - free trade policies to Keynesian economics, which was the creation of the welfare state. The state now implemented measures to ensure employment to everyone, and free essential services came into being.

This didn't last long, as the 1970s oil crisis made the world question the central control of economic policy, and freed up the western economies once again, causing another paradigm shift from Keynesian economics to free market economics, with a high slant towards privatisation. This was also fomented by a rising antagonism towards communism, and a general disillusionment with central planning.

In economics, the other major paradigmatic shifts we have seen since the 19th century are the emergence of stock markets - the ability of individuals to hold parts of a company's worth in stock, and freely trade it. The introduction of electronic money revolutionised the world, making wealth fluid. The enablement of microcredit lifted millions above the poverty line, earning Muhammad Yunus a Nobel Prize.

The ongoing paradigm shift in economics is the blockchain concept, which frees up the concept of money and economies from the control of central banks and governments, by putting the power truly in the hands of everyone, with a collective consensus.

Bitcoin, Ethereum, and the hundreds of other cryptocurrencies that are creating ripples the world over, are fruits of this distributed ledger technology invented in 2008, in which every transaction ever is recorded in blocks and distributed to every account ever, so that there is no fraud, double entries, or even a need to check.

### **Geographical Realm**

Geographically, the world has had four distinct paradigm shifts in the way we have understood the physical world, and used it to suit our needs. In the beginning, our geography was cosmological, as maps were built to understand how the world functioned.

The first paradigm shift in our approach was from cosmological to chorological, a paradigm shift to studying geographical phenomena locally - how lands and organisms interact regionally. And the second paradigm shift was from chorological to the lived world, putting the human at the centre of geography. The third paradigm shift was from human centrisism to the one of welfare-centric geography, with theories focusing on using geography to understand disparity and economic distribution in order to make our world better.

While the 20th century was all about making the earth 'flat' as Thomas Friedman called it, the current paradigm is making the world a globe again, with

the consumer at the core of it. With global positioning systems (GPS), enter hyper-personalised, hyper-localised, and hyper-dynamic market paradigm.

Amazon, Apple, Google, Facebook and hundreds of innovative start-ups across the world (such as Uber or Swiggy) have put the customer at the heart of all technology. There is no one-size-fits-all approach anymore. If you don't like it, you move on to what you like better is the theme. And millions of lines of code are written to make every service more friendly, more personalised, and more relevant to what one needs.

### **Political Realm**

In the political realm, the world moved from imperialism to nation states and moved to a twin-paradigm of capitalism and communism.

Sub-nationalism, regionalism and nativism are brewing in pockets as well, as the world is now moving towards the emergence of a new paradigm, where economics and geopolitics set the agenda for politics.

Thus, paradigm shifts are everywhere. Think of how McDonald's revolutionised global quick service restaurant chains. Think about Apple's extraordinarily thoughtful and fluid experience across its software and hardware. Think of how South West Airlines in the United States has been able to create affordable air travel.

Ultimately, a paradigm exists not because it is the most immutable way, but only because there has not been a better and a forceful paradigm to replace it. To effect it, we need a solid understanding of our multifaceted histories, an imaginative spirit, an open mind and a warm heart.





# 3D Printing: The Benefits Add Up

*When we talk about breaking paradigms, it is about rethinking the entire chain of operations that we traditionally perform. Being in the manufacturing industry, what better example than Additive Manufacturing (AM) as a paragon of breaking and redefining paradigms in the domain?*



Harsh Bharat Mehta  
Engineering, CBR

**A**dditive Manufacturing (popularly known as 3D printing) is the technology that builds objects layer by layer from a digital model. That is the opposite of conventional Subtractive Manufacturing, where the raw material in the form of blocks is machined and processed to achieve the final shape, after wasting significant amount of material. In AM, raw material in the form of powder or filaments, is added layer by layer as per the shape of the component with minimal wastage.

## Process Flow

A typical AM process consists of the following steps:

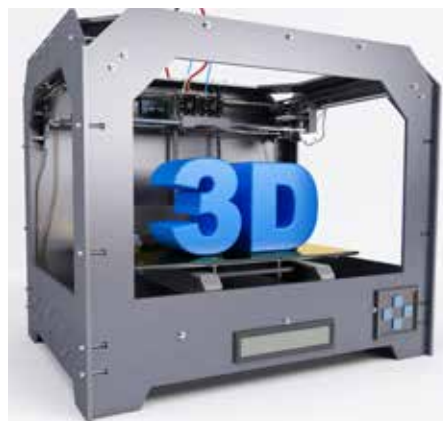
- Creation of a virtual CAD model in a 3D modelling environment
- Creation of a STL/G-Code file of the model in a Slicer Software
- Printing the component using a 3D printer
- Measurement and data analysis

## Technologies Used in Additive Manufacturing:

- Fused Deposition Modeling (FDM) - In FDM, molten thermoplastic material extruded through a nozzle is deposited on the build plate surface in a pre-determined manner to create a 3D component.
- Selective Laser Sintering (SLS) - In SLS, a moving laser beam sinters heat-fusible powders one layer at a time. After each layer is completed, a new layer of powder is added across the surface. Layer by layer, the powders are bonded by the laser beam into a solid mass to form the 3D printed part.

## AM Applications in Valves

- Customised Solutions - AM can be an effective way to create prototypes as well as products with complex shapes and low batch volume
- Control Valve - AM can be used to print control valve cages and



- trims - faster and more cost effectively compared to traditional manufacturing methods. AM can also be used to manufacture balls with intricate shapes in the flow bore.
- Hydraulic Valves - Significant cost reduction and economies are achieved by using AM for complex-shaped manifolds

## Future Opportunities at L&T Valves

Additive Manufacturing is in the process of transitioning to a mature technology with myriad applications in manufacturing and aftermarket.

API has initiated work on API 20S 'Qualification of Additively Manufactured Metallic Materials for Use in the Petroleum and Natural Gas Industries'. This standard will be a significant gamechanger in making AM mainstream in the Oil & Gas industry.

There is also a lot of concern about the protection of product patents and copyrights. The wide availability of desktop 3D printers will make it possible to produce the designs anywhere in the world, making it for difficult for companies to safeguard their intellectual property right. This is an interesting debate and attorneys are working hard to safeguard their clients against such infringements.

The technology and the industry are evolving rapidly, and the future looks very exciting.

# Winning Over VUCA, the Human Way

*The lifeline of any organisation, no matter how heavily automated, are its people. The Human Resources or HR department is the primary channel through which the people of an organisation are 'managed'. Has the COVID pandemic impacted this role in any manner?*



R Malar Vannan Fernando  
Head - HR & IR

Typically, the HR department handles key tasks that help keep the business process moving. Largely, these may be classified as recruitment and training, charting of salaries and benefits (based on guidelines from senior management), training and development, and (finally) retirement / resignation / end of term and separation procedures. Truth be told, the 'human' aspect of the HR department is often lost in the maze of the many business functions they undertake. The COVID pandemic changed that.

The rapid spread of the Corona virus and resulting lockdowns not only caused disruptions in the production and business schedule, but also brought about hitherto unseen levels of anxiety and fear. The second, intense wave of the pandemic (witnessed over the last couple of months) resulted in an unprecedented loss of lives, with each passing day looking even more grim.

In times like these, companies have the dual responsibility of ensuring that performance and productivity is kept up, while also maintaining the well-being of their employees. While no crisis can be managed by any single department, the onus of creating a sense of shared concern and camaraderie fell on the HR department. With offices being closed and movement restrictions in place, they were faced with the need to find means to keep the threads of communication open and ensuring that employees' work and well-being were not affected. They also had to be prepared to deal with possible outbreaks of cluster infections, particularly on the shopfloor, and to provide adequate support for those who got infected.

All of this could not have been achieved through policy measures alone. As Malar Vannan Fernando, Head - HR & IR, tells us, they had to find innovative ways of implementing new measures within the shortest time possible. To do so, their reliance on technology was less - the impetus was on using an empathetic and compassionate approach. A truly 'human' resources approach.

**In the last week of March 2020, India was put under a nation-wide lockdown. Since then, to date, we have been having intermittent lockdowns. How did L&T Valves adapt to this unexpected change? What role did the HR department play in helping the company adapt to the change?**

The first lockdown was effective from 25 March 2020. As you know, the last week of every month is crucial for us, and this time it was the close of the financial year. The lockdown was totally unexpected! However, we know and understand that uncertainty and volatility is high in our business.

Our first priority was to protect the employees' safety and health. Within two days, the HR team created a strong network amongst all departments. We created Cross-Functional Teams (CFT) and department-wise WhatsApp groups. Everyone was getting different information from peers and social media, and we wanted to provide them

with authentic information through these 'official' groups. Every day, we would be in touch with the CFT members and all department heads. Dos and don'ts and other safety protocol were communicated through the WhatsApp groups.

Our 11 staff members in the HR department were assigned a set of employees. We had to call everyone - within the span of a week - to find out about their health and wellbeing, if they were able to work from home, and what kind of help they required. Some of our employees could work from home but did not have laptops. For them, we applied for special permission from the respective district administration and moved their computers to their houses.

We set up a toll-free number for COVID-related problems (this was directly linked to my phone) as well as a COVID grievance email. Most grievances were about wanting to move out of their current work locations, safety of their families, fear of isolation, arrangement of food and so on. One by one, we looked into and addressed the queries and needs that were raised. When we felt that any query could be a frequently-asked one, we immediately broadcasted it and our response to all the WhatsApp groups.

With regard to customers, our first priority was to maintain strong communication channels. We wrote to all our customers and told them that we were planning to get special permission from the government to run the factory. We approached the district administration, and they gave us special permission to operate the plants with lean staff. Throughout the first lockdown, L&T Valves Kancheepuram plant was the only manufacturing facility that worked all the days. We ensured that all pending orders, which were planned for March, were completed

before 15 April. That, I would say, was a great achievement.

**Factories were said to carry the risk of cluster infections. How did you manage to keep the plants running and maintain safety of the workers on the shopfloor?**

At the Kancheepuram plant, we got permission for one-third of the shopfloor employees to be present at the plant. We spoke to all the employees and reached a mutual agreement that they would work on a rotation basis. We also arranged transport for the workers. Between shifts, we sanitised the entire shopfloor.

We supplied masks to all attending employees. Hand sanitisers were placed around the floor. Weekly once, every employee had to undergo a medical check-up and we proactively conducted RTPCR tests. We also employed doctors at our work locations. If someone on the floor was unwell, we asked them to proceed to isolation, and when they returned after the break, they had to get a 'green light' from the doctor. If one person was affected in a particular department, we undertook contact tracing, and everyone in that dept had to undergo an RTPCR test. During the second wave, after an observation period of four days, the contact-traced

employees had to undergo RTPCR test again (as suggested by the doctor).

**What are some employee well-being measures that the HR department put in place?**

From the beginning, our employees' well-being was our priority. We did not cut even a single day's wages for any of our employees, including those on contract.

We carried out RTPCR tests for all the employees and their family members, free of cost. We also carried out antibody tests for all the employees. If anyone showed symptoms of COVID, we immediately carried out an RTPCR test for their family members (all free of cost). A taskforce was formed to support those who tested COVID-positive. If anyone needed to be admitted in the hospital, we organised the company ambulance for them. We tied up with Apollo Hospital to extend support to those who were on home quarantine. Three times a day, every day, the doctor would call and counsel them, and provide them with medical advice. We also supplied food (three times a day) from our canteen to families of COVID-positive employees. Over and above this, a member of the HR department would call all the COVID-positive employees on a daily basis and update us.



*Social Distancing - Sagar S Kumar*



# Leading from the Front

*“My experience is that when people feel protected and are at peace, their performance is at its peak.”*  
**S Kalyanaraman, CE**

**How has L&T Valves supported its employees during the pandemic? What were the key challenges in handling the pandemic across locations in India and overseas?**

“Machinery must be there, buildings must be there but without the people - it’s all nothing”. I would like to reiterate the immortal lines of our founder Henning Holck-Larsen: “People are our only real asset”. We share an enduring bond with our employees and, when faced with an unprecedented challenge, we fought the battle together. The size of the team and the geographical spread did pose challenges in the beginning, but we reached out to each and every employee, tracked the wellbeing of every family, empathised with their situations and initiated best-in-class support, be it medical, financial or emotional.

**The pandemic is seen as a massive market disruptor. What changes do you foresee in terms of project activity in its aftermath? Further, how do companies sustain the relationships with customers and other stakeholders in light of the movement restrictions?**

While we plan for normalcy and provide for contingency, we are often not prepared for the unexpected. COVID became the disruptor that nobody had prepared for, and as much as we suffered, our customers and the partners also suffered. Many of our customers work on projects of strategic importance, and with them we share relationships that are built on performance and nurtured on trust. We are confident that core project activity will resume soon and stabilise over time. I believe the experience gained during the 1<sup>st</sup> wave and the SOPs we internalised will help us ride this wave better.

**What are some hidden, unexpected opportunities that have emerged due to the pandemic?**

The pandemic completely changed the way we work as well as interface with customers. During the pandemic, our digital platforms helped us connect with customers across the globe, and the webinars enhanced our engagement. We pioneered many initiatives during the pandemic - financial accounts were compiled, audited and released remotely, we even carried out inspections remotely using the power of AR. We truly witnessed the emergence of a new paradigm, and I am sure some of the interventions will sustain well into normalcy.

**Companies have the dual responsibility of ensuring that the performance and productivity is maintained, while also ensuring the well-being of their employees. How do you balance both these demands optimally?**

My communication to the team focused on our shared responsibility and the importance of empathy - we are fighting this battle together, and we will not leave anybody behind. We unified the L&T Valves team under the motto, “One Team, One Dream” and my experience is that when people feel protected and are at peace, their performance is at its peak.

**What are your thoughts on data security in the light of WFH becoming the new normal?**

During the lockdown, we had over 50% of our staff working from home, and we didn’t face any data breach issue. We used the twin approach of continuous education and controlled access to protect our data. A robust system to track and address incidents complemented this.





Work From Home Mode - Kiruthiga S

This year, we were faced with the need to help with more hospital admissions. We tied up with major hospitals in different cities for beds for employees in need. Because of this, waiting time for our employees was reduced significantly. During the second wave, we also increased the COVID insurance coverage for all our staff members, with minimal employee contribution.

We also conducted virtual employee engagement and training programmes for all departments. The number of training hours definitely increased during the lockdown period!

**Other than staff members, was there any form of communication undertaken to family members of employees by the HR dept?**

We conducted almost 16 'Ask the Doctor' sessions, which was extended to employees and their family members. Each was a two-hour session, wherein we would share latest updates, proactive measures to take, and dos and don'ts, apart from answering queries. We also engaged third-party counsellors, and our employees and their families were given a toll-free number to contact them.

**Have all the employees and their families been vaccinated?**

Initially, a lot of our employees were not keen on getting vaccinated, due to the misinformation. After mid-May this year, many of them came to the camps we organised. So far, we have vaccinated around 63% of the employees, and our efforts are ongoing. We are also asking the families to get vaccinated at the camps.

**How did the 'work from home' (WFH) model work out?**

Working from home was welcomed! We created three models: Work from Home, Work from the Office and the hybrid model. An issue we faced with WFH was that many of us ended up working random hours and did not adhere to a structured schedule. I myself have been guilty of that! Also, not many people have the comfort of having an exclusive space to work while at home. During meetings, it can be a bit difficult for them to find a quiet place in the house.

Despite all this, their mental wellbeing saw an upswing. It gave them some solace that they were safe at home. There was a challenge of allotting WFH

for shopfloor employees and resumption of work for non-shopfloor employees from WFH mode. This was very evident during the second wave and required a lot of empathetic dialogue with concerned employees for making them understand the social-business situation.

**How has recruiting and on-boarding been affected? Has there been a dip in recruitment due to the pandemic and lockdown?**

Last year, we inducted 89 new staff members and 27 GETs. The only challenge we faced with recruitment concerned the pre-joining medical certificate. We preferred that the people submit a self-declaration form because we did not want them to get exposed to infection by going to a hospital. We asked them to declare that they would get their medicals done after the lockdown was lifted. All the joining formalities and induction was done virtually. The laptops were delivered through courier. We ensured that the joining formalities were seamless.

**How has the role of the HR department changed in the light of the COVID pandemic?**

We are all living in a VUCA world. We need to first remain calm in the light of new challenges and accept the current reality. We have to then respond to the situation. We need to be proactive and face the challenge with confidence. Then, we can overcome anything. Given more than two decades of experience in HR, I would say it really comes down to enhancing the customer and employee experience. If these two things are achieved, even in this period of uncertainty, the organisation can excel.

# Digital Shopfloor: Body, Bonnet and Bytes



*The shopfloor used to be filled with many workmen and few machines. Today the landscape has shifted towards a machine-oriented shopfloor, which requires very little human intervention. Let us examine how the paradigm was broken.*



Syed Aslam S  
Special Projects, CBR

**W**ith the Industrial revolution came rapid improvements in manufacturing. In fact, from its inception in the 18<sup>th</sup> century, we saw more improvements in manufacturing in the 200 years since than the several thousands of years before that. We had four stages of industrialisation, which have led us to where we are today.

In the first stage or Industry 1.0, we saw the use of steam-powered machines that improved the scale of manufacturing with greater efficiency and better quality. In the beginning of the 20<sup>th</sup> century, we saw the dawn of Industry 2.0, and with it came the use of electric-powered machines. Electric machines were able to overcome the inefficiencies faced by steam-powered machines and helped reduce cost and effort. We also saw the introduction of assembly lines in this stage - this helped streamline the mass production of goods. The improvement of production capabilities was not limited to just new machines; we also saw new procedures like 'Just In Time' and 'lean' manufacturing, which helped boost manufacturing capabilities.

With Industry 3.0, the focus was centred on electronics, and thus came the

introduction of semiconductor products such as transistors and integrated circuits (IC). In 1960, the first Programmable Logic Controller (PLC) was made, and this was a catalyst of the automation of processes in the manufacturing industry.

Along with hardware improvements, we saw software improvements as well. Software programs helped in management of resources, inventory, logistics and so on. Electronics and IT worked together to improve production capabilities. In the 1990s, with the introduction of the Internet and telecommunication services, we saw the birth of Industry 4.0.

In this article, we will see how digitalisation and Industry 4.0 is helping the manufacturing sector, and its importance in boosting productivity.



### The New Era of Digitalisation

Industry 4.0 has reduced the difference between physical and digital, as we see a lot of integration between the two. At L&T Valves we have introduced digital solutions such as smARt.view, SPEED, ValvTrac and LAMP, which leverage the latest technology to improve our operational efficiency and the customer experience.

For example, we leverage Augmented Reality in our Remote Inspections platform, smARt.view, wherein a representative of ours can show our products to the customer in real time, remotely, without having to be physically present at our facility. Amidst the Pandemic, smARt.view was a boon for us.

Merging digital with production process is essential to stay ahead of the competition. Digitising the shopfloor has several advantages such as:

- Decentralising the information so that everyone has the data required to complete their work faster and

without any loss in quality.

- Reducing the need for basic tasks to be supervised, so that the time saved can be utilised elsewhere.
- Eliminates the usage of paper, which helps reduce cost.
- Integrating lean practices in the operational systems to build a seamless link to manage deviations.

In a few years from now, the manufacturing industry will hardly see any workers on the shopfloor. Those who are working there will be dealing with complex machinery, and not engaging in simple tasks, such as, lifting heavy materials, physical inspections and so on.

### Recommendations For Manufacturers

Manufacturers need a more holistic picture of how the shopfloor is operating, so as to respond faster and to stay ahead of the competition. Relying on complicated systems that are obsolete to document and capture data will not help in this case. Manufacturers should equip shopfloors with the right

tools (such as sensor-fitted machines) to retrieve data in real-time. This enhances their ability to perform diagnostics and avoid downtime. Machines that operate in a standalone mode will lead to unstructured communication on the shopfloor. Hence, it is imperative to adopt new skills and technologies that enables syncing data between different machines, tracking information during the production cycle, leveraging the flexibility and openness of new technologies.

### Digital Shopfloors

Businesses are bound to be impacted by the digital technologies that are changing processes and re-inventing manufacturing from the ground up. Nowhere is the impact of digitalisation going to be more evident than the heart of the manufacturing enterprise - the shopfloor.

This is a paradigm shift, and it is happening for the better. Companies are welcoming new age digital technologies like the cloud, analytics, digital transformation and IoT to redefine the way they improve their operational efficiency and productivity. Technologies such as AI, IoT, IIoT and 3D printing are radically transforming the industry through automated processes that could completely change the shopfloor operations.

Using IoT and sensors, data from machines are collected and analysed in real-time and are sent to the ERP systems to enable the operators to make better decisions swiftly on the shopfloor. Optimising a production line involves several complexities. However, companies now have better access to data and more robust analytics. With the use of Manufacturing Execution System (MES), they can perform a multitude of tasks, such as process planning, visualisation, factory modelling, simulation of operations, resource





alternatives, remote management and routing, on the plant floor.

At L&T Valves, we use software that has made the customer journey more efficient through a unified platform for Enterprise Resource Planning (ERP), Manufacturing Operations Management (MOM) and shopfloor controls, which provide real-time visibility into the plant floor operations for improving decision-making and optimising utilisation.

### Shopfloors of the future

With the emergence of Industry 4.0, there is high demand for skilled personnel who can create and implement the new systems. To make an efficient shopfloor in the plant, companies will have to think outside the box and focus on upskilling and re-skilling of the workforce. The 'Make in India' initiative will help in improving the country's manufacturing industry especially in Defence and Aerospace sectors. Seeing this opportunity, L&T Valves strengthened the manufacturing and testing facilities to capture the demand of those sectors.

New technologies are paving the way for a new era in automation for companies in which men and machines work together. The rapid advancements in robotics, AI and machine learning are enabling automated devices to add value to human efforts in myriad ways.

Today, digitisation allows the entire manufacturing process and entire supply chain to be completely automated, secured and managed as one global entity. This drives greater outcomes such as improved efficiencies, reduced downtime, greater resource utilisation, and increased returns on investment over a shorter time.

### Empowering the shopfloor

Digitalisation is a team effort, one that requires collaboration across many departments and focusses on four main aspects:

- Customer centricity
- Resource management
- Operational excellence
- Delivering with confidence
- Advanced analytics

Improvements to shopfloor processes will make everyone's tasks easier. Instead of apologising for late deliveries, sales representatives can be engaging with customers about long-term goals and upcoming orders. Instead of guessing about production schedules and resource planning, the procurement team can be talking to vendors about long-term pricing and Just In Time delivery plans.

Repositioning digitalisation around change management is therefore crucial for producing results for the company. All digital solutions should be designed to enable the users to do the work in the quickest and best way possible, not just give their supervisors more control over them. The system will give you the solutions, so it becomes easier to upskill on the job rather than go through extensive training. In a broad sense, the aim is to reinvent the way we work, to improve performance and become self-sufficient. Digitalisation will be a catalyst for this.



# Flue Gas Desulphurisation

*What exactly is Flue Gas Desulphurisation and what are the valve prospects? KK Sreenivasan explains...*



KK Sreenivasan  
Product Management, CBR

In India, over 54% of power is generated through coal/ lignite-fueled power plants. Flue gases from these power plants contain pollutants such as carbon dioxide, nitrogen oxides and sulphur dioxide. As you are aware, air pollution is one of the biggest factors causing global warming, irreparable damage to our ecosystems as well as health issues. While it will take decades to reduce the dependence on coal, it is imperative that the power plants introduce better pollution control measures.

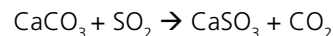
Flue Gas Desulphurisation (FGD) system is an effective Air Quality Controlling System (AQCS) that removes sulphur dioxide from the flue gases of thermal power plants. While equipment such as Electrostatic Precipitators (ESP) and bag filters do not prevent the escape of sulphur dioxide into the atmosphere, FGD system has proven to reduce the sulphur dioxide emission by over 90%.

Though the technology was available for many decades, implementation in India started only in the last decade. India had

set 2017 as the deadline for installation of FGD units, but the deadline was later extended up to 2025.

An FGD system can be installed in an existing power plant without much modification but has its own challenges and complications. The different technologies adopted for FGD can be broadly classified as Wet FGD, Dry FGD and Semi-wet FGD. Wet FGDs are used when the flue gas has a high sulphur content, and Dry and Semi-wet FGDs, when the sulphur content is low to medium.

The most common FGD used in India is Wet FGD using limestone slurry as an absorbent - where the alkaline limestone slurry is sprayed through nozzles to neutralise the acidic sulphur dioxide gas.



The Calcium Sulphite generated is used to produce gypsum for the construction industry.

Typically, FGDs are installed after ESP and bag filter and before chimney. In addition to limestone, seawater and Magnesium Hydroxide also can be used as absorbents in a Wet FGD.

## Valves Used in FGD Applications

FGD media is highly abrasive and corrosive and the most preferred valves for this application are Knife Gate Valves (KGV). In a KGV, the Natural Rubber / EPDM sleeve prevent direct contact of the media and the valve body. The Duplex/ Super Duplex knife gates ensure

effective sealing as well as long service life. Typically, valves used in limestone slurry lines are of sizes less than 16", and in tank isolation and recirculation lines, 40" to 60". L&T Valves has supplied Knife Gate Valves in sizes up to 60" to various FGD projects across the country.



Butterfly Valves with rubber-lined body and super duplex discs are also used in FGD. The makeup and recirculation water lines use Gate, Globe, Check and Ball valves in carbon steel or stainless-steel. The bigger size isolation valves are generally electrically operated and the smaller valves, pneumatically operated.



**Maduraiveeran S**  
Deputy General Manager  
Engineering - GGC

# Designing The Future

*Design and Engineering at the heart of the manufacturing industry have witnessed many changes in the last three decades. V-connect got together 7 design engineers from across generations for a free-flowing conversation on the technologies, the human touch, customer satisfaction and much more.*

*We share the excerpts from the chat.*

**V-connect:** We wish to understand the changes that have happened in the design aspect of the company and how it helped improve the time taken to make valves and also our customer experience.

**Maduraiveeran:** You can see my old photo (top left) - this is me in 1985 at the Maraimalai Nagar plant. I used a drafting machine and micro-tip pens. Then I migrated to being a design engineer. For the past 30 years I have been in design services, so I have seen some massive changes!

**V-connect:** So, how has the designing of valves changed over time, in terms of time and effort involved?

**Pappu:** We could start with the transition from pen and paper to digital

media. When I was in college, we used drafters. After coming here, I could understand the nuances in designing. I am still learning but I can definitely tell that there is a vast difference between the conventional manner and digital manner. The ease with which you can draw is manifold. Even if there is a mistake, it can be rectified faster.

**Maduraiveeran:** In the early days, it started with the basic tools for the design of valves. But it was always the engineer's knowledge that was the basis for designing the product. That way, there has not been a change in the core of how we design. However, the way in which we design the products for faster release and easy approach to the customers...I would say that is the major change over the decade. When we started, the volume also was less. Later on, AutoCAD came into the picture. Designs were done on the software and given to superiors for further work, and then to the head for approval. Sometimes, the superior would come to review the design, then the approving authority would come to the table and discuss. So, the process took a long time, since it was a face-to-face discussion. Yet, knowledge sharing was more. Then,



**Suriyanarayanan S**  
Deputy General Manager  
Defence, Nuclear and Aerospace

the volume of work began to increase, and the storage of hard copy documents became difficult to handle. We used to have 30 to 40 storage racks just to keep our drawings! Around 2000, the culture of 3D modelling came about. We were the pioneers in inducting 3D design in the valve industry. The size of the files were very high, so the machine's capacity had to be upgraded from normal PC to workstations. Every engineer stored their docs in a server, which was then used and shared by everyone else. This reduced the chances for error and duplication of work.

**Rajkamal:** Today, we are using the latest technology at L&T Valves. Creo is a better software compared to others.

**Suriyanarayanan:** There is a great benefit to using 3D-modelling in our industry, and it is in parametric design. Since 2008, when we started a range of development in valves - pressure-seal valves, double block and bleed valves - we were very quick to develop the entire reach. With the right software, errors are reduced, and we can really optimise the design across the sizes. More controls had to be put in place when we moved to the digital platform, that is the biggest learning. But I would



**Subramanian M**  
Assistant Manager  
Engineering - GGC

say it has constrained engineering a bit. Earlier, there used to be face-to-face discussion... That sort of thing does not happen much anymore and it does not stimulate a great amount of debate. Also, I would say we still need a printout of a drawing, as reviewing on the PCs can leave us prone to errors!

**Yunous:** Day by day, expectations from customers were also growing higher. Initially, when I joined in 2012, our GAD would be made in a single page or hardly two pages, with a cross section of the view. Then, customers started expecting more detailed views and the designs also progressed in a great way - from a simple design to valves for critical application. Digital models helped in increasing the speed and accuracy.

**Subramanian:** Back in the day, the shopfloor was similar to our design people in terms of knowledge. They required the 2D format only, with plan, top and side views. With 3D, we need to add the isometric view and also It has become easier to translate the requirements to the shop floor.

**V-connect:** Is it possible for us to give information directly from R&D to the machine?



**Maswood Ahmed**  
Manager  
New product Development, Innovation

**Rajkamal:** In some cases, for complicated segments, we give a 3D model directly to the machines. They will directly convert the model into G codes, which would completely eliminate the drawing or the drawing coordinates.

**Maduraiveeran:** To add to the advantages - we started giving virtual models to our casting vendors. They analyse the given models and eliminates casting defects. That helps us develop castings faster, and also be defect free.

**V-connect:** On the topic of 3D models, how has this helped our customers?

**Masood:** I would like to quote the case of a customer complaint stating that there was some noise in our check valves. When we asked for the layout, they sent us a photo of the pipe. Using the dimensions provided here, we made a model, analysed it, and found that the turbulence is much higher. So, we suggested that they increase the straight pipeline and change the layout. This way, we have helped customers tackle their issues.

**Rajkamal:** From a design point of view, we have done some 3D printing and verification in terms of dimensions and



**Rajkamal R**  
 Manager  
 New product Development, Innovation

profiles. But for R&D lab validation, we make a prototype valve and carry out the testing as per our standard requirement.

**Suriyanarayanan:** Earlier, when people used drawing boards, it took a lot of time to realise and solve any issues in manufacturing or prototyping. With 3D platforms, we can solve them quickly. However, let us clearly understand that just because digital methods exist, it doesn't solve all the issues, so we have to be clear where it is helpful and where it is not. What rapid prototyping can help us with is geometry and structural validation, that is all. We should not think that digital methods replaces all the old engineering techniques. It cannot, and some old methods have to be followed.

**Maduraiveeran:** Finally, it lies in the hands of three people. First, the design engineer - 80% lies with them. Second, the reviewing person. Finally, the approving authority. Be it an older or newer tool, it depends on the creator. The tools are meant to make it faster, for us, for our customers, vendors, and so on, but the accuracy lies on the person who is starting the subject, reviewing and approving.



**Mohammed Younos S**  
 Assistant Manager  
 Design & Development

**V-connect:** What do you think is the future when it comes to design?

**Yunous:** The upgrading changes has been continuous, and the challenges from the customers in the changing environment are growing. Day by day, the expectations are increasing. As we grow along with the company and extend our verticals from Oil & Gas to nuclear, aerospace, and other areas, the changes will be interesting as well as challenging.

**Suriyanarayanan:** The immediate challenge I see in the next three to four years is in technology. Currently, we are able to make 3D models of all our components designed, but wherever we buy accessories like gear boxes, we still don't have a good procedure or control to have their model. That is a biggest reason why our assembly drawings are still on the 2D platform. This takes a lot of time and is prone to errors. If that situation were addressed, it would be of great help for our department. Many times, the customer would approve the drawing, and they would rely on our knowledge and experience to take care of the actuator portion. Now, customers are going into each and every detail of the assembly. Unless we make a



**Pappu Jagannadha Mallik**  
 PGET  
 Engineering, Design & Development

complete 3D model, I do not think we would be able to meet the expectations of the customer and the market.

**Masood:** When I joined L&T Valves, there used to be subject matter experts for every category of valve. Now, we have started storing knowledge in the form of file notes. This is helpful for the future and new recruits. But still, there is some information that hasn't been documented and we would need to improve on that.

**Pappu:** COVID has brought about a huge disruption in the supply chain. Even after COVID ends, there would be changes in manufacturing. We should be ready for that front. Being a conglomerate that is spread across the world, we should be ready to take into account all these transitions and move forward. That will only happen if our team can visualise what will happen five years from now.

The debate continues...



# Power of Voice

*What are your users telling you and why do you need this information to get meaningful insights? In this article, we touch on how to understand the voice of your users (internal customers) and use it to drive change within your department and across the organisation.*

There is no denying that the focus on our internal customers and their satisfaction is as important as the focus on our end clients. Internal customer satisfaction is in fact an enabler of improved customer satisfaction. We have more data than ever before but drawing insights from that data to actually understand our user's 'voice' is extremely difficult. Although people are certainly more aware of the voice of external customers these days, the Voice of User or VOU differs greatly across organisations.



Aravind Siddharth S  
QC, CBR

Voice of User is the collection of a user's wants, needs, expectations, likes and dislikes. Certain expectations, feedbacks and perceptions go unrecorded or even untold in a working environment. VOU is a platform where users can put forth their requirements in black and white. In other words, VOU is the entire process of collating customer feedback in one place, analysing the data, and ensuring that the relevant people in the organisation have the insights easily on hand to actionise the insights. Only then can a department be wholly collaborative with a focus on increasing customer satisfaction.

## Driving Change and Improvement

The process of VOU helps a department validate its current service levels, and checks whether the current operations strategy is working or not. An introspection and course correction with a renewed strategy will trigger the enthusiasm of the

staff members and lead to a sense of accomplishments among individuals. The concept of VOU will change the perspectives of individuals towards problem solving, troubleshooting, and engaging in improvement initiatives as a cross functional team. This will bring about a paradigm shift in our working culture and enhance harmony across the organisation. This, in turn, leads to refined products and processes, which ultimately results in improved customer satisfaction.

At the Quality department, we conducted a VOU session, and have rolled up our sleeves to get to work to fulfil our users' needs. When are you conducting a VOU session for your department?



# Customer-driven Transformation



Sagar S Kumar  
Special Projects, Delhi

Going out to a restaurant for team lunches, catching a new movie for 'First Day, First Show'; going to watch a cricket match at a stadium, watching your favourite singer perform at a concert; attending a bustling business expo in a convention centre... These experiences were all missed in 2020 and 2021. Such large gatherings will surely return to our lives at some point, but we do not know when.

The pandemic has broken the paradigm of customer contact. Multiple lockdowns that extended for several weeks have

triggered a kind of ultimatum for businesses: Go digital or be forgotten. Companies are being forced to change the way they do business. Digital transformation is the need of the hour, as it is the only way can follow Covid management norms effectively while carrying on with our work.

Simply put, digital transformation is the use of various digital technologies to drive the different areas of business. This has resulted in fundamental changes in how business entities operate and the value they deliver to the customers. It is changing the way a business interacts with its customer, with the thrust being on how a customer can be provided with a consistent experience, whenever and wherever they need it.

For a B2B Sales team, customer interactions have changed from in-person meetings to digital meetings. Through virtual exhibitions, meetings, presentations and so on, companies are ensuring that the customer's experience is enriching and fruitful.

Today, customers expect relevant content in relation to what they are doing anytime, anywhere, and in the format and on the device of their choice. In order to keep up with the new, 'always-connected' customer, businesses must embrace new technologies to deliver a value-added customer experience.

Take the case of digital exhibitions. We have gone from packed expo halls, where we used to exhibit our capabilities, product lines and upcoming innovations to the virtual exhibitions on a laptop/phone. This is by far the biggest experience transformation the customer has observed. The digitisation of such events is being applauded. The customer can now attend the exhibition, exchange business cards, learn about new products, listen to industry leaders and a lot more - from the comfort of his/her home.

At L&T Valves, discussions with vendors and customers over digital platforms are a part of everyday business. A major digital move that is being slowly accepted by the industry is remote/virtual inspections. We have been offering our valves for inspection remotely through latest augmented reality technology and other virtual modes. We have been successful in implementing remote inspections and getting clearances from many customers, including national defence, aerospace and power organisations. As we look and move ahead towards the future, we will develop more strategies around this 'new normal' to ensure that the customer is always given the best possible experience.



# Covering New Ground in Marketing



Ravisankar  
Marcom, Chennai

The future of marketing is digital - that is what we here at L&T Valves believe. Our focus in marketing has shifted greatly towards Social Media Marketing and Search Engine Optimization, as compared to heavy reliance on more traditional print media. We realised the potential that digital marketing had in terms of reaching customers across the globe and in finding potential customers as well. This cannot be achieved through traditional means, especially when a pandemic prevents companies from operating in 'normal' terms. During the COVID pandemic and lockdown, the primary way of reaching our customers was through social media and other digital means.

Speaking of our social media presence, we have a very active [LinkedIn](#) profile with over 80K+ followers and industry-leading engagement rate. Through LinkedIn, we engage with our customers on topics about the products we offer, the industries we cater to, and employees' experiences. We identify content that is of interest to our customers and, using that, we are able to streamline our content.

To improve our engagement with the customers, we open the forum to

questions from time to time, and get our experts to clear doubts that the audience may have regarding valves. We also conduct polls to obtain feedback from our audience about relevant topics. In addition to LinkedIn, we also have a [YouTube](#) page with several knowledge sharing videos aimed at helping the customer with a range of things - from understanding the basics of valves to tutorials on how to maintain valves. We use LinkedIn as a platform to increase the awareness of our company and to attract talent, and YouTube for guiding the customer about our products.

Social media is used primarily to reach out to our customers. On the other hand, if a customer wants to reach out to us, our [website](#) is the best place to start. For a new customer, they might not know about our website so they would use Google to find us online. Or they might search for a valve without a specific brand. This is where Search Engine Optimization or SEO plays a major role. With the help of SEO, we try to ensure that customers find our website page in the top results thrown

up after they type in a keyword related to valve products. This reduces the need for paid ads while also improving the visibility of our company in the digital sphere. With SEO, we also improve the user experience by making it easier for them to find the data they are looking for. By integrating our office, factory and distributor locations with Google My Business, we make it easier for people to find us on Google Maps as well. All these features together help improve our lead generation and conversion rate as well.

By constantly improving how we market our products, and by keeping up with the latest trends in the digital marketing space, L&T Valves has been able to stay ahead of the competition on various fronts. For a company that delivers valves across the world, marketing plays a major role in improving the visibility of the company. Tools like SEO and Social Media has helped us achieve this goal more efficiently. No matter where, physical or virtual - we always try to stay one step ahead.



# How we enhanced vendor confidence during the pandemic

*COVID-19 and the economic slowdown were tough on everyone across the globe. We used this period to review our strategies, renew our payment model and become ready for the new world order. Selva Muthu Kumar shares the BTS story.*



Selva Muthu Kumar MA  
Finance and Accounts, CBR

It's April 1st, the beginning of a new financial year. And probably the quietest beginning to a new financial year in our generation. Sure enough, it was one of the toughest transitions our generation faced. It's neither business as usual, nor life as usual.

Our major import procurements were from China. It was the first country that faced the evil named Corona. China went into lockdown, vendors started chasing rigorously for payments.

Rumours started spreading across the nation. Domestic vendors also turned up for payments. The size of the problem, we didn't know how big it was. Everything had changed.

We decided to revisit our strategies, budget and the payment model.

## **New L&T Valves**

We segregated all payments into 3 tiers, namely Tier-I, Tier-II and Tier-III based on the nature and criticality of the expense.

We did scenario planning. Revisited our budget. We analysed our CDD (contractual delivery date) for the next six months - what will be the impact if certain countries restricted imports?

We also worked on an 'FAQ', Free A Quarter scenario. We planned our expenditure for 12 months and income for nine months.

We also had periodical meetings with Supply Chain and Operations Team to understand the critical and urgent requirements. We had meetings with vendors, forwarders and shipping agents as well.

Add-ons to manage liquidity:

- We ensured the optimum use of MEIS scrip and the maximisation of Advance Authorization (AA) model to reduce the cash outflow through customs duty payments and this helped us increase the vendor pay-outs.
- We renegotiated credit terms with vendors. With this revised payment tenor, we were able to effectively manage the working capital.
- We made use of the various banking facilities like discounting and carried out channel financing model religiously.

We used the threat of covid to build systems to enhance vendor confidence and support our business partners.

We worked as a team, walked together, ran together and sprinted together and now we have inspirational stories to tell the world how we broke the paradigm and bounced back!



# Red Rising

When it comes to Paradigm Shifts, how could one forget the series 'Red Rising' by Pierce Brown? Members of Lighthouse, our book club, tell us more.



The phrase itself is mentioned in every other page. While folks may still not realise its impact now but below are some of the things it envisages:

- Genetically modifying humans to create super humans.
- Another planet/solar object gaining superiority over Earth.
- Discrimination based on eye colour (just a heads up that discrimination can happen based on anything so that we can tackle it while it is still less of an evil).

Just as the current generation is turning their childhood fiction into reality, this book (Elon Musk is a fan) will create a generation of new dreamers that will take humanity to new heights. While regular dystopian books focus on the story, Red Rising focuses equally on technology and gives a great picture of the background. An apt book for employees of the company which has 'future' in its tagline.

The ultimate hook: This book is a 'klichdi' of all your favourite books such as Harry Potter, Hunger Games, Divergent, etc. You will even connect with the book if you liked movies such as the Matrix, Guardians of the Galaxy or Star Wars.

Also, I could see some influence of the Game of Thrones here. The planet Mars is akin to the House Lannister with their own version of 'Rains of Castemere' called the Iron Rain but in the form of a space battle. How cool is that?

With strong female characters, this book will be a joy for feminists. The added depth to each of the characters really brought them to life. Weirdly enough, the book is as much funny, romantic and cheery as it is gory, suspenseful and dark. To sum up, it's a complete package!



Saravana Raja Kumar T  
CE's Office, Chennai



Yaser Ahmed Palikonda Latheef  
Digital Initiative, CBR

## Books that Inspired Many 'Risings'

### Uncle Tom's Cabin

Harriet Beecher Stowe

The book that kindled the war against slavery. It intensified the debate leading to the change.

### The Jungle

Upton Sinclair

It highlights the plight of the immigrant labours but resulted in Food and Drug Administration [FDA]. Sinclair famously complained: "I aimed for the public's heart and by accident I hit it in the stomach."

### The Feminine Mystique

Betty Friedan

When it was published 60 years ago, this book broke the image of women as a housewife and implored women to seek out occupations that could eventually improve their lives. This book triggered the second wave of feminism.

### The Wealth of Nations

Adam Smith

Published in 1776, Adam Smith's work redefined business and changed taxation laws within a year of its publication. Read by economists even today.

### Das Kapital

Karl Marx

From Kapital sprung an economic and political ideology, which dominated half of the earth. It has shaped the world and its opponent (Capitalism) as well.

### On the Origin of Species

Charles Darwin

This book challenged the Church and broke the idea of 'God created all the species'. It changed the way we think about nature - and continues to do so.



## THINKING OUTSIDE THE BOOKS

*R Subramanian is a qualified chartered and cost accountant. A specialist in setting up process and systems, Subramanian has worked in the area of acquisition (in Europe) and green field projects. He regards his strengths as analytics, and the abilities to connect and interpret the numbers and influence a business to achieve the metrics. His decisions are driven by data and facts, due to which he finds it easy to analyze problems and respond quickly with solutions. In his free time, he indulges in sports and listens to Kannadasan's songs.*

### What is your vision for the Finance & Accounts department? What are your plans to achieve this vision?

The vision is to deliver excellence in strategic and financial solutions to create a value and foster a culture of compliance at L&T Valves. To be solution-focused, while embracing a robust governance framework, and collaborate with business in formulating strategies and extend decision support through functional proficiency. I believe in fostering a culture of respect, trust and accountability, and in encouraging individual development and growth to build a high-performance team.

### What are the strengths of your team?

The current team is new and comprises energetic, young, ambitious professionals who have varied experience outside L&T. They complement the experienced, professional long-timers at L&T Valves. The team members are from different backgrounds who think differently and challenge each other while working together as one unit.

### What are the major challenges faced by L&T Valves F&A?

Liquidity management, retaining talent and developing data sensitivity in the finance team are key challenges. The former two are self-explanatory, so I shall not go into detail. With regard to data security, the complexity of the IT landscape makes it difficult to get the right information without adequate analytical tools. Finance and Accounts is struggling to evolve a set of standard algorithms and data models that would underpin the business needs first and offer dynamic support to the changing business scenarios.

### The theme for this issue of V-connect is 'Breaking Paradigms'. What paradigms would you like to break in F&A?

The traditional finance talent pool has been trained in the skills of bookkeeping and compliance. The data deluge in the new age will require a completely new skill set - the ability to synthesise large volumes of data and identify trends and patterns. To attain this, there needs to be a shift in the mindset, one that understands how large volumes of data and analysis will be an integral part of finance skills going forward.

### In recent years, how has technology changed the F&A domain?

While advanced analytics, RPA (Robotics Process Automation) and block chain have started influencing the F&A domain in various areas, like order to cash, procure to pay, record to report, fixed assets and so on, there are other technologies that will redefine the way the finance will deliver organisational value. Some of those technologies are visualisation, in-memory computing, mobility and cognitive computing.

### How is the pandemic going to affect L&T Valves and the industry as a whole?

The pandemic has adversely affected customers in the industrial valves market as supply and demand cycles have been disrupted. Lots of projects are getting deferred, leading to decreased capital expenditure. There is immense competition to grab the small pie in the market. However, given the industrial valves market of \$72 billion, our served market and sales at \$16 billion and \$136 million respectively, there is huge opportunity to increase the market share. For which L&T Valves must focus and increase our cost competitiveness.

### How do you ensure peak performance from your team even during times of constraints?

Empowering the team, giving independence and authority in their domain, creating a culture of performance by setting aggressive but realistic goals and holding them accountable for regularly reporting on their progress. I trust them and I have the faith in their ability to do the job, solve the problem, and to meet the deadline. I also engage with the team regularly, and they can look to my guidance whenever they need it.

### What kind of person are you outside of work?

People say that I am friendly and approachable, and that I listen and provide guidance when they share their problems. I like to participate in social activities such as sports and dance.

### Which book has inspired you the most in your life, and why?

The *Bhagavad Gita*, a book that details how every human being can apply the subtle philosophical principles of vedanta in day-to-day life. It builds a sense of confidence and strength, and changed my perspective, world views, and my outlook towards relationships and the work I do.

### As the new Head of Finance & Accounts, what advice would you give to the employees of L&T Valves?

*Career:* Aim high, have high benchmarks, and focus on systems and process. Perform for yourselves and give your best shot with passion in whatever you do. The results will fall in place.  
*Personal:* Focus on your health and work-life balance. Stay healthy.

# Industrial Relations: The Backbone of Business Sustainability



We present excerpts from an article that R Malar Vannan Fernando, Head - HR & IR contributed to the National Institute of Personnel Management (NIPM) Research Compendium on the topic of Industrial Relations.

[Click here to read the full article](#)

Industrial Relations is the way in which management interacts with the employees to increase overall productivity, reduce workplace conflict and raise staff morale. A healthy employee relationship leads to an increased level of satisfaction among the employees and in turn to increased productivity. Workplaces become a much happier place and employees tend to concentrate more on the work rather than unproductive things.

The goal of IR is essentially to build mutual trust. I had adopted RREE (Respect, Refresh, Enable and Execute) to promote collaborative Industrial Relations across the organization.

**Respect:** Create an environment where employees can work fearlessly. It is reinforced by a very effective two-way communication mechanism. Content, clarity and connect are the prerequisite for employee communication initiatives. For example, the content (company performance, competitor performance, opportunity lost, etc.) for monthly union meeting, quarterly

employee communication and monthly performance dashboard) are integrated with clarity and it was well connected with every employee in the organization. The management and the HR professionals 'Walked the Talk' across the organization which in turn promoted mutual trust on what was communicated.

**Refresh:** Build a mechanism for promoting constant and voluntary continuous environment. It was demonstrated through continually reviewed and revisited people processes, systems redesign and by engaging and involving employees in all development activities and risks to secure a diverse skillset and a strong skill pool that is relevant to the future needs. These continual actions eliminated compliance driven practices and institutionalized voluntary participative culture. We were privileged to had TFI (Total Family Involvement) in our business journey.

**Enable:** Employees are fully committed through employee development. The committed workforce was able to

access a wide range of capabilities and experiences from across the skill eco-system. The management invested in skill assessment and development beyond the traditional employment deal and focused on the whole person agenda which energises the employees and their family members and makes them aware how the management supports their physical, financial and emotional well-being.

**Execute:** The above three steps make an employee feel that the employees are growing and contributing, and find their work engaging and fulfilling as management moves beyond profit to stills employees with a sense of purpose. The connected and empowered employees are able to access the skill and knowledge and the people they need to form teams to deliver the business deliverable with greater pride.

High-impact IR integrated with HR strategies facilitate higher levels of employee engagement & productivity and turns the overall work experience more rewarding.

# Long Service Awards

## Our Congratulations to all Awardees



35

**Ramachandran A**, Sr. Engineer - Engineering, receiving the award from Basavarajappa D, Head - Global Operations



35

**Maduraiveeran S**, DGM - Engineering, receiving the award from Venkatesh NR, Head - R&D



25

**CMS Kandasami**, DGM - Stores, receiving the award from Basavarajappa D, Head - Global Operations



15

**Rahul Don Rudy**, DGM - Sales (Europe), receiving the award from Milton Danny, DGM - International Sales



15

**Arumugam R**, Asst. Manager - Quality Control GGC, receiving the award from Basavarajappa D, Head - Global Operations



15

**E Saravanan**, Executive - Central Purchase receiving the award from J Suresh, Plant Head, KPM



# Quality, Certified

*Our heartiest congratulations to our colleagues on achieving their certifications. Come hell, high water or a pandemic, they have proven that there is no slowing down the journey of learning. Kudos!*

## ISO 9001 QMS Lead Auditor Certification



**M Vijayarangan**  
QA, KPM



**N Marimuthu**  
QC, KPM



**SM Balaji**  
QC, CBR



**Srijith S**  
QA, CBR



**Vijayakumar DK**  
QC, KPM

## API Q1 Fundamentals



**M Vijayarangan**  
QA, KPM



**Rajkumar V**  
QA, KPM



**N Gopi**  
QC, KPM



**S Vinoth**  
QC, CBR

## Internal Auditor Training Course on Integrated Management Systems



**Sitharthan V**  
QA, KPM



**Bharath Kumar Badari**  
QC, KPM

## BGAS - CSWIP Grade 2 Painting Inspector



**Sivaram Anbalagan**  
QC, CBR

## NDT Level 2 - UT



**Abin Saji**  
QC, CBR



Sivaram Anbalagan  
QC, CBR

## On the **Winning Track**

*e-TechFest, an initiative of L&T Corporate HR, is a technical competition conducted every year across L&T by CETA (Corporate Technology & Engineering Academy, Madh). Sivaram A, who was the winner in the Welding Technologies segment, shares his experience.*

At this year's e-TechFest 2021, we were offered 4 tracks:

- Track 1: Industry 4.0
- Track 2: Hydraulics Engineering
- Track 3: Welding Technologies
- Track 4: Concrete Fundamentals.

Being a certified welding inspection professional (CSWIP 3.1), I participated in the Welding Technologies track. There were three modules with 18 topics in all. We had one hour to complete each module. (Topics included: Basics of welding, FCAW process, SAW process,

MIG process, SMAW process, TIG process, welding equipment, welding position, welding defects, welding symbols, safety aspects and PPE in welding)

I was assessed based on my score and the time taken for completion of the track. The minimum qualifying score was 85%.

I am happy to have won the e-TechFest, and hope to participate in more such events in the coming months.

## Win the V-connect Prize

*We welcome everyone to participate in the V-connect Quiz. One winner will receive a Special Prize – so pull out your phones and get started!*

### Instructions

1. Scan the first QR code using Google lens for Android or iPhone camera app.
2. Open the link and fill in your PS number, Name and Answer.
3. If your answer is correct, you can use that answer to access the next question.
4. Submit the form, scan the next QR and enter the previous questions answer to proceed.
5. The first person to answer all questions and submit all five forms will be the winner!



QUESTION – 1



QUESTION – 2



QUESTION – 3



QUESTION – 4



QUESTION – 5

# A round up of news from the **Valves Community**

## **New Kids on the Block!**



Sagar S Kumar and Divya Kayarat were blessed with a baby girl, Vedika, on 9 April 2021



Praveen Kumar S and Gayathri M were blessed with a baby girl, Bhavatharani, on 24 April 2021



Anjani Ranjan Das and Purna Kumari were blessed with a baby girl, Shreya, on 11 May 2021. Also in the picture is their first daughter, Ananya

## **Wedding Bells!**



Congratulations to Gowtham S and Jayadharani, who tied the knot on 25 April 2021



# Voice of **Kancheepuram**

*Ever heard the saying, "He who sings scares away his blues"? At our plant in Kancheepuram, we chased away all our blues through a wonderful music competition that saw enthusiastic participation from all our employees. Melodious notes filled the air and our hearts!*

*Here are the results of the competition:*

**Winner: Louis Jesuraja**



**1st Runner-up : R Packiyathan**



**2nd Runner-up: Vinay L Iyengar**



**Unique Voice: S Mohana Murugan**



# Technology Month: **A New Tradition**



*Harsh Bharat Mehta  
Engineering, CBR*

2021 saw the beginning of our new initiative, 'Technology Conclave' - a great platform for all employee-trainers to showcase and share their knowledge. Our Technology Conclave in May 2021 coincided with the National Technology Day on 11 May 2021. So, we decided to commemorate May as 'Technology Month'. A seed was sown, ideas started flowing and teams got to work. We narrowed down to two events that could be conducted for all our employees. Keeping in mind the social distancing guidelines, both events were hosted on virtual platforms.

### **Technology Crossword Puzzle**

The first event was the Technology Crossword Puzzle. A team of six volunteers came up with the set of questions, which covered the length and breadth of topics at L&T Valves. All the answers to the questions were words, methods, phenomena, processes and so on. The puzzle was shared via email, and we received more than 60 responses! The organisers had a tough time in determining the winners as all participants were close in accuracy and speed.

Winners: Mohammed Younos S, Sundar G, Ganeshperumal S, Shashank Bharathi, Siddharth PK



Volunteers: Abhishek Ankolekar, Ajay Kumar Neelam, Anuj Joshi, Gumalapuram Manideep, Harsh Mehta, Pappu Jagannadha Mallik

### **QRIOSITY Technology Quiz**

Aravind Siddharth S and Harsh Mehta were Quizmasters for QRIOSITY Technology Quiz. The event started with the launch of four Quiz Prelims, each with a set of 10 questions. The prelims were prepared in Microsoft Forms and shared via email. The top three winners of each prelims were shortlisted for the upcoming rounds.

Quiz Prelim 1 Winners: Arunbabu A, Balaji V, Rajin NR

Quiz Prelim 2 Winners: Durairaj S, Sagar Kumar, Sandeep S

Quiz Prelim 3 Winners: Arunkumar K, Sridhar S, Prasanthi S

Quiz Prelim 4 Winners: Arunkumar S, Praveen Kumar T, Ashwin J

The Elimination Round of the Top 12 winners of the Prelims was held over Microsoft Teams. Ten questions were asked, and participants had to fill in their responses in a sheet of paper and send it to the quizmaster. The top four winners of the Elimination Round were shortlisted for the Grand Finale. The four winners were grouped in teams of two members each. Team 1 had Sagar Kumar and Sridhar S, while Team 2 comprised Sandeep S and Durairaj S



The finals were held on 19 June 2021. The 'Bounce & Pounce' method of scoring was adopted, and there were four rounds: Current Affairs, Personality, Technology and Technology History. The teams were cautious at the start but the quiz soon transitioned into a thriller as the pendulum swung to either direction with each passing question.

The team scores were tied at 180 points before the final question.

The teams waited with bated breath for their final question. It was like a sudden death situation (in Football lingo). Team 1 decided to take the risk and answered the question. Their risk was rewarded, as they got the answer right and were adjudged the Champions of the inaugural edition of the QRIOSITY Technology Quiz! Our CE, Head - Global Operations & Design Head, addressed the gathering and congratulated the winners and participants.

Technology Month 2021 was special in many ways at L&T Valves, and we will endeavour to continue this tradition in the years to come.



# Environment Month Celebrations

*Presenting the green warriors who helped spread the message of environmental protection and conservation.*

## Campus Photography Contest



*Winner - Sugumar S, KPM*

## Home Garden Video Contest



*Winner - Thyagarajan M*

## Crossword Puzzle



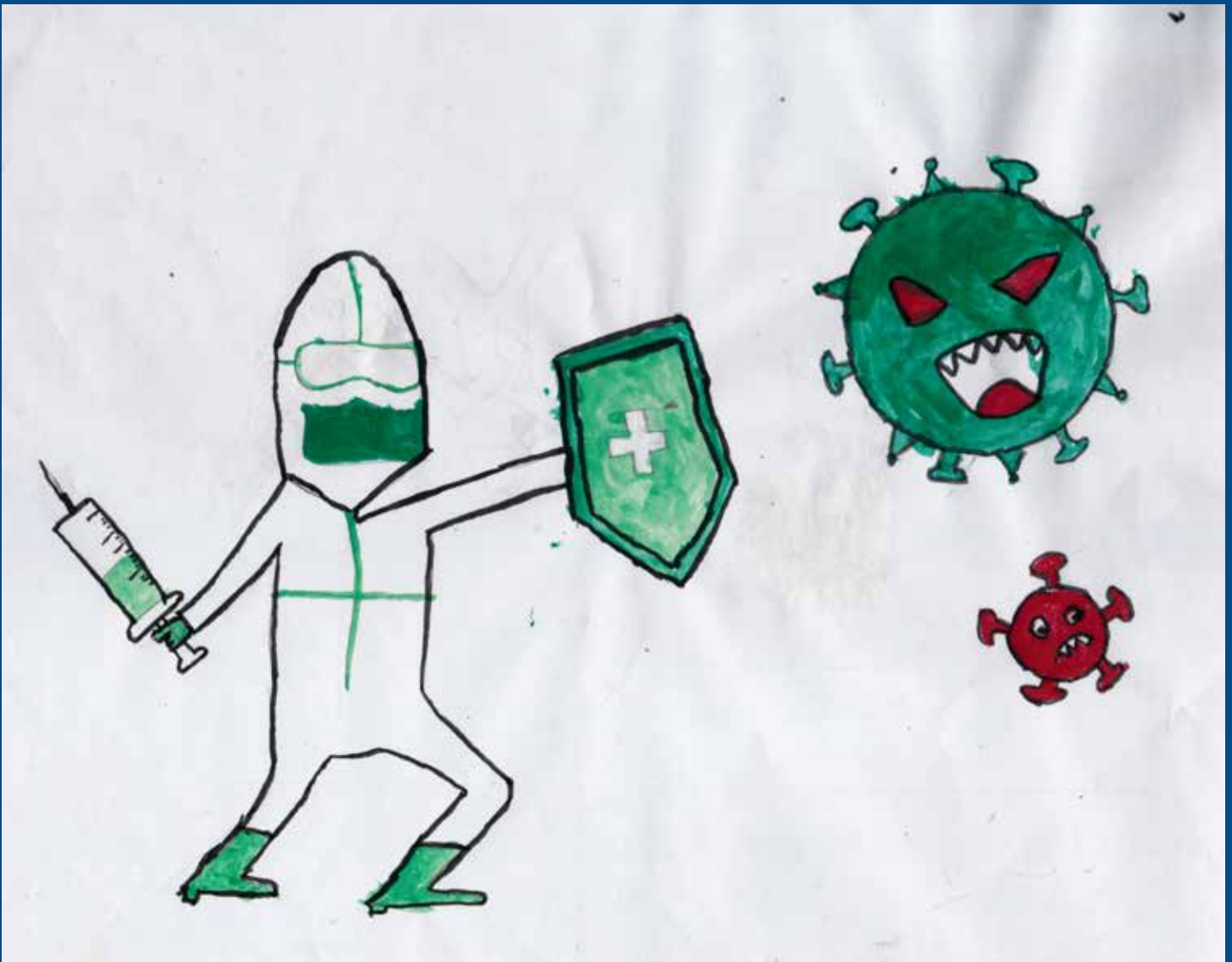
*Winner - Durairaj S*

## Oratorical Competition for Val-kids



*Winner - Shwetha S,  
Daughter of Sridhar S*

# Don't Hesitate. Vaccinate!



Art courtesy R Nishanth (6 years), son of Ramkumar P, CBR

Wear Mask | Maintain Distance | Sanitise

