

PROPEL

ISSUE 9 | JULY 2016

AT THE CUTTING EDGE OF TECHNOLOGY

From light weighting and safety features to new emission and fuel efficiency norms, there is tremendous emphasis on technology and innovation at Rane Group.

THE WORLD OF RANE



Expanding Horizons

Rane Holdings Limited (RHL)

Rane Brake Lining Limited (RBL)

Rane Engine Valve Limited (REVL)

Rane (Madras) Limited (RML)

- Steering & Linkages Division
- Diecasting Division
- Rane Auto Parts
- Rane Precision Die Casting Inc. (RPDC)

Rane NSK Steering Systems Private Limited (RNSS)

Rane TRW Steering Systems Private Limited (RTSS)

- Occupant Safety Division
- Steering Gear Division

Rane Holdings America Inc. (RHAi)

JMA Rane Marketing Limited (JMA Rane)

SASMOS HET Technologies Limited (SASMOS)

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For queries: Please mail: prem@growthmechanics.in

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AT THE CUTTING EDGE OF TECHNOLOGY



As I begin to write this note, we at Rane Group are very positive about the overall market opportunity in front of us. In my view, Q4 of last year was in line with our expectations with no major surprises and we're indeed happy to see the recovery of the automobile sector. In the two-wheelers segment, which got affected in FY 16 due to a sluggish rural economy, we see things looking up. Additionally, a normal monsoon should see revival of growth in the Farm Tractors' segment.

During the last few months, we completed our planning and budgeting phase for all our group companies. Further, we've initiated a new program called the Rane Plant Score (RPS) to further enhance operational excellence. It is a self-evaluation process, wherein each plant scores its own performance on key metrics and drives improvement plans.

Capex Plans

As we expect continued momentum across key segments in the Automotive sector in FY 17, we're planning a capital expenditure of Rs. 280 crore across group companies.

Although we have planned Rs. 85 crores in Rane Madras, the actual spending will be carefully monitored based on the capacity utilization of the new die-casting plant and overall performance in the first half of the year.

At Rane NSK, we're making investments of about Rs. 95 crores to service new customer orders – especially from Maruti Suzuki and Honda – and these will mostly

be delivered from our plant in Bawal, Haryana.

Also, like we all know, the seatbelts and airbags business is witnessing tremendous growth and Rane TRW is gearing up to capture a good share of this pie. We've also won a new export order from Korea for the seatbelts business. We'll also be enhancing the production capacity of commercial vehicles steering gear in our Trichy plant.

Overall, we're allocating about Rs. 50 crore from our capital expenditure budget to Rane TRW.

Our first acquisition in the U.S.

One of the major milestones from the last quarter is the acquisition of Precision Die Casting in the U.S. The biggest reason for this acquisition, in line with our global aspirations, was to work closer to our customers and bring our products faster to the market. In the current quarter, we'll be learning more about this business, understand their current management bandwidth, learn about various business, operational or cultural aspects and, broadly, sensitize ourselves to running a company outside of India.

Focus on technology & innovation

From a technology perspective, there is tremendous management interest in capturing future opportunities in the marketplace with the right approach to innovation. We're working on certain broad themes, across various products at Rane; Some of these themes include:

- Light Weighting
- New emission and fuel efficiency norms
- Safety features

On the light weighting front, one of the focus areas is to increase the usage of Aluminum instead of a heavier material like cast iron. For example, we're seeing increased efficiency and weight reduction by the right usage of Aluminum in hydraulic steering pumps and power steerings. In the manufacture of steering gear linkages, we're researching the possibilities of replacing solid bars with high-strength hollow tubes.

On the friction materials front, we believe whatever trends we saw emerging in passenger cars – noise reduction, better braking and reduced vibration – will now become mainstream in commercial vehicles as well.

The Indian government also recently made the announcement to move up to BS-VI emission norms by 2020, from the current BS-IV norms. This, we believe, will lead to new technology on the engine side, both in existing products like engine valves and newer products as well. With increasing emphasis on safety features, airbags and seat belts technology is being upgraded.

On a closing note

The key message I want to leave our employees with is that we must capitalize on this growth momentum in the market and not miss any opportunities. In fact, if the growth sustains, we should aspire to do even better than our goals mentioned in the strategic business plan.

Also, as you all know, we're pursuing a number of leadership initiatives at Rane. Developing a leadership pipeline and enhancing the breadth and depth of our management is crucial to our growth plans.

Looking forward to a good year ahead.

“WE MUST NOT BE AFRAID TO STEP OUT OF OUR COMFORT ZONES. TECHNOLOGY FOCUS IS SHIFTING FROM AUTO MAKERS TO SUPPLIERS.”

Excerpts from Dr. V. Sumantran's talk to senior management and business heads of Rane Group

We invited Dr. V. Sumantran, currently the Chairman of Celeris Technologies, to address senior management professionals at the Rane Group, earlier this year.

Dr. Sumantran is a very well-known business leader, and was the former vice-chairman of Ashok Leyland. Currently, as Chairman of Celeris Technologies, he is an advisor to several leading Fortune 100 companies in auto, industrial equipment, defence and aerospace sectors. A distinguished visiting professor at the IIT Madras, he is currently writing a book on the future of the global auto industry in partnership with MIT. He was also a special advisor to Mr. Carlos Ghosn, Chairman of Renault-Nissan Alliance, on alliances and product strategy. He also served as the CEO of the passenger car business at Tata Motors, between 2001 and 2005.

In his talk delivered to our senior managers, Sumantran touched upon several key topics for the auto industry including business model innovation, disruptive technologies, and dealing with complexity. Here, we've culled out excerpts from his talk.

(As narrated by Dr. V. Sumantran)

The big challenges for OEMs

“The automotive industry is a capital junkie,” in the words of Fiat-Chrysler CEO, Sergio Marchionne. There is a reason for this – typically, automobile companies plough back enterprise value every one and a half to two years in product research and development. Therefore, achieving profitability is a challenge. Generally speaking, volume manufacturers are not even generating the cost of capital. Their Weighted Average Cost of Capital (WACC) is also quite poor. Premium manufacturers may, in good years, be profitable. But, return on investments is failing, and EBITDA is behind many other industries.

Moreover, competition is high and because of it, pricing is low. Cost of

manufacturing is going up but not the pricing, so that's another area of pressure on car manufacturers. Then, there is the additional need to add content (electronics, other features) and compliance requirements, for which the customer is reluctant to pay.

I say all this because it is important for every stakeholder in the automobile industry to understand the realities of the OEMs and take decisions accordingly.

Our products are becoming more complex

Product Variety and Platform Complexity are increasing, which is further driving the costs up. Earlier, a car brand used to have just a few models. But today, each brand



has several models with just minor variations to differentiate them.

There are many possible combinations of non-identical cars for one brand. So the manufacturers have to keep track and work on the optimum possible combinations even if they do not engineer all of them. This has led to the products exploding in the market.

Another complexity is the use of software in cars. If we compare a Raptor or Boeing A380 to a Mercedes 2000 S Class model, approximately speaking, the Raptor has 5 million lines of code, Boeing has about 100 million while Mercedes has 200 million! But to a Boeing's price of \$100 million, Mercedes is only a US \$100,000.

Demanding customers and society

There is no doubt that customers want novelty. Every six months, the market sees new models, new brands and people are on to the latest thing. The average life of a car is shorter, accelerating product obsolescence.

Society is demanding more and that is adding pressure on the industry. There is a need for eco-friendly cars, energy efficiency, emission control and fuel economy. Fuel efficiency is expected to improve by 50 percent in the next five to eight years. The US market is looking at cars that can potentially give a mileage of 35-54 miles per gallon. India also has its roadmap. The question for the industry is, how do you achieve it?

Europe is targeting 78g/km CO₂ emission. Just to give you a perspective, a cyclist generates 15 g/km of CO₂. In Germany, there is a car where, when two people get into it and drive away, they generate 30 g/km of CO₂. So it is possible, but it costs money, time and a relook at existing manufacturing technologies.



APART FROM INDUSTRY RELATED FACTORS, CAR MANUFACTURERS ARE ALSO FACING COMPETITION FROM AN UNEXPECTED SOURCE - TECHNOLOGY COMPANIES SUCH AS GOOGLE AND APPLE.

There is a commitment to comply with BS-VI by 2020. How are we going to get there? There are technologies to drop particulates, NOX emissions from cars, etc. But that is going to require significant investments.

Learning about the disruptors

Apart from industry related factors, car manufacturers are also facing competition from an unexpected source – technology companies such as Google and Apple. They all want to get into this segment and are probably investing into building cars. Earlier the high investments were a barrier to entry, but these Silicon Valley companies have the capital and the willingness to experiment.

They are potential disruptors to the traditional auto industry. For instance, Jabil – a solution provider for Supply Chain Management – had a die cast tool that can manufacture a die cast in three days as against the industry standard of three months. Since they need scale, they are approaching auto manufacturers.

Tesla Motors has generated significant interest – people are camping in

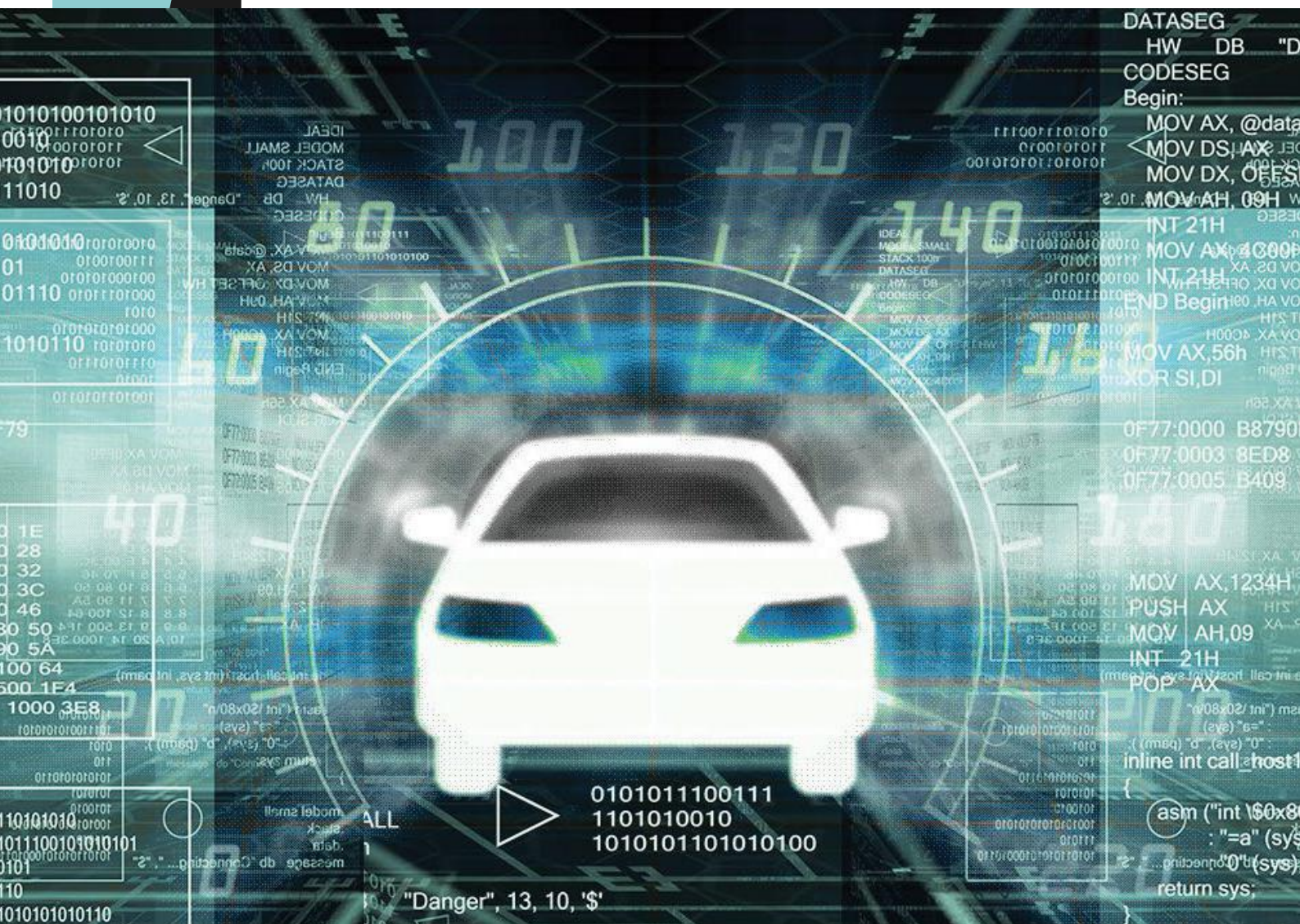
its parking lot to book their cars the next morning, though the car will be launched only in 2017! They have changed the way people buy cars. Using the pull approach, they build the image of the brand first to attract customers, who book in advance.

Unlike in traditional cars, the network is left open for downloading updates any time it is ready and available. This has revolutionized the automobile industry as no traditional manufacturer would ever recommend leaving the network open. Car maintenance too has changed. A customer who couldn't start her car, that she had parked the previous night in her garage, called Tesla service. She was taken through a few menu options over the phone, and the problem was resolved remotely, delighting the customer. A traditional manufacturer, on the other hand, would draw much flak if the car stopped working suddenly. The auto industry does not work that way. On the other hand, the auto electronics industry is trying to understand user needs and is catering to it.

An era of constant churn

There is constant churn in this industry. Now other new players are ready to enter the industry and do to Tesla what Tesla did to the auto industry – disrupt its model. Chinese players are entering the foray in right earnest and working hard to change the perception that Chinese quality is poor.

Mobility is becoming the crux of the personal auto industry today. Rather than looking at cars and their sales, the industry must take into consideration the changing perception about how people want to commute. It is becoming multi-modal. Companies like Uber and Ola have changed the market and even car manufacturers are looking at services such as Cars on the Go – you can rent a car, drive, leave it anywhere, pick up another when you need it again; all by



downloading an app on your mobile. Data suggests that this car float or sharing of 1 car, potentially eats into sales of 13 cars.

Another trend will be the industry opting for collaborations to remain profitable and focus on their core business instead of handling the entire chain.

Capabilities are shifting to the East, and the good thing is that India has the right capabilities. Though Tata Nano was not a great success,

Renault Kwid is an example of frugal and innovative engineering made in India. Another example is Albonair GmbH, an associate company of Ashok Leyland. The company, with its manufacturing units in Germany and Sriperambudur, supplies an indigenous exhaust after-treatment system to Volvo Trucks.

We must not be afraid to step out of our comfort zones. Technology focus is shifting from auto makers to suppliers, and companies such as Rane need to come up with innovative solutions and work as partners.



THERE IS NO DOUBT THAT CUSTOMERS WANT NOVELTY. EVERY SIX MONTHS, THE MARKET SEES NEW MODELS, NEW BRANDS AND PEOPLE ARE ON TO THE LATEST THING

"WITH REGARD TO PEOPLE MANAGEMENT, THE ONE THING I HAVE FOUND CRITICAL IS TO BE FRANK, CLEAR AND UPFRONT"

Anjanikumar Choudhari, Independent Director, Rane Holdings Limited, shares his views on India's auto sector, the opportunity to build a competitive advantage using R&D, the government's 'Make in India' campaign, and the importance of managing people right.

Anjanikumar Choudhari has over four decades of experience in India Inc. He joined Mahindra Group in 1999 and held several senior leadership roles including that of Executive Vice President of Human Resources & Corporate Services and President of Farm Equipment Sector.

Prior to joining the Mahindra Group, Choudhari worked for over 3 decades in several key positions at Unilever/ Hindustan Lever.

A veteran of Indian industry, Choudhari holds a Masters in Management Studies from Jamnalal Bajaj Institute of Management Studies, and today serves on the board of Rane Holdings Limited.

In this interview with us for Rane Propel, the business leader brings to the fore his experience in India's automobile industry and shares his thoughts on several key subjects.

(As told by Anjanikumar Choudhari)

According to you, what will be the key drivers of India's auto sector in the future?

In general, automobile markets are impacted by GDP and employment growth, the availability of credit, the price of fuel, and overall consumer confidence. Basically, any economic statistic that reflects increased disposable income impacts auto sales. These apply equally to India's auto market, with perhaps a special dependence on rural prosperity for two wheelers and infrastructure development for commercial vehicles.

Additionally, automobile sector exports, which relies on our country's technical capabilities and cost advantage, significantly depends



on whether the bounce-back of the American economy is sustainable, clarity on the economic situation in Europe and the impact of Chinese surplus capacities driving down prices.



ASCERTAIN IF THERE IS AN OPPORTUNITY FOR A COLLABORATIVE PRODUCT DEVELOPMENT EFFORT WITH SELECT OEMs

From a regulatory perspective, what recommendations do you have for the government to boost manufacturing in the country? How does the 'Make in India' campaign become truly meaningful and successful?

The National Manufacturing Policy announced in 2011 had planned that manufacturing sector growth should be 2-4% more than GDP growth, increasing manufacturing's share of GDP to 25% by 2025 and creating 100 million new jobs.

Currently, the manufacturing sector contributes about 14% to India's total GDP, which is lower than other emerging economies, which are seen as providing significant competitive advantages for their manufacturers, including China where the contribution is about 32%.

So there is still a long way to go and the 'Make in India' campaign recognizes this.

Four specifics which, I believe, need to be addressed are:

- The emphasis should be to create globally competitive local infrastructure in advance which will attract manufacturing rather than providing infrastructure after the manufacturing investment is made and overstrains local resources. It

would be ideal to create industrial clusters with integrated townships. If we can create 2 or 3 such clusters, it'd serve as a proof of concept and an example for more such industrial clusters.

Of course, this is in addition to basic infrastructure development like building ports, highways and power grids.

- We should certainly make labor laws less rigid and less complicated, so that there is flexibility in manpower management.
- The government must setup industrial training institutes in the form of public-private partnerships, and must provide relevant vocational and skill training at scale.
- Additionally, the government must eliminate uncertainty in the regulatory and legal environment so that investors can take a long term view – commit to a consistent, long-term policy in areas such as FDI, which allows reasonable levels of foreign stockholding, environment protection, land utilization and develop a more liberal and simplified tax structure, with a greater level of transparency to improve consistency of interpretation.

What should be an effective approach to R&D in today's business environment – both strategically and operationally?

The answer to this really depends on the type and size of the business in question. Also, one needs to be clear whether it is 'R' or 'D' which is more critical.

For a reputed, technically capable, component manufacturer, some options worth pursuing are:

- Ascertain if there is an opportunity for a collaborative product development effort with select OEMs, ideally with joint IPR – which can cement relations further
- Identify core discontinuities possible in the future and pick and choose the right items for R&D. For example, research on new materials, shifts in design with alternative fuels or even legislative moves, can help generate competitive advantage
- Identify how new technical innovations, say, additive manufacturing or explosive welding, may be used in your process to bring in a cost or quality advantage
- Explore opportunities where sourcing-in designs may be better than in-house development, for better speed to market



ON ORGANIZATION BUILDING, DELEGATION HAS BEEN CRITICAL - SUPPORTING AND HANDHOLDING BUT AFTER GIVING SUBORDINATES THEIR SPACE

From a pure people management and organization building standpoint – what are key lessons you’ve learnt from your own journey?

A 45 years’ career certainly teaches many lessons in people management and organization building! If, however, I was to select just two, those would be:

- With regard to people management, the one thing I have found critical is to be frank, clear and upfront. Too often, especially as Indians, we have a tendency to soft-peddle and delay feedback. This seldom helps and generally works against the interest of the other person to whom we are trying to be kind. Often, such lack of clarity also results in procrastination in important decisions to the detriment of the business.
- On organization building, delegation has been critical – supporting and handholding but after giving subordinates their space. The faster a boss can make himself ‘redundant’ by such delegation, the faster the organization will develop – and so will the boss’s career!

If you’d like to share one piece of advice with managers in India’s manufacturing industry, what would that be?

Since it has to be just one, single piece of advice, I would say “Speak out”.

Most of us have been brought up in a family culture where hierarchy was strong and elders were to be obeyed. This was usually carried into our jobs and, an even more obviously labelled, hierarchy.

Too often one had this regret after a meeting: ‘Arre, I had exactly the right solution/same idea/more alternatives – I wish I had spoken out!’ It is quite common for subordinates to come up after a meeting is over and say ‘Sir, I did not want to say in the meeting but actually I think that’

My advice is, therefore, to speak your mind, express yourself – never sacrifice an opportunity to contribute a relevant input in a suitable way. At worst, you will be shot down (or be given add-on work to implement your suggestion!) but you won’t be ignored and you will spare yourself post facto regrets.

FEELING THE PULSE OF THE MARKET



G Parthipan, President, Rane TRW Steering Systems

Rane TRW, which manufactures Hydraulic Steering gears and Occupant Safety Products for all types of vehicles, has been agile and responsive to market changes and thus kept itself competitive and relevant.

Rane TRW, a joint venture between Rane Group and ZF TRW, manufactures Hydraulic Steering gears and Occupant Safety Products for different types of vehicles including passenger and commercial vehicles. While the technology development in Steering Gear Division (SGD) is managed locally, the Occupant Safety Division (OSD) works closely with the JV partner for technology and marketing. The SGD has a vision to be a leader in the domestic hydraulic steering business and the OSD vision is to be a preferred supplier of occupant restraint system with a commitment to safety. To fulfill these visions, the company has fine-tuned its marketing and product technology skills to be relevant and address the needs of its customers meaningfully. Both the divisions are preferred partners of its customers, committed to quality and keeping pace with the latest trends in the specific product categories.

Steering for Success

Rane TRW SGD runs four manufacturing units – manufacturing commercial vehicle Steering Gears in Trichy (started in 1988); rack and pinion, and pump at Guduvanchery (started in 1996/97) ; and one factory for commercial vehicle/rack and pinion gears at Pantnagar in Uttarakhand to serve the customers in that region.

As mentioned earlier, the SGD manufactures hydraulic

power steering. The passenger vehicles had migrated to electric power steering at an unexpectedly rapid pace. This had a considerable impact on the revenues of SGD and the division is looking for other avenues for its business growth. But, in parallel, there was an increase in the revenues from the commercial vehicle segment and so the company decided to turn its focus there and on exports due to its competitiveness.

“It is a very mature product and has not seen any changes in the last 10 years. So one of our focus areas has been to make it more energy efficient by introducing a variable displacement pump. We are looking at modular aluminum pump as against cast iron and we are also looking to introduce electronic components,” explains G Parthipan, President, Rane TRW Steering Systems Pvt. Ltd.

Traditionally, the tractor industry uses a hydrostatic power steering gear. SGD has offered a value proposition to the tractor customers by designing a recirculating power steering gear. This is expected to bring down the cost and improve the efficiency.

Protecting Passengers with a Commitment to Safety

The company started manufacturing seatbelts in 1997. In 2012, it started the airbag manufacturing division. The



plant for these two product lines is in Singaperumal Koil, and takes care of manufacturing the products designed by ZF TRW. "These are very complicated products" explains Parthipan.

The seatbelts with Emergency Locking Retractor technology is the most commonly used one. Rane TRW is exploring the latest technology products using pretensioners to further protect the occupants. SPR4, the latest technology in seatbelts, is another initiative the company is working on. In airbags too, the company is looking to bring in the latest technology.

Export is a big opportunity here. The company has already won an order from Hyundai, Korea, and hopes to get in to Hyundai, India, as well.

Milestones

The entire Rane Group follows Total Quality Management Principles, and RTSS is no different. It won the Deming Prize in 2005 and the Deming Grand Prize in 2011.

The company has a strong belief that it must deliver as per the promise made, regardless of changes in customer demands. This has been possible because of the culture to align to the customers' needs using Lean Manufacturing principles.

This attitude was particularly evident during the recent Chennai floods in 2015. Both Divisions had to be closed

RANE TRW IS OPERATING AT THE CUTTING EDGE OF TECHNOLOGY ACROSS BOTH ITS DIVISIONS - STEERING GEAR DIVISION (SGD) AND OCCUPANT SAFETY DIVISION (OSD).

for about a week. Customers were naturally nervous. But the factory lines came up one by one and the team worked round the clock to deliver on time.

The company also believes in the PDCA model, to make sure that any deviations from the planning stage are corrected mid-course after analyzing the reasons.

Additionally, Rane TRW believes in employee empowerment, following lean principles and adheres to the PDCA approach to be responsive to market needs and implement its 'Customer First' policy meaningfully. Based on price and performance metrics, Rane TRW is confident of approaching the export markets.

A GURKUL-STYLE LEADERSHIP DEVELOPMENT EXPERIENCE

We spoke to several managers who attended the Leadership Development Outbound program at Pegasus Institute of Excellence and underwent executive coaching, to get a perspective of what they learnt and experienced at the workshop.

Outbound Program

Rane has a rich tradition of nurturing promising leaders within the organization. The recent Leadership Development Outbound program conducted at Pegasus Institute for Excellence, Pondicherry, on 22nd and 23rd of April 2016 is one such example that provided a platform for the development of 31 high potential employees.

The overarching objective of the program was to sensitize and build leadership perspectives for the participants; The program also entailed sessions that focused on enhancing competencies such as ambiguity tolerance, result orientation, attention to detail, influencing, collaboration and team development. The event was designed based on the learning needs that emerged from Individual Development Plans of the target participants. The environment was created bearing semblance to a Gurukulam, with the participants staying in tent-like structures, dining under the open sky and going for early morning walks in the beach. The faculty members, Brigadier Williams and Colonel Bala, facilitated several

lively and meaningful sessions, that helped break inhibitions.

Hari Nair of RBL, who found the experience highly enriching both from an individual and team development perspective, said, "Through certain well-crafted activities, the program helped us identify our competencies, especially the ones relevant to our organizational roles."

The methodology of "Action-Learning Cycle" helped participants understand the concepts of leadership at three levels:

- Doing an activity
- Reflection on one's actions, behaviors and learning from it, and
- Applying the learning in further activities.

Specific learning at Pegasus

All participants at the program unanimously mentioned one key takeaway from the program, and that was about the most effective way to give and get feedback. At Pegasus, the managers learnt how feedback has to be descriptive, informative and based on data. The managers learnt how such a feedback mechanism

is essential to develop the ability to influence and collaborate with others.

Another key learning revolved around the importance of detailed, in-depth planning and how crucial it can be for the success and failure of a project.

According to P. Sundaresan from RTSS, this event helped in self-assessment on key competencies and a reminder of what we learnt in the High Performance Leadership Development (HPLD) intervention. (Several Rane managers had attended a HPLD program organized by School of Inspired Leadership sometime back). "I also understood the key enablers and traits that can shape these competencies further and where I need to focus," he explains.

Implementing the Learning

One of the major aspects covered during the program was about how one must habitually implement learnings from such workshops.

RBL's Hari Nair intends to specifically act on three aspects he learnt – ambiguity tolerance, detailing and influencing, and document the following to make progress.

- When and Where the trait was demonstrated
- How the above traits were modulated and what the result was?
- The feedback from the relevant stakeholders

"I believed a self-reflection of this, maybe, once in a quarter, will certainly help me course correct if needed," he says.

For Sundaresan from RTSS, the key application area was in identifying new processes to cope up with the quality and productivity requirements in manufacturing.

Another manager who attended the program, Sagar Kota from REVL, believes the program is useful in understanding one's leadership traits and, importantly, clear general misconceptions. "Key takeaways for me from the program include – knowing what motivates the team for performing their best, importance of paying attention to detail, collaboration as a tool for achieving goals and taking decisions in ambiguous situations." He believes that these may sound like minute aspects of leadership and decision-making, but, at the end of the day, can make a significant difference.

Executive Coaching

At Rane, we also have a structured coaching program to develop high potential leaders for the future. In 2015-16, several high potential leaders underwent coaching. Going forward, more people will be mapped with a coach to drive the overall leadership development agenda. Three of them share their coaching experiences here.

Makesh of RML, one of the people who was identified to be part of this initiative, says frankly, "The moment I was told that I will be coached, I

was taken by surprise and clouded with apprehension. I have always associated "coaching" with specific outputs – in school we will be sent for coaching if we are not good at some subject to enhance our grades." Even as he was apprehensive about the reasons for being selected for this program, he found it to be a wonderful journey of self-discovery, growth and improvement. It made him aware on his limitations and enabled him to work on it.

The tools used were very scientific (for example, EQi, 360-degree feedback etc.) revealing more realistic insights, on both positive feedback and improvement aspects. "A lot of my hidden strengths came out," he explains.

MAP Sridhar Kumar of RBL, believes this coaching experience has enabled him to introspect on both professional and personal fronts, helped understand himself better and provided clarity on how to progress towards desired goals.

Having an open mind, to accept things as they are, not overanalyze and consider the coach a facilitator rather than a mentor has helped the mentees gain immensely from the coaching exercise.

S. Bhargav of RBL, Trichy, adds, "Over the years, Rane has helped enhance my educational qualifications; The company motivated me to pursue a 1-year Executive General Management Program at IIM-Bangalore."

Additionally, he has also benefited from coaching, which included journaling and reflection and learning to understand new perspectives through discussions.

RML's Makesh believes this program has helped him in many dimensions, specifically, improve his outlook and

attitude towards life. "The whole exercise has reduced my anxiety levels and given me clarity and calmness to overcome crisis," he adds.

The key learnings for Makesh were:

- Keeping emotions regulated at all times
- Delegate more wherever possible

RBL's Sridhar says the program helped him in other areas that include:

- Carefully understanding 'areas that need attention'
- Identifying his blind spots and how to overcome them
- How follow ups, reviews and feedback are critical to achieve goals
- Ensuring work-life balance

Summing up on behalf of all attendees, RBL's Bhargav says the coaching helped in several different areas:

- Goal setting with strategic action plans
- Driving for change within the organization
- Becoming more self-aware
- Accepting and appreciating the cultural diversity
- Ambiguity tolerance
- Building upon new perspectives and strengths
- Improving as a person - both at home and at work

Most importantly he believes, this process of learning, especially about oneself, is a continuing journey.

As we can see, for each person, the takeaway from this leadership development intervention was unique and personalized. And, as we gear up to enhance our leadership pipeline for the future, we'll engage our managers and leaders in many such programs.

RANE DATA CENTRE – AN ENABLER OF BUSINESS GOALS

Currently, Rane Data Centre (RDC) is responsible for implementation and management of all technology needs across Rane Group companies.

As is often repeated, over the last two decades, the role of technology in each and every sector has been tremendous. Technology provides the right tools to bring in efficiency to operations and business processes, while also making sure data and information is readily available to make critical business decisions.

Established in 2004, Rane Data Centre (RDC) caters to the technology needs of all Rane Group companies. In the process, RDC partners with various technology solution providers to meet specific business requirements.

At a macro level, the aim of setting up and operating RDC was three-pronged:

President-Corporate Services and Group IT Head, Mr. R. Venkatanarayanan, has a long-term vision of further building RDC as a customer-centric shared service IT services provider leveraging emerging digital technologies

SOLUTION	ACTIVITIES
Business Process	Payroll, Accounts Payable
IT Application	Development - Attendance, Performance Management System, Access Management, Workflow management Maintenance and Customization - ERP System, Data Warehousing and Business Intelligence, Intranet Portal, Website, IT Helpdesk
Custom Technology	Microsoft .NET, Workflow capabilities to provide custom IT solution for businesses Advises on specific new technologies
IT Infrastructure	IT Assets, Data Centre, IT Connectivity, Conferencing facilities

INFORMATION SECURITY - RDC IS ISO-27001 CERTIFIED, PERIODIC AUDITS AT LOCATIONS

- **Cost Efficiency** – Lower the Total Cost of Ownership (TCO) and realize quicker Return on Investments (ROI)
- **Process Efficiency** – Bring in scalability, improve productivity and faster completion
- **Business transformation** – Have IT processes to support our vision of accelerated profitable growth

RDC offers more than just traditional services of a data centre viz., redundancy and uptime goals, ensuring network bandwidth and processing capabilities. RDC was designed holistically, with centralization of business critical applications, including SAP implementation. This required wide network connectivity to all locations of Rane. This was provisioned from the TRDC (Transit Rane Data Centre) at Tidel Park, Chennai.

At the same time, Rane Group wanted standardisation of the end-user IT Support as well. This was accomplished by outsourcing the IT Facility Management. Subsequently, other IT support services were also brought into RDC, through the last decade.

RDC's SERVICES - Data centre and beyond...

RDC provides secured information processing and energy efficient infrastructure to realise full potential of businesses' investments. RDC also enables optimum reusability and technology consumption by facilitating transparency, metric-based governance and proactive/on-demand support. Broadly speaking, RDC services to Rane's businesses can be classified under the following areas:

RDC collaborates with various internal stakeholders and delivers IT

solutions with stringent service level agreements.

President-Corporate Services and Group IT Head, Mr. R. Venkatanarayanan, envisions RDC as a customer-centric shared service IT service provider with an all-digital on-demand ecosystem, to eventually pave the way for a Rane Digital Centre.

To meet the business need, Data Centre transformation and managed services continue to be key strategies for IT. RDC will continue to be a true partner enabling Rane achieve business excellence by processing information that can lead to innovation. At every stage, being agile and responding to the internal customer needs and upgrading the technology will continue to be the primary goal.

CAPABILITY BUILDING FOR INDIGENOUS TECHNOLOGY DEVELOPMENT

Upskilling its R&D team has enabled Rane NSK to increase its product offerings from 11 in 2008 to 38 today.

Typically, the approach of most manufacturing companies is to highlight their products' capability and suitability for its customers, and find the right fit. Rane NSK Steering Systems (RNSS), which manufactures steering columns, was no different. From the time it was established in 1997 as a joint venture between Chennai-based Rane and Japanese firm, NSK, its strategy for selling its manual steering systems followed this familiar approach to passenger and commercial vehicle manufacturers.

In 2008, RNSS was able to see that the market started changing and Electric Power Assisted steering columns started being used widely in passenger vehicles. They anticipated a corresponding decrease in the volumes manufactured in the Chennai plant from 800,000 units to around 200,000 in the next three years for passenger vehicles. However, in the commercial vehicle space, there was a promising opportunity to grow from 200,000 units to about 400,000 in the same time period.

The writing on the wall was clear. The company had to shift the focus

of the Chennai factory to cater to commercial vehicles. This needed capabilities to be able to understand the segment and provide relevant solutions.

Meanwhile, all research and development was done in Japan and the team here was only focusing on application engineering of the design with local OEMs. Passenger vehicles formed the primary focus, with commercial vehicles forming only a small percentage of the total volumes. Limited local capability and technology for the commercial vehicle space was a challenge.

To "Customer First" from "Product Focus"

Now, with the change in market conditions, the approach of selling what was available was not enough. RNSS had to understand the needs of the customers and upgrade their capabilities to suit future trends. "In-sighting" discussions helped the company gain deeper insights into customer requirements, which regular product development-based discussions alone may not reveal. These include understanding the market trends for the customer's product, their technology road map

for the next five years and current pain points and limitations. These inputs also helped RNSS understand the levers that can enhance its value to the customer. "A "Customer First" approach in all our thinking and actions gave the company greater clarity, visibility and focus," says K Saravanan, Head-R&D, RNSS.

People Development

On understanding the need and necessity, RNSS had to gear up its own local technology development capability since the Japanese parent's focus was much on the passenger cars. With support from NSK, the next stage was initiating local skill development. In 2010, a team of five, three managers and two engineers, was sent to Japan to enhance capabilities. The two engineers were further trained in specific technology to meet future market needs. Since then, RNSS engineers have been sent periodically for training, and Japanese trainers have also been brought down to provide training to the engineers here. RNSS also got support from Rane's training institute – RIED (Rane Institute for Employee Development) – to constantly refresh and upgrade their skill and competency.



RNSS HAS CREATED A TEST LAB WITH A TWO-PRONGED PURPOSE: SERVE AS A LEARNING GROUND FOR ITS ENGINEERS AND A SHOW ROOM FOR ITS CUSTOMERS, TO FEEL THEIR PRODUCTS AND TECHNOLOGY

Test Lab: Engineer's "Class Room" & Customer's "Show Room"

RNSS has created a test lab which is a learning ground for its engineers and a show room for its customers, to feel their products and technology. Earlier, all products would go to Japan for testing. But there are certain conditions unique to India and hard to replicate; also when engineers assess their products in their own hands, it gives them lots of learning and confidence. Customers are assured that the product that is going to sit on their vehicle is undergoing rigorous tests and it is reliable. This makes RNSS a valued partner, which can co-work and bring quicker solutions to them.

Since importing test equipment was prohibitive due to the high investments needed, they combined research and product development capabilities to develop their own machines. Over the years, the lab has been able to add more and more test capabilities considering the different kinds of terrains the commercial vehicles may need to travel on. As a result, the local capability increased to 80 tests out of 82 tests that were needed totally. The two tests that get done in Japan needed huge investments and, anyway, have less utilization factor locally.

Apart from having control laboratory testing, recently RNSS added the

capability to measure the real time signals from vehicles (while on road/track testing) and simulating those signals in the lab. RNSS is now capable of measuring NVH characteristics, loads, deformations, temperatures etc. Closer application of 'working environment' situations in a lab and predicting the product's function and behavior in real time, help RNSS engineers improve product robustness.

Theme-based Development

Based on insights from the market, the R&D team coined five themes to focus on for its product development: light weight, safety, comfort, service and low cost.

It has experimented with materials and processes for manufacturing to bring down costs. It has innovated with designs to improve safety and comfort. It is also working on the number of parts to be touched to bring down service times. All these have resulted in lower costs not only of ownership but maintenance as well.

With these improvements, the product found an immediate taker in an MNC manufacturer as well, who had approached for a column, thus effecting import substitution. This has also opened up newer markets for the company.

Customised Roadmaps

In 2011, the Chennai R&D team

crafted a technology roadmap based on development themes; new technology features and products were introduced to the market. Its market share grew from 23 per cent to 32 per cent in 2012. Out of eight platforms introduced in the Commercial Vehicle market, RNSS secured new business for six of these platforms.

Though the efforts were a great motivation for the RNSS team, a new challenge has been brought by the market fall. RNSS Steering Column's market share had fallen to 27 per cent in 2014, at a time when the economy for commercial vehicles was sluggish. As the market was plunging, the volumes of existing legacy platforms came down and at the same time the new launches were struggling to get anchorage in the market, due to its premium nature. The learning attitude of the RNSS team helped them to introduce an innovative concept of "Modular & Standardized" product designs.

The challenge for commercial vehicle OEMs was that customers need to be "ambidextrous"; meaning, they need technology products to counter competition from MNCs but at a low cost. At such a time, a leading LCV



manufacturer saw RNSS's latest column and was impressed with the technology; but, due to cost, they were unable to place orders – the market was not ready to completely upgrade to the new niche platforms introduced by RNSS.

To overcome this challenge, RNSS engineers developed the product designs with modularity and standardization. Products with base level functionality and limited features can be applied to economical versions, and additional features can be added for the niche and premium versions, with incremental development effort. This saved development time, cost and provided greater flexibility to adopt the technology change. "We told our customers that all the versions are package protected from Economic to

Niche models; they can choose to opt for the versions seamlessly whatever they want and whenever they want, based on the market development," explains Saravanan.

The above changes helped RNSS secure business in current legacy platforms of the customer to add additional volume, and also helped customers have a flexibility to float between niche technology system product or economic design, based on need. With this, RNSS expects to expand its market share further to 44 per cent by FY18.

Apart from an organizational roadmap that guides product development, the company also started developing individual customer roadmaps, to be able to partner with them more effectively.

With these efforts, the total products in RNSS's stable has increased from 11 products in 2008 to 38 products.

Setting Sights on Global Markets

RNSS also has a C-EPS manufacturing facility in Bawal, Haryana. The teams here too have been trained in handling testing and solution development to improve customer service support.

RNSS is now aiming to move to the next stage in its research and development journey. Next target is to collaborate with NSK's global design centers for product and technology development and service commercial vehicles across the globe. It already exports to a few countries, but by 2018, the company aims to scale this up significantly.

NEWS ROUNDUP

RANE @ AUTO EXPO 2016

Auto Expo provides us an excellent platform to connect with several existing and potential customers in a short span of time. Rane Group has been participating in these shows from the early 90s.

The **Auto Expo Components** show this year was developed around the theme “**Mobility for All**” with a specific focus on technologies, safety and production efficiency. Our main focus was to showcase our latest products and technologies that have been developed to enhance the experience of our OEM customers and end users. For the first time, Rane Auto Parts (RAP) joined the show along with all our group companies.

We took a total stall space of 243 sq.m, the largest in our history at Auto Expo. All the main products of our group covering steering & suspension systems, engine components, friction materials, seat belts, air bags and die cast components were displayed. Through these products, we highlighted our enhanced R&D and technology capabilities. Further we showcased product applications providing light weighting, improved safety and performance, cost effective solutions to our customers.



Our show was inaugurated by Mr. Ravindra Pisharody, Executive Director (Commercial Vehicles), Tata Motors Ltd in the presence of Mr. Harish Lakshman accompanied by the Presidents and senior management team members of our Group.

The Honorable Minister for Heavy Industries, Shri Anant Geethe, graced us with his presence. Several senior executives from many of the Indian and Global OEMs visited our stall including Ashok Leyland, Maruti, BMW, Eicher, Escorts, Force Motors, HMCL, Isuzu, M&M, Volvo Eicher, Volkswagen, and Brakes India. With a footfall of about 2500, our presence at the show was a resounding success.

MEET OUR OWN ULTRA MARATHONER

Satish Babu became the youngest person to finish the Himalayan Trail 70 km ultra marathon in Mashobra, Shimla. Get Set Run (GSR) Tuffmann Shimla Ultra Marathon is touted to be India's best ultra marathon attracting participation from senior runners including Indian army captains and colonels. The route is at high elevation (2330 m) above the sea level in the Himalayas with weather conditions changing from 28 degree to 9 degree and low oxygen levels. Satish had a strong finish in the race with a timing of 10 hours 35 minutes.

Satish Babu joined Rane Brake Lining at Trichy in June 2012 as Diploma Engineer Trainee (DET). Currently,



he is 23 years old and has completed 30+ Ultra, Full and Half Marathons including SCMM and TWCM. His personal best timing for a half marathon and full marathon are 1 hour 48 minutes and 4 hours 28 minutes, respectively. The longest distance that Satish has attempted is 75 kms.

CONFERENCE @ RANE POLYTECHNIC



Rane Polytechnic College organized a conference on the theme **“Role of Polytechnic Education in Bridging the Skill Gap between Industry Requirements and Institutional Rigor”** on Feb 13, 2016. Eminent speakers from corporate, academia and government blended in, to provide rich perspectives on the theme that benefitted the college and practicing HR professionals from various companies in and around Trichy.

One of the important features of the event was the panel discussion on the topic **“Building vocational skill base to strengthen manufacturing in India”**. The session

witnessed experts from Rane Group, Sanmar Group, NIT Trichy and Rane Polytechnic. The panel discussion focused on a two-way dialogue between industry leaders and representatives from the institute to identify industry expectations and build those into the curriculum. This will enhance the employability of the Polytechnic graduates and support ‘Skilling India’.

Rane Polytechnic has made significant strides since its inception in 2011 to serve the needs of industry by offering diploma engineers, with application oriented exposure.

RANE GROUP ACQUIRES US-BASED DIE CASTING COMPANY



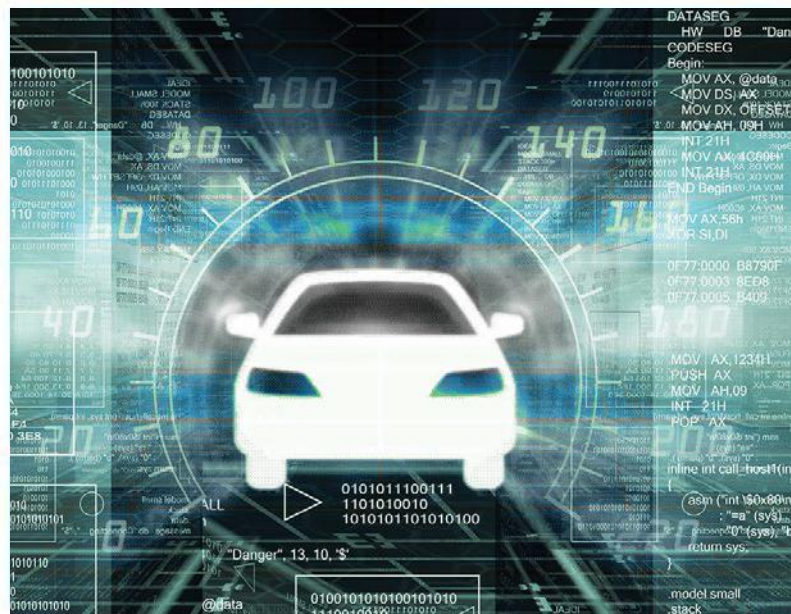
Rane (Madras) Ltd, part of Rane Group, has acquired US-based Precision Die Casting Inc. (PDC) to expand its presence in the overseas markets. PDC supplies complex, thin-walled, low porosity, cast and machined aluminum die castings to the automotive industry. PDC manufactures steering and compressor housings from

its manufacturing facility in Kentucky. PDC has an annual turnover of about \$29 million.

The acquisition is aligned with our 3D aspirations and will deepen our presence in North America, which contributes to 75% of our die-casting products revenue.

The background of the page is a light blue grid. Overlaid on the grid are several technical drawings. In the upper left, there are several interlocking gears of different sizes. To the right of the gears, there are dashed lines forming a circular path, with a small square containing an 'X' and an arrow pointing upwards. In the lower right, there is a large gear and a dashed line forming a circular path. The quote is centered in a dark blue box with white text and large white quotation marks.

“THE BEST WAY TO PREDICT THE FUTURE IS TO INVENT IT.” - ALAN CURTIS KAY, AN AMERICAN COMPUTER SCIENTIST.



Expanding Horizons

Rane Corporate Centre

"Maithri" 132, Cathedral Road,
Chennai - 600 086. India.

Phone : +91-44-28112472 / 73

Fax : +91-44-28112449