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'The business landscape is precarious due to uncertainty'

Rajashekhar Rao, CEO & Chairman, DynaFusion Technologies spoke to Autocar Professional about how the company has reinvented itself to stay relevant in the fast-changing automotive ecosystem.

engaluru-based 13-year-old automotive industry technology specialist DynaFusion offers engineering tools for developing and testing mechatronic control systems. The company's forte lies in working with technologies such as Modelling, Rapid Control Prototyping (RCP), ECU auto coding, Hardware-in-Loop Simulation (HILS) and Test Automation.

Autocar Professional spoke with Rajashekhar Rao, CEO & Chairman, DynaFusion Technologies to understand how the recovery process has been post-Covid and how it re-invented itself as it moves forward.

How has the past two years of lockdown and pandemic been? How are you recovering from it?

Furthermore, the pandemic

created an endemic situation

of uncertainty and confusion about

risks to employees, measures, and best practices that organisations

The COVID-19 pandemic has created a crisis which

is unprecedented in terms of scale and social, economic, and environmental implications. The consequences of this crisis have been many and of unpredicted severity for most organisations, due to restriction policies imposed by the government and health authorities, halting of economic activities that led to an economic crisis.

should adopt, stakeholder pressures, government shutdown and recovery plans, the potential for new waves of contamination, and lasting changes forecasted for consumer habits.

As part of the automotive industry, we at DynaFusion Technologies, also went through a challenging situation to some extent. Nevertheless, identifying the best practices for managing the pandemic situation inside the organisation was a great learning curve. This necessitated reconsidering business practices, acquiring new capabilities, and implementing innovative measures to meet the challenges of an environment that had become much more uncertain and volatile.

However, this has also given us new perspectives towards carrying on with business as usual. While keeping ourselves abreast of the situation, we implemented mitigation methodologies such as employees working from home, most of the marketing activities continued by optimising usage of technology and continuous interaction with our esteemed customers who have been always supportive. We especially would like to highlight the effort of the entire team to take a step back,

> reconfigure and redeploy with minimal lead time as far as operations go. And as concerned about recovering from the pandemic, we now have processes and systems in place to brace against unforeseen circumstances and ensure seamless delivery to our clients.

What were the core challenges over the last two years?

Over the past year, the business landscape has become much more precarious due to protracted uncertainty and confusion in pandemic response approaches. Businesses have had to manage dual economic and health crises, which have driven employee and customer engagement protocols, remote working on an unprecedented scale, the re-engineering of business models and much more.

The initial challenges were related to ensuring customer access to the test systems and the related software. This was resolved when dSPACE announced EULA

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relaxations and customers were able to work on these test systems from the safety of their homes. The next challenge was enabling the team to work end to end on IT systems while maintaining data security and homogeneity with all the tasks.

This involved changing our basic mindset and culture with respect to customer engagement, service delivery and quality assurance.

Has Covid impacted or altered your short- and long-term plans?

We have fundamentally tweaked our approach to customers. We understand the emerging need for Software-In-The-Loop tool suites. With the pandemic, we noticed sweeping changes within the industry and the urgent requirement for cloud-based testing solutions. Of course, dSPACE responded to these changes very effectively and we can see that with the product launches of SIMPHERA

and AURELION. And of course, with a focus on e-mobility and ADAS, we are gradually moving away from conventional IC-engine based testing.

How are you making changes for the increase of EVs in the market?

According to a report by Market Research Future, the electric vehicle market is worth \$208.95 billion in 2021, a number that could more than quadruple to \$957.42 billion in just over eight years. Along with rising demand, fuel price hikes and various government initiatives will push more people towards electric vehicles.

As some of our major clients' report, EVs are in a nascent stage of development, especially in a country like India and the players are varied, right from experienced OEMs to enthusiastic start-ups. Considering the evolution towards EV, the increased public focus on climate change, shifting environmental regulations, and technological advances are making the case for a green-mobility transition and thus for Electric Vehicles; we are all set to adapt to the technology and continue being a technology leader within the e-mobility space. This would entail new teams focused on motor controller validation, battery management systems controller validation and onboard charging validation. One instance would be our principal dSPACE recently launching updated technology to precisely emulate battery cells for HIL validation of a BMS controller.

What are the new changes you see in the market and how are you getting ready for it?

We are ensuring to keep an open mind and understanding





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Post Covid-19 scenario

Businesses have had to manage dual economic and health crises.

Employee and customer engagement protocols, remote working on an unprecedented scale.

Various government initiatives will push more people towards electric vehicles.

More and advance technologies will enter the automotive ecosytem.

Demand for softwarein-the-loop tool suites, cloud-based testing solutions will grow in automotive set-ups. of our client's requirements. As we are in the twilight of the conventional engine and the dawn of autonomous driving, we understand that all client's ideas are valid and there is no one correct-way of doing something. dSPACE is responsible for providing cutting edge automotive test solutions and they continue to impress customers with their scalability, flexibility, and most of all qualitative results.

What other new products are you coming up with?

As mentioned earlier, we are looking forward to the full-fledged launch of the new dSPACE technology in BMS testing, Smart Charging validation, fuel cell development tools, V2X solutions and Adaptive AUTOSAR developments. In addition to this, we have SIMPHERA – our ADAS cloudbased testing solution and AURELION - cloud-based high resolution visualisation solution. So yes, an extremely exciting time ahead for us.

Tell us about new

investments, R&D and expansions?

While the array of products, both existing and new ones are the opportunities that we have to offer to our customers and to infiltrate into new market segments, our most valuable investments are in adding qualified and experienced resources, enhancing the facilities and strategically planned expansion of our operations in Bengaluru, Chennai and Gurgaon.

ADAS. How safe is it for Indian roads?

We can only talk from our perspective keeping in mind the wide range of client requirements and we do believe that ADAS as a functionality must cross a lot of hurdles before it is here to stay within India. We can see some ADAS levels conducted flawlessly with the Indian OEMs, but the higher autonomy functions require innovative Indian-infrastructure concentrated testing solutions if we need concrete validation. dSPACE has been working on a lot of these developments for the past few years. To be precise, ADAS makes the drives safe, obviously depending upon the noteworthy features that come in distinct categories.

What's the road map for the next few years?

DynaFusion Technologies, has a mission to provide worldclass solutions to the engineering community and we have progressively grown within the automotive industry, we want to extend our offerings; in addition to the products, we intend to start turnkey solutions that are created to be implemented into a current business process without disruption. At the same time, we plan to offer customised solutions to meet our customer requirements. RNI registration No. MAHENG/2006/17345, Postal Regn. No.MCE/117/2021-2023. Posted at Mumbai Patrika Channel sorting office on 3rd & 4th, 17th & 18th of every month.Publishing dates: 1st & 15th of every month.WPP License No. MR/TECH/WPP-277/EAST/2021-2023.





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