Infinitive Group go full speed ahead with McLaren Applied innovative technology

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With a new website, headquarters, Australian office, and a major exclusive contract, this RBDCommunity Eagle Lab partner is excited to share its innovative technology at Railtex/Infrarail.

Infinitive Group – now with a new re-branded site and a business hub set to open soon – provides systems engineering and management to the rail sector. Recently, it entered into a global exclusive rights deal with McLaren Applied.

Infinitive Group has taken over service support for the award-winning train occupancy and reservations system on LNER's Intercity225 fleet. The base technology is set to be evolved with enhanced capabilities for people and object monitoring and will form part of Infinitive Group's IRRIS platform.

Using its leading-edge knowhow, Infinitive Group plans to evolve McLaren Applied's Sensa system, finely tuning it with its IRRIS technology platform. The objective is to gather a granular level of data from seat reservations and subsequent seat occupancy. Furthermore, with the integration with IRRIS, the anonymised system is then able to follow passenger movements. All of this will provide human-factor insights to operators and inform their decisions – from planning timetables to marketing plans that boost

passenger numbers during quiet times. The system can even forecast when a seat may need maintenance.

Future applications could address issues such as social distancing – should it become necessary – and health and safety concerns from overcrowding.

The deal comes as Infinitive Group unveils its fully developed vision for the business. Founded around four pillars – engineering and technology, management and advisory, research and development, and sales and supply, the business is structured to carefully meet all client needs. "It is important to properly structure your business around delivering value and innovation, but in a way which meets the needs of the client in a bespoke and sustainable manner," said CEO and co-founder Ben Craze.

"With our structure in place, we can focus on outcomes for our clients – advising them about complex machine learning and other AI in an appropriate and meaningful way, helping their business break new and exciting technological ground, all whilst ensuring the system is built to last.

"The old ways of doing tech are effectively long gone. Businesses now want to understand how they can not only develop innovative systems for their train fleets and infrastructure, but also how these systems can truly and positively influence business processes sustainably long after the excitement of the new shiny thing has worn off. All this needs to happen whilst helping the environment and saving money in the process.

"Without proper future proofing, for example, you have trains that will drastically outlive the systems on board and no plans to upgrade or replace them."

Other systems that form part of their product portfolio include their advanced analytics and data visualisation system Artemis, which can check the condition of train systems, hybrid data management platform Pithoi, and secure data harvesting and acquisition solution Ramus.

Ben says that the future of such technology could help even further if applied across the board. His vision is one where AI information is shared safely – managers of infrastructure passing information seamlessly with freight companies and passenger focused services alike.

"I like to imagine a railway which could reactively deliver extra value for businesses and passengers on the route – making services faster and saving the environment," he said. "Imagine for example that a passenger train is empty and travelling along a certain point on a route. What if they could communicate this was the case, and then allow a freight train to pass where it would potentially be expected to stop and wait in a station or, worse still, be pushed into a siding? It would not affect the passenger service and could save time and emissions if the fully-loaded freight vehicle doesn't have to stop.

"With the right application, innovative ways to improve passenger, freight and infrastructure experiences could be right around the corner.

"We look forward to sharing this vision with our friends as they visit us at Railtex/Infrarail. Our business is always tailored to meet the needs of each individual customer, so the chance to finally talk with

prospective clients person-to-person, now pandemic restrictions have lifted, is most welcome."

Railtex/Infrarail takes place at the NEC, Birmingham, from September 7-9.

About McLaren Applied:

McLaren Applied's vision is to pioneer a better future by uniquely applying data science, design and engineering. It draws on a 30-year heritage in electronics and data systems expertise derived from motorsport to move into new sectors including automotive, public transport and beyond. McLaren Applied delivers performance breakthroughs in electrification, telemetry, control and analytics. The focus is on electronic systems, electric drive, telemetry, software, sensor technology and predictive analytics. Learn more at https://www.mclaren.com/applied/

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