

Utilise Smart Technology to Overcome Rail Industry Understaffing

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In the wake of increasingly understaffed rail networks, Chris Chinnapan, Sector Director at mpro5, highlights how investing in the Internet of Things (IoT), real-time data and adaptive software can fill the gaps in rail company operations.

Whilst we may finally be seeing the end of the pandemic, the underlying problem of staffing issues shows no sign of going away. Instead of absences due to isolation or illness, now the issue has become mass resignations across many sectors. People are seeking a change of scenery when it comes to their work lives, suddenly leaving many companies in the lurch as they scramble to take back control.

This presents significant problems for the rail industry. The need for rail operations, particularly efficient, reliable and safe rail operations, is key – and thus upholding quality whilst managing the scarcity of staff is key for the overall customer experience.

Quite simply, rail companies need to adjust by doing more with less – a hard task especially when combined with the multitude of other challenges that may beset networks at any given moment.

Effectively managing trains, buildings and facilities through their data usage can be the answer to maintaining quality during this time and minimising the impact of any potential vacancies. A smart network consisting of IoT sensors, along with the right software to operate them, can give train operating companies (TOCs) the edge they need to react to and replan for any sudden changes.

The Great Resignation

For many companies in industrialised nations, it has become an issue to navigate a growing discontentment with employees who are seeking a new career in the wake of the pandemic era. Workers changing jobs has become the next challenge companies have had to face, with the ONS reporting that vacancies increased to 1.2 million within the UK alone in October 2021.

This would be bad enough without the issue of Covid-related absences that would follow in the holiday period, with the Rail Delivery Group reporting that staff absences reached one in ten workers – an all-time high – due to the Omicron variant. In combination, this deadly cocktail of absence issues culminated in significant problems for the rail industry – most notably massive cancellations across many if not all major lines as some were forced to shut down entirely.

Even if that may be in the past, there is still the looming potential threat of a new variant to cause massive disruption, or a new cycle of staffing problems to get to grips with in future. This is a significant threat to rail more than any other industry; not only is rail a crucial part of business supply chains, it also impacts many workers' commutes, and therefore needs to maintain operations for the sake of the wider economy. Without proper staffing for stations, we might just see another wave of cancellations.

Using IoT and the power of smart stations

A rail network supported by smart technology and real-time monitoring can be the difference between safe and unsafe, pleasant and uncomfortable; and both of these factors will impact the bottom line. However, the technology is available and ready from its first deployment – and it can immediately bring intelligent decision-making options to operations.

IoT, and the right software, can harvest and unify data in one central place – so teams can know what needs doing when in real-time, and use that data to spot patterns and therefore accurately predict the future.

For example, cleaners can react to real-time events: if a sensor on a toilet door has been opened 100 times, they may well be needed. If they go to clean as their schedule insists, and no one has been in there, it is simply a waste of their time.

Ultimately, this means prioritising jobs, prioritising teams, and updating scheduling based on who is available when, and what is needed where. Teams spend less time worrying about covering for missing staff, or tasks remaining incomplete, and instead can trust that all tasks are being accounted for and covered; improving overall operational effectiveness and leaving no gaps while reducing stress and pressure on individual employees.

Ultimately, it cannot totally make up for an understaffed team - and it can't make trains run if essential operators are missing. However, it can massively improve productivity and efficiency, while reducing time wasted. When used correctly, it will improve customer satisfaction, safety, sanitation, and therefore a train operating company's bottom line.