TWO-WAY STREET

THE RISE OF TWO-WAY APPLICATIONS CRITICAL TO MEETING THE FUTURE NEEDS OF THE FREIGHT INDUSTRY

Martin Chappell, General Manager – Radio Channels, Motorola Solutions Australia, New Zealand and Pacific Islands

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The ubiquitous smartphone has become a popular tool for drivers, but the digital two-way radio is still the most essential communications device for drivers.

The road freight industry employs about 200,000 people in Australia and it's estimated that more than 42,000 businesses use the sector. The industry continues to grow and researchers forecast that road freight tasks will almost double by 2030.

This research suggests there are bound to be many more drivers in years to come, and with more drivers comes the need to ensure they are equipped with the same level of safety through resilient communications systems as the drivers of today. While the smartphone has become a popular tool for drivers, the digital two-way radio is still the most essential communications device to ensure their safety and productivity.

The most obvious benefit is the ease of use while driving: rather than entering a passcode, entering a phone number and waiting for the dial tone, two-way radios open up immediate and seamless communication to the right people with the push of a button.

It's also not illegal to use a two-way radio on the road, for that matter.

On the road, or in any operational environment requiring workers to keep their heads up and hands free, voice communications are still king. That's why the two-way radio remains so popular and an essential communications device in road freight enterprises. Yet in a similar way that the original mobile phone has evolved into the smartphone, two-way radios have also undergone an evolution through substantial growth in new applications designed to improve functionality and workflows within the enterprise environment.

What we once knew as the 'walkie talkie' has evolved into a full-featured digital device through apps that enable organisations to reach their goals for safety, productivity and efficiency.

Digital mobile radio (DMR) apps allow personnel to do more than just communicate with each other. With hundreds of compatible business apps now available for DMR systems, drivers can use their two-way radios to raise an alarm, monitor their health, locate their co-workers, track sensitive equipment or deliveries and even share updates with other users working outside of their radio networks via broadband.

Delivery company Wentworth Carrying is just one company that has improved business efficiency in a number of ways through the use of DMR applications.

"The [new DMR] system has lightened the workload of the drivers," said owner-operator Angela Chambers.

"I can guide a driver to the destination over the radio if need be, rather than having the driver pull over to use the map.

"This system is definitely more efficient and the cost savings are across the board. We've not only saved on mobile phone costs, we save time, which is a big factor, by making everything quicker and easier. A job which used to take one hour now takes nowhere near that time. It's hard to put a monetary amount on the value because there's so much time saved as well."

Many applications are being built for enterprise and are in routine use today. For instance, a digital radio application could be used to provide GPS location and mapping information to alert a freight company's headquarters of accidents or road blocks so that a new route can be determined for drivers.

Meanwhile, job ticketing applications can help manage busy workloads while enabling greater efficiency. In circumstances where drivers are managing a large number of deliveries in a day, a job ticketing application provides a simple but highly effective way for drivers to send a message instantly back to base after each delivery is done. In addition, staff at headquarters can create, assign and monitor job tickets through the radio network to deliver routine tasks more efficiently. These tickets are sent out to drivers over the network and can be accepted or declined by a driver with the simple push of a button.

It's not just time that is saved by DMR applications, but lives, too, and an increasing number of digital two-way radio apps are specifically tailored with the aim of improving safety standards and response times. Applications such as 'Man Down' are helping to alert control rooms when field workers face potential dangers. When a two-way radio is tilted past 90° for 90 seconds, an alarm is triggered in the control room. The GPS tracking system then sends to headquarters a link to a mapping application which pinpoints exactly where that user is located. Another application can track a driver's speed leveraging that same GPS functionality. If a driver is speeding, an alert is sent back to headquarters, which can then request the driver to slow down.

Additionally, the underlying communications network is now evolving and increasing in capacity to support the maximum number of users and applications — becoming more than capable of meeting the resilient communications needs of a growing industry today and into the future.

Infrastructure upgrades to DMR networks have enabled a far larger number of users to access the network, expanding across a greater number of sites, with thousands more users now able to connect to the network at each site.

As the push for greater productivity and reduced downtime continues, another important innovation has been the ability to provide remote software updates on digital radios. In a manufacturing environment, for example, this capability could enable workers to continue their daily tasks while live software updates are completed over the air in the background — a substantial improvement over having to physically plug in every radio to upgrade it with new software.

Due to the ease of functionality and instant communications capabilities, two-way radios are ideal for the road freight sector. And while business productivity and efficiency apps are still largely accessed through consumer-grade devices, the new generation of DMR radios is making it possible for companies to extend the value, reach and capability of their radio networks.

In an industry that will only continue to grow in scale and pressure, it's clear that the two-way radio is still the go-to device for freight drivers.

Motorola Solutions Aust Pty Ltd
www.motorolasolutions.com.au

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