



BUILDING SEAMLESS CONNECTIVITY FOR A COMPETITIVE EDGE

Solving the Top Four Manufacturing Communication Challenges





The manufacturing industry always keeps safety at the forefront of operations. In recent years, finding new approaches to safety has been a top priority. Yet, as the world continues to live with the virus and employees continue working in hybrid models at the plant, in the office, and at home, what hasn't changed is the need for greater connectivity between machines, people, facilities, and data. In fact, that need has grown substantially.

Unified communications technology will be a key enabler of this connected workplace, with the ability to advance three connected goals: safety, efficiency, and productivity.

Adopting systems that enable seamless communications and that are durable, reliable, and integrated will allow forward-looking manufacturers to grow and meet productivity needs now and well into the future.

While every manufacturing operation is unique, most share similar communication challenges. According to a recent comprehensive survey from Motorola Solutions, the manufacturing industry faces four key hurdles to increasing connectivity and unifying communications: communication device reliability and durability, audio clarity, the integration of data applications across devices, and keeping all devices updated and secure.

Those manufacturers that are able to overcome these challenges will see immediate benefits for both their people and productivity, while gaining a clear competitive advantage. Here's how.

**OVER
90%**
**OF MANUFACTURING
WORKERS ARE USING
MULTIPLE DEVICES TO
COMMUNICATE WHILE
ON THE JOB**

— 2021 Motorola Solutions Survey



CHALLENGE #1: Device Durability and Reliability

Manufacturing encompasses a wide range of environments, from sprawling industrial sites to compact cleanrooms. Yet, the need for rugged, durable, and reliable communication devices is universal. When workers are wearing protective gear such as gloves, eye and ear protection, helmets and specialized clothing, handling devices can be a challenge.

Delicate electronics simply won't last long. Workers at manufacturing facilities need devices that can pass a drop-test, be moisture resistant, and tolerate exposure to dust, dirt, sand, and extreme temperatures — so workers can keep communicating no matter what the day brings.

But the need for durability and reliability goes far beyond the cost factor of replacing electronics when they break, it's also key to maintaining a safe and productive environment. Knowing that a teammate is always a reliable button press away and that a radio will be fine if it's accidentally dropped means workers can perform their jobs safely, without interruption and with total confidence.

That's why MOTOTRBO™ R7 and MOTOTRBO Ion radios are built to be ultra-durable.

The **MOTOTRBO R7** is designed and tested to military standards, so you can rely on it wherever and however you work. Tested to IP66 and IP68 standards, the MOTOTRBO R7 radios are dust-resistant and protected from water immersion of up to two meters for two hours and can even withstand high-pressure water jets. Plus, the enlarged screen is ruggedised so it can stand up to repeated drops, even on concrete. The casing on MOTOTRBO R7 was even designed to medical-grade specifications so it can resist damage from disinfectants and decontamination substances.

MOTOTRBO Ion uses ultra-strong materials both inside and out for outstanding impact resilience. It has an ultra-rugged, liquid-resistant touchscreen and is easy to operate with or without gloves. Because temperature extremes can wreak havoc on battery life, MOTOTRBO Ion has a long battery life through extreme temperatures—hot or cold.



CHALLENGE #2:

Audio Volume and Quality

It's not surprising that respondents to our manufacturing industry survey said that audio is a top communication challenge for manufacturing workers. Manufacturing facilities are frequently loud operational environments. The presence of heavy, often dangerous machinery and equipment on a factory floor, multiple workers conversing, and more make seamless communication and the ability to hear absolutely critical to safety.

Manufacturers need communications devices that ensure they can hear correctly the first time, every time. That's why superior loud, clear audio is a top feature of across the MOTOTRBO portfolio.

The MOTOTRBO R7 excels in the most challenging audio conditions. Adaptive dual microphone noise suppression cancels deafening sounds from machinery, engines and road noise, whilst automatic feedback suppression intelligently cancels out the feedback from other nearby radios when individuals are working in close proximity. The R7 also offers an extra-loud audio profile option, allowing teams to hear each clearly even in loud environments. Intelligent audio screens background noise, adjusting speaker volume automatically so that audio is always at the right volume, whether in digital or analogue mode. No missed messages, no requests to repeat what was said, just clear and audible communications that cut through the clamor of facilities and vehicles.

With industry-leading volume, clarity, and noise suppression features, MOTOTRBO ION's voice communications outperform the competition. The radio features intelligent audio such as adaptive dual microphone noise and automatic acoustic feedback suppression. With microphone distortion control and even adaptive wind noise mitigation, ION is ready for whatever the day brings.

BE HEARD WITH MOTOTRBO R7

Providing next-level noise canceling, loudness and clarity, [MOTOTRBO R7](#) excels where audio communications can be challenging, so your team can hear and be heard.

*Please refer to the MOTOTRBO R7 user manual for a list of approved disinfectants and decontamination substances.





CHALLENGE #3:

Integration of Data Applications

Our manufacturing communications survey revealed that device proliferation is a growing pain point across the manufacturing industry. More than 90% of workers say they currently use more than one device to communicate while on the job with workers reporting they frequently use up to three and even four devices.

Yet, in manufacturing facilities, safety, efficiency, and uptime depend on fast and clear communication. Manufacturers want a range of features and applications that go beyond voice communications such as rich data, text to speech, Bluetooth® connectivity, and enhanced privacy. By adding these capabilities directly on the PTT devices workers already know and love, manufacturers can get the job done using only one communication device.

That's why we offer digital radios with the capability to run a range of applications, purpose-built for manufacturing's needs, from streamlining dispatch, to creating work orders, to ticket management systems.

For example, the MOTOTRBO Ion's business-ready communications capabilities include always-on broadband capabilities and an open app ecosystem running on the Android platform. With built-in access to Motorola's unified technology ecosystem, teams can stay connected across multiple networks and devices.

For environments where app use may not be appropriate, such as on the road, the MOTOTRBO R7 offers the ability to connect and collaborate without distraction. MOTOTRBO R7 keeps teams connected with streamlined critical communications, while offering the ability to collaborate with video security systems, sensors and more.

Workers can prioritize the alerts that keep themselves and customers safe, avoiding excessive notifications, so they can maintain peak productivity and efficiency.

GO ALL ON WITH MOTOTRBO ION

[MOTOTRBO Ion](#) is our first business-ready communication device with always-on voice and broadband data capabilities. It brings together renowned PTT performance, an open app ecosystem on the Android platform, and access to our unified technology ecosystem - without compromising on durability.



CHALLENGE #4:

Keeping Devices Updated

With the broad adoption of data and applications to enhance manufacturing operations, ongoing, proactive software updates are now a critical part of deploying technology. This proactive maintenance is necessary to prevent downtime, stay current on software features, and ensure security.

Yet, constantly maintaining devices can be challenging, requiring additional staffing or expertise. For many manufacturers, the answer is a service that transfers the burden of ongoing maintenance to a third party, for a predictable, low-cost-per-user subscription fee.

Service packages from Motorola Solutions include features that ensure continuous security, performance and enhanced functionality of radios and infrastructure. Depending on the adopted service level, companies can transfer radio operations and updates to our experienced managed services professionals, reducing risk and maximizing radio performance. Our service packages also provide priority access to MOTOTRBO certified and tested release software updates and upgrades.

SEAMLESS CONNECTIVITY:

The New Competitive Edge

Manufacturers are embracing a new challenge, with the need to keep workers safe and connected across multiple environments including hybrid and remote worksites. Yet, all team members must be able to seamlessly communicate, from those working at a manufacturing facility to those working remotely. That's why, today, seamless connectivity is a critical business imperative for manufacturers of all types.

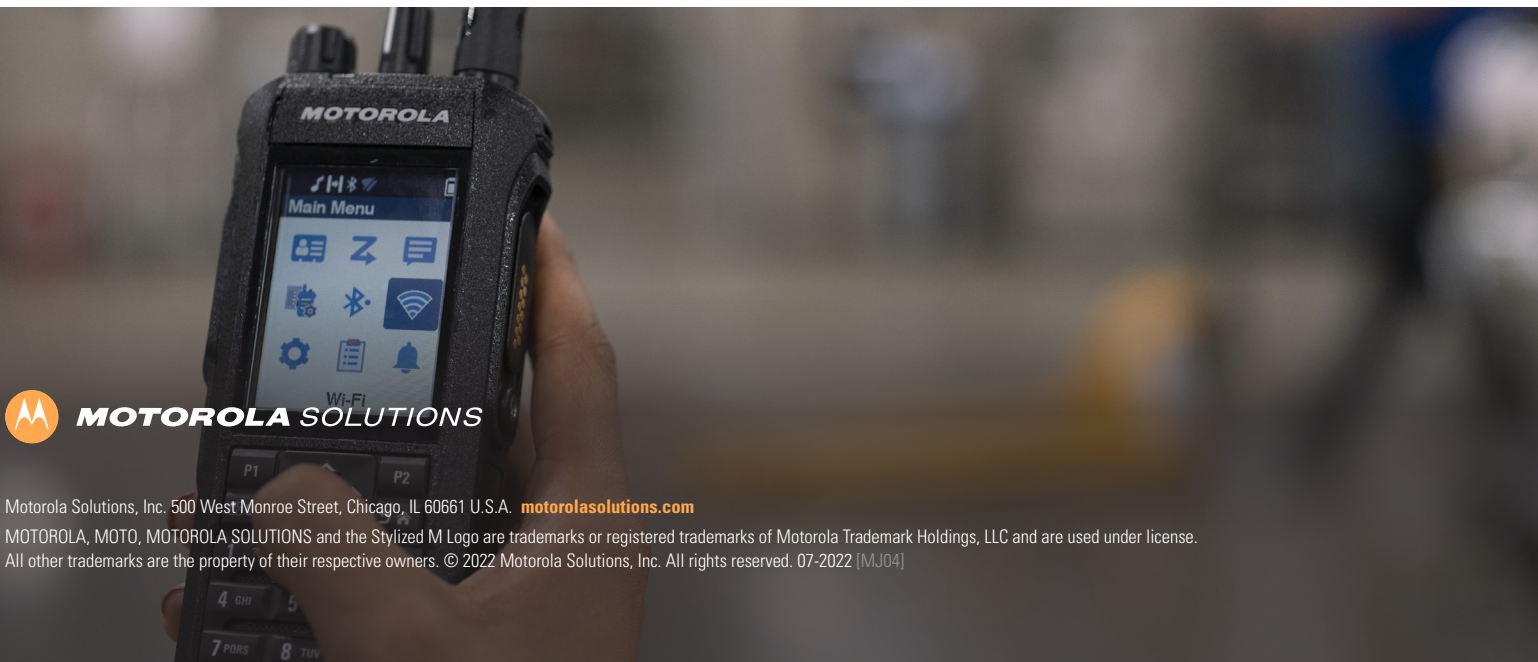
Forward-looking manufacturers are adopting new systems and devices that enable seamless communications for increased safety, efficiency, and productivity. To get there, they're confronting key communication challenges including device reliability and durability; audio clarity; the integration of data applications across devices; and keeping all devices updated and secure.

With the help of the Motorola Solutions ecosystem of radios, devices, and services, manufacturers can easily overcome these challenges.

The result? Immediate benefits in both safety and productivity. And a clear competitive advantage.

To learn more about Motorola Solutions communications solutions for Manufacturing, please visit

<https://www.motorolasolutions.com/en-us/solutions/manufacturing.html>.



Motorola Solutions, Inc. 500 West Monroe Street, Chicago, IL 60661 U.S.A. [motorolasolutions.com](https://www.motorolasolutions.com)

MOTOROLA, MOTO, MOTOROLA SOLUTIONS and the Stylized M Logo are trademarks or registered trademarks of Motorola Trademark Holdings, LLC and are used under license. All other trademarks are the property of their respective owners. © 2022 Motorola Solutions, Inc. All rights reserved. 07-2022 [MJ04]