

WHITE PAPER

# How Smart Communications Improves Efficiency in Manufacturing

The Case for Mass Notification During  
Emergencies and Routine Operations



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# Introduction

Over the years, technology and automation have changed manufacturing in ways that greatly improve efficiency, productivity, output and cost containment. Since the latter half of the 20th century, technology's role in manufacturing has affected virtually every aspect of the industry from computerized lines to process monitoring and modeling for durable products.

An equally essential component of manufacturing technology is communication. For manufacturers to maintain a competitive edge, a smart, overarching communication plan should be identified and adopted. What can be often overlooked in communications planning is the integration of a mass communication system to assist in the management of operations and as a tool for responding to crisis situations.

As demand and competition continue to present challenges to manufacturers, a case for a mass communication tool becomes more apparent. More expedient than more traditional means of communication, mass notification tools can help manufacturers improve operations, reduce costs and promote heightened workplace safety.

Used in conjunction with processing standards, mass notification can help keep workflow and operations running more smoothly and predictably than without a multi-channel communication tool. Additionally, in times of crisis or emergency, mass notification is the most reliable way to get information to the people who need it — quickly.

The wake of the COVID-19 pandemic, recent disruptions in supply chains and fluctuations in consumer confidence have all impacted manufacturing in the United States. For these reasons, heads of facilities must take a more proactive approach to improving efficiency and eliminating unnecessary costs.

In this white paper, we'll explore how a well-honed communication plan, coupled with easy-to-use mass notification tools can boost productivity and keep stakeholders and workers informed.

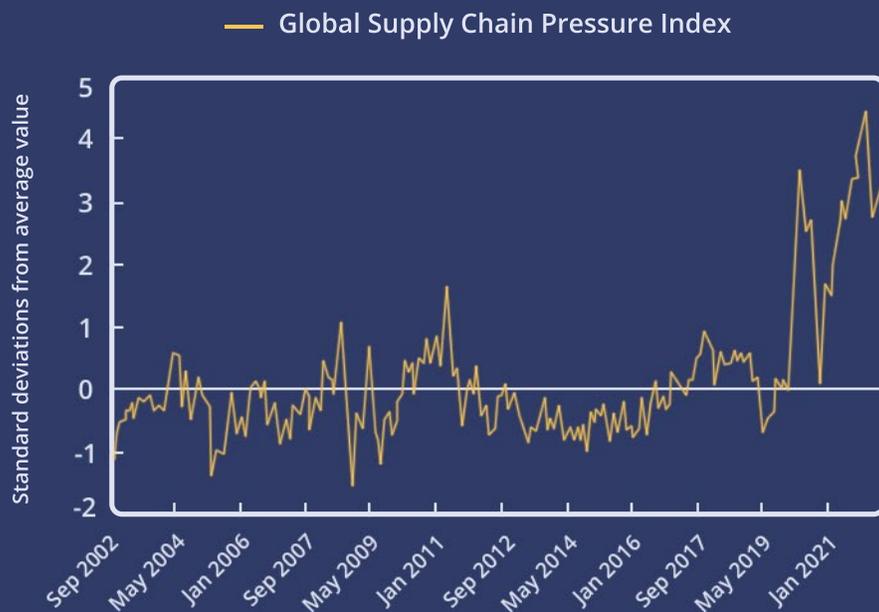


# Background on Manufacturing Challenges

Manufacturers can face enormous challenges with productivity and cost containment. Emerging communication technologies can be helpful when implemented before losses occur.

## The Supply Chain

Mass notification tools, combined with threat intelligence can give manufacturers an advantage in anticipating, identifying and responding to supply chain disruptions. As we've seen in recent years, many manufacturing sectors rely on raw materials and goods from overseas. When these materials become scarce or deliver past scheduled deadlines, production can come to a devastating halt.



According to the Bureau of Labor Statistics, the November 2021 Global Supply Chain Pressure Index (GSCPI) was at the highest point since its measurement began<sup>1</sup>.

Though some easing has occurred in 2022, April 2022 had an index score of 3.4 compared to a score 0.4 recorded in April 2019. Inventories are also at their lowest in decades, making the production of certain products impossible.

Much of this interruption in the flow of materials is a result of the COVID-19 pandemic and worldwide shutdowns in the manufacturing sector. As 2022 continues to see small recoveries, there are still bottlenecks in food production, electrical equipment, construction supplies and other durable goods. As of this writing, the main culprits of supply chain disruptions are Chinese delivery times, airfreight costs and the Ukraine conflict creating a ripple of supply chain issues in Europe.

Manufacturers who rely on raw materials from sources or OEMs offshore must develop a communication plan to respond to disruptions in the supply chain in order to satisfy contractual commitments. This can be far better served with a mass notification tool in place. Faster and more immediately utilized than methods like faxing, mass notification can deliver to large numbers of recipients by email, text, push notifications, voice mail, desktop notifications and corporate intranets or private networks.

This provides a more comprehensive remedy when there are time zone differences or when the intended recipient is not always close to a desktop computer or landline phone. Mass notification also enables two-way communication that allows immediate collaboration with suppliers when deadlines are looming.

**With the right mass notification platform, stakeholders can make use of targeted lists and request templates to make reaching out faster and simpler.**

## Facility and Employee Safety

Facilities management takes into account a number of continuously moving targets. From employee safety to threat response and from regular operation to important production updates, mass notification can address needs better than traditional methods.

When used in conjunction with a mobile app or push notifications, recipients can receive important alerts even in loud environments. Mass notification can also trigger visual alerts through digital signage. This allows others to receive notifications even when they may be wearing ear protection.

When it comes to employee safety, the ability to get word out quickly cannot be understated. Mass notification can help plant management to alert employees when chemical spills or exposures are possible, when machinery has malfunctioned or in the case of approaching weather conditions.

Integrated systems work with digital signage, public address equipment and desktop notifications to quickly notify everyone on site. Meanwhile, mass notification can assist facilities managers in creating a virtual paper trail with reporting on who received the alert and when.

## Severe Weather and Natural Disasters

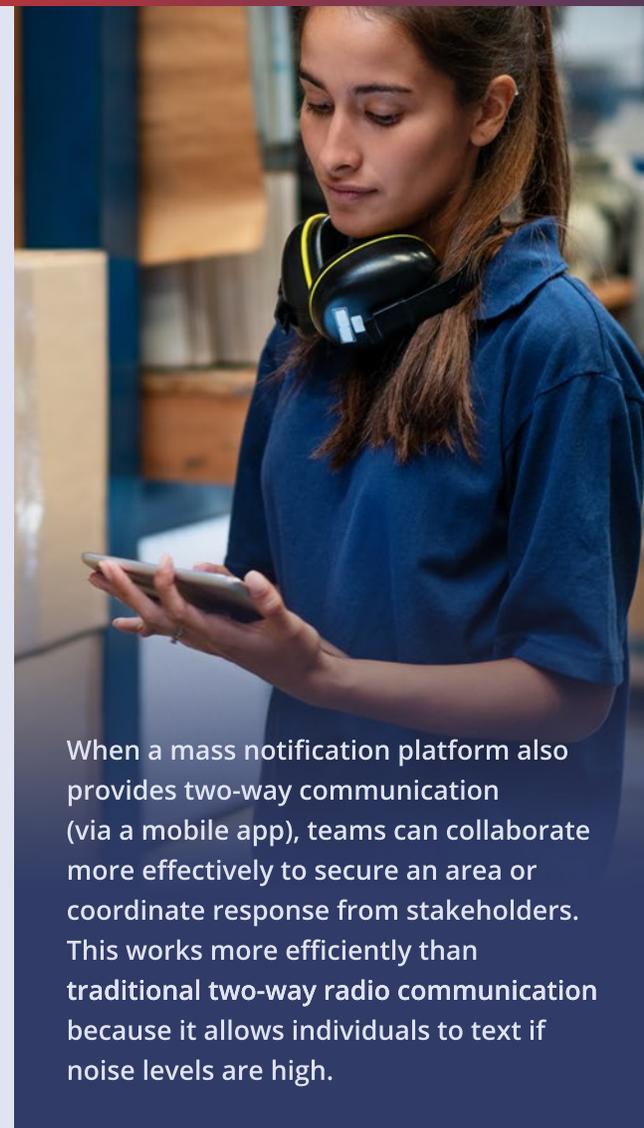
The ability to quickly and effectively communicate when severe weather threatens is critical for maintaining employee safety, preventing financial loss and ensuring continuity of operations. For these reasons, mass notification is a must for manufacturing facilities.

With a mass notification platform that integrates with a variety of government weather alert systems, plant managers can implement strategies for safety well ahead of storm conditions.

When used in conjunction with the National Weather Service, NOAA and the IPAWS system, automated alerts and other critical information are sent via text/SMS, push notifications, digital signage, public address systems, corporate intranets, Microsoft Teams\*, email and even voice calls to cellular and landlines.

Once these integrations have been implemented, recipients have more time to coordinate production shutdowns, shelter in place alerts or government carry out evacuation recommendations.

Further, mass notification can be utilized to call staff back to work once facilities have reopened. This helps keep returning to production more orderly for everyone involved.



When a mass notification platform also provides two-way communication (via a mobile app), teams can collaborate more effectively to secure an area or coordinate response from stakeholders. This works more efficiently than traditional two-way radio communication because it allows individuals to text if noise levels are high.



# Mass Notification and the Production Process

Manufacturing is an uncompromising industry. As the success of any manufacturing company is determined by its dependability and quality of finished products, mistakes, slow-downs and disruptions must be avoided in order to stay competitive.

Incorporating a mass notification system into everyday communication protocols is smart on a number of levels. As a day-to-day tool, nothing is simpler to deploy or easier to use than mass notification.

Using a multi-channel delivery approach, mass notification can alert specified groups — or an entire corporate network — via email, push notifications, text/SMS, PA announcements, digital signage, corporate intranets and desktop alerts. This practice helps close communication gaps and ensures that important information is received no matter where people are or what they may be doing.



When production lines are interrupted for unscheduled repairs or calibrations, mass notification can quickly alert team members and direct them to other production floor areas to assist another team. Additionally, mass notification can be used for two-way communication with maintenance and operations for guidance and support when equipment doesn't perform as expected.

Purchasing and planning staff can also use mass notification when delivery of raw materials is late or canceled. Instead of phoning individual vendors, leaving voicemail messages and spending hours to find alternative supplies, a single notification can be sent to an entire list of vendors by email, push notification and text. This gives purchasing and planning a more time-efficient means of finding replacement materials.

Since time is continually of the essence in the manufacturing environment, a more wide-spread approach to communicating with others makes more sense than sending emails alone. With mass notification and an open API for integrations into other relevant platforms, needs can be communicated and responded to more quickly and efficiently. This can help reduce down time and improve ROI and overall profitability.

When a production run fulfills a number of customer orders, mass notification can be used to alert a group of clients to any adjustments in arrival times as well. This gives manufacturing companies a more competitive edge and boosts customer satisfaction. Keeping in close contact with customers and other stakeholders demonstrates accountability and a commitment to fulfilling orders on time and as expected.

Every manufacturing environment is unique, though the products may not differ dramatically within a particular specialty. What makes manufacturing companies stand out to customers is their ability to deliver quality and consistency and to keep their customers close. When used as part of an overall communications plan, mass notification has the ability to cement client relationships and keep fulfillments in check.

# Personnel Management and Training Considerations

Training and employee development are important elements of a successful production environment. Most equipment manufacturers can provide training and certification tracks for operators and production floor managers. However, other training is also fundamental for keeping all aspects of manufacturing in good order.

From accounting to buying and planning and from production to quality control, mass notification can play a vital role in reducing errors and costs while improving efficiency and quality.

For emergency preparedness, mass notification can help teams conduct drill exercises. Team leaders can use alerts to specific divisions or departments to instruct and direct response for a number of scenarios. Since each scenario or critical event merits a specific response protocol, a mass notification platform with unlimited pre-built templates makes the most sense. This allows administrators and other team leaders to alert and direct others accurately and quickly.

Beyond drills, mass notification can easily be used to send reminders of training schedules and other requirements. Used by managers and team leaders, mass notification serves to keep everyone in the loop and convey expectations in a clear, accurate way. With a multi-channel approach, team members receive notifications by email and their mobile device, keeping messages from management more accessible, regardless of the staff member's location or current activities.

This represents a more technology-driven and smart approach than more traditional means of imparting information, such as bulletin boards or corporate intranets alone. With the end goal being a more adapted workforce and employees better empowered to do their jobs well, mass notification offers an intelligent tool for establishing guidelines and promoting employee engagement.



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# Accountability and a Virtual Paper Trail

Quality assurance is vital in any industry, but even more so for manufacturing. Since customers and end-users rely on dependable, safe and effective products, standards for quality are the backbone of any successful manufacturing business.

The ISO standards for manufacturing may be the best known and most widely used for quality assurance at every step of the manufacturing process. They promote a strict protocol for documentation, corrective actions and continual improvement of processes to ensure consistency and quality.

The ISO standards are also internationally recognized as confirmation that a manufacturer has examined their own processes, taken steps to improve them and carefully documented each change and advancement. In a sense, the ISO standards create accountability.

In recent years, ISO standards have incorporated principles for emergency response. Specifically, emergency management guidelines are now recognized for public warnings before, during and after critical events.

This concept can also extend to workforce accountability and quality assurance at every step of the manufacturing process. Using mass notification to alert management of a breakdown in process or a quality concern can create a virtual paper trail that bolsters accountability at every stage in production.

The right mass notification platform should boast robust reporting features that allow team leaders to visualize how notifications were received, who received them and what responses or actions were taken. This serves to bolster accountability and document changes in processes more accurately.

Using mass notification to alert management of a breakdown in process or a quality concern can create a virtual paper trail that bolsters accountability at every stage in production.



# Emergency and Crisis Communications

As with any business, emergencies can arise in the manufacturing environment, and the first responsibility of team leaders is to ensure the safety of workers. This can be problematic if only traditional forms of communication (phones, loud speakers) are in use. Because of higher noise levels on production floors and few employees at their desks at all times, facility managers need options for alerting employees when emergencies occur.

Because mass notification has the ability to send alerts to public address systems, desktop notifications, push notifications, text/SMS, email, landlines and corporate intranets, critical notifications are more widely received and acted upon.

There are many scenarios where mass notification can help get critical information to entire workforces or selected groups of individuals. For example, a mass notification that incorporates geo-targeting for messaging allows administrators to send important alerts to a single facility, those within a geographical area or those entering a specific region. This is invaluable for protecting workers who may be traveling or working remotely (accounting staff, legal).

Mass notifications with integrations to weather-alerting agencies (NOAA, NWS, IPAWS) will automatically notify those in endangered areas of threatening conditions. These integrations can automatically deliver emergency alerts, evacuation notices and other updates to help employees stay safer and collaborate to protect equipment and other assets.

Furthermore, two-way communication enables the workforce to communicate updates and other critical information to team leaders. This allows better collaboration when moments count. Workers can be instructed to shelter in place or take other actions for immediate protection and receive the all-clear notification when it's safe to move freely about.

Mass notification is essential for keeping individuals safe, but can also assist in protecting equipment and other assets in the event of a host of critical events:



# Conclusion

With so many applications for critical notifications and routine communications, mass notification is a natural for manufacturing environments. Not only can it help keep people safe when an emergency occurs, it can keep the wheels of production running smoothly and predictably.

It can assist plant managers stay on top of supply chain issues, facilitate employee safety and respond to emergencies with greater efficiency and speed than with traditional communication channels.

Mass notification can also help reduce overall costs by keeping manufacturers one step ahead of potential disruptions and providing greater options for solving problems before they impact production.

Finally, a well-developed mass notification system is highly adopted by individual users. As simple to use as email or text messaging, mass notification is not susceptible to failures due to power outages or cellular tower interruptions. This makes it the single most reliable communication tool manufacturers can employ to get important and critical information to a large number of people in a short period of time.

It, therefore, makes excellent sense for manufacturers to incorporate mass communication into their overarching communication strategies for safety, efficiency and the overall success of operations.

## About Regroup Mass Notification

Since 2006, Regroup Mass Notification has provided a cloud-based, multi-channel mass notification platform for emergency and routine applications.

Serving manufacturing, logistics, the educational community, enterprise, finance and government, Regroup's continual pursuit of excellence has made it the most trusted name in mass notification and a leading-edge provider of smart communications for clients throughout North America.

We provide customized solutions for every organization we serve and offer many options including desktop notifications, open API, threat intelligence and more.

Learn More [regroup.com](http://regroup.com) 855-REGROUP [inquiries@regroup.com](mailto:inquiries@regroup.com)

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# References

1. <https://www.statista.com/statistics/1315308/global-supply-chain-pressure-index/>

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