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COMMUNICATIONS

| Manufacturing

Manufacturing is a complex industry; one that's been around for centuries but also an industry which has arguably seen the greatest changes in terms of operations.

It's also an industry which has seen technology have the greatest influence and, as the digital revolution continues to take hold, it's an industry which is ever-changing.

In 2020, we all know and felt the impact coronavirus had and the ripples which were felt across the globe. In some countries and industries those ripples have since had permanent changes and **manufacturing** is one industry where things may have changed forever.

Add to that the increasing impact that technology and the digital revolution is having on manufacturing and it's an industry which is ever-changing and one in which businesses need to adapt, change and grow.

Collaboration

In any industry collaboration is crucial to forming effective and efficient ways of working however in manufacturing collaboration has arguably greater importance. As you'll know in a supply chain it takes every member to work together in order to design, build, market and deploy your products or services. Should one member or one function of the said supply chain falter, it could spell failure for the product or service you're producing or providing.

Collaboration is simply a tool utilised to enhance the supply chain and strengthen the bonds. Collaboration leverages the ubiquitous nature of the internet and allows the supply chain to work

cohesively. Working collaboratively means to work together without being affected by location, system platform or supply chain level to achieve the very best in integration. In the past, engineering, production and the manufacturing took place largely in one sole location whereas now, even before the 2020 pandemic, supply chains could be across several locations, even several countries. Despite the changes in technology and time periods, the goal has remained the same; design, build, market and deploy a product or a service. That's why collaboration has taken on a much more important role within manufacturing and, why new ways to share information and work together must be taken on by businesses looking to develop and grow.

With the globalisation of manufacturing and the shift towards collaborative partnerships, the need for new digital technologies and increasing connectivity are all required to ensure businesses remain at the forefront of manufacturing.

New digital technologies such as **Microsoft Teams** allow the hybrid workplaces where employees are both within the plant or factory and also at home or in an office to work collaboratively. Tools such as Microsoft Teams, Slack and Zoom allow shared working sessions where new digital mock-ups, statistics, findings and research and even new machinery can be demonstrated, spoken about and discussed with ease.



Effective and reliable connectivity underpins these relatively modern conferencing tools so that employees from across the business and across facilities can view and evaluate information simultaneously, share ideas and files as well as solve problems together no matter where they may be based in the world.

Engineers within manufacturing can also invest in collaborative tools during planning to allow earlier impact on designs. This can be done by reviewing designs and amending it with the design team, verifying tooling operations, reviewing process plans and factory layouts as well as discussing complex issues with suppliers and coordinating tools, equipment and employees across several sites to ensure design and process goes according to plan.

While collaboration has always been a key cornerstone within manufacturing, it's now become a necessity for those battling to retain market share in the face of competition from digital disruptors. Companies have formed collaborative partnerships to ensure they stay ahead of the game

In fact, Fujitsu collaborated with Microsoft in 2015 and, more recently, announced a collaborative partnership with Upstream Security to ensure its connected car technology can work across cars and their systems regardless of make or model to provide cyber-secure integrated solutions that support safety, transport routing and real time data usage.

The partnership between Fujitsu and Upstream Security is just one of many which demonstrates that the traditional contracts which previously linked the supply chain together are now making way for flexible multi-party contracts so that a new collaborative model can pave the way in the future.



Communication

When the 2020 pandemic struck, the employees working on the floor were critical to proceedings and, despite the working from home messaging, it simply wouldn't have been possible to send them home. However, employees working in offices would have been sent home and, possibly have remained working remotely.

Bridging the gap between those employees working in several different locations is a challenge and one where strengthening communication between all parties is vital to working effectively and efficiently.

Having half a team which is physically together while the other half is dispersed creates a new challenge when it comes to enabling consistent communication and collaboration. It's arguably more challenging than managing an entirely dispersed remote team as it could be easy for the physical team to silo itself and, as a result, fail to communicate effectively with those working remotely.

Delayed or ineffective communication within manufacturing can severely hamper the company. Excessive waste, poor quality products, late deliveries and, as a result, unsatisfied customers and clients are all by-products of poor communication. Hence why it's vital for communication to be one of manufacturing's top priorities so much so that improving communication could boost your bottom line by more than 10%.

On the floor, loud machinery can make it difficult for employees to hear phones ringing or announcements over a system. However, Bluetooth headsets, rugged smartphones and robust screens could be alternatives to projecting messages across your business to ensure all employees get notifications, stay alerted and remain engaged.

Mobiles are a crucial part of manufacturing however different roles require different specifications and different tariffs. Mid management, for example, may require a newer model with enough data to stay informed and engaged via email and Microsoft Teams. Floor employees will need a **rugged phone** which may just be used to receive updates, push notifications and contact suppliers should there be an issue. Managers can easily use enterprise messaging to gather feedback from employees if they're all equipped with mobile devices and incorporating such communication methods can enable managers to better oversee operations by receiving direct, real time updates from those on the frontline.



However, to ensure your phones stay safe, secure and connected on the same network **mobile device management** would be a wise investment. Not only does it allow for internal and secure communications between all employees but, should a device be misplaced, data cannot be retrieved and devices cannot be hacked.

As well as equipping employees with the tools to stay communicating; it's also important to hold regular forums or send our engagement surveys to ensure those employees on the plant floor are as engaged with the company as those managers and office-based staff.

Communication doesn't just need to be improved between your employees. As Industry 4.0 continues to disrupt; the need to improve communications between man and machine as well as machine and machine communication grows; even more so when it's expected that by 2025, over **75 billion** manufacturing devices will be connected and communicating with each other.

Smart machines can decrease human error and, in turn, increase efficiency and production time. As a result, investing in connectivity which enables the smart machines to work with maximum output can have a positive effect on your employees as it frees them up to focus on tasks such as planning, maintenance and quality control.

Connect

Robotic and sensor technology are largely mainstream in its adoption across manufacturing however, it's important that plants and factories are cyber-secure as the complex supply chains make manufacturing an industry vulnerable to attack.

Picture this; one of your robotic arms is hacked and forced to move by the tiniest of margins. That miniscule margin could spell disaster for your operations line and, in turn, cost thousands in ruined products - not to mention that the arm could have granted access to your entire company's data bringing your business to a grinding halt.

Investing in cyber-security is critical in manufacturing as is investing in connectivity solutions which come with robust service level agreements (SLAs) and built-in cybersecurity protection.

Despite the cybersecurity risks associated with having a connected business, there's plenty of reasons why you should be investing in better, faster and more reliable connectivity and technology to ensure you're ready for the future.

The Internet of Things (IoT) has been spoken about for several years and, in the last few years, has made significant inroads within manufacturing. IoT allows leaders to monitor and act upon data flowing between the touchpoints within a company and the automation of the supply chain will no doubt have led to increased productivity.

Ensuring your business is connected can make light work of tasks which may be laborious. For example, tracking the supply chain may have involved making several phone calls to track deliveries of products and chase up supplies. Using connected devices, you'll be able to use GPS to track your cargo and tracking devices can notify you of the exact location of your supplies in real time and, when you're getting low on stock, your smart machines can be programmed to automatically order new stock once they reach a certain threshold.



A connected manufacturing company will also want to take advantage of the cloud to ensure an increased performance, cost-effectiveness as well as the flexibility cloud solutions offer. Not only are cloud systems quicker to roll-out and deploy but they're also easier for a business to customise and relatively straight-forward to scale up and down, depending on growth.

Adopting cloud solutions also allows manufacturers the scope technology 'as a service' easily and, with cloud these services can be rolled out with speed and quality. Utilising cloud technology allows manufacturers to access hardware and software which previously may have been out of reach.

As well as allowing access to futureproofing technology, adopting cloud technology can also save businesses money. For example, with a **hosted telephony solution** the system sits in the cloud without the upfront cost for expensive hardware - not to mention finding the storage room for such a system. However VoIP isn't the only cloud solution where you can save money - research suggests organisations which adopted cloud saved \$1 million in cost reductions.

Digital transformation and adoption of IoT is all well and good but both things can only ever be as strong as the underlying foundation which is why choosing a reliable, secure and stable connectivity offering is the key to unlocking the future of manufacturing.

Daisy Communications has worked with manufacturers for more than 20 years to ensure the industry stays at the forefront of technology and provides the underpinning connectivity, voice, cloud and mobile products which allow manufacturing to take strides in the digital revolution.

To speak to us about how we can help streamline your supply chain, automate your processes and ensure man and machine are working together; contact us and we'll be happy to either speak with you or visit your site for a discussion.

Collaborate, communicate and connect with Daisy Communications.