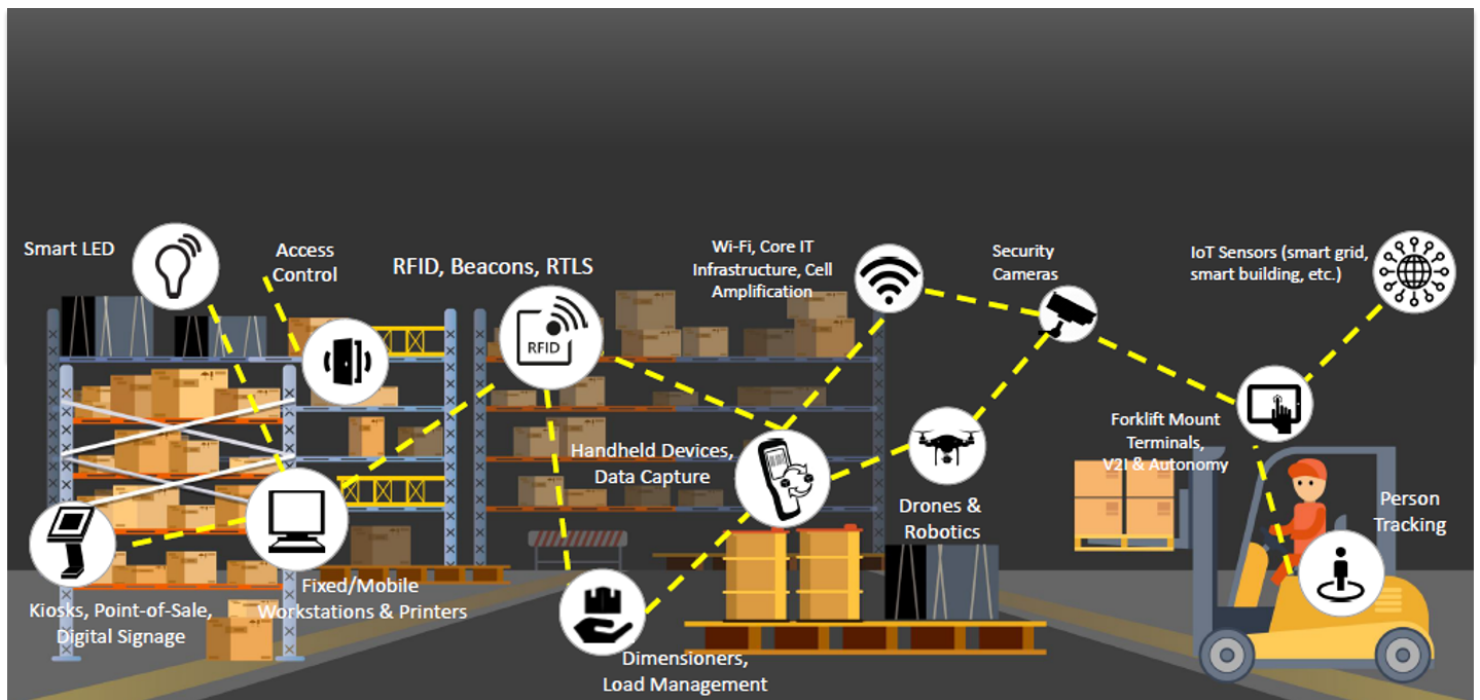


# STABLE NETWORKS ARE THE BASIS FOR INDUSTRY 4.0 SUCCESS

Guest blog by Eric Miller, CEO of MHI member company [JLT Mobile Computers](#)

Industry 4.0 is offering manufacturing, distribution and supply chain companies the capability to completely reinvent the way they run their operations. The primary protagonist behind this revolution is data. Deploying a robust data-capable network solution that links all devices within an enterprise is therefore crucial.

Data access, especially in real time, enables companies to react almost instantaneously to issues, such as changing in-plant dynamics and varying market demands. This instant access can resolve issues far quicker, adapt processes to current variables and change business operations parameters, often with just a few key strokes. But data also has benefits even when it is not used in real time: Trending and analytics are creating huge opportunities for manufacturing, distribution and supply chain companies to react to historical trends to counter fluctuating seasonal demand, changing shift patterns and even quality problems arising from utility supplies. In both cases – real time and historic – actionable data, when leveraged effectively, can have a huge impact on time, efficiency and, of course, the bottom line.



Like any data-based solution, seamless data collection and flow is the key to success. Taking a holistic standpoint, where no single device, branch or infrastructure is considered more important than another, is also essential. All elements of the solution must be fit for purpose and have the capability to speak to each other in the clearest and most effective way possible. This means that open solutions offer the most flexibility, which is why Ethernet and standard industry-hardened Wi Fi are the protocols of choice

in a majority of cases. But even these have to take into account the various challenges presented by industrial operations, which often far exceed those found in an office environment. Wi-Fi presents even greater issues than wired solutions.

The deployment of stable, reliable, plant wide industrial Wi-Fi has to take into account multiple factors, such as range, capacity, electromagnetic interference (EMI) and dead spots. In offices where stationary desktop PCs are often in line-of-sight of a router or repeater, Wi-Fi deployment rarely causes any issues. But supply chain environments present a huge list of hurdles that few “office IT” practitioners are capable of handling. It is for this reason that companies are now looking for outside help from service providers who can design, deploy, manage and maintain reliable industrial wireless LAN networks.

Wi-Fi is ideal for mobile applications, but only if it is fit for purpose and delivers the goals defined in the Industry 4.0 plan. Only a full-service company – with the necessary experience and hardware – can deliver on all fronts, creating the all-important peace of mind that the large investment a company is making in its digital transformation is in safe hands. Flexibility, uptime and total coverage are key. Get them right at the front end and your data-capable solutions will start showing an ROI almost immediately.