



## Technology Trends to Watch in 2023

Another eventful year has come and gone. As we end 2022 and plan for 2023, there are a few key technology trends that organizations should investigate and pay attention to as they orchestrate their 2023 technology planning and investments. Most of these trends are not exactly “new” but their maturity and potential has become a reality and will be essential to advancing companies’ digital transformations in 2023. These five trends are:

### Expansion of IoT Capabilities with 5G Services

The Internet of Things (IoT) started with devices that relied on WI-FI networks for communication. Today and going forward with connected cities, connected cars and remote devices, the need for communication capabilities has shifted to broadband cellular networks. 5G networks can provide reach for 10 times more devices per square mile than 4G, and has improved speeds that are 10 times faster than 4G. This will allow for an expansive new set of use cases for transformative IoT applications that are not currently possible with the current network capabilities. With low latency and expanded networks the possibilities will transform what we currently believe are the limits on connected products and services.

### Application Platforms as a Service

An application platform as a service refers to a cloud environment that is designed, built and deployed for managing the creation and deployment of custom business applications. It enables speed, collaboration and control across the entire application lifecycle. Examples of these platforms are: Google Cloud, Microsoft Azure, Amazon Web Services (AWS), and IBM Cloud. Because application platforms are designed in this way it enables organizations to skip the learning, design, and creation of their custom development environment.

### Distributed Hybrid Architecture

A few years ago, when the “Cloud” was introduced, it was presented as the infrastructure of the future: a holistic approach to what organizations would go to for their infrastructure needs. Now, companies are in the mode of “best fit”, which inherently, is a combination of “Cloud” offerings for infrastructure, Application Platforms as a Service, Software as a Service (SaaS) and internal systems and infrastructure. There are a multitude of reasons and criteria to decide upon what the “best fit” for your company is. However, no matter what percentage of which type of offering you choose, it has become a business need to orchestrate a coordinated and managed infrastructure and business offering. We see this capability as a necessity going forward.

### Intuitive Manufacturing Teaching Platforms

Manufacturing companies have the constant pressure of optimizing efficiency, cost and output. The added strain they have, is their ability to retain employees and to assimilate the addition of new employees in a fast, efficient and easy manner. We see the high-rate of turnover and retirements continuing in 2023 and beyond. With that being said, manufacturing organizations need to focus on delivering education and instruction in an easy to consume manner. Technologies such as digital work instructions., augmented reality and in-process validation, are all technologies that have come to the forefront to provide the needed capabilities to incorporate new talent within a manufacturing organization.

### Cybersecurity

We highlighted cybersecurity as a key technology for 2022, and we believe there will be a continued focus in 2023. With continued deployments in digital and connected services in 2022, the need for robust cybersecurity capabilities is fundamental to address the heightened security risk that comes with these advanced solutions. Continued adoption of Advanced Identity & Access Management Solutions, Security Information & Event Management (SIEM) and Security Orchestration, Automation and Response (SOAR) are all capabilities that are needed to address the risk in interoperable technologies, and infrastructure. The use of analytics to establish user and solution behaviors will become a necessity to understand what activities and anomalies need to be focused on. A combination of these technology solutions will need to be deployed to manage these ever changing and increasingly complex connected business applications that are being deployed.

**Wishing you and your families a great end to 2022, Happy Holidays and a great start to 2023!**

## Next Month: Using IoT to Level the Playing Field in Baseball