

Digital Transformation

Manufacturers are increasingly embracing a data-driven approach to operations in order to improve reliability, lower maintenance costs, and spark productivity. While the initial undertaking can seem overwhelming, the potential benefits are significant. Before becoming immersed in the technical details that enable digital transformation (such as choosing and implementing hardware and software), a company should first conduct a broad assessment of current conditions and articulate their desired future conditions.

BEST PRACTICES

Although specific products and processes vary significantly among manufacturers, the following key considerations are relevant to digital transformation regardless of the industry.



THINK STRATEGICALLY

Success in digital transformation begins with developing a plan that aligns with the organization's broad strategic goals. Knowing what you are trying to accomplish is the first step towards accomplishing it. A strategic plan will guide how money and time are best spent.



PREPARE THE WORKFORCE

Advanced automation and the industrial internet of things (IIoT) require a different skill set than many traditional manufacturing processes. Proactive planning is paramount to develop the workforce training necessary to bridge the skills gap between current conditions and evolving roles. The importance of preparing and empowering the workforce to analyze and implement change should not be underestimated. Supplying the right training and the right tools will equip the workforce to create superior processes.



IMPLEMENT INCREMENTALLY

Digital transformation takes time, and the process is a long-term commitment. While alignment of a digital strategy with overall corporate goals is critical, implementation is better served by an incremental approach that realistically tackles projects. A single project is the perfect opportunity to gain an understanding of how the organization functions in this new world. Intentional learning through targeted, incremental efforts is a smart way to prepare for larger successes over time.



ENGAGE OT AND IT

Innovative Operational Technology (OT) projects that create havoc with Information Technology (IT) standards can create barriers that are difficult to overcome. Engaging OT and IT early in the planning process is beneficial for identifying potential issues and developing collaborative solutions.

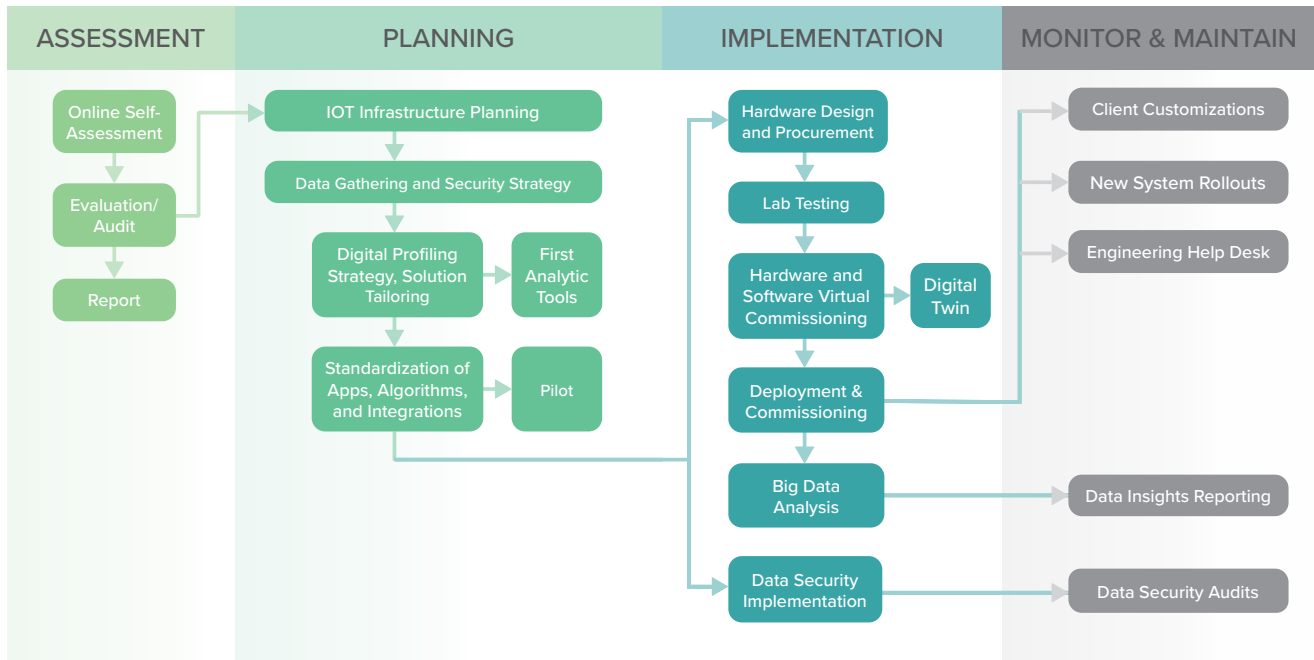
POSITIONING FOR THE FUTURE

Rapid changes in technology necessitate the selection of a platform for data aggregation and analysis that can be adapted over time. Open-source architecture enables the adoption of new technology and retains flexibility, while still allowing for customization. Another important consideration in choosing a solution is the number and types of data sources that currently exist within your company, as it is common to have multiple databases from CMMS, MES, ERP and other platforms. For this reason, a central platform for gathering data must be able to accommodate multiple cloud platforms.



THE VALUE OF A COMPREHENSIVE APPROACH

Digital transformation is a continual activity that involves positioning for the future while balancing legacy systems. Navigating this process is a complex undertaking that requires a comprehensive approach in order to maximize the return on investment. As the push for digital transformation has accelerated, companies focused on helping manufacturers make these changes have emerged. One example is Bridge Automation, a company based in Greenville, SC that provides specialized expertise for digital transformation within complex manufacturing operations. Bridge Automation uses a life-cycle approach that consists of the following four key components: an accurate initial assessment, proper planning, skilled implementation, and ongoing monitoring. This approach is outlined below.



ENDLESS POSSIBILITIES

The digital transformation opportunities available today allow for endless possibilities within the manufacturing industry and provide end-users with useful, curated metrics to make better decisions about their plants. Bridge Automation builds systems that access and link multiple data systems and apply algorithms to produce system-wide insights. Embracing this technology can transform any manufacturing plant into a highly efficient digital facility that is prepared for current and future challenges.

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Bridge Automation specializes in digital transformation within complex manufacturing operations. The team includes experienced process controls design professionals, automation experts, data scientists and machine learning specialists. www.bridgedata.tech

