

# MANUFACTURING INSIDER

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## TACKLING THE EU'S GDPR REGULATION: WHAT COMES NEXT FOR MANUFACTURERS?

General Data Protection Regulation (GDPR) is the most prescriptive global data protection law regulating enterprises that process personal data of European Union (EU) residents. The primary goal of the regulation is to provide a set of standardized data protection laws to make it easier for EU residents to understand how their personal data is being used and allow them to raise complaints, even if they do not reside in the country where the violation occurred.

The EU adopted GDPR two years ago to provide enhanced privacy and data protections for its citizens, and effective May 25, 2018, any organization inside or outside the EU that stores, processes or touches personal data of EU residents is subject to GDPR. Potential fines for non-compliance are administered by individual member state Supervisory Authorities, and can be massive (i.e., up to 20 million Euros (\$23.5 million USD), or 4 percent of the company's worldwide annual revenue).

Many manufacturing companies have been working diligently to become more customer-centric by gathering and analyzing data on the consumers of their products. Accordingly, manufacturers have been consuming more and more data as part of these Big Data initiatives. GDPR allows manufacturers to continue obtaining, retaining and analyzing personal data, but only if consent has been obtained from the individual. Manufacturers are also on the hook for implementing appropriate cyber measures to protect this data as well.

It may appear feasible for US manufacturers to largely ignore GDPR since its requirements apply only to EU citizens and companies deemed to be doing business in the EU. However, Facebook's recent Cambridge Analytica debacle, where a political data firm inappropriately utilized over 50 million Facebook accounts, may dramatically speed up the arrival of similar privacy regulations here in the US. Even if your company is not yet subject to GDPR, UHY experts believe it won't be long before similar onerous privacy legislation arrives in the US.

If you collect personal data and are not complying with GDPR, you are exposed.

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*The next level  
of service*

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### What are the GDPR requirements?

Under the GDPR, organizations must:

- Track an individual's opt-in consent before collecting data, including the adoption of simplified public-facing privacy policies. These new policies allow users to better understand when their data is being collected and what they are allowing an organization to do with their data.
- Support users' right to be forgotten, right to data portability and right to object profiling. These new rights empower users to take control of where and how their personal data is used and stored.
- Notify authorities within 72 hours of a data breach. Data breach notification

plans ensure effective communication to law enforcement, users and shareholders under crisis.

- Appoint data protection officers, data controllers and data processors. These specific data protection roles and responsibilities bring unified accountability to the organization's data privacy.
- Keep an inventory of all personal data that has been processed. Data maps can be a powerful tool for creating transparency in knowing what data is held, where it is stored, and who it is shared with.
- Implement privacy by design (a framework to incorporate privacy controls) and data protection impact

assessments (DPIA) throughout the data lifecycle. Designing with privacy proactively reduces unnecessary data and privacy risk.

### Is your organization prepared?

The GDPR is a complex regulation with severe penalties for non-compliance. Since the deadline to comply has passed, there is an immediate and urgent need for organizations to review and adjust their data privacy and protection programs. To build an effective GDPR roadmap, ask the following questions of your organization:

- Are we considered a company doing business in the EU?

- Do we collect and/or process the personal data of EU citizens?
- Do we know all the places within our organization where we store personal data?
- Are we prepared to respond to requests from EU citizens asking about data we store about them?
- Do we know how to purge all data on an EU citizen if they exercise their right to be forgotten from our systems?
- If we were to experience a data breach, could we alert authorities within 72 hours and provide them with a data map of our systems?
- Have we conducted a privacy impact assessment (PIA) to identify and create mitigation protocols for privacy risk?
- Have we updated our privacy policy to comply with GDPR requirements?
- Are we implementing privacy by design, proactively integrating privacy controls into our systems by default?

Tackling GDPR requires the right combination of modifications to business processes and supporting technology. There is much to gain from building an effective GDPR roadmap, but where do you start?

**PERFORM A READINESS ASSESSMENT**

Conduct one-on-one interview with key stakeholders such as the Chief Technology Officer, Chief Risk Officer, Chief Information Officer and Chief Marketing Officer to review all GDPR compliance plans and documentation to assess the readiness of your organization for the GDPR. Since

awareness of GDPR is often limited in manufacturing organizations, it is important to educate the entire senior leadership team on GDPR's requirements.

**DESIGN AN ACTION PLAN**

A thorough action plan should include conducting a PIA, creating a data map for your organization and designing a data breach notification procedure. Conducting a PIA to identify and evaluate your organization's privacy risks can empower you to build an action plan to remediate your GDPR compliance gaps. Creating a data map for your organization helps to understand what kind of data you're storing, who has access to it, and where your data lives across your organization. Finally, designing a data breach notification procedure enables your data protection officer to successfully engage with authorities and notify affected data owners in under 72 hours.

**IMPLEMENT YOUR ROADMAP**

Manufacturers have ramped up their data collection efforts in the past decade. Work with your key stakeholders to implement your newly designed GDPR roadmap to ensure that data is protected, governed, managed and utilized effectively in line with your organization's strategy. This is where privacy by design can help reduce unnecessary data and privacy risk throughout the data lifecycle.

**SUSTAIN COMPLIANCE**

To sustain compliance, develop and facilitate training and formal reporting procedures to ensure continuous

compliance and data accountability. It is strongly recommended that your organization perform bi-annual audits and monitor your system and processes to have an always up-to-date understanding of your privacy risk.

Although personal privacy has been an important topic in the EU since the 1990s, privacy has not been a priority for most US-based businesses, especially manufacturers. Accordingly, GDPR represents a new set of requirements that many manufacturers in the US have never dealt with before. Manufacturing companies can create a competitive advantage and save a lot of headache regarding fines if they address data privacy requirements in their businesses now.

By David Hartley, Principal (St. Louis, MO)

“Tackling GDPR requires the right combination of modifications to business processes and supporting technology.”



## WHAT IS INDUSTRY 4.0?

In the simplest terms, Industry 4.0 is the intersection of machines, devices, sensors, data and people all communicating in real time via the cloud, intranet or network (ERP/MRP) system. "Smart factories" will begin to propel manufacturing into a new era where production, information technology and communication (internet) are all connected together to improve processes and supply chain optimization. The ultimate manufacturing goal is to make more informed decisions that will move products faster through the supply chain. These premises are the foundation of the Industrial Internet of Things (IIoT).

The second driver of Industry 4.0 is the interconnection of products and services also known as the internet of things (IoT) through the web and connected devices. All the rage right now is how to wirelessly connect products to customers through physical devices. A simple example of how a physical product has changed how we digitally interact through the web is the Nest thermostat. We can now control the temperature in our house from practically anywhere in the world. Our cars, phones, homes, appliances and entertainment systems are all becoming connected wirelessly through apps and dramatically changing how we buy and sell goods and services.

### Looking back 10 years, what has changed in the industry in how we use technology?

Without a doubt the biggest change has been the widespread availability of stable, low cost, high speed connectivity via the web. Today when I tour middle market manufacturing plants I see increased use of automation, electronic digital KPI data trackers, collaborative robots and cloud based software solutions which allow for real time decision making. This level of integration simply was not possible 10 years ago.

### How will Industry 4.0 be a disruptor or game changer?

Industry 4.0 already is a disruptor and game changer in many sectors. Remember not too long ago we actually went out and rented movies from



Blockbuster and now we stream them from Netflix whenever and wherever we want. We hailed a cab and now use a ridesharing service. We purchased goods at retail stores that we now order on our phone and have it on our doorstep within hours. These are just a few examples of how the fabric of our daily lives are being meaningfully changed by this level of connectivity. Disruptive businesses embrace the challenges of continuous connectivity and capitalize on innovation and speed to market to effectively capture market share. Manufacturing is no different as the market now favors those with less capital asset intensive processes driven by technology. This bodes well for smaller manufacturers as Industry 4.0 tends to lead to more customizable products and more localized production as speed to market is critical.

### What opportunities does Industry 4.0 bring?

With great change comes tremendous opportunity. Industry 4.0 creates more high paying jobs, expands our educated workforce and ultimately increases

our standard of living. In my opinion Industry 4.0 will be a time of significant change that must be embraced by all manufacturers large and small. With the enactment of the new tax law, manufacturers have the opportunity to use the tax savings from reduced tax rates, 100% deduction for capital acquisitions, and other tax changes to really invest in their future. What is the biggest opportunity for your company? Every company is different as to where they are on the Industry 4.0 continuum. Ask yourself where you can get the biggest return on investment given where your organization is in its lifecycle: Is it a cloud based software solution, capital equipment with embedded data analysis, collaborative robots, 3D simulation software, 3D printing, or augmented reality? Whatever direction you take there is no time like now to drive your business forward! Create a plan, engage all stakeholders and go for it, because doing nothing is not an option.

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**How will Industry 4.0 impact small to medium manufacturers with fewer than 200 employees?**

As Professor Klaus Schaub chairman of the World Economic Forum has stated "There has never been a time of greater promise, or greater peril." I have been advising middle market manufacturing clients for more than 20 years and agree that the professor's comment is spot on. Having walked the shop floor of hundreds of small, medium and large manufacturing companies, each one has its own culture and vision of the future and where they fit in. But, the greatest impact will not be in machine capabilities as much as how you can digitally connect your organization internally and through the supply chain. The speed of change in the coming years will be the biggest surprise to those companies that have not invested in their IT structure. Will your company be able to react quickly enough to customer demands, have the capital resources to invest in software solutions to connect to customers, have the

capital resources to protect your company and customer information from cyber-attacks, or have resources to train the next generation of workforce to run a more IT focused production process? These are all questions that only you can answer. I have clients that are overachievers and well on their way into the fourth industrial revolution, and I have clients that believe Industry 4.0 will not impact them. Which one do you want to be?

**What does a manufacturer need to be doing to be prepared to be a player in Industry 4.0?**

Those manufacturers that can introduce and implement technology into their organization will be in the best position to be a player in the next industrial revolution. Getting the organization aligned and prepared to make the right investments, and have the ability to train and attract a more technological workforce will have the most success. Like I mentioned before, every company is different and at different stages of their lifecycle. Making an assessment of

how your organization will be impacted is a good starting point. I know in our firm we are assisting a lot of companies in implementing various cloud based software solutions including ERP, MRP, or apps to help them get connected and make more real time decisions. Several small manufacturing clients of mine are also investing in collaborative robots. The investment is much less than most think and the return has been greater than most expected. 3D printing has also been on the rise among middle market manufacturers along with production simulation software. What I can say is to think about how you can improve your customer experience. Is it through innovative solutions? Better or faster service? Again, the move to more customizable products and speed to market are certainly points to consider as your company moves through the next industrial revolution.

By Tom Alongi, Partner and National Manufacturing Practice Leader (Sterling Heights, MI)

**CURRENT STATE OF THE MANUFACTURING INDUSTRY**

According to a new Standard & Poor's report, there are two key indicators that will tell you what kind of shape the manufacturing industry is in. The first is the Institute for Supply Management's Purchasing Manager's Index and the second is the Federal Reserve's Capacity Utilization Index for motor vehicles and parts. A reading above 50 percent for the ISM index indicates that manufacturing is expanding in the US, and below 50 means that it is contracting. History shows that each time since 1983 that the index fell below 43 percent "speculative grade" automotive companies began to panic. Similarly any time the Fed's utilization rate dropped below 72 percent during that period, it caused stress to automotive companies. Let's take a look at where we stand as of May 2018:

ISM Purchasing Managers Index: 58.5%



Fed.Capacity Utilization Rate: 75.3%



## MANUFACTURING INDUSTRY INSIGHT

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- Distribution
- Automotive Suppliers
- Industrial Manufacturing
- Consumer Products

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