
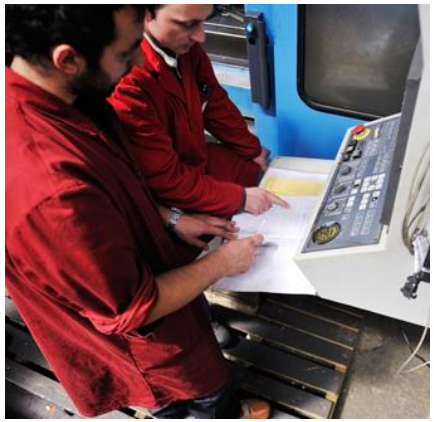


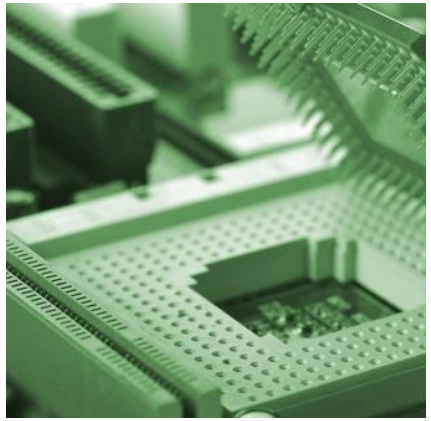

Cybersecurity and NIST 800-171 Impact on Small Manufacturers
PTAC - June 15, 2017

Manufacturer's EDGE
TRANSFORMING COLORADO ONE COMPANY AT A TIME

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- MEP Network
  - 51 centers in the US and Puerto Rico
  - Cooperative partnership with the U.S. Department of Commerce through NIST
  - Focus is to grow manufacturing and advance manufacturing technologies throughout US Manufacturing
- Manufacturing USA
  - DMDII driving digital manufacturing
  - Strong Cybersecurity component

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- Manufacturing USA
  - DMDII driving digital manufacturing for Manufacturing USA
    - IMEC in Illinois is MEP partner pushing learning through the network
  - Strong Cybersecurity component

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Manufacturing Context

- **275,000 manufacturers, 12 M Workers**
  - Worker number may be much higher
- **$2.1 Trillion**
- **200,000+companies (75%), are <20 people**
- **84% are S corps, partnerships, or sole proprietorships**

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Changes and Impacts

- People
- Systems
- Processes
- Customer Expectations
- Risk Management
- Supply Chain

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People

- Hiring
- Training
- Roles
- Responsibilities
- Performance Expectations

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Systems

- **No more, "We can't afford an IT guy"**
  - Outside IT is much more integral to risk management and response
- **Complexity breeds opportunity for intrusion**
- **New systems will change the entire system ecosystem**
- **Connections to suppliers and vendors is part of the system, requires monitoring**
- **More data means more value to intrusion**
- **Overall, higher IT Costs**

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Processes

- Links to eternal processes
- New process design explicitly consider cyber
- Control points for all processes
- No more ad hoc process designs

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Customer Expectations

- **Your cyber protection is as good as theirs**
  - Either come up to snuff or lose the business
  - Will ask for indemnification
- **Routine encryption**
- **Knowledgeable support staff**
- **Contract terms**
- **Protecting customer IP as if it were yours**

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Risk Management

- **Cyber is a routine subject for risk review**
- **Cyber risk will be connected to financial risk**
  - Banks will ask and may have requirements
  - Large customers will require cyber risk assessments and active cyber risk management, including audits
- **IP intrusion is an existential risk**

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Supply Chain

- Managing cyber means understanding and cooperating across a supply chain
- Creates much more complex problem
- Everyone will be looking to limit liability
- Without adequate cyber awareness and protection, manufacturers won't be allowed to play
- Cyber will be part of contract negotiations

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Conclusion

- **The cyber security future is here**
- **This is an existential threat to small companies**
- **In the VERY near term, this will be an entrance fee for doing business with primes**
  - And not much later for doing business with anyone
- ***Adding Cyber Security to routine management concerns is no longer an option***

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Thank You!

Questions?

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