

[print](#) | [close](#)

Get a Handle on Data Governance

[Machine Design](#)

[Chris Grossman](#)

Chris Grossman

Thu, 2014-06-26 10:28

Since manufacturing entered the digital age, the volume of electronically stored information (ESI) that manufacturers generate has continually increased. Now, manufacturers must deal with the challenges that go with all that ESI. Yet they also can streamline their operations in doing so.

Related

[Medtech: Regulations Can Be a Competitive Advantage](#)

[Paperless Manufacturing: This Time, Not a False Alarm](#)

[If Starbucks Behaved Like a Manufacturer](#)

The Challenges of More Manufacturing Data

Capturing, backing up, and retrieving a manufacturer's data might be more straightforward if all this information was homogenous, but it isn't. In fact, manufacturers may own the most diverse data portfolio of any industry, including:

- Data generated by enterprise resource planning (ERP) systems in the form of bills of materials, engineering and sales orders, and more
- Engineering-specific files
- Data shared between engineering and sales systems/customer relationship management (CRM) systems
- Data created on the shop floor, including production and shipping data
- Simulation data for design optimization

Also complicating matters, employees often collaborate on projects from different locations.

In short, manufacturing design produces myriad interconnected files and models from disparate systems owned by ever-increasing numbers of stakeholders. Storing, archiving, and backing up all this valuable information are not simple tasks. Most companies have IT departments already stretched thin and under-budgeted, even while they're tasked with making their companies compliant with data-management regulations such as the [Federal Rules of Civil Procedure \(FRCP\)](#).

Applying Data Governance

Data governance is a business requirement. But it's also an opportunity to organize data streams, because manufacturers that can meet data storage, backup, and archiving challenges also can locate pertinent data in any situation.

Say a manufacturer needs to recall a piece of its equipment. In this case, a manufacturer with comprehensive data management has an audit trail that lets it rapidly recover communications, records, and data during the engineer-to-order process.

Likewise, say the manufacturer needs to audit the data on a specific part. Comprehensive data management lets the manufacturer search records by referencing part numbers and even trace bills of materials that include the part. Access to documentation, regardless of file format, enables manufacturers to recognize all possibilities and respond accordingly, often without the need to progress to litigation.

Manufacturers can adopt policies, rules, and technology to strengthen the pillars of data governance — namely, archiving and e-discovery (defined as identification, collection, and production of ESI in response to requests for the data when investigations or lawsuits require it). For such situations, comprehensive data governance ensures that all of the organization's ESI is available and searchable at all times. A robust archiving solution coupled with e-discovery lets manufacturers store, index, search, and make audit trails of vital ESI, while comprehensive backups let manufacturers protect and recover ESI for business continuity in the event of a disaster.

Getting a Head Start

Manufacturers can implement data governance initiatives themselves, but it can pay dividends to get help from industry partners with expertise in ESI management. Here, OEMs should look for a partner that understands the manufacturing process as well as CAD and product lifecycle management (PLM) software that drive efficiencies across the process.

Wherever CAD models and the corresponding data are interconnected and rely on information from other systems, the program should preserve relationships between files during storage, backup, and retrieval.

Also, backup helps recover information on all devices that create it, including mobile devices anywhere and at any time. Some solutions even verify the validity of backups. The importance of this can't be overstated. Most companies don't perform disaster recovery drills, so they only learn whether backups work if a disaster occurs.

Finally, OEMs should look for agentless programs that don't need to be installed on users' machines. Such programs reduce downtime and maintenance costs, and they don't rely on users to remember to perform backups. They also let manufacturers meet internal policies and external compliance requirements.

Chris Grossman, senior vice president, manages the Enterprise Applications division of Rand Worldwide, including the Rand Secure Data division (a sister division to IMAGINiT Technologies). He can be reached at cgrossman@rand.com. Visit www.randsecuredata.com for more information.

Source URL: <http://machinedesign.com/guest-commentary/get-handle-data-governance>