

By **Christy Goulet,**GIS Analyst, Data Solutions,
ENTRUST Solutions Group

EVERY ORGANIZATION REQUIRES ATTENTION TO DATA GOVERNANCE, WHICH AFFECTS EVERY PART OF THE ENGINEERING AND OPERATIONS CHAIN, FROM START TO FINISH.

Utility companies frequently rely on digital tools to help make operational decisions, meet regulatory requirements, plan capital spending and respond to incidents. The key to success in all these endeavors is accurate, complete and timely data. Data



governance is the process of effectively managing, utilizing and securing that data. It establishes internal policies and processes to protect the integrity, availability and usability of data within the organization. This type of system generally includes a governing body, a defined set of standards, and a plan to implement and maintain the new data procedures throughout the organization.

With well-executed data governance, organizations can avoid the headaches that go along with inconsistent data because it standardizes definitions and increases accuracy across diverse platforms and teams. More importantly, a well-organized data governance system will increase security and ensure compliance with internal and external data regulations while providing decision-makers with reliable information.

Utilities have access to vast amounts of data, and with new technologies, the volume of data will continue to increase. Often, utility data is used and created by multiple teams with different data standards due to an emphasis on each individual team's interests. This can result in poor data quality that affects the overall understanding of the utility network and assets. Accurate, good-quality data is essential for data analysis, and proper governance paired with a well architected data system strategy helps keep data organized, secure and usable.



CHALLENGES TO IMPLEMENTING SOUND DATA GOVERNANCE

Data governance is crucial, but it can be difficult for utilities to implement it effectively. Issues range from the culture of the organization to data security, efficiency and cost. Below are some of the problems utilities may face when employing a data governance system.

Cultural resistance: Changing protocols and technology can be stressful for end-users in an organization. If the employees that collect, utilize and analyze the data do not see the value of data management, they may be less likely to create good quality data. It is essential that all stakeholders within the organization understand the importance of quality data governance in order to gain their support in data governance initiatives.

Data ownership: Lack of agreement or understanding of who is responsible for what data can lead to gaps or overlaps in data ownership. This inevitably leads to data having different values in different groups within the organization. Good data governance defines a system of record and designates an owner for each category of data. It also establishes the process for disseminating data throughout the organization so that everyone is working with accurate and current data.

Data standards and data quality: Without data governance, inconsistent workflow practices exist between the various groups, teams and projects that generate, maintain and use data. Many different data sources often are available, including corporate acquisitions, which bring historical data of varying quality, and other departments and regions that have different processes and values. All of these factors lead to inconsistent data quality. Data governance is the solution to creating data and workflow standards for all teams and projects, ensuring that data quality is consistent throughout the organization and over time.

Efficiency and cost: Implementing data governance may have short-term costs that impact both personnel and expenditures. Consultants and technology may be employed to ensure a high-quality end result. However, the return on investment is well worth it in the long-term, as new data standards and practices increase organizational efficiency and the accuracy and currency of the data.

Security: IT security is a critical issue for all organizations. Security is necessary to prevent attacks on the corporate data structure and leaks of sensitive information. Good data governance will help enhance corporate data security by putting controls in place that specify where data comes from and where it is allowed to go, while maintaining visibility to support business needs. Data governance is not a replacement for IT security, but it will make security easier to manage and control.

SUPPORTING DATA GOVERNANCE IMPLEMENTATION

EN Engineering (EN) offers a wide range of services designed to support its clients in all stages of a data governance implementation or review. During the early stages of a data governance project, EN



can facilitate the collaboration of all relevant stakeholders. EN teams have extensive experience drafting policies to ensure that the requirements and concerns of all stakeholders are considered in setting a data governance policy. Workshops can ensure that critical stakeholders are not overlooked and that each group has the opportunity to contribute to evolving standards.

At its core, EN is an engineering company that not only brings experience in data governance to clients' projects but also brings operational expertise relevant to utility companies. EN draws upon industry best practices developed from its experience with utilities across the U.S. and understands utility operations and where exceptions need to be allowed for expediency.

Specialists make sure that processes are put in place that allows these exceptions without sacrificing quality. Some data governance standards require that the utility adopt changes to long-standing practices. EN helps create, review and test new workflows within the utility as part of this process—smoothing the transition to new procedures and standards for all stakeholders.

SPECIFIC SERVICES FOR DATA GOVERNANCE

Data governance needs analysis: This is the process of assessing clients' current data state and identifying ongoing and potential problems that data governance can address. This service involves quantifying the value of data governance to an organization and includes a cost/benefit analysis. The EN team works with clients to identify both immediate and long-term benefits of data governance that will deliver measurable value to their organization.

Facilitating workshops: All stakeholders in a data governance initiative are identified and workshops facilitated to ensure that the needs and concerns of all parties are considered when developing an effective data governance program, including policies and procedures. Stakeholders include groups who create, manage and use the data under consideration.

Developing data governance recommendations: Data governance policies and processes, which incorporate industry best practices and are specific to each client, are recommended. A data governance program should not only be an implementation of a textbook recipe for data governance. The particular circumstances of each client will direct what policies and procedures will be successful. EN experience with a wide variety of clients in the same industry, and working with various circumstances, informs a deep understanding of what will be effective for individual clients.

Drafting policies supporting corporate data governance practices: Specialists at EN have extensive experience drafting standards, procedures and documentation for clients, including policies needed to support the implementation of a data governance program.

Reviewing and testing new or changed workflows: A new data governance program will necessitate the implementation of some new processes and the changing of some existing processes. These workflows



will need to be tested for bottlenecks and unforeseen consequences. A testing program can be set up to evaluate the proposed process changes and resolve any identified problems.

Implementing data governance programs: After a new data governance program has been developed, documented and tested, the program needs to be implemented to achieve the desired results. EN can assist in this process, drawing on experience to help clients avoid costly mistakes during the implementation—making sure the process is performed effectively, so that benefits are received as quickly and completely as possible.

Managing change: For any new program to be successful, change has to be managed effectively. Changes need to be communicated to all relevant stakeholders because it is critical that everyone involved understands and values the new processes and standards. EN understands who needs to be included in change management and what messages will gain their buy-in.

Assessing results: Once a new data governance program has been successfully implemented, one must assess the program's results to ensure that the desired benefits have been achieved. If the program is not delivering the planned value, the program must be reassessed to determine what changes need to be made in order to achieve the desired results.

SUMMARY

Every organization requires attention to data governance, which affects every part of the engineering and operations chain, from start to finish. Uniquely, EN is not just an IT company concerned with raw data; it is a team of engineers who understands the true nature and value of the end application of the data in the real world.

Having worked with many tiers of companies in different environments over time, EN has witnessed data governance in action from multiple perspectives, observing and learning from both the worst and best practices. Through effective interaction with the client, it is possible to understand an individual company's roadmap and needs, so that standards, practices and methodologies can be set up that do not get in the way of achieving the client's wider goals.

Data governance is a journey, not a destination – it cannot be achieved overnight. In long-term partnerships with clients, incremental changes work to build improvements in data governance, rather than prompting sudden and drastic overhauls of current practices. From the client's perspective, this approach also allows for effective cost control. Data governance ultimately provides significant financial value to the client. When done well, it has the potential to improve planning decision-making, safety, cost and productivity, not to mention regulatory compliance. In addition to improving company financials, a proper data governance strategy improves customer satisfaction and the overall morale of the workforce, who then know they can rely on the data they work with on a daily basis.

