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Transforming Government Data Management: RELI Group's Data Analytics Solutions

Written by: Chris Carter, Ed Gorens, Jacob Herritt, and Thomas Smith





In the government sector, the management, analysis and presentation of data stand as critical components of decision-making. However, traditional methods of data management using manual aggregation, static reporting, and disparate data sources can not only hinder an agency's ability to make decisions with accuracy and agility, but they can also become huge drains on resources. This white paper explores how Microsoft Power Business Intelligence (BI) presents an innovative solution to these challenges, transforming the landscape of data management for government agencies.

Challenges in Data Management

By its very nature, managing government data is complex and challenging, and those challenges manifest themselves in a variety of ways. Trying to get a handle on massive amounts of information can hinder efficient data aggregation, impede timely decision-making processes, and limit the accessibility and usability of critical information. Some of these specific challenges include:

Laborious Data Aggregation: Daily or monthly data aggregation involves tedious processes like Excel macros or manual copy-pasting, consuming valuable time and resources.

Accessibility and Analysis Tools: End users lack self-service tools to perform comprehensive analyses or access necessary data themselves, leading to delays in decision-making.

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Massive, Complex Spreadsheets: Extracting insights from unwieldy spreadsheets poses challenges, especially for senior leadership, impacting their ability to interpret complex data effectively.

Static Reports: One-time snapshot reports are often outdated by the time they're published. Moreover, they are often time-intensive and tedious to generate.

Inconsistent Results: Variations in data outcomes across different programs raise concerns about data accuracy and consistency.

Data Availability: Delays in data retrieval or reliance on outdated information hinder prompt decision-making processes.

Overcoming these challenges requires a holistic solution that goes beyond traditional methods. Power BI presents an opportunity to streamline processes, enhance accessibility, and empower decision-makers with actionable insights. By tackling these challenges, Power BI establishes the foundation for a data-driven transformation within the government space.



Solving Data Management Challenges for Government Clients

Before implementing any data management solution, RELI Group first takes the time to develop a thorough understanding of the unique issues and priorities faced by each government client. This begins with extensive discovery sessions with stakeholders to identify and comprehend the intricacies of their data-related challenges, looking at everything from existing data infrastructure to potential bottlenecks and security concerns, and layering that with the mission and goals of the client.

Once the challenges and priorities are clearly defined, RELI Group leverages its expertise to evaluate existing tools and programs available to the government client that are capable of meeting its data management needs. The focus is on finding fiscally responsible, scalable and sustainable solutions that align with the client's mission and goals – not simply peddling the latest "shiny object" on the market.

For many clients, Microsoft Power BI emerges as an optimal solution for meeting data management needs. Power BI is a comprehensive business analytics tool that empowers users to visualize and analyze data across an organization. Designed to transform raw data into meaningful insights, this tool offers a highly customizable, user-friendly platform for creating interactive reports, dashboards and visualizations. These outputs can be added to intranet sites or other shared

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resources, allowing anyone who needs access to the data to get it in real time. The comprehensive features and userfriendly interface of Power BI position the platform as a transformative tool for government agencies. Its ability to automate processes, share data, and customize dashboards empowers decision-makers across the government to harness data effectively. Embracing Power BI represents a pivotal shift towards a more efficient, responsive, and data-centric governance approach.

Case Studies

Case Study 1: Streamlining Data Processing and Improving Accessibility

The Problem: Limited accessibility to data in an aggregated data source that lacked the necessary tools prevented the client from performing timely analysis and decision making.

The Solution: After engaging the customer and other stakeholders to gain an understanding of agency needs and limitations, the RELI team collaborated with a federal database team to implement Power BI as a data management solution. This process includes data standardization and availability through the use of machinereadable data formats, eliminating errors associated with manual aggregation and spreadsheet manipulation. The team built dynamic dashboards to track daily, monthly and yearly activity along with trending metric data that assists in analyzing program health. The dashboards show trends with new vendors, the health of the program, and specific metrics requested by the client, and also include tools for users to pull unique data specific to their needs.



The Value: The dashboards are now used by senior leadership within the agency, the internal branch managing the program, and other branches throughout the agency. The marketing team uses the data to identify trends, departments throughout the agency rely on the data to arrange future staffing, and financial managers and section chiefs use the data to make informed decisions.

Case Study 2: Improving Report Preparation Time and Information Accuracy

The Problem: Fragmented data storage across federal agencies that required manual manipulation, coupled with outdated software, resulted in inefficiencies, data integrity concerns, and time-intensive report preparation prone to errors.

The Solution: The RELI team guided the agencies through a holistic change to the processes, services and software used to gather, distribute and analyze information. Through collaboration with federal staff, the data-gathering process was automated using Microsoft SharePoint. Additionally, the team automated data storage, computing and distribution through Microsoft SQL Server Analysis Services, and connected the services to Microsoft Power BI for data visualization and analysis.

By understanding the intricacies of each client's environment, identifying specific issues, and leveraging existing tools, RELI is able to deploy data management solutions that not only resolve immediate challenges but also remain adaptable to evolving requirements and emerging technologies.

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The Value: As a result of the RELI team's efforts, these agencies now regularly use fully automated systems and business analytics solutions with high confidence. Stakeholders have a centralized location to access data and perform analysis, and each stakeholder can analyze data in their own way without compromising the data. Easy access and configuration enables stakeholders to complete analyses and gain insights without having to perform tedious data preparation tasks. Incident performance reports are now fully automated staff members no longer need to manually prepare reports, saving time and reducing the potential for human error. Additionally, staff members now have access to consistent, and continuously updated, tables, charts and graphs that they can reference at a moment's notice.

Conclusion

RELI Group's approach to helping government clients navigate data management challenges is a holistic and collaborative process. By understanding the intricacies of each client's environment, identifying specific issues, and leveraging existing tools, RELI is able to deploy data management solutions that not only resolve immediate challenges but also remain adaptable to evolving requirements and emerging technologies. In many cases, Power BI emerges as an ideal solution. It represents a transformative toolset for government agencies, fostering a culture of data-driven decision-making. By addressing key challenges, empowering users with accessible analytics tools, and revolutionizing data visualization, Power BI becomes the cornerstone of efficient, informed, and agile governance across agencies.