A Successful BI Solution Is Not Always a Simple Roll-up

Off line systems can complicate what appears to be a simple BI solution

"Due to a lack of information in the business systems business managers had to create interim reporting by creating off line systems using spreadsheets, manual adjustments, and other means...this left upper management without a way to drill down, analyze and find actionable information" Business Systems Executive

Situation

The customer is a large, international organization that engages in selling and supporting business jets. Upper management needed to monitor spare part sales on a daily basis since maintaining profitability was critical to achieving corporate goals. The problem was that they received a supporting report only at the end of the month. So the task fell to the department managers to accurately report spare part sales compared to the budget on a daily basis to upper management so that they, in turn, may take appropriate actions early enough to make a difference. This process was highly labor intensive, difficult to execute, required timely information, and was very business critical.

During each month, until the monthly sales report is published, a sub-set of reports was created daily. Business managers would use the information in these daily reports along with information gathered manually from other sources to build spreadsheets to report the information to management in the interim. The business users also worked on answering management queries by researching the information in the report and investigating the issues in the source systems. Because the process is so labor intensive, business users cannot possibly research every issue nor could they always find the information in the source systems and in many cases had to use their business experience and knowledge to provide a "best estimate".

The Monthly Sales Report was created once a month which created summary postings to GL. The invoice details that were printed on the report were created through "off line" business logic which created temporary tables and reports that were no longer available for drilling down to supporting detail. Without the ability to "drill" into the detail, upper management had to accept the numbers as is or ask specific issues to be investigated; i.e.; Why was a specific financial transaction lower than expected or missing? Was anything expected to occur postponed instead? Why is the profit margin higher or lower than expected?

Simply rolling up the data into a BI Reporting Solution would not solve the problem since upper management already had the summary numbers but had no way to drill into the issues to take action on the information.

Methodology

The customer had previously experienced a successful BI implementation with AccessIG®, Inc., a Microsoft Certified Partner, so once again the customer contracted with AccessIG. Because AccessIG had extensive business experience they took a lead role in bridging the gap between IT and the business users. And, based on AccessIG's 30 plus years of extensive business process experience, they brought valuable "best practices" experience that the customer could draw upon. This experience played a key role in mitigating risk and accelerating benefits. AccessIG knew how to ask the



The customer is an international organization that engages in selling and supporting business jets. The company also provides avionics, engine, and aircraft support services, including maintenance, repair, and overhauling.



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right questions to discover not only how the information was to be used, but how to discover what off line processes had to recreated to reproduce critical business information that was no longer available.

AccessIG worked with both the business users and IT to discover what data was available in the source systems. Where available, each critical piece of information was traced back to the source data and proper ETL functionality was added to clean and validate the data. It was while investigating the supporting information that wasn't available in the source systems that it became apparent that "off line" processes were creating this information through other methods. Then challenge was to then uncover business rules associated with these "off line" business processes.

At this point it was realized that what was needed was more than the usual information roll-up. The final solution required an application to reproduce those interim, off line business processes so management would have the ability to drill into the information to analyze and act on information.

Each set of off line processes was documented so they could be codified into the final BI solution to provide the necessary supporting information. This included spreadsheets, manual reports, as well as temporary tables they were no longer available at the end of the month.

Technology: AccessIG, a Microsoft Certified Partner, helped the customer deploy a solution using Microsoft technologies on a SQL-Server platform. In addition, since an application needed to be developed, AccessIG used a rapid development tool, Iron Speed® Designer to produce a .Net application that was a faster, more reliable, and less costly solution. This web-based solution featured a spread-sheet like environment that was familiar and comfortable to the business users and required little to no retraining.

Results

Today upper management as well as other business users are enjoying a secure, web-based system with clean, dependable information that is up to date on a daily basis. The off-line processes are understood and documented resulting in reduced business risk. The off line business process rules are automatically applied so that drill downs to actionable information are available that combine information from three systems: General Ledger, Budgets and Operation. The solution not only reduced labor costs and delivered dependable information, but it allows the business users to spend more time spent on business critical issues that will help the business be more successful.

Benefits

- Undocumented manual systems were documented and replaced which reduced labor costs and business risk
- Management receives up to date performance-versus-budget on a daily basis
- Management can drill to actionable information to take proactive actions
- Business users can analyze performance-versus-budget, over multiple years and sort on many dimensions such as parts, customers, line of business, aircraft, countries, etc.
- Management has more to spend on other business critical issues