Consolidating Departmental Functions Across Multiple Sites

Business Intelligence in a multi-site manufacturing environment

"...Even our power users had difficulty getting the information they need from the transactional systems. If you compound that by trying to analyze information over three divisions in a supply chain infrastructure, the task was insurmountable..." IT Executive



Situation

The customer faced the task of consolidating information from three separate divisions, on three separate ERP systems, to more effectively manage the entire supply chain. The goal was to combine and analyze information so that critical support functions, such as Procurement, Scheduling, and Finance, could be consolidated from three separate departments to a single department for each function.

Unfortunately, the data was stored in three separate ERP systems and each system had different data mapping for the information. Also, the very design that makes transactional systems efficient prevented easy data extraction and reporting by the users.

The first challenge was to map the information across the division. Then, they needed a set of reporting tools that could be used by individual managers and power users. In order to do this, they needed to extract information from the transactional system into a relational environment with data views that were easily understood by power users.

User Concerns

The customer knew that there were several risk factors:

- Distraction of the managers from important business issues if detailed scripting of IT personnel were to be required
- Disruption of up and downstream business processes if unintended consequences were to occur
- Dissipation of scarce budget resources if the improvements were to not be captured

The Customer was concerned about the mapping process; specifically that the mapping and labeling of data, if done incorrectly, would result in erroneous business process reporting when accessed by the users. Although each division used the same basic ERP application, each system was implemented differently; i.e., how the data was labeled and stored depended on how the software was originally configured. So, they required support from someone who had the business expertise to find and interpret the information stored in the ERP systems.

The business users knew what information they wanted, but, they needed IT support to implement the process improvements. Internal IT departments are very talented in managing the corporate data and associated platforms; however, they are often too busy to become familiar with each departmental process and the associated business rules. Therefore, departmental managers must spend valuable time scripting each step to avoid the risk factors listed above.

The customer had to coordinate the supply and demand for three geographically separate divisions operating in concert to produce a hi-tech, complex product. Each division had a separate ERP system, implemented in a different configuration.

The customer is a leading supplier of electro-optical and infrared technology to the United States Armed Forces.



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Solution

The customer brought in AccessIG, Inc., a Microsoft Certified Partner, as a member of the team to help mitigate the risks and to accelerate the capturing of the benefits. Because AccessIG had extensive A&D experience the customer did not have to script each step. AccessIG not only demonstrated a quick understanding of the business processes, but also those processes that would be affected up and down stream. And, based on their extensive experience, they brought valuable "best practices" experience that the customer could draw upon.

As a result, the customer gains faster benefits at a lower cost due to:

- the acceleration of the process improvements/prototyping phase
- the acceleration of the identification of the cost/benefit
- the acceleration of the identification of avoidable risk

Teaming with AccessIG, the customer implemented a BI-DataMall® solution, (a separate relational database implementation where information from disparate system can be stored in a format that is easily access by users) based on Microsoft SQL Server technologies. Data was automatically extracted from each ERP system on a scheduled basis and combined into a single, multi-divisional BI-DataMall. Information was labeled with a common identifier in order to eliminate the problems associated with individual ERP configurations. Now users could analyze information for either a single division or across the entire business unit.

The BI-DataMall, through NT authentication, provided multiple levels of security with a single sign on so the security implementation was transparent to the users and required no additional training.

The BI-DataMall was installed using SQL Server 2005 which included Server Reporting Services (SSRS), SQL Server Report Builder (SSRB). In addition, an Excel direct connection was set up. A huge advantage was that the users could leverage the desktop Microsoft tools with which they were familiar.

The BI-DataMall automatically monitored data updates and if failure occurred users were presented with "updated as of" times so they were always informed as to the timing of the information. This helped users to have confidence in the integrity of the reports. Critical personnel were notified by email if failure did occur.

A SharePoint site was established for publishing and sharing the information. Microsoft Office SharePoint Server 2007 provides a single, integrated location where employees can efficiently collaborate with team members, find organizational resources, search for experts and corporate information, manage content and workflow, and leverage business insight to make better-informed decisions.

Training for power users was done over the corporate intranet, using live meeting, saving time and resources. Now the users could easily create the reports they needed when they needed them.

Benefits

- The customer was able to consolidate several strategic functions into a single department
- Power users were able to easily create the reports they needed
- Reporting could be done for single division or consolidated
- All users in the strategic business unit had a centralized location for accessing information
- Users didn't have to learn new tools, training was minimal
- Information is consolidated and structured for easy reporting and analysis
- Customer has multiple options for creating and distributing reports; i.e., automatically generated, one time, published, e-mailed, etc.
- Gathering and completing the information has been automated freeing up critical resources