



SEVinS

Disparate Systems Data Integration

SEVinS is a data analysis and decision-making tool created for a leading defense industry contractor. This tool is designed to vastly improve the Earned Value Management System (EVMS) processes engaged within government projects.



Correctly tracking earned value is critical when large projects are funded by the government. NBI provided crucial services to extract data from multiple sources so that it could be centrally processed and provide the best EV information and process control opportunities. This system became a distinguishing factor that positioned the defense contractor to win multiple billion-dollar contracts while in competition with other firms that did not have this type of tool.





SEVinS

Project Discussion

The Federal Government required the use of Deltek's wInsight Analytics. However, this system did not have all of the data needed to satisfy governmental regulations. Data from the master schedule, time entry system, Deltek's MPM (EVMS Cost Engine), shop floor inventory systems, supply chain procurement and billing systems, and the NBI' custom-developed Program Log was missing.

Armed with in-depth domain and development knowledge, NBI developed an earned value dashboard system (SEVinS). This system identified outliers and exceptions and extracted the information needed to ensure adherence to the governmental EVMS regulations. SEVinS used an online analytical processing (OLAP) cube that went beyond the Cost Performance Index (CPI) and the Schedule Performance Index (SPI). Using extensive domain, mathematics, programming, and database expertise, NBI developed a direct interface that connected the disparate systems into a central database.

This ETL process required the extraction of up to one hundred gigabytes of metadata from each of the sources, de-normalization of the data, and the merging of this data into an OLAP cube of approximately one terabyte. Each run was completed in less than nine minutes, whereas previously, the defense contractor had to use data that was one month old.

Deltek.