Adventure Works BI Project

Required BI Software

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| Software | Rationale |
| SQL Server Database Engine | * The CEO wants a consistent view of all business data, and a centralized data warehouse in SQL Server would provide this. * Since consolidating the database servers onto SQL Server 2012, the Database Management team has spare capacity, so presumably managing another instance of SQL Server to support the data warehouse should be achievable. |
| SQL Server Integration Services | * The business data required for analysis and reporting is currently spread across a range of data sources. Integration Services will provide an ETL platform to populate and refresh the data warehouse. |
| SQL Server Master Data Services | * The CEO has complained about inconsistent data, which could potentially be caused by a lack of central data management for key business entities. * More specifically, the marketing specialists have noted that product definitions in the Internet sales database do not always match the definitions of the same products in the Reseller sales database. Bringing the product data under master data management will help to eliminate these inconsistencies. |
| SQL Server Data Quality Services | * The marketing specialists have difficulty ensuring that their analysis of Internet sales data is accurate because of quality issues in the customer data. Data Quality Services could be used to cleanse customer records and improve the consistency, thereby reducing the inaccuracy of the sales analysis. |
| SharePoint PerformancePoint Services | * The CEO wants to be able to see key business metrics at a glance. * The Sales VP wants a dashboard that shows sales revenue data. |
| PowerPivot | * The marketing team has expertise with Excel, and both perform their own data analysis. PowerPivot would enable them to perform more comprehensive analysis. * The marketing team often find themselves analyzing large volumes of data in Excel and experience performance problems, despite having adequate memory. PowerPivot would handle these large data models more effectively. |
| SQL Server Analysis Services in Tabular Mode | * While much of the tabular analysis can be done with PowerPivot, the network administrator wants heavily used workbooks to be brought under centralized control. This can be achieved by migrating highly utilized PowerPivot workbooks in SharePoint to a tabular Analysis Services database. * Note that users can still access the tabular data model in Excel and Power View through SharePoint by creating a BI Semantic Model connection to the Analysis Services database. |
| SQL Server Analysis Services in Multidimensional Mode | * The finance department may have a future requirements for complex modeling that includes financial accounts and data mining. A multidimensional instance of SQL Server Analysis Services can provide this more effectively than a tabular instance. * The finance department already has expertise in building OLAP cubes with an earlier version of SQL Server. They should be able to do the same with SQL Server 2012 as the multidimensional functionality has not changed significantly. |
| SQL Server Reporting Services in SharePoint Integrated Mode | * At a future point, the monthly financial management reports can be automated and delivered through SharePoint or by e-mail subscription. * The North American regional sales manager requires printable reports, which a report developer could create in Report Designer and publish to SharePoint. |
| Power View | * The Sales VP has requested the ability to create visualizations from the Excel data provided by the sales administrative staff. * Since only one interviewee (albeit an executive) has requested this, further research should be undertaken to validate this requirement – however, the functionality is present in Excel 2013 by default and can easily be incorporated into SharePoint when Reporting Services is installed in SharePoint Integrated Mode. |
| SharePoint Excel Services | * This is a prerequisite for sharing PowerPivot workbooks in SharePoint. It is also already in use to share Excel workbooks. |