

System Integration

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Case Study 4: Functional Integration

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Functional Integration

- The CEO has determined that he wants a fully integrated system because the company is growing and he anticipates more customization applications
- There are still data inconsistencies that have impacted some of the decisions and have had an impact on the ability of the company to respond to new markets
- Many of the executive managers have visions of customized applications that will support their functional areas as the company grows
- The executive managers also expect to purchase other applications in the near future and would also like those integrated
- The company understands that quick response to the market , demands that information be available to all that need it

Problem

- In order to grow and expand, the company will purchase other companies. These companies will already have their own enterprise systems so the CEO needs an IT infrastructure that supports information sharing
- The current system ensures that the data is populated between databases, but the CEO recognizes the need for a general mechanism that facilitates integration
- Is it possible to have a single data source, where all users access a single database?
- Can the team develop a proof of concept that shows how applications could access the same data, and yet have other applications able to function within the same framework

Task

- Without loss of current functionality, create a single database that could serve as the primary database for the organization
- Develop a schema for the database that integrates the schemas from the other two databases
- Modify the dashboard to include the new requirements document
- Your team will have access to the databases and the code, but try to minimize changing the code, if possible. The most successful implementation will be the one that meets the requirements and minimizes changes to the applications

Deliverable

- Turn in a functionally integrated system solution, including source code and executables of your product
- Include test plans, documented test results, and designs
- Ensure that the dashboard does not display old data
- Update the document describing any operational constraints that must be observed so that the system will be consistent
- Document all work!

A Note on Software

- Select a database that will likely support most applications such as SQL Server
- The Integration team can make any modifications necessary to the software, but the more the existing applications are modified, the fewer points the team will receive for their final product
- The Integration team should ensure that the system data is consistent to users
- Design decisions should be reflected in your team journal