

INTEGRATION 101

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The Sidwell Company



INTEGRATION

IN-TE-GRA-TION

“IN”-TE?-GRA-Should



INTEGRATION 101

- What is integration
- Why integration occurs
- Types of integration
- Benefits of integration



WHAT IS INTEGRATION?

- 1 : to form, coordinate, or blend into a functioning or unified whole
: **Unite**
- 2 : to find the integral of (as a function or equation)
- 3 a : to unite with something else
b : to incorporate into a larger unit



Merriam-Webster Online Dictionary 2006 – (<http://www.m-w.com/dictionary.htm>)



What Is Integration?

- Access to information/data
- Access to applications
- Getting two or more systems to communicate



INTEGRATION—WHY DO IT?

- Assumptions:
 - All data is current.
 - All data is complete.
 - All data will match at the end.



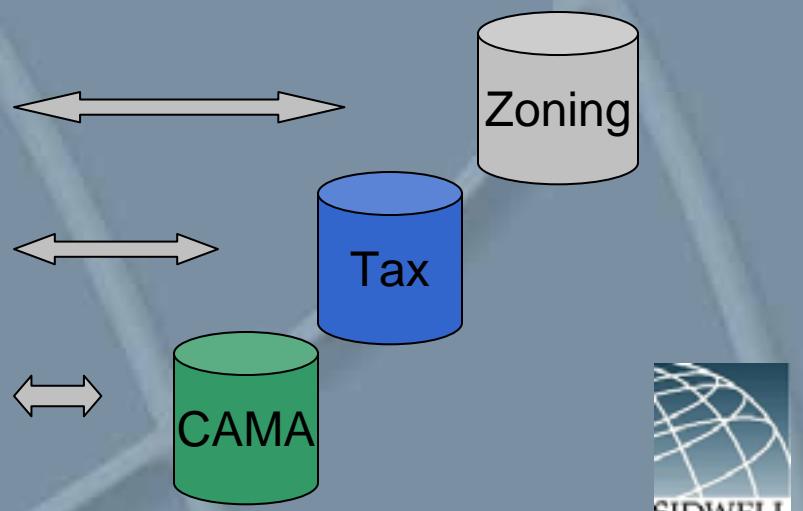
TYPES OF INTEGRATION

- Access to information
 - “Back-end” or “Faith-based” Integration
- GIS centric workflows
 - “Front-end” Integration



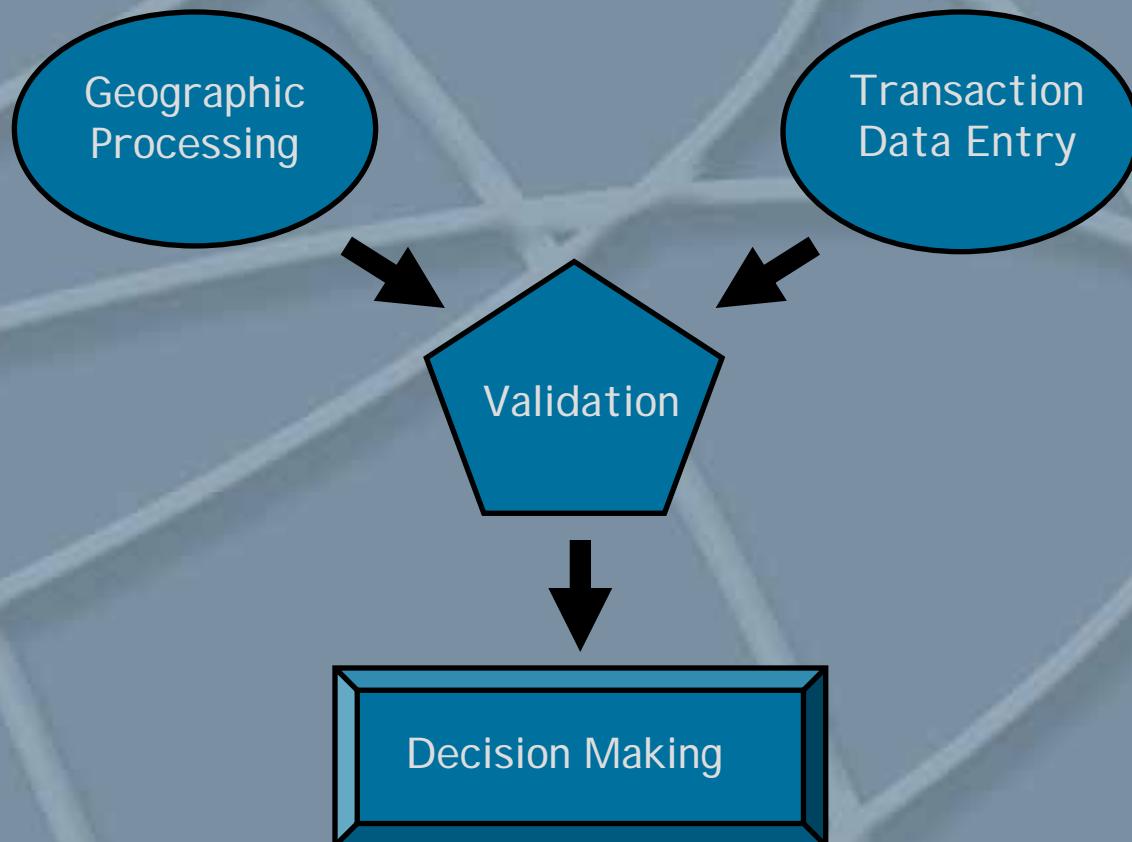
“Faith-Based” Integration

- Access to data in multiple, separate applications
 - Data Analysis
 - Visualization
 - Deployment



“Faith-Based” Integration

- Data Validation/Quality Control



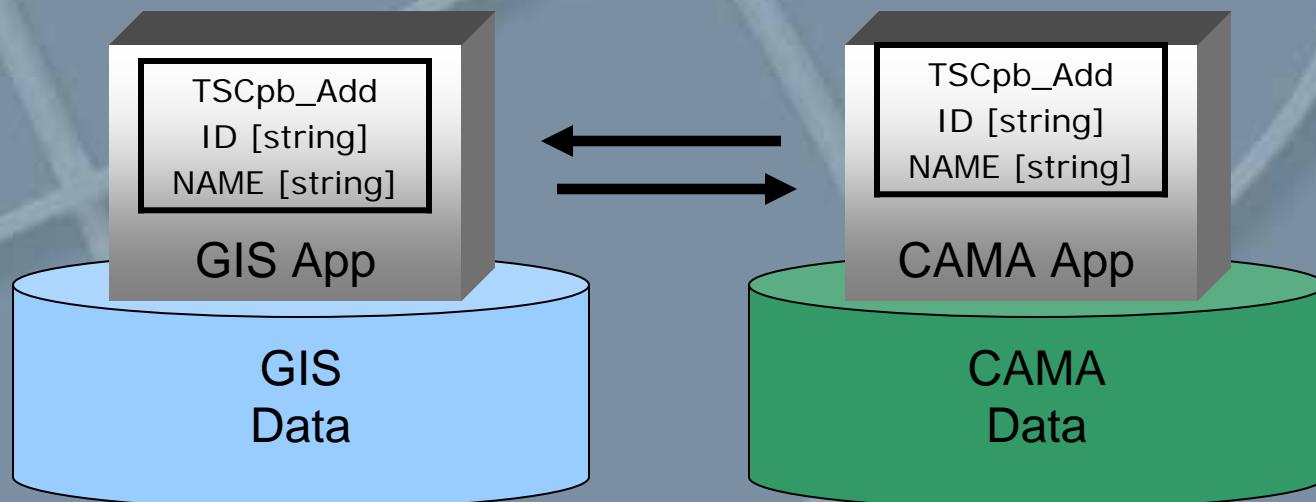
“Front-End” Integration

- GIS Centric Workflows
 - Information passes between applications
 - GIS initiates workflow



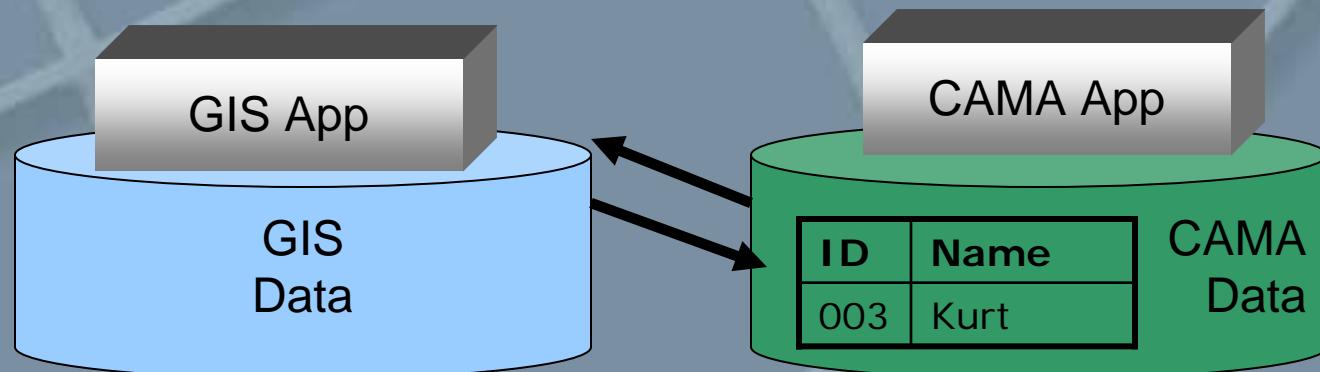
“Front-End” Integration

- Function Call Approach
 - API (Common application development practice)
 - Opens source code to access information
 - Isolates both applications from database schema changes in the other system
 - Higher level of control over what is written



“Front-End” Integration

- Table Population Approach
 - Interim table accessible for multiple applications
 - Works outside vendor business tables
 - Both applications read and write to the same common table
 - Simpler



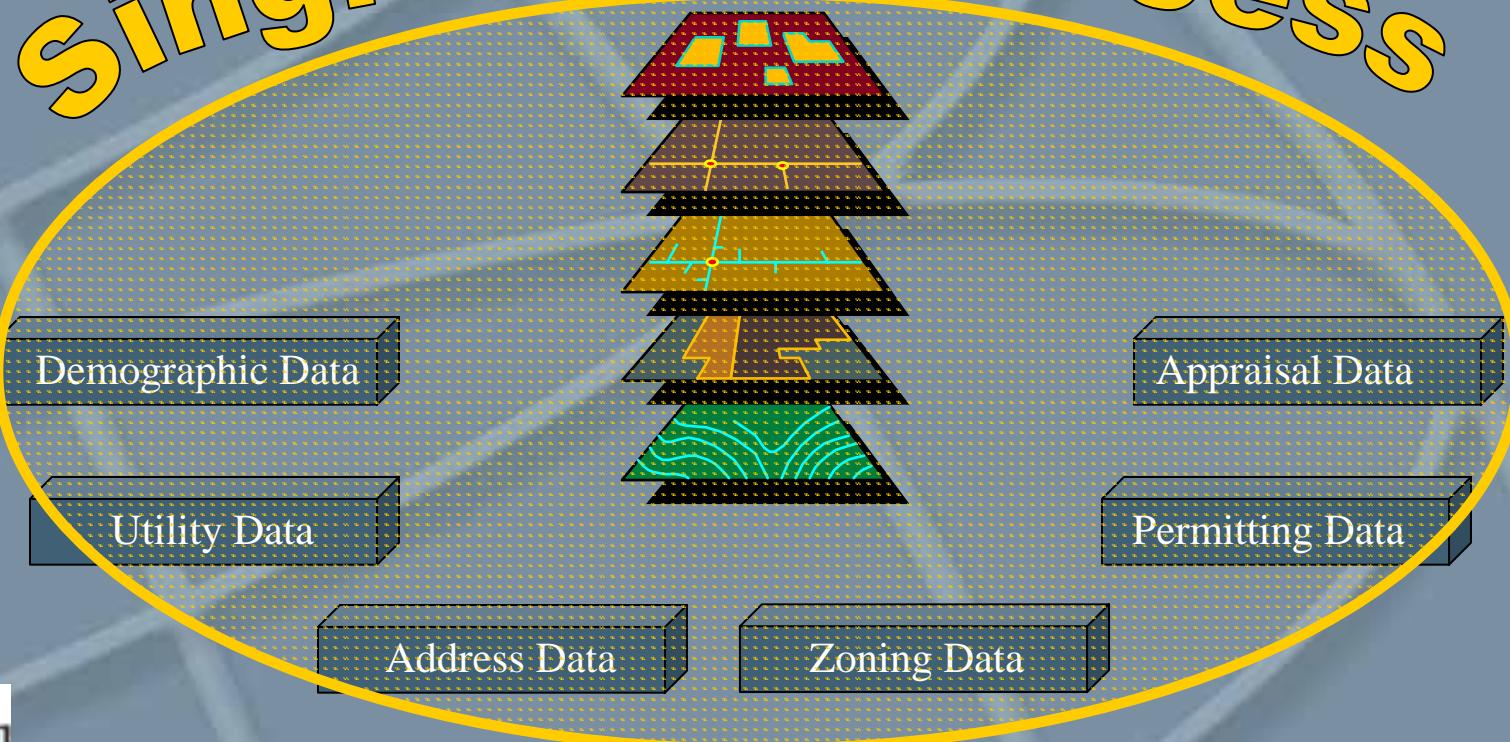
INTEGRATION 101

“Front-End” Integration



INTEGRATION—WHY DO IT?

Single Point Access



BENEFITS OF INTEGRATION

- “Faith-Based” Integration
 - Access to data into multiple applications
 - Data analysis
 - Visualization
 - Deployment
 - Validation/Quality Control

Better Decision Making!



BENEFITS OF INTEGRATION

- “Front-End” Integration
 - GIS centric workflows
 - Information passes between applications
 - Applications and data always in synch

Efficient GIS Workflows!



INTEGRATION TIPS

- Integrate at the application tier, not data tier
- Isolation from vendor-dependent data structure changes
- Provide standard protocols for passing information between systems



Questions?

*Or Are You Ready for the
Next Presentation?*



Thanks!

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