# Can a Vendor Truly Partner with You? LBCC and Phytorion: Reporting and Analytics

Session 23748 2:00 – 3:00 PM Orlando, Florida



### Overview

- The challenges we faced
- The process to pick a partner
- The project
- College roles and partnership
- Reporting tools and functionality
- Data warehouse demo
- Questions



### Long Beach City College



- Two year community college
- Associate degrees, certificates, and transfer to four year university
- ❖ Each term we offer about 1100 courses and over 3,000 class sections

Long Beach City College, 4901 E. Carson Street, Long Beach, CA 90808



### Picking a Partner

- We knew about other data warehouse solutions
- We wanted a group that understood our issues, scope and timing
- ❖ We wanted a model that would work for others but had ourselves in mind
- They used the most current type of schema

### What did we need?

- A degree of independence for Business Analysts
- A way around limits imposed by joins and number of tables
- The ability to access data without impacting production
- Flexibility and fleetness of product was very important



### Departments in Data Warehouse

- Counseling Datebook & Assessment
- Financial Aid
- Admissions & Records
- Human Resources
- Academic Services
- Student Services







### Highlights of the Data Available

- Characteristics of Students
- Degrees, Certificates, Honors
- Information about each course
- Information about classes
- ❖ Roll ups → Division → School → Dept → Subject
- State reporting and complex derived fields
- Financial information
- Human Resources employee information
- Student GPA, load, status, test scores
- ❖ ISIR, PELL, & Financial Aid characteristics

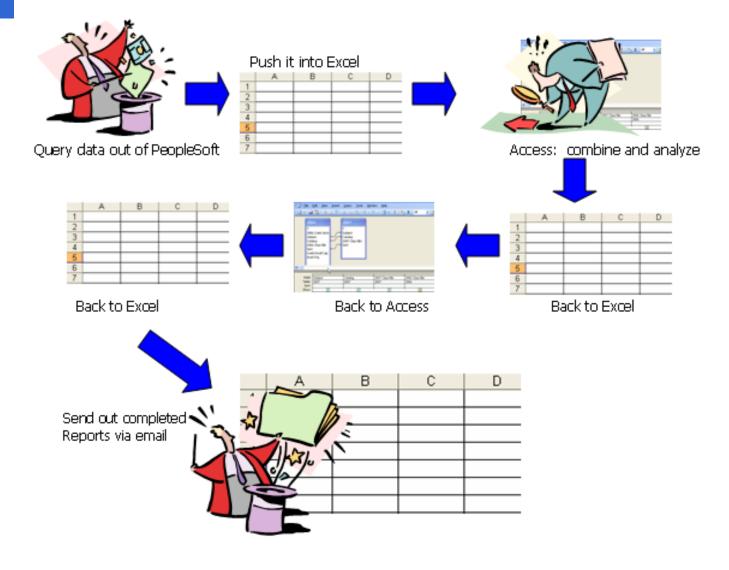
### Derived Fields - A Virtual Miracle!

- Course Key: Hist 10 (Subject + Catalog Number)
- ❖ FTES full time equivalent student: If attendance type = "W" then count residents enrolled \* class hours/meeting \* 17.5 / 525
- Weeks of Instruction: actual weeks calculated according to dates
- Days: converted from Y & N's to Monday, Tuesday, etc.
- Meeting Patterns: converted to MWF
- Saves time and cuts down on errors
- Whatever you may have dreamed about!





### How Did We Get Data Before?





### Here We Go Again



### **Transactional**

- Optimized for processing
- Thousands of tables
- Effective dated
- ❖Tree structures
- Complex joins to report on needed data
- Live data

### **Dimensional Model**

- Optimized for reporting
- Trees flattened to allow for quick rollup
- Effective dates transformed to valid date ranges and current flags
- Dimensions allow efficient "slicing" of data
- Lots of derived customized fields
- ❖ Near live data



### Joining Tables is Easier in a DW

- Surrogate ID's or SID's allow for highspeed efficient joins between fact and dimension tables
- ❖Naming conventions ensure that there's never any doubt about which fields to join



## Project Steps

- 1. What are the business questions?
- 2. Understand the requirements
- 3. What PeopleSoft tables are needed
- 4. Which data is fact and which is dimensional?



### Project Steps

- 5. Decide level of granularity needed
- 6. Build the data warehouse
- 7. Test the data warehouse
- 8. Review the Visio documents and data maps
- 9. Start writing reports!



### True Partnership with Phytorion

- Some solutions are turn key, Phytorion's was not
- Guided us through what was most useful
- ❖ Designed with us
  - Data elements we wanted
  - Unique derived fields were created
  - Our priorities
- We had naive users and Phytorion was patient
- Data warehouse team members were the intermediaries

### College Roles

- Executive sponsorship was critical
- Liaison from Executive Committee
- Project Team
  - Designers of project
  - Business Analysts
  - IT staff

### Working with a Consultant

- Negotiating parameters and expectations
- Strategizing to solve our problems with best practice expertise
- Did not impose a solution
- A true collaborative approach
- Thorough documentation
- Excellent support
- ❖ No black box





### Live Remote from California









### Questions?





### A True Partnership

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