#### STATE OF REPORTING

## PEOPLESOFT INSTITUTIONS

#### AGENDA

- Higher Education Reporting Issues
- Recommendations from PAG
- PeopleSoft Delivered Reporting
- Reporting Platforms Utilized by Other Institutions

PeopleSoft Higher Education Product Advisory Group (PAG) held conference calls on reporting issues and the following five themes summarize the functional-area perspectives on reporting.

- Reporting is an essential component of all PeopleSoft systems, but PeopleSoft does not provide adequate reporting solutions to higher education customers
- Many of the delivered reports currently provided are of limited value because they are inflexible, not well documented, and not linked to record-level detail

- Reporting Solutions must support institutional customization and ad hoc reporting needs
- Many, perhaps most, customers meet their reporting needs by creating data structures designed to support reporting with a variety of user friendly tools

• The lack of delivered reporting solutions means that PeopleSoft customers devote duplicative effort to building campusspecific solutions to common problems

• The following four recommendations address these common problems.

 PeopleSoft should deliver as part of each ERP application fully documented data structures to support flexible end user reporting with a variety of tools, integrated across systems, and supported by row level security

• To accommodate different budgets, PeopleSoft should provide data structures for reporting by offering customers a choice between purchasing 1. The data mappings and documentation for institutional use, 2. An installed structure plus delivered reporting solutions

• PeopleSoft should provide reports that are fully documented, customizable, and extensible, with all summary data linked to record level detail

• PeopleSoft should convene a focus group in each functional area to identify common management reporting needs, review the delivered reports currently offered, and recommend the addition, improvement, and discontinuation of specific reports

## Identified Issues by PAG

- Reporting Data Structures
- Tools
- Data Documentation
- Delivered Reports
- Customized Reporting

#### Reporting Data Structures

- Several institutions initially designed reporting strategies that began with the use of delivered reports and transaction-system data
- Moved to the development of reporting data structures providing power, simplicity, flexibility, speed, and an integrated approach to routine reporting and ad hoc analysis

## Reporting Data Structures

- Most of the data structures (warehouses) customers have developed use third party tools such as Brio, Cognos, Access, SAS
- Customers that have not developed formal data warehouses, create data extracts that "flatten" and reorganize transaction-system data to support reporting

#### Reporting Data Structures

- Data Extracts are created using tools such as Access to avoid the limitations of PSQuery and the technical difficulty of SQR
- Limitations of local reporting systems
  - Time and technical expertise required to develop
  - Maintenance through upgrades

#### **Tools**

- Limitations of delivered reporting tools
  - PSQuery
     performance problems, complex joins
  - nVisiondifficult to use for large scale reports
  - SQR
     required technical expertise, printer formats

#### Data Documentation

- Lack of data dictionary and data mappings impedes the development of institutional reporting solutions and the use of delivered reports
  - Data derivation of delivered reports is not understood
  - Data structure not available to Query users

## Delivered Reports

- Lack of standard operational reports required by all institutions
  - Audit reports such as imbalance between student financials and general ledger
  - Reports to track students on payment plans
  - Budget to actual comparisons
  - Reports to track student status changes

## Delivered Reports

- Several delivered reports are of limited value and all are virtually useless without customization
  - Do not meet reporting needs
  - Do not provide accurate data
  - Lack of ability to drill down to record level
  - Lack of documentation

## Customized Reporting

- 90% of reporting needs are ad hoc
- Recommend PeopleSoft develop
  - Customizable queries to be used for standard management questions
  - Development of tools to empower non-technical users to run these queries
  - Develop reporting systems that optimize electronic report distribution via desktop
  - Develop an efficient row-level security system to support these applications

## **Participants**

- Stony Brook University
- University of Alberta
- Indiana University
- University of Kansas
- Northwestern University
- College of Lake County
- University of Queensland
- University of Kentucky

## **Participants**

- Bryn Mawr
- University of Wisconsin Whitewater
- Texas Christian University
- Western Michigan University
- University of Wisconsin System
- University of St. Thomas
- Syracuse University

#### Recommended Publication

- PeopleSoft HRMS Reporting
  - Critical guide to how PeopleSoft works behind the scenes

Author: Adam T. Bromwich

**Publisher: Prentice Hall** 

How to extract data-the first time

Avoid costly mistakes arising from enterprise-wide implementation

Covers HR, Benefits, Payroll and more

Master the SQR language to create robust reports

- HR application has market dominance
- Written by HR professionals
- Reflects a best practices mentality
- Provides applications necessary for making customizations (People Tools)

#### Two main components

- HR application
   actual programs used to manage HR such as
   recruit workforce, position management,
   administer workforce
- People Tools tools that write, compile, and "read" the language

Application Designer
 principal tool for modifying the PeopleSoft delivered package
 allows programmer to to add, modify, delete, view tables, panels, fields, and menus

- All of the information in the PeopleSoft database is stored in different tables
- Definition of a table is mirrored in Application Designer
  - Allows user to see a list of fields that make up the table
  - Double clicking the fields will yield the field definitions

- PeopleSoft is designed to be customized
- Customization is risky path to take
  - Tendency to over customize
  - Can affect processing, delivered reports,
     maintenance is a burden

- HRMS database has over 5,000 tables
- Data is stored once for data integrity
- Each release spreads the data thinner which requires more tables
- Multiple tables makes the database more efficient but has the opposite effect on user attempting to extract the data

- Users need to find data when and where they need it
- Most queries against the database require at least a
   7-table join for basic information
- Knowing where to find each data element and how to link them together is NOT common knowledge
- It is critical to understand which tables are the core sources of information

- 75 tables contain the most commonly used data in PeopleSoft HRMS
- Six basic types of tables
- Must know what you are looking for
  - Tables that come *before* a functional process
  - Tables used during the process
  - Tables populated with the *results* of the process

- Tables contain different types of keys that are needed in reporting
- Tables have required fields
- Translate Values
- Effective Dating
- Users must understand the structure of the database in order to be able to extract data

- To facilitate reporting PeopleSoft provides Views and Reporting Tables
- Views take fields from several tables and combines into one table
- Over 1,500 views come delivered with PeopleSoft

Not the end all be all of reporting

Limitations

Degrade performance

Hide the underlying data from the user

Links may not be appropriate for desired reporting

- Advantages
  - Simplify the database
  - Solves problem of linking tables
  - Modifications are not necessary

#### Reporting Tables

- similar to *views* but table links are performed once a day
- principal advantage is performance
- PeopleSoft provides 3 reporting tables

#### Reporting table limitation

- Data is not always current
- Not all of the employees are in the table
- Some of the fields are missing
- Customizations must be duplicated
- Certain status cannot be detected
- Effective dating is misleading

- PeopleSoft recommends organizations create their own reporting table
  - Allows addition of new fields
  - Customized to meet unique reporting needs

# Platforms Used by Other Institutions

Due to complexity of database structure other institutions have developed reporting platforms outside the delivered PeopleSoft solution

- Forged new partnership with IT community
- Created data warehouse, data marts, that contain denormalized data

## Other Reporting Platforms

#### Most commonly used tools

- Brio
- Cognos
- Access
- SAS

#### What Next for UM

- Enlist the assistance of IT community
- Users need access to data that is denormalized
- Users need a tool that matches reporting needs and skill level
- Users need training on the tool

#### ALL I WANT IS A REPORT!!!!!