

SNOWing Crimson: Harvard HR Analytics and Phytorion

Session #29920

March 29, 2011

Version: March 27, 2011



Your Presenters

John Jurus,
Director, Office of Administrative Systems
Harvard University

Ashley Silverburg
Chief Data Architect
Phytorion



Problem Statement

Faced with unprecedented growth in data warehousing demand and continued customer frustration with the time required to develop solutions, Harvard needed to embrace new ways to deliver information to the community

This case study will discuss the challenges Harvard faced and the steps it took to increase customer satisfaction

Early HDW Challenges

- Underfunded data warehouse strategy
- Inability to develop well defined requirements at the time of transaction system implementation
- Poor query response times
- No University wide query tool
- Requests for many report variations with no easy method of delivering them

The HR Analytics (HRA) Project

A pilot project to validate the value of analytics and test an alternate delivery approach

Evolve an existing Excel based application, **Some Numbers about Our Workforce (SNOW)**, into a robust analytics application

- Build an extendible SNOW data model incorporating employee demographics, mobility, and turnover information
- Enable users to interact with the data
- Use an outside firm in a strategic capacity

In 2008 Phytorion, Inc. was brought in to help create an HR Analytics (HRA) data model for Harvard



Project Challenges

- The calculations required to meet the needs of the business were very complex and sophisticated
- HDW's previous experience with external vendors was not stellar
- The functional and technical groups at Harvard were not functioning as a team
- The technical group was initially resistant to different approaches
- The economy collapsed in the early stages of the project

How Phytorion Helped

- Brought strong PeopleSoft, higher education data warehousing experience
- Demonstrated relevant technical competency early
- First worked to gain the trust of all parties involved
- Acknowledged strengths of the technical team but was persistent with a best practices approach
- Tailored the project to Harvard's operating culture
- Valued customer success over contract details

The unwavering commitment from Phytorion and the Harvard Executive Sponsors enabled the project team to work through the series of difficult project challenges



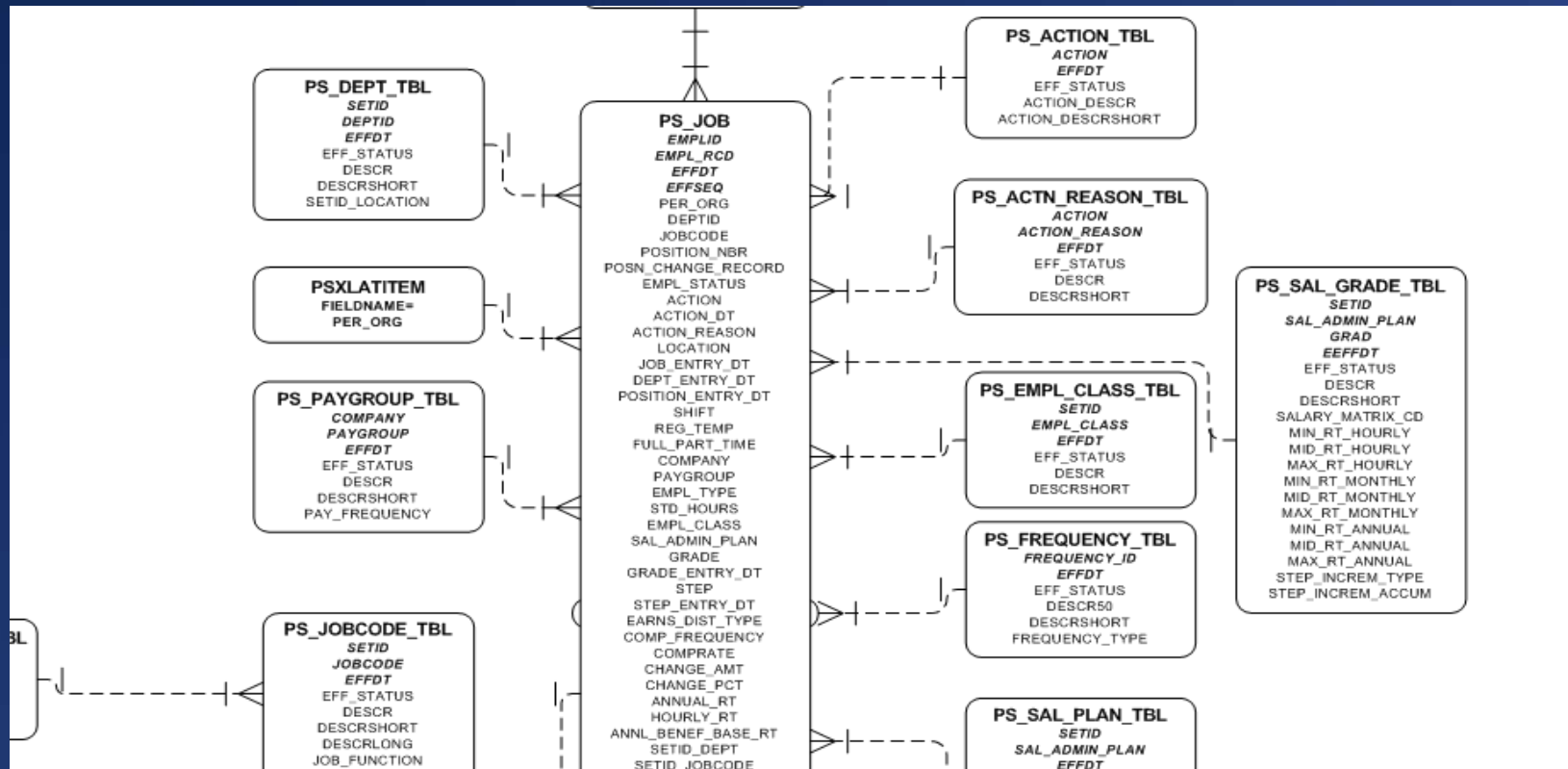
Results

- The partnership between Phytorion, Inc., and Harvard successfully delivered a data model on time and on budget
- HDW learned how to work successfully with an outside firm
- Phytorion was subsequently engaged to expand the SNOW data model by adding employee costing
- The Harvard functional team built a user layer using Qlikview

HR Analytics Project

- Demographics
- Mobility
- Turnover

Reporting from PS Job



HR Analytics Project

- Demographics
 - Bio/demo attributes (age, gender, ethnicity)
 - Job attributes (jobcode, EEO class, position)
 - Administrative rollups (department, unit, etc)
 - Multiple-counting or distinct counts
 - Headcount, FTE, salary, compa ratio

HR Analytics Project

- Mobility
 - Complex logic due to definitions of mobility
 - Analysis by same attributes as demographics
 - Comparison of 'from' and 'to' attributes of job
 - Counts of types of mobility transactions (hires, promotions, etc)
 - Analysis of metrics such as from and to salary, % salary change, FTE change

HR Analytics Project

- Sourcing doc/Business Reqs doc

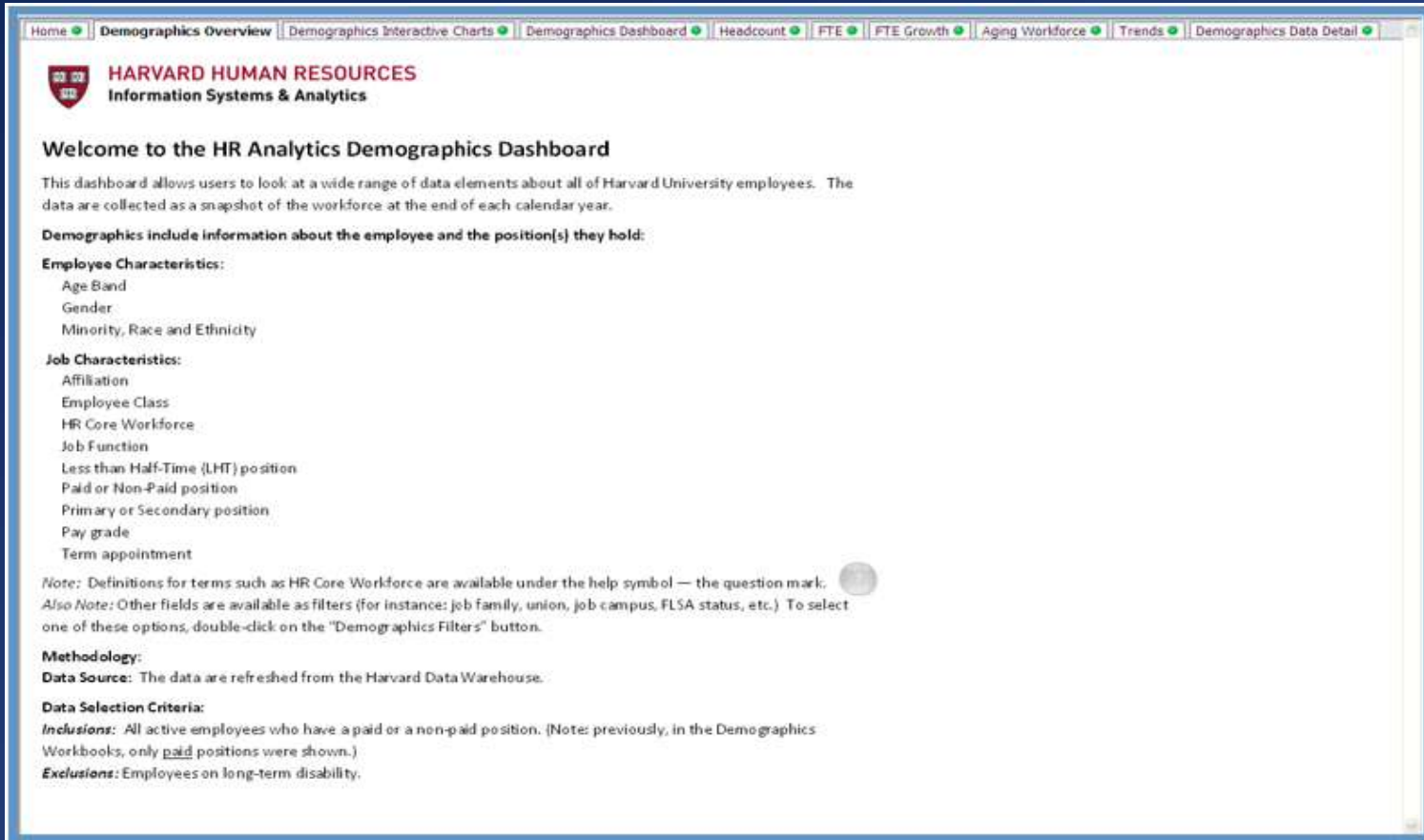
HR Analytics Project

- Turnover
 - Like mobility, complex calcs involving comparisons of multiple rows of data
 - Analysis by same attributes as demographics
 - Comparison of 'from' and 'to' attributes of job

HR Analytics Project


- Costing
 - After the success of the HR Analytics, job costing was the next key area of analysis
 - Queries were complex because of the different levels at which job costing could be assigned
 - Metrics include annual salary, FTE salary, FTE
 - Analysis by costing attributes (chart of accounts breakdowns) and fund categories such as endowed, restricted/unrestricted, sponsorship

Qlikview Demographics Overview



The screenshot shows a QlikView dashboard titled "Demographics Overview" for Harvard Human Resources. The dashboard includes a navigation bar with links to Home, Demographics Overview, Demographics Interactive Charts, Demographics Dashboard, Headcount, FTE, FTE Growth, Aging Workforce, Trends, and Demographics Data Detail. The main content area features the Harvard logo and the text "HARVARD HUMAN RESOURCES Information Systems & Analytics". Below this is a heading "Welcome to the HR Analytics Demographics Dashboard" followed by a paragraph explaining the dashboard's purpose. A list of demographic categories is provided, including Employee Characteristics (Age Band, Gender, Minority, Race and Ethnicity) and Job Characteristics (Affiliation, Employee Class, HR Core Workforce, Job Function, Less than Half-Time (LMT) position, Paid or Non-Paid position, Primary or Secondary position, Pay grade, Term appointment). A note explains that definitions for terms like HR Core Workforce are available under a help symbol. Another note mentions that other fields are available as filters. The dashboard also includes sections for Methodology, Data Source (Harvard Data Warehouse), and Data Selection Criteria (Inclusions and Exclusions).

Home | Demographics Overview | Demographics Interactive Charts | Demographics Dashboard | Headcount | FTE | FTE Growth | Aging Workforce | Trends | Demographics Data Detail

 **HARVARD HUMAN RESOURCES**
Information Systems & Analytics

Welcome to the HR Analytics Demographics Dashboard

This dashboard allows users to look at a wide range of data elements about all of Harvard University employees. The data are collected as a snapshot of the workforce at the end of each calendar year.

Demographics include information about the employee and the position(s) they hold:

Employee Characteristics:

- Age Band
- Gender
- Minority, Race and Ethnicity

Job Characteristics:

- Affiliation
- Employee Class
- HR Core Workforce
- Job Function
- Less than Half-Time (LMT) position
- Paid or Non-Paid position
- Primary or Secondary position
- Pay grade
- Term appointment

Note: Definitions for terms such as HR Core Workforce are available under the help symbol — the question mark.

Also Note: Other fields are available as filters (for instance; job family, union, job campus, FLSA status, etc.) To select one of these options, double-click on the "Demographics Filters" button.

Methodology:

Data Source: The data are refreshed from the Harvard Data Warehouse.

Data Selection Criteria:

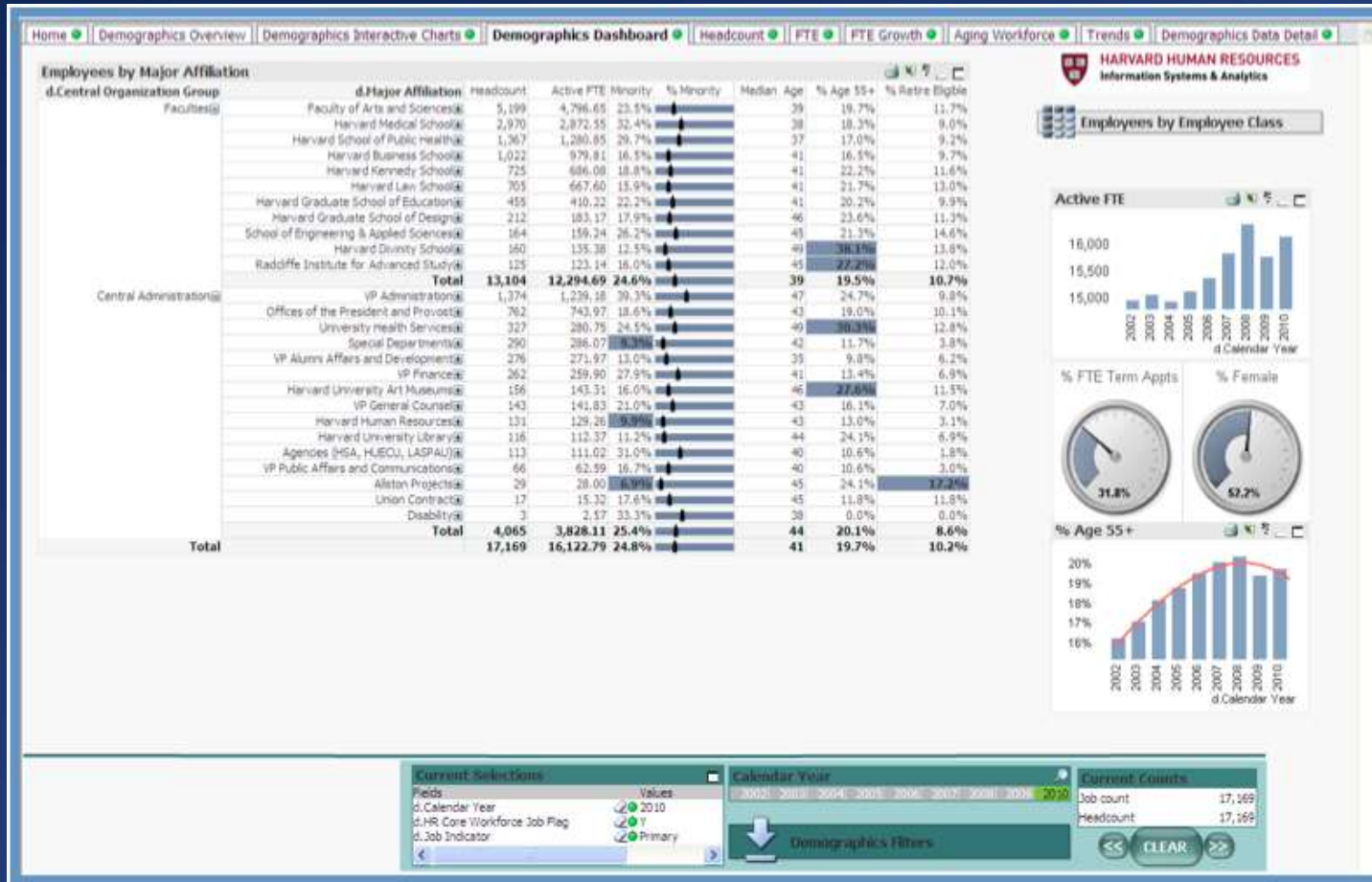
Inclusions: All active employees who have a paid or a non-paid position. (Note: previously, in the Demographics Workbooks, only paid positions were shown.)

Exclusions: Employees on long-term disability.

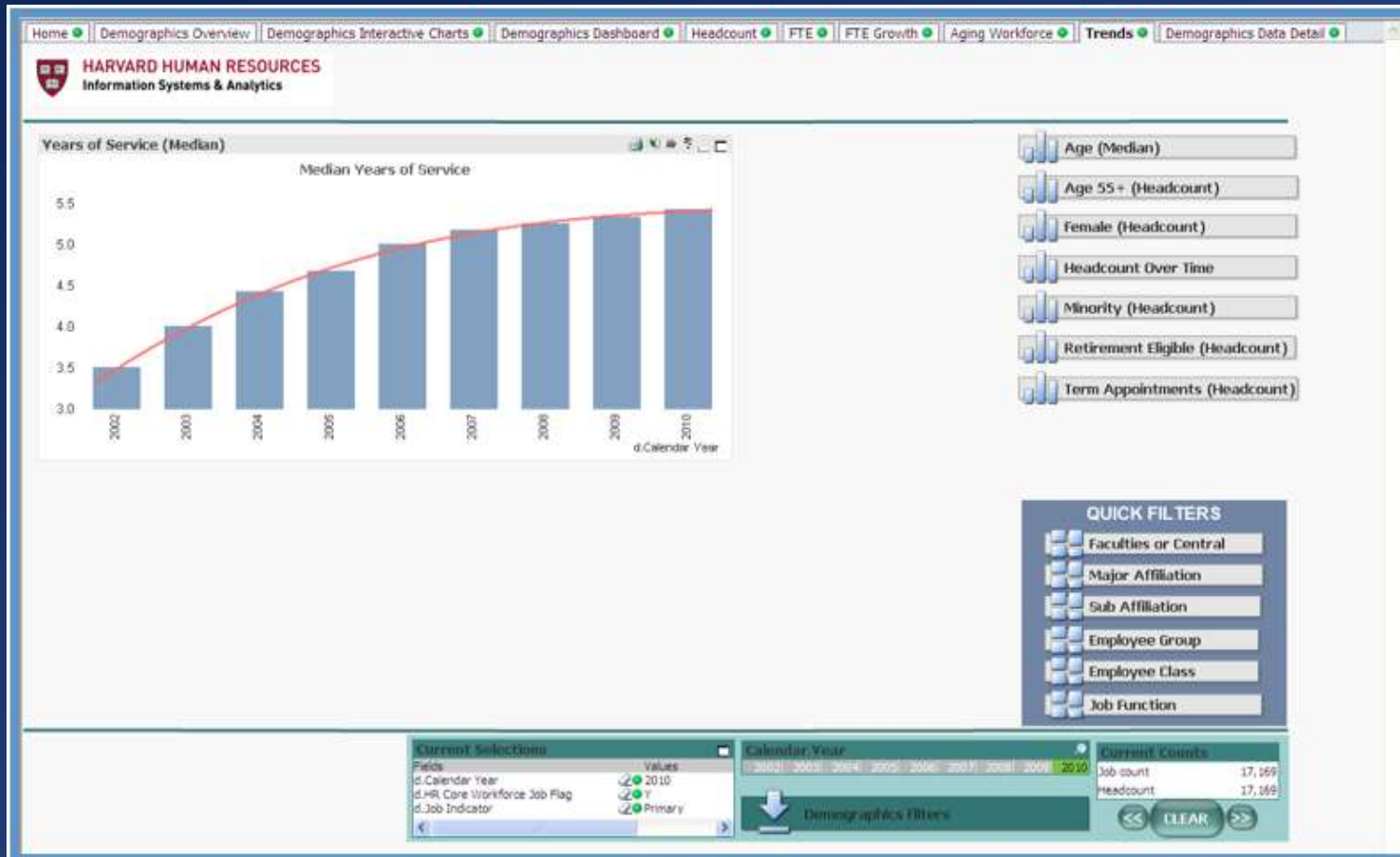
Demographics Interactive Charts



Demographics Dashboard



Demographics Trends



Questions?



Contacts

- John Jurus
 - Director, Office of Administrative Systems
 - Harvard University
 - E-mail: john_jurus@harvard.edu
- Ashley Silverburg
 - Chief Data Architect
 - Phytorion, Inc
 - E-mail: ashley_silverburg@phytorion.com

This presentation and all Alliance 2011 presentations are available for download from the Conference site at
www.heug.org
www.psugonline.org
www.federalusersnetwork.com

Presentations from previous meetings are also available

