System Integration

Mini Case Studies © 2010

Case Study 3: Data Integration

Shawn A. Butler, Ph.D.
Senior Lecturer, Executive Education Program
Institute for Software Research
Carnegie Mellon University

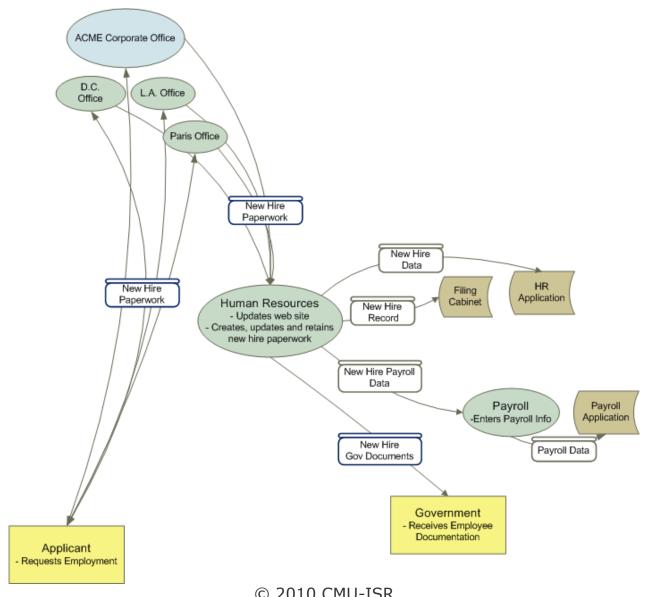
Presentation Integration

- The dashboards allowed the company to make informed decisions about human resource and payroll issues
- The dashboards created by the integration team are working well, but now ACME staff want greater flexibility in using both applications
- The company also wants to minimize data entry inefficiencies and human error mistakes

Problem

- When the payroll staff enter data into the payroll system, the human resource staff have to also enter some of that data
- Frequently, payroll finds out that there is a new employee when they complain that they haven't gotten paid
- The Human Resources Department needs some of the information and the payroll department has to do some reports
- When the human resource staff enter an employee into the system, payroll also has a lot of information that they have to enter into their system

ACME New Hire Process



Task

- Data should only be entered once into either system. Once entered, the other system should be updated automatically
- Any update in one system should result in an update in the other system, if applicable
- The databases should be consistent within a few seconds once an update has taken place in one of the databases
- Neither application can be modified to accommodate the data base consistency

Deliverable

- Provide ACME with an integrated system solution
- Update the dashboard to reflect any changes in the system
- Ensure that the dashboard does not display old data
- Provide a document describing any operational constraints that must be observed so that the system will be consistent
- Document all work!