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# **Cornell Cooperative Extension Gains Efficiencies** and Increases Capacity with a Central Database

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Abstract: Cornell Cooperative Extension (CCE) has developed a central database system that replaces many manual processes and streamlines many other administrative procedures. The history of the Central Database Project is provided, and major accomplishments are described. These improvements have increased CCE's ability to comply with state and Federal regulations and with human resources policies. Daily operations are improved with easier access to data and analysis and administrative overhead is controlled, allowing staff to focus on program development and delivery. Finally, the improved technological capacity should increase technological credibility.

## Introduction

Cornell Cooperative Extension (CCE) is a large organization of 56 Associations in New York State counties, several hundred faculty on the Cornell University campuses, and CCE Administration based on the Ithaca campus. The Associations are autonomous local agencies with formal financial and programmatic ties to Cornell University and with their county legislature. There are approximately 1,700 Association employees statewide.

The Associations receive services from Cornell University, through CCE Administration, and in turn deliver local research-based programming. For example, CCE Administration processes New York State funding for the Associations and bills for some services provided by Cornell via a monthly bill, the "Cornell bill."

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Administration and the Associations were conducting many operations manually and on paper, or in local, Association-maintained databases. Local data then was delivered via a number of methods to campus. Many financial and human resources analyses were very difficult to perform on the existing, outmoded database structures. Security is a growing issue, as databases aged simultaneously with increasing security risks. Accountability standards are making new demands on our ability to report on data for such purposes as equal employment and program opportunity. Finally, even storage space for paper records is becoming a problem on campus.

More sophisticated and powerful database systems were becoming critical to manage increasingly complex financial procedures and far larger volumes of data.

#### Methods

In 2007, a project description was developed, based on interviews with Association Executive Directors and bookkeepers and with CCE Administration financial and human resources staff. A database project manager position requiring both database design and implementation skills and business processes savvy was filled. The project manager spent some weeks becoming familiar with CCE business systems, on and off campus. An advisory committee of users in CCE Associations and Administration followed the Cornell Project Management Methodology (Cornell Project Management Methodology, <<u>http://projectmanagement.cornell.edu/</u>>, 2007) to identify and prioritize goals and tasks within the database project and develop a time line.

Development focused first on central CCE Administration processes that serve the statewide CCE system. The first major accomplishment in 2007 was completion of a new Oracle budget database and interface, including improved reports and analysis capabilities, for CCE Administration.

Major accomplishments in 2008 were: 1) migration of the CCE budget to the new system; 2) an on-line annual Smith-Lever (Federal Formula Funds) reporting system; 3) an on-line Federal Retirement management system; 4) an on-line Association salary improvement system that updates directly from the Cornell University data warehouse; 5) the "Cornell bill" on-line; 6) an annual plan of work on-line reporting system; and 7) on-line Association year-end reporting system. All applications are available from a single launch page and have consistent navigation. Data entry is via secure on-line processes and direct queries between databases. If necessary, a secure electronic dropbox or ftp access is provided. Access to the database applications is controlled and secure and the server is hosted and maintained by Cornell Information Technologies, minimizing past security concerns.

In addition, CCE collaborated with the Cornell University Agriculture Experiment Station to build a new Federal Formula Fund (FFF) pre-proposal submission site. The CCE Central Database Project followed on that by creating a new FFF pre-proposal review and funding decision database and interface. The pre-proposal site was launched in October, 2008 and the review site in January, 2009.

## **Results**

The CCE Central Database Project has streamlined processes that were primarily manual in the past, freeing staff for other tasks. For example, the central budget database interacts with the University General Ledger system (GL) using a template that uploads directly to the GL. Reporting capabilities combine the budget database with university data warehouse information. This has saved per year approximately 18 hours of booking budgets and 16 hours of budget analysis and reporting.

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Federal Retirement contributions are monitored each payroll period. CCE Administration staff compared one payroll to the previous one by examining paper copies and reading each entry manually. The new system automatically acquires electronic payroll statements each pay period. Standard electronic reports allow quick review of the contributions and deductions and changes or discrepancies are flagged. Federal statements, approximately annual, are now electronic, compared to the previous system of typing the reports on a paper form. This single change has reduced staff time spent on this task by a minimum of 1 month per year.

Many manual processes are dependent on paper forms and mail or courier services. The 56 Associations receive a monthly bill and statement, and accompanying documentation from Cornell. The volume of the transactions made it difficult to deliver monthly bills and statement to Associations in a timely manner. Packets that were misplaced had to be copied and re-mailed to the Association. The new system posts the bill and supporting documentation on-line within a few days of the end of each month. Association bookkeepers view the bill on-line and can return to it as needed. CCE Administration is saved the step of compiling 56 paper packages and shipping them to the Associations. A minimum of 15 hours of staff time, 2,500 sheets of paper, 56 manila envelopes, and the associated mail services has been saved each month.

FFF pre-proposals are now reviewed on-line, which saved the time of approximately eight administrative assistants working for 2 full weeks to print, copy, collate, and mail the pre-proposals to the reviewers, equivalent to approximately 4 months full time equivalent, in addition to saving supplies and postage. Reviewers submit rankings and comments on-line. The funding decisions database interfaces with the CCE budget database, allowing for effective tracking of funding decisions (for example, amounts and percent of funding awarded to integrated projects).

These improvements have increased CCE's ability to comply with state and Federal regulations and with human resources policies. Daily operations are improved with easier access to data and analysis and administrative overhead is controlled, allowing staff to focus on program development and delivery.

Finally, the CCE system has improved technological capacity and therefore technological credibility.

## References

Cornell Project Management Methodology. (n.d.). Retrieved August 18, 2010 from: <u>http://projectmanagement.cornell.edu/</u>

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