

**The University's Work Distribution Survey: Developing a  
Business Case for Process Reengineering**

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The University's core teaching, research, and community service missions are supported by human resource, finance, and student services administrative systems. Crossing departmental and divisional lines, these processes touch every student, faculty, and staff member on each of the four campuses making up the University of Missouri System. Typical to other large universities, these processes, initiated decades ago using available technology, have mushroomed and metamorphosed over time. Viewed with the lenses of today's technologies and current practices, these processes are characterized by unnecessary manual operations, territorial isolation of related activities, redundant paper trails, multiple levels of review and approval, and, with the development of the personal computer, the proliferation of shadow systems.

Faced with the realization that dated processes and technology were adversely affecting "customer service" and administrative efficiency, the University wanted to take advantage of contemporary "best practices" and technology. To help support the case that although current processes appeared to be working, they were in need of being overhauled, the University needed to (1) quantify the time and costs associated with the human resource, finance, and student administrative processes and activities; (2) identify the extent to which this work is done in central units versus in departments; (3) identify the opportunities for process improvement and cost savings; and (4) identify opportunities for using process redesign and new technology to reduce and/or redirect resources.

As the University embarked on its reengineering project, it was imperative to have a tool that would help define the questions and set the foundations for process reengineering within the context of a complex, multi-campus university system. Also, in a world where students are routinely getting admitted and going to classes, where faculty are being paid, and

where commencement exercises are regularly occurring, making a compelling case for change was difficult. Drawing from the work of Dougherty, Kidwell, and Hubbard, the University, working with Coopers and Lybrand Higher Education Consulting, developed a Work Distribution Survey as one means of gathering the needed data.

The population surveyed included all employees who 1) were employed as full-time and benefit-eligible, 2) were classified as active, and 3) fell within one of four selected occupational group codes (executive, administrative, managerial; professional; office; and certain technical). Employees at the University Hospitals and Clinics were not included. Data were collected through an application on the World Wide Web, and the results from each respondent were added to a central database, which aggregated responses.

University employees reported the percentage of time spent during a “typical period” (week or month) in the activities grouped under the subprocesses. The typical period was based on a 40-hour week, and four weeks per month, for a total of 160 hours per month. Respondents were only able to report activities that account for significant portions of time spent in a month; significant was defined as at least 5%. The cost component of the survey was calculated by multiplying the percent of FTE reported times compensation (actual salary plus a 20% add-on for benefits).

From the staff sampled, estimates of overall staff time and personnel costs were determined. The estimated staff time and personnel costs for each of the major processes, their related subprocesses, and the respective activities involved in those processes were studied for the University as a whole. Although respondents allocated time across the eight broad processes, the analysis focused on four main administrative processes: administering human resources activities, managing finances and assets, providing student

services, and managing information technology resources. Within each of these processes, the subprocesses and related activities were analyzed to provide further information about the processes.

The results of the survey have been invaluable for measuring the size and costs of the University's administrative processes and for developing new perspectives of administrative efficiency. For example, over half of all administrative activity is centered on human resource, finance, student services and information technology processes at an annual cost of more than \$100 million. The University now knows where to concentrate its redesign efforts; more than half of all human resource, finance, and student service processes are located in academic departments and not in the functional central units.

The data also confirm the hypothesis that across these processes, significant resources (approximately \$32 million) are spent on "non-value added" activities like paper transactions, review and approval, and shadow systems. These data suggest many opportunities to focus efforts for process improvement and for the application of newer technology to significantly improve our customer service and administrative efficiency and effectiveness. Most importantly, the Work Distribution Survey has been used to communicate to the University's board, executives, staff, and constituents, the need and sense of urgency to undertake costly, and often painful, process improvement efforts and to invest in new technologies to support such endeavors. If the university can successfully implement new systems *and* change its current processes, substantial productivity savings are possible that will allow the redirection of the time of people to other more productive activities.

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