

William & Mary Innovation at Work:
Summaries of Selected W&M Business Innovations 2008-2010

April 2011

William & Mary (W&M) has been highly productive for a very long time, achieving great results with limited resources. Nonetheless, organizations can always learn and improve.

Universities in particular should be centers of experimentation and innovation. The record of innovation has been impressive. During our review of efforts in 2008 to 2010, organizational innovation teams exchanged over 100 examples of how they had identified opportunities, implemented changes and achieved gains either through lower costs, greater benefits, cost avoidance or new sources of revenue.

This document presents 40 examples that highlight some of the most common approaches organizations pursued. The summaries identify the problem addressed, discuss the changes implemented and highlight the impact achieved. The major categories and numbers of examples in each are as follows:

- Reorganization (16)
- Improved management of databases (5)
- Information technology management and support (5)
- Shifts from Paper to Digital Formats (6)
- Expanded services at constant cost (2)
- Training (2)
- New Revenue (4)

The most common approach involved some form of reorganization, typically merging related functions to reduce layers, combine skills, more clearly define cost centers and, in some cases, reduce positions. Another leading category was the application of new technologies to replace more expensive systems, make better use of available data, replace hardware with software and significantly reduce the use of paper.

Reorganization

1. Control operating expenses. (School of Business)

Problem: The School of Business needs to control costs as part of its strategy to meet its financial challenges.

Changes (approximate savings in parentheses): Introduced zero based budgeting system, trained staff, required budgets built around functions, and line item justification (\$460,000); reduced food and beverages at various functions (\$56,000); extended replacement cycle for computers from 3-4 years

(\$24,000); reduced marketing budget and shifted from print to more electronic communications (\$250,000); eliminated assistant director of personnel position and reassigned responsibilities (\$40,000); combined the graduate registrar and assurances of learning positions by introducing technology based systems and improving operating procedures (\$40,000); and other adjustments.

Impact: estimated program/staff savings per annum of \$888,000.

2. Shared Support for Fiscal Staff Positions (School of Education)

Problem: Due to funding limitations, the SOE had only one fiscal technician processing payments for its administrative, research, and outreach operations. (A few large centers such as the Special Education Training and Technical Assistance Center have had their own managers/fiscal specialists.) Heavy workload resulted in delays in processing. As faculty secured more grants and contracts, they needed additional part-time staff support for fiscal management. Hiring part-time staff and training them to use the Banner system was a continual challenge.

Changes: The SOE began using a shared funding model to support two full-time fiscal tech positions. As grant proposals are developed, The Dean's office includes fiscal support services in the budgets, estimating the amount of time needed to manage activities planned. When grants are funded, the Director of Fiscal Operations assigns the project to one of the two fiscal technicians and charges the project for that appropriate percentage of staff time. The SOE uses E&G funds or indirect cost recoveries to back-fill full salaries and benefits.

Impact: The SOE now has sufficient fiscal staff to support its core administrative functions as well as grant projects. The cooperative funding arrangement ensures stability for employees and flexible—highly skilled—service provisions for project directors. Each year, the SOE saves approximately \$40,000 in salaries and fringe benefits by charging a number of grants proportionately for needed fiscal support services.

3. Reorganization (Office of the President)

Problem: Streamline operations and free funds for high level needs of the College.

Change: Eliminated three full time positions – Assistant to the President, Senior Writer, and Fiscal Manager. Fiscal Manager became part time (16 hours a week) in February 2011. Responsibilities spread among remainder of staff and a graduate assistant. President assumed responsibility to write and/or edit key documents coming from the office.

Impact: These measures, in combination, reduced salaries/benefits in the President's Office by more than \$236,000. Using some of the funds so freed and pursuant to the Strategic Plan, the College was able to create a full-time position for a chief diversity officer (CDO), with an independent office and budget. The CDO is called, for now, Assistant to the President for Diversity and Community Relations, because we lack the resources to create a new Vice President for Diversity, with all that entails in staffing, office space, and programmatic reach.

4. Shift from Public Affairs to Strategic Initiatives (Strategic Initiatives).

Problem: W&M needed more leadership resources to devote to a new strategic planning process. The VP for Public Affairs was leaving, which created an opportunity for reorganization.

Changes: (1) Promoted the AVP for Economic Development into a new position of VP for Strategic Initiatives, which included all the former responsibilities of the VP for Public Affairs plus strategic planning. (2) Eliminated the AVP for Economic Development position. One year later, promoted the

Assistant Director, Economic Development to the director position. (3) Moved Director of University Relations into the Office of Strategic Initiatives as Director of Strategic Communications. One year later, promoted Director of News Services to Director of University Relations. Director of News Services position was eliminated.

Impact: Leadership for the new strategic planning process and greater emphasis on strategic communications with a net cost saving of approximately \$170,000.

5. Merged the Office of Publications and the IT Web Team into a new office of Creative Services (Strategic Initiatives).

Problem: Needed cost savings to meet university targets. Our communications strategy was shifting from design and publication in specific media to designing material once in digital formats for publication in multiple media, but print and web resources were in two separate organizations. We needed to provide resources to support widespread shift from print to digital formats across the university.

Change: Merged the Office of Publications and the IT Web Team into a new Office of Creative Services under Strategic Initiatives. This blended skills in traditional print media with skills in digital media. We traded larger space in Blow Hall for smaller space in Corner House. The Project-Level AID (PLAID) organization expanded into needed larger space, and the Creative Services team could be reorganized in two buildings close to each other. Two positions in Publications created by retirement were converted into a new position with different skills in Creative Services. The new office developed a project management system that effectively combined skills from both prior organizations into blended teams.

Impact: Net personnel cost savings of \$40,000 per year cut from the baseline. The change significantly improved communication performance in terms of website hits, social media interaction, support of other campus organizations and a better blend and integration of print and electronic formats.

6. Reorganized the Office of University Relations (Strategic Initiatives).

Problem: Needed cost savings to meet university targets. The strategic plan called for greater emphasis on placements in national media and more coverage of faculty research. Technology trends required expanded video production.

Changes: (1) Eliminated a senior communications director position with oversight for University Relations and Publications, and had both directors report directly to the VP. Created a federal relations position following priorities in the strategic plan. (2) Promoted the Director of News Services (DNS) to Director of University Relations and eliminated DNS position (3) Froze an administrative assistant vacancy for one year and then recast this position into an entry level Public Relations specialist position to address more pressing needs within the strategic plan. (4) Eliminated the print version of the W&M news and switched it to a web format (prior to 2008) and shifted the former editor into a multimedia news position. The Director of University Relations took on additional responsibilities as editor of news content on the website and in the print-on-demand publications, so the resources of a senior level staff member could be devoted to the pressing need of expanding video news coverage. This allowed us to avoid hiring a new video person. (5) Expanded a liaison system with schools and departments to generate additional faculty coverage. (6) Shifted responsibilities to free a person to concentrate on national media coverage. One product was a new web faculty experts page, identifying faculty who are willing to respond to media inquiries.

Impact: (1) Elimination of the printed *W&M News* saved \$35,000, and streamlining the news clips function saved \$12,000 for a total savings of \$47,000 per year. We are using those funds to enhance our

web presence. The result has been enhanced access to the clips and to W&M news stories. We have reprogrammed future savings to support a full-time media/web writer position in University Relations. (2) The net impact of the personnel adjustments was an annual saving of \$30,000 per year cut from the baseline. (3) National media efforts have produced a sharp increase in national coverage.

7. Counseling Staffing Changes (Student Affairs)

Problem: As student psychological and developmental needs have become more prominent and more complex, the need for a case manager became increasingly evident. It was also clear that additional clinical staff were required to meet students' mental health needs.

Changes: By eliminating a full-time health educator position and restructuring other positions, one new FTE and one full-time psychological intern were added in the Counseling Center; a permanent part-time position was created to provide psychiatric services in the Student Health Center; case management responsibilities were formally incorporated into a position in the Dean of Students Office; and health education programming/services were integrated into the Dean of Students Office. The Counseling Center, Student Health Center, and Dean of Students Office collaborated to shift human and financial resources to make these changes possible without the need for additional funds.

Impacts: These changes have increased our ability to provide clinical mental health services; increased the visibility and efficacy of student case and crisis management, allowing for more seamless coordination with departments across campus; and broadened the reach and potential impact of health education.

8. Consolidation of Annual Giving Programs (University Development)

Problem: Many constituencies at W&M had their own annual giving programs. This caused duplication of effort, inefficiency, and donor confusion as well as lost staff time in production, collation, and receipt of gifts.

Change: During 2010, the office of annual giving began the initial implementation with several campus units to centralize annual giving phonathons, direct mail, and e-mail solicitation processes. For example, Mason School of Business, Swem Library and the School of Education now conduct all non-personal solicitations for annual giving through University Development in efforts to better deploy staff and resources to less routine solicitations and other duties. This consolidation also led to productivity gains in Gift Accounting where gift intake and processing tasks were also streamlined.

Impact: greater benefit—and hopefully higher donor yield and retention as well as improved alumni participation rate and decreased donor fatigue—at constant cost.

9. Reorganization of Administrative Offices and Functions (Virginia Institute of Marine Science)

Problem: Needed cost reductions to meet institutional budget targets, and better communications and streamlined reporting structure to facilitate goals in the VIMS 2009-2012 Strategic Plan.

Changes: (1) The Department of Planning and Budget was reorganized into an Office of Finance, and staffing was reduced by 1 FTE with the elimination of the Director's position. Several job duties were reassigned within the new Office of Finance, and the reporting structure was changed to reflect more oversight by the Office of the Dean and Director. The non-personnel budget was also reduced. (2) The Vessels Operations unit was reorganized into a Field Support Center, and staffing was reduced by 4 FTEs and 2 hourly employees. One of the underutilized research vessels, the Pelican, was taken out of service. The reporting structure was changed to place the new unit under the direct supervision of the Director of

Operations, Support Services and Special Projects, who reports to the Dean and Director. The Field Support Group was also internally reorganized to streamline operations.

Impacts: Net personnel and non-personnel cost savings were \$700,000 per year and both units, although understaffed, are actually now more efficient than before.

10. Reorganization of the Office of Sponsored Programs (Virginia Institute of Marine Science).

Problem: The Office of Sponsored Programs, which handles all grant and contract activity at VIMS, has always been highly efficient but was never fully connected to its parent department, the Department of Planning and Budget. As the percentage of the VIMS operating budget supported by grants and contracts has increased over the years, exceeding 50% in the 2008-2010 timeframe, it became apparent that better communication and coordination would be essential for effective operation of the institute as General Funds declined.

Changes: Reorganization of the Department of Planning and Budget into the new Office of Finance created the opportunity to link the Office of Sponsored Programs to the Office of the Dean and Director in the same way that the Office of Finance was linked.

Impacts: Regular interaction among staff in the two offices allowed more effective sharing of vital financial information and better long-range financial planning. Although the previous reporting structure remains in place for day-to-day activities (e.g. budget development, signature authority, proposal submission, grants tracking), there is an upper-level administrative connection that did not previously exist and a more robust institutional approach to development and management of grants and contracts.

11. Reorganization of the Office of Facilities Management (Virginia Institute of Marine Science).

Problem: The Office of Facilities Management, which handles construction, operations and maintenance of VIMS facilities, has historically had an inefficient reporting chain to the Department of Planning and Budget. Although the staff of approximately 35 classified employees in Facilities Management was skilled and hard-working, the Director was on occasion unable to make independent and timely decisions on important projects, especially those related to repairs. The Office of Facilities Management lacked having a defined budget and thus was unable to make crucial budgetary decisions independently.

Changes: Reorganization of the Department of Planning and Budget into the new Office of Finance created the opportunity to link the Office of Facilities Management to the Office of the Dean and Director in the same way that the Office of Finance was linked.

Impacts: The Office of Facilities Management now has an identified budget and is able to move ahead with many of its projects without first requesting approval to have the funds committed. A written update of all construction and maintenance projects at VIMS is prepared every two weeks for the Dean and Director and distributed monthly to the Department Chairs, Center Directors, Office of Research and Advisory Service and the Associate Dean of Academic Studies. Communication has been enhanced considerably and morale within the Office of Facilities Management is high.

12. Reorganized management of the VIMS Aquarium (Virginia Institute of Marine Science).

Problem: The VIMS aquarium, located in the lobby of the main administrative building at VIMS, has functioned as the point of entry and very public face of VIMS but without an efficient operations structure. Management and maintenance of the aquarium was housed in the Department of Fisheries Science where the budget for its operation resided. Although reasonably well-managed over the years, operation of the aquarium was more expensive than deemed necessary and the aquarium increasingly

became an “orphan” in an academic department that did not have within its mission, the maintenance of a public display.

Changes: The operation of the aquarium was placed under the Advisory Services arm of VIMS where expertise in aquarium management was available within the existing staff. The aquarium received a new budget and an infusion of one-time stimulus funds to bring the operation up to the highest level possible.

Impacts: the aquarium is now more efficient and its operations have been regularized in the form of a new more logical model for its operations. These changes allowed the elimination of 1 FTE.

13. Restructuring of Dive Office billing (Virginia Institute of Marine Science).

Problem: VIMS maintains an AAUS (American Association of Underwater Scientists)-sanctioned diving program that has strict requirements for certification, equipment purchases and maintenance of records. The program is critical for conducting underwater research and requires a Dive Master and a Dive Policy Board. Much of the budget, which exceeds \$50,000 per year for personnel and operating costs, is fixed, even during years when there may be little diving activity. It is clearly a program that can be relatively expensive to maintain for a small number of divers.

Changes: (1) Diving is an activity that has not historically been targeted for operation as a cost recovery center, but has now been set up to recover part of its costs by billing grants and contracts where diving is required. (2) The Dive Master, previously funded at 50% from General Funds, has been pressed into other services in the Field Support Center to reflect a salary reduction from General Funds to 20%.

Impacts: Insufficient time has elapsed to gauge the full impact of new revenues from cost recovery, but there is anticipation that up to 10% of the costs for maintaining the program could be achieved. Reassignment of duties when diving activity is low will provide greater efficiency in other areas.

14. Reorganized Communications Department billing (Virginia Institute of Marine Science).

Problem: The Communications Department, which includes a publications division, a print shop and a public relations function, has been heavily subsidized by General Funds.

Changes: In addition to the elimination of a graphic artist, the Communications Department is being structured to operate more effectively as a cost recovery center. Faculty are required to budget in their grants and contracts sufficient funds to cover their needs in the area of printed material such as technical reports and scientific posters.

Impacts: Insufficient time has elapsed to gauge the full impact of new revenues from cost recovery, but there is anticipation that up to 100% of the salaries for the two remaining graphic artists could be achieved.

15. Reorganized Vessel Operations billing (Virginia Institute of Marine Science).

Problem: VIMS has operated a vital but expensive research vessel program for many decades that includes maintaining a vessel fleet, a marine safety and training program, a machine shop, an electronics shop and a small-boat shop for engine and hull repair. The full cost of field operations at approximately \$1 million per year is the single most expensive support service at VIMS. Recent cost recoveries have generated about one-quarter of the operating expenses but there is capacity for significant new revenue.

Changes: (1) Vessel Operations was restructured into a new unit called Field Operations that centralizes the services and takes better advantage of capturing new revenue. (2) The VIMS machine shop was changed from a departmental asset to an integrated institutional function.

Impacts: Insufficient time has elapsed to gauge the full impact of new revenues from cost recovery, but there is anticipation that up to \$500,000 per year could be achieved.

16. Reorganized Seawater Research Laboratory billing (Virginia Institute of Marine Science).

Problem: VIMS dedicated a new highly-specialized 43,000 sq ft Seawater Research Laboratory in April 2009 with operating costs subsidized entirely by General Funds. The facility, one of the largest of its kind in the U.S., has space for controlled experiments that require circulating sea water and, in specific cases, highly-specialized bio-safety rooms and isolation chambers. Because it was designed for future growth in size of faculty, it is currently undersubscribed.

Changes: (1) User fees were established to recover costs from grants and contracts for specialized laboratory space in the building. (2) Available space has been advertised to other institutions.

Impacts: Insufficient time has elapsed to gauge the full impact of new revenues from cost recovery, but there is anticipation that up to \$50,000 per year could be achieved.

Improved management of databases

17. Data Integrity Project (Alumni Association)

Problem: The Alumni-Development database was under scrutiny for quality, accuracy and integrity issues, actual and perceived. Root causes were: unmanaged expectations of non-data-managers about what was realistic in terms of data, a shortage of resources to improve the data posture, and no references or industry standards by which to measure our posture against.

Changes/Actions: Actions were three-fold:

1) Make a demonstrative and public effort to acquire more, and more current, data from the population. While printed Alumni Directories are experiencing declining sales with alumni, the effort and surveying that goes into the preparations provide a definitive and marked improvement in select alumni data. The benefit is that we received a royalty of \$30,000 for a third party to do the project, thus increasing revenue.

2) Expand resources in terms of personnel and emerging technology to acquire and process data. We added a Data Integrity manager to monitor data trends, implement an alumni survey process that was low cost, identify and fix data anomalies, and educate and keep contact with data entry contacts across campus.

3) Survey and poll peer institutions about their data posture. Educate and brief constituent groups and leadership on the data acquisition process and what were realistic numbers to expect when using information from the database.

Impact: Revenue - aforementioned one-time cash royalty of \$30,000. Lost alumni rates down from 5% to 3-4%; cell phone rates went from <1% to 13%; home email rates rose from 41% to 54% with a “contactable email” rate now at 60%; employment data rose from 53% to 57%; W&M meets or exceeds the average of our strategic planning peers in all areas but home phone and business addresses. Efficiency - is enhanced for all College users of the database in reduced mailing return costs, reduced calling to bad phone numbers, increased audience reachable by email without incurring paper costs.

18. Use of the Online Recruiting and Applicant Tracking System (School of Education)

Problem: For faculty and administrative searches, an SOE staff member previously had to track all applicant materials by hand. This method was both tedious and time consuming. On average, two or three faculty searches were conducted each year in addition to administrative staff positions. Not only did searches generate a ton of paperwork, but search files also need to be maintained for three years.

Changes: With the implementation of the PeopleAdmin system, applicants now have the ability to submit search materials through the online system. Faculty search committees can also access applications, CVs, and supporting documentation online. The entire recruitment and selection system is now conducted electronically which saves support staff a tremendous amount of time and generates less paperwork to keep on file.

Impacts: Countless hours spent by support staff organizing and maintaining applicant tracking logs have been reduced considerably, allowing staff to reallocate that time to other critical support functions.

19. Implementation of ADVIZOR program for Prospect Management and Evaluation of Staff Productivity (University Development)

Problem: The Office of University Development needed a more robust system for assisting gift officers in the management and review of efforts related to their potential donor pools and a better way of evaluating efforts of individual and groups of gift officers to identify and communicate best practices and expectations related to productivity.

Changes: In 2007 we began implementing revisions to our prospect management coding structure. We enhanced coding to describe specific stages of relationship building with potential donors. We have identified patterns of activity that lead to success as well as those that require correction. Once we had agreed upon the new tracking structure, we partnered with ADVIZOR to develop a business intelligence dashboard to be used with individual gift officers and managers. This resulted in a tool that transforms information from our database of record, ADVANCE, into graphs and charts that facilitate donor tracking and reporting. The tool increases productivity by streamlining analyses and automating processes. The division utilizes ADVIZOR to review portfolios, proposals, and fundraising activity; generate progress reports (ADVIZOR output reports) for the division-wide, central, school and college fundraising units; and prepare activity reports and projections.

Impact: Results include: faster, easier, and up-to-date reporting/monitoring of prospect pools; greater opportunity for prospect management staff to assist in the planning and strategies for prospects; and a consistent and timely tool for management use in reviewing performance at the overall, unit and individual level. An unanticipated use has been the preparation of the base annual operating plan for each gift officer using data that have been stored in ADVANCE during the prior year by that individual. This initial document provides each officer with a standard format populated with information that he/she can edit and add to. This has cut the preparation time in half and allows for an immediate focus on the upcoming year. The College has joined with ADVIZOR to market this implementation of the package to other universities and has created a revenue stream of royalties to the College.

20. Data Integrity Review and Implementation (University Development)

Problem: While our processes for getting data into the Advance data system were sound, we needed to invest in our processes for gathering data and evaluating accuracy and completeness of data.

Changes: The Alumni Association and the Office of University Development have long cooperated on maintaining data in Advance. Both units had seen the need for additional investment in the evaluation of data and in the need for additional efforts for capturing rapidly changing data through various electronic and surveying methods and had set aside budgetary resources for accomplishing these tasks. Upon consideration of those needs, the two units were able to identify needs common to both programs and agreed upon the addition of one new staff position instead of potentially two (one for each unit).

Impact: Dedication of one position to data integrity management allows for auditing of data changes, “just in time” surveys and data capture, “exception reporting” to identify records with information that is out of sync in one area of the record in comparison to other areas (ex. business in one state, home address in another). Real savings to Development budget ½ FTE (\$25,000). Greater benefit at constant cost otherwise.

21. Determining student domicile (Admission/Registrar/IT).

Problem: The former system was to use two forms to determine domicile – the Admission form and a separate form from the Registrar – creating redundancy in process and delay in final domicile decisions.

Change: Added a series of carefully crafted questions to the Common Application and worked out a decision paradigm allowing automatic assignment of residency in the 60 percent of cases where a clear decision could be made.

Impact: reduced the staff review of applications for in-state tuition from 5,000 to 2,000, saved ½ FTE, slashed paper usage, significantly reduced backlog in domicile processing. Inspiration: three individuals in undergraduate admission, IT and the registrar’s office realized that the tools needed – Banner, Axiom software, and use of the Common Application – were all in place, and the new process could be done without developing new software. The rest of the story: the ½ FTE has been reallocated to improve communication with constituents. [Highlighted in *University Business*, November 2010]

Information Technology Management and Support

22. Virtual Server Deployment (IT).

Problem: Meeting the demand for servers to support the huge growth in IT services in a 30 year old machine room where power and cooling were at their limit. Several years ago, Information Technology reached the point where we could only install a new server in the machine room if we removed one.

Change: The solution was server virtualization, which creates the environment where multiple virtual servers can operate effectively on a single physical server. Using this technology, Information Technology now operates 210 virtual servers on 38 physical machines.

Impact: Two obvious but hard to quantify savings include electricity and cooling. Other benefits include faster deployment of servers, easier recovery from a server failure, and greater service redundancy. Cost avoidance for not purchasing over 200 physical machines is well over \$500,000. Given that the existing machine room is at capacity, there is no doubt William and Mary would have had to forgo some IT services without virtualization.

23. Outsource Student Email to Google (IT).

Problem: William and Mary offered students email for life in 2007 leading to an annual growth of approximately 2000 email accounts hosted on Information Technology servers. Since the Information Technology email servers were nearing the end of their useful life in 2008 and providing new servers to host growing student accounts would be prohibitively expensive, another solution had to be found.

Changes: Outsource student email to Google Apps for Education taking advantage of the free hosting solution offered to colleges by Google.

Impact: This change required major modifications to the account provisioning procedures and scripts requiring an intense three month effort by the IT accounts team to change multiple processes. William and Mary avoided an immediate minimum server hardware replacement cost of \$100,000 and continually

escalating hardware costs as the number of accounts grew. Student email storage space increased immediately from 50 megabytes on IT servers to 7 gigabytes per account on Google servers and students were offered easy access to a full suite of Google Apps.

24. Replace Aging Technologies (IT).

Problem: Technology is constantly changing thereby making some existing IT services obsolete while increasing demand on IT for implementing new technologies. Doing away or replacing obsolete technologies has allowed IT to implement new and improved services as well as meet required budget cuts.

Changes:

(A) Removed all in-room residence hall student land lines and made phone service optional.

Impact: Over the past several years students have moved almost exclusively to using cellular phones for voice communication. IT has removed over 2000 phones from residence halls which has simultaneously increased capacity on the existing system while decreasing required maintenance. Without this change, we would not have had the capacity to support the new School of Business or School of Education buildings. Additionally, removing these phones significantly reduced the startup costs of the College's new phone system.

(B) With the implementation of College's ERP system (Banner) complete, we were able to phase out use of the legacy mainframe.

Impact: Annual savings of \$500,000 in maintenance costs.

(C) Renegotiated the College's bulk cable TV contract and eliminated the College Movie Channel.

Impact: With many alternative media services available via the Internet, we were able to reduce these services with little or no impact to students at an annual savings of \$75,000.

(D) Moving to Microsoft Exchange email and calendaring solution for faculty/staff. Exchange replaces two separate IT services with one integrated service considered to be the industry standard.

Impact: Simplifies support and allows standardized scheduling to be implemented across the entire university including those graduate schools with existing systems. This allowed us to achieve savings in calendar licensing from Oracle at \$7,000 per annum. Since we already own the licensing for exchange we avoided additional email licensing costs to another vendor.

(E) Distribute desktop software via the network rather than by CD or DVD. This distribution method created an immediate on-demand service for faculty, staff and students to acquire software without visiting the Technology Support Center or waiting on IT staff to complete desk side visits.

Impact: Improves licensing accountability and security.

Impact: Increased service at an annual saving of over \$582,000 per year.

25. Cherwell IT Service Management Software (IT).

Problem: Information Technology using antiquated help desk incident tracking system with limited licenses requiring multiple separate process to support technology at the College of William and Mary. The current tool Remedy purchased 12 years ago required extensive programming support and \$100,000 upgrades to implement changes to improve the effectiveness of support.

Changes: Information Technology reviewed 15 different incident tracking products focusing on meeting the support and process requirements, ease of use and configuration, affordability and vendor support and training. The solution was the purchase of Cherwell IT Service Management Software for less than half the cost of upgrading our current system and didn't require extensive programming expertise.

Impact: Avoided \$51,000 in additional costs. Business processes in the Technology Support Center flow in a more logical path. All support escalations within Information Technology are distributed using the same method improving workflow and resulting in quicker action and resolution. Requests for software and affiliate accounts are streamlined removing manual steps required in the past. Billing forms for software purchases are created automatically as the last step in the software purchase process. A number of paper forms have been replaced by Cherwell processes saving at least a case of paper per semester and reducing storage of paper forms.

26. Meeting the Demand For Web Services (IT)

Problem: In recent years, IT experienced a growing demand for interactive web sites that had greater interactivity and variety than those available to faculty, students, and staff through the Tribe Voices tool. The diversity of those requested sites was very substantial—complex survey data collection sites, impromptu study groups, administrative intranets, faculty-managed course sites and student reflective journals and e-portfolios. Few in the college community had the technical skill to develop these specialized web sites or the budget to hire developers to create custom sites.

Change: To meet this growing demand, we took advantage of a staff transition to replace a technology specialist who was providing very high end support to about 15 faculty projects in the humanities with a web applications specialist to assist users across the university in using a set of common tools to develop and maintain moderately to very complex web sites. These common tools included: a full installation of WordPress Multiuser, offering a blog, journal or rudimentary content management for anyone with a William and Mary userid; a “private label” account on Wikispaces, which allowed anyone with a William and Mary userid to create a full-featured Wiki; and an unlimited site license for Opinio, an online survey development and administration tool. (Note: Opinio has recently been replaced by a site license for Qualtrics.) These particular tools were chosen because they had a combination of features that encouraged even inexperienced users to be self-sufficient in creating accounts, directing their own orientation and learning and in accessing customer service. IT provides some documentation, instruction and orientation, but the vast majority of our users are entirely self-supporting.

Impact: The impact of this move has been enormous. Our private label wiki account has over 2,000 registered users and over 1,100 individual Wiki sites. The blog site has nearly 1,800 registered users and over 500 individual blogs. Opinio/Qualtrics has over 400 users who conduct over 1,000 on-line. All of these are new services that have been added in the last three years with no increase in support staff.

Shifts from Paper to Digital Formats

27. Magazine Reduction (Alumni Association).

Problem: Magazine costs had been increasing based on higher paper costs, increasing postal costs and decreasing advertising revenue.

Changes/Actions: We examined ways to incrementally reduce costs without sacrificing quality, and especially wanted to reduce costs as we needed to get back to publishing four issues per year as a key strategic alumni communications piece. Specific efforts to bring about changes were: Changed paper quality from #3 stock to lower, cheaper #4 stock while maintaining production quality; moved printer location in 2008 from Burlington, Vt., to Dulles, Va., for cheaper shipping costs; increased advertising

revenue to enable utilizing space normally used for paid ads to leverage Alumni Association events, products and services to the readership.

Impacts: Maintained quality of publication despite changes in staff and in printing costs: the *William and Mary Alumni Magazine* won both a 2008 and a 2010 Award of Excellence from CASE District III. Publishing costs have dropped from a high of \$300,000 to \$263,000 for FY 09/10.

28. Reduced use of paper (School of Law).

Problem. Reduce the costs of a large, school expense, the use of paper.

Change: Placing more written material on-line, review more material on-line, reduce use of publication offices to design marketing materials, employ email rather than a mailing service, and redirect users to on-line applications. Handbooks and Journals: (1) The Adjunct Faculty handbook was placed on-line in 2009. (2) The William & Mary Law Review reduced the use of printed material for cite-checking. All William & Mary Law School student-edited journals emailed edited articles to authors. Course and Committee Materials: (1) Our Summer Abroad Program in Madrid copied thousands of pages of course material in the past. In summer 2008 we implemented a max printing page limit per course and placed other materials on the University provided BlackBoard. (2) Our four-semester Legal Skills Program is required of all law students. During an academic year, the Program would administer a seven-page course evaluation to more than 850 students. Last year, the Program created an on-line survey, using University-provided software. (3) The Faculty Appointments Committee vets hundreds of teaching applications. We encouraged the Committee to make review of applications on-line. We also encouraged the faculty, as a body, to review the interview materials on-line through University-provided software. Marketing: (1) The Institute of Bill of Rights Law eliminated publishing and mailing marketing material for the annual Supreme Court Preview. (2) The Law School Admission Office reused the layout of and reduced the prospective applicant viewbook size and quantity ordered. Library materials: (1) In the past 10 years, the Wolf Law Library has selectively cancelled primary law and loose-leaf materials subscriptions. Total money saved since 2001 is more than \$1,600,000, including approximately \$252,000 in 2010 (these figures are not adjusted for price inflation, so actual savings are significantly greater). As a substitute for this paper, we direct folks to Westlaw and Lexis (no additional cost to the Law School over our existing subscription rates) and have subscribed to the widely-used BNA and CCH law resource databases. (2) Use of these on-line databases not only reduces employee time to manage the documents, but also improves faculty access to the material which once was routed through a distribution list before being filed in the library. Though the BNA and CCH database subscriptions are significant, by cancelling all these print materials, we were able to eliminate one FTE position and re-allocate staff duties to improve the work efficiency within the Library.

Impact: The total savings in a one year period (and savings that are an annual cost reduction) is approximately \$270,000.

29. Shift from Print to Multi-media Formats (Strategic Initiatives).

Problem: Creative Services and University Relations are shifting formats within their own organizations and helping other university organizations make the same transition.

Changes: (1) Continued emphasis on assisting other units in in-sourcing print and web design and replacing costly print production with web versions of content. Those savings should be reflected in reports from other units. The Tribe Guide was web only in 2010; the last Law Facebook and W&M Student Handbooks were printed in 2010. (2) Expanded emphasis on reaching multiple audiences with

existing materials – including dramatic expansion in contacts through web, social media and YouTube. Nearly all video is hosted off campus, using YouTube, (4) Avoided software purchases by relying on internal web development for custom applications (faculty experts database, Social Stream, etc.) and use of open source software for enterprise solutions (ResourceSpace for photo database, UNL Calendar for campus calendar, and MIT mobile web for m.wm.edu). (5) Expanded print/web integration. For example, the St. Andrews Joint Degree Programme (one print piece with web as the primary communication vehicle) and increased coverage for *Ideation* through a web presence). (6) Used internal projects, internet research, and collaboration with campus experts to expand video and multimedia skills. (7) Provided tools for simple and efficient communication. Built “Tribe Responses” for easy web form creation and “Tribe Voices” for creating very simple personal websites. (8) Approached projects in ways to get more and different content for multiple uses. For example, one faculty interview produced material for a research article and coverage of a new book, resulting in a full-length web feature for *Ideation*, a cover story for the print edition, a sidebar on the book for the print edition, a blog entry, and a Facebook update. **Impacts:** Greater access to the new web content versions compared to earlier print formats. Substantial reduction in print costs across the university. Significantly expanded video and multimedia products. Greater viewing of video through YouTube and savings for IT network storage requirements.

30. Elimination of Cover Sheets for Print Jobs (Swem Library).

Problem: The amount of paper used in the public printers in Swem’s Information Commons was staggering. Students use these printers to print out their papers, articles they’ve found in Swem databases, webpages, and anything else they want in hard copy. Each print job came with a cover sheet, identifying the student for whom it was printed and other information.

Change: Based on a suggestion from the Swem Sustainability Committee, Swem staff explored with Campus IT the possibility of eliminating the cover sheets. A survey of students confirmed that students were willing to do without the cover sheets.

Impact: We’ve had virtually no student complaints about the lack of cover sheets. It is estimated that this saves as much as 8,800 sheets (or 340 lbs) of paper PER WEEK during the academic semesters.

31. Use of electronic bookplates for donor recognition (Swem Library).

Problem: Swem receives hundreds and often thousands of books each year as gifts; in addition Swem purchases books using endowed funds. In the past, cataloging staff spent hundreds of hours each year creating, printing, and gluing bookplates into the books. Some donors, especially those who gave rare books, had their own unique bookplates, forcing staff to keep track of hundreds of different bookplate designs.

Change: Cataloging staff suggested acknowledging gift books and books purchased with endowed funds through an “electronic bookplate.” After checking with development staff, we determined that in most cases, this would be perfectly appropriate. There were a few cases in which longstanding donor agreements required the continued use of paper bookplates.

Impact: In most cases, we now acknowledge the donors/endowed funds through a note in the catalog record. We are scanning some of the individual bookplates, so that we can just link to the image of the bookplate for some rare book donors. This change saves hundreds of staff hours every year. In addition, it is now possible for donors to search the catalog, from anywhere in the world, and find the books they gave, properly acknowledged. This is an excellent enhancement in terms of donor relations.

32. Use of electronic options to replace paper documents and postal delivery (University Development).

Problem: Reduce increasing costs of printing and mailing board books, newsletters, informational manuals, invitations, etc.

Change: Each department within Development has moved from printing materials to putting them on a web site or scanning and emailing documents. Examples are Foundation Operations using a Blackboard course site for posting the Foundation Board Trustee manual and the board meeting books, University Events using “Paperless Post” (on-line invitations and rsvps) for some functions and avoiding the printing and mailing costs associated with paper invitations, increased communications to donors and prospective donors through e-newsletters through Development Relations program – W&M Today weekly and W&M Momentum monthly reduces Ringing Far & Near newsletter to 1 annually from 2 annually, decreased number of printed Foundation annual reports and electronic President’s report, both introduced by emails pushing readers to the sites.

Impact: Benefits include net cost savings in printing and postage of \$30,000 and immediate communication with larger number of donors and prospective donors. The ability to post meeting materials has all but eliminated need for Fed Ex or similar express delivery of documents.

Expanded Services at Constant Cost

33. Added Career Services Function (Alumni Association).

Problem: Alumni needed more career resources from the College.

Changes/Actions:

- William and Mary Alumni Association hired an assistant director of Alumni Programs to serve as a liaison between the Alumni Association and the Career Center.
- Developed a single sign-on between the Career Center job network, Experience and my1693, the Alumni Association’s online community.
- Developed the William and Mary Alumni Career Network in partnership with the Career Center
- Maintain the William and Mary Alumni Career Network LinkedIn Group.
- Developed a webinar series that connects alums with alums on various career development opportunities.
- Created a career focused community, called Joblist in my1693.

Impacts: The impact can be mostly seen through the participation in the Joblist community and the LinkedIn community. Joblist is the largest community in my1693 with 762 members and the LinkedIn group has seen an increase in membership every day since its creation. The webinar series has also provided an opportunity for alumni to connect with other alumni in a meaningful way. Webinar topics have covered everything from how to network in DC to how to obtain a career in film. Although the staff member at the alumni association is not a trained career counselor alumni now have a person they are able to call that will connect them to all of the available resources the College provides.

34. Engagement Program (Alumni Association).

Problem: The College was not sufficiently focused on a lifelong relationship beyond the initial four-year experience.

Changes/Actions: Over the past 5 years the Alumni Association has increased its programming to enhance the lifelong relationship with the following programs with no increase in overall Association funds. Programs have primarily been enabled through sponsorships:

- Alumni Admission Weekend
 - Began in 2009, in partnership with the Admission Office. Event has reached capacity both years of 150 parents and high school students. Event includes welcome dinner, campus tour, interviews for rising seniors, and introduction to the overall admission process, committee review and Q&A with other campus admission professionals. .
- Annual Student Programs for Fr, SO, JR & SR classes
 - Freshman ice cream social began in 2006, has reached 700+ attendees.
 - Sophomore Smores began in 2008, nearly 200 Sophomore attend
 - Junior Tailgate began in 2008, 100-200 juniors attend annually
 - Senior Spring Day began in 1992., have reached 700+ attendees
- Legacy Brunch
 - Began in 2007. Invite current students and their alumni parents. In 2009 had 220 attendees and in 2010 reach a total of 320 attendees.
- Dinner with 12 Strangers
 - Occurs 4 times a year. 6 alumni and 6 students are invited to dinner to share stories of what the College was like while they attended and what it is like today.
- Life after Dog Street (LADS)
 - 4 week program for seniors. Topics include: Wine and Entertaining; Building a firm financial foundation; Relocating to a new city after graduation with the YG; How to Stay Connected to W&M
- Alumni Induction Ceremony
 - Began in 2004. In 2010 moved to Saturday, saw an increase from 900 attendees to 1400 seniors and guests.
- Young Guard Weekend
 - Began in 2007. Over 200 young alumni return to campus to reconnect. Favorites of the weekend are the cheese shop lunch and Mug night.

Impacts: With the increase of student programs the alumni association is giving students access to the alumni house and instilling the idea that William and Mary is for a lifetime not just for four years. The Association has also reconnected with alumni through the Legacy Brunch and Alumni Admission Weekend by providing resources for the next generation.

Training

35. Website Design Training (Strategic Initiatives).

Problem: Reduce the time and effort required for clients to use our services and for us to solve their problems.

Change: Creative Services established a training and support program for over 750 campus users of Cascade (website editors). We trained several site managers in Cascade who in turn support Cascade users in graduate and professional schools. University Relations developed a training program to assist clients in dealing with the media.

Impact: Reduced time in responding to individual problems.

36. In-house training in Recreation Sports (Student Affairs).

Problem: All student employees at the Recreation Center must be trained in First Aid and CPR. In addition, all group fitness instructors and personal trainers must be properly trained. Significant costs were incurred to send student employees to outside organizations, or to bring those organizations to campus to conduct trainings.

Changes: Recreation Sports now conducts its own CPR and First Aid training for all student employees. In addition, the department offers non-credit courses in group fitness and personal training to train its own fitness instructors.

Impacts: The cost for CPR and First Aid training has been reduced from \$50-\$75 per person to \$7 per person. Courses for personal trainers and group fitness instructors previously cost \$250-\$450 per person. Offering these courses in-house saves money, although it also places additional demands on staff time. As a result, it represents a cost avoidance, but not necessarily an overall increase in efficiency.

New Revenue

37. Expand programs with new organizational partners. (School of Business)

Problem: The School of Business needs to identify new revenue sources to meet its financial challenges.

Changes: (approximate net new revenue per year in parentheses): Reinvigorate the Center for Corporate Education as a profit center by expanding support, increasing marketing and controlling costs (\$600,000). Create a new Army logistics MBA program with 20 students in the initial cohort beginning in 2011 (\$300,000) and expand the program over time to include other Department of Defense and related organizations.

Impact: Net new revenues of \$900,000 per year.

38. Improved marketing results (William & Mary Center for Archeological Research)

Problem. Expand revenue base.

Change. Established a new partnership with the Virginia Department of Military Affairs to identify new projects. Established a new customer database to promote repeat business. Improved tracking through Banner of costs expended, invoicing, and project status reduces wasted staff time. Reduced report printing costs.

Impact: Increase in FY10 to 37 projects for a total of \$647,600 compared to FY09's 32 projects for a total of \$508,000. The program is on track to have contracts of over \$1,000,000 for FY11.

39. Incubator Management (Strategic Initiatives).

Problem: Identify additional resources to link W&M programs with local entrepreneurs.

Change: The Technology and Business Center (TBC) now manages the James City County Business and Technology Incubator. The TBC developed an innovative marketing strategy to attract branches of international companies, companies moving into the area, technology-based companies, and companies linked to faculty, student and W&M technologies. The mentoring program connects clients to faculty and

students, particularly in the new Entrepreneurship Center in the School of Business. Students have the opportunity to complete studies for and serve internships with the clients.

Impact: The Technology and Business Center receives \$70,000 per year from James City County to manage the incubator. The number of clients in the incubator expanded from 1 in 2010 to 6 in 2011. Faculty and students are actively engaged with client companies.

40. Develop off-campus housing website with Off-Campus Partners (Student Affairs)

Problem: The Student Information Network (SIN), which featured a section where users could post and search for off-campus housing opportunities, had become unreliable due to changes in students' ability and interest in maintaining the site.

Changes: We decided to use a professional online housing market service, Off-Campus Partners. (Four other Virginia schools had already contracted with this service to connect property owners with students seeking off-campus housing.)

Impacts: The off-campus housing site is now much more professional and user-friendly. Off-Campus Partners allows us to post additional information of interest to off-campus residents, such as information about how to be a good neighbor, how to deal with leases, and a sample roommate contract. It also includes Google maps to show locations of properties. The company also plans an off-campus housing fair, invites property owners, and provides food and drinks—services that would require considerable time and money if we were to provide them ourselves. In addition to these gains in service and efficiency, the College also receives a percentage of the revenue generated by those using the website to post their property listings. (This year we received more than \$2,500.) In short, everyone benefits from the more professional, reliable service of a dedicated housing company; the College gets additional revenue; and users enjoy a more personalized and user-friendly housing marketplace. Furthermore, by using a company that already had a contract with other Virginia state institutions, William & Mary was able to avoid soliciting bids, which allowed us to launch the new service quickly and with much less staff time devoted to the effort.