Entering the Digital World: Electronic Workflow Best Practices
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Abstract
Rowan-Cabarrus Community College is a public two-year, multi-campus, higher education institution with five campuses and two campus centers located within the College’s two-county service area, spanning more than 1,000 square miles. The highly distributed environment created by the multi-campus environment poses challenges, especially when multiple individuals at multiple campuses are needed to approve travel authorizations, reimbursements, and general expenditures. The College utilized paper forms completed manually and routed manually for at least two levels of signatures, with approvers often located at two or more campuses or centers. Leaders within the finance and business services division at the College recognized a need and an opportunity: to redesign critical financial services processes to find efficiencies and streamline processes to make them more efficient and more customer friendly. Rowan-Cabarrus established best practices and new processes governing the use of electronically routed forms with digital signatures that increased finance staff efficiency and productivity, reduced the average time to process travel and payment processing time by about 80%, and reduced errors by as much as 50%.
Introduction of the Organization

Since 1963, Rowan-Cabarrus Community College (Rowan-Cabarrus) has served Rowan and Cabarrus counties and the surrounding region, by educating more than 650,000 individuals. As the ninth largest community college among the fifty-eight community colleges that comprise the North Carolina Community College System (NCCCS), the College has progressively evolved in response to the community’s workforce and economic development needs, serving more than 20,000 individuals on seven campuses and centers across the two counties.

The College is accredited to award associate degrees, diplomas, and certificates by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC). Rowan-Cabarrus offers three Associate degree programs for students who intend to transfer to a four-year college or university: the Associate in Arts, the Associate in Science, and the Associate in Fine Arts. In total, the College prepares students for careers in business, health, and public services, and industrial and engineering technologies by offering 55 degrees, 37 diplomas, and 97 certificates. Fourteen degrees are available completely online.

The mission of Rowan-Cabarrus Community College is to “improve lives and build community through public higher education and workforce development,” and the College’s vision statement envisions achievement of this critical mission by “building sustainable futures through the power of learning.” The success stories of the College’s students and graduates demonstrate amazing commitment, sacrifice, and dedication, and the work of Rowan-Cabarrus has never been more critical and the challenges faced by the local communities in the College’s service area has never been more pressing or complex. Now, more than ever, Rowan-Cabarrus Community College is positioned to work with regional leaders to strengthen the region by
providing extraordinary opportunities for students and preparing graduates to live meaningful lives as active and contributing members of the community.

**Statement of the Problem/Initiative**

Rowan-Cabarrus Community College is a multi-campus institution with five campuses and two campus centers located within the College’s two-county service area, spanning more than 1,000 square miles. The highly distributed environment created by the multi-campus environment poses challenges, especially when multiple individuals at multiple campuses are needed to approve travel authorizations, reimbursements, and general expenditures. The College utilized paper forms completed manually and routed manually for at least two levels of signatures, with approvers often located at two or more campuses or centers.

The first problem with the College’s travel forms and expenditure approvals processes centered around the use of paper forms completed using manual calculations. Employees routinely used incorrect reimbursement rates for subsistence, mileage, and other calculations and frequently made errors. The second problem dealt with the manual paper routing processes. The College routing process was an internal mail system that utilized an internal courier service to collect signatures from the various campus locations and ultimately route the completed form to the finance and business services office for processing and payment. The internal mail/courier process was problematic for several reasons.

1. The internal courier service was time-consuming and expensive to operate.
2. Routing paper copies of approval and reimbursement forms was slow creating the possibility to pay vendor invoices late. Additionally, employee reimbursements of travel expenditures were processed slowly due to the transit time required to route forms between multiple campuses for approval.
3. Often paper copies of forms were lost in transit, causing dissatisfaction, complaints, and finger pointing as employees placed blame when payments and reimbursements were not processed expeditiously.

**Design**

Goal 4 of the Rowan-Cabarrus strategic plan proposes to “*Acquire, develop, and manage human, fiscal, and physical resources essential to the development and delivery of technology-enriched, high-value education and service,*” the first objective for that goal is to “*Plan and optimize resources in a fiscally responsible manner*”. Leaders within the finance and business services division at the College, recognizing an opportunity for a continuous improvement that fit under this goal and objective, established a project to redesign two critical financial services processes: the approval to pay invoices process and the employee reimbursement process. The project goal was to find efficiencies by streamlining the processes and making them more user-friendly. Three broad objectives framed the project:

1. To reduce invoice processing time.

2. To reduce travel reimbursement processing time.

3. To improve staff and faculty satisfaction with finance and business services payment processing.

Goal 4 is evidence of the College’s commitment to the use of technology, so the team naturally focused on ways to utilize technology to redefine these critical processes. Staff attended a financial conference where several digital transaction solutions were presented that provided the ability to create and route electronic forms and to secure digital signatures for approval. One of the platforms presented at the conference was DocuSign. The State of North Carolina had recently negotiated a contract with DocuSign, and the team was impressed with the
product’s ease of use and support for mobile devices. However, the high level of security and authentication of electronic signatures was the most significant attribute. Additionally, the State had already secured a very attractive rate that was approximately 92% lower than DocuSign’s market rate, making the product affordable and within the finance and business service division budget.

The final selling point for DocuSign was the ability of the College to create forms in standard software application programs like Microsoft Excel or Word, and upload them to the DocuSign product. This meant that the finance and business services staff could create and modify their forms without needing information technology staff support. Staff training was required to set up fields and tags in DocuSign and create routable workflows, but the State’s contract included ample training and support.

The finance and business services team proposed DocuSign as the electronic/routable form solution for the College’s financial services processes and the executive leadership team approved the proposal. The DocuSign representative assigned to Rowan-Cabarrus worked with an implementation team comprised of finance and information technology staff to develop the project development and deployment timeline. The only additional cost required was the purchase of routable transactions, known as “envelopes” in DocuSign. The College’s vendor representative worked with the implementation team to determine how many envelopes to purchase. Existing staff managed all development and implementation activities.

The College chose the travel authorization form as the pilot and the College’s first electronically routable form. While the IT staff worked with the DocuSign technical team to set up the College’s DocuSign database and user access accounts, finance staff worked with DocuSign support to design the travel authorization form based on the existing paper form. The
product supported advanced workflows, and that proved to be especially valuable in simplifying the user experience.

**Implementation**

Rowan-Cabarrus found the DocuSign implementation to be straightforward and thanks to the simple and intuitive user-interface, there was very little need for end-user training. Authentication occurs through Email and approvers simply clicked on the link in the Email to open the form, review the information, and approve or decline the request. The finance and business services staff provided in-person training, but the majority of users utilized written instructions only and were able to adopt the new electronic form practices seamlessly.

The College initially piloted the new electronic travel authorization workflow within the finance and business services division, but quickly expanded the pilot to include the information technology and human resources divisions. Users loved the new forms and were thrilled with the updated electronic workflows. Authorizations were fast, often taking literally minutes through Email instead of days through internal courier. The human resources division loved the new electronic forms processes so much; they quickly converted faculty contracts to electronically routable DocuSign forms, and the finance office expanded the use of DocuSign forms for reimbursements and approvals to pay invoices.

The project team quickly converted the pilot to a college-wide implementation. However, the electronic forms process was initially an option rather than a mandate. The College implemented the digital forms option in spring and gave employees a year to choose electronic forms or paper forms, before moving to 100% electronic processes for most of the DocuSign processes. The final travel reimbursement processes will be fully electronic by January 2016.
Benefits

It used to take three to five days at a minimum to collect all of the necessary authorizations for Rowan-Cabarrus personnel to travel. The process now takes less than one day on average, and often approvals are completed literally within minutes. Additionally, the College estimates an 80% improvement in the time required to approve invoices for purchase requisitions and pay vendors. DocuSign technology ensures adequate and appropriate authentication, avoids the introduction of human error, and provides an audit trail that shows finance staff the exact location and status of every electronic document at any given point in time. With the new electronically routed forms, there are no more lost documents.

The College believes they completely recovered their investment through cost savings within a year. Finance and business services staff used to spend a great deal of time shuffling paper, waiting for paper forms to be manually created and routed across various campuses, and correcting errors from the manual calculations. The College has reduced paper consumption and increased productivity and efficiencies significantly. Perhaps the most important benefit is the increase satisfaction by staff and faculty who are thrilled to have their money reimbursed more quickly and vendors who receive their payments well before the payment due date.

Retrospect

Moving from manual, paper-based process to electronically routed digital signature transactions, was a huge shift in culture. However, at Rowan-Cabarrus Community College, the shift proved to be overwhelmingly positive, creating productive and efficient new workflows and processes, while enhancing employee satisfaction. In retrospect, perhaps the main thing the College would have done differently is to have moved into the digital world sooner.