



LGFCU
LOCAL GOVERNMENT
FEDERAL CREDIT UNION

2016 EXCELLENCE IN INNOVATION Awards Program

| | |
|-----------------------------|--|
| Project ID | GG-4 |
| Title of Program | Implementing Agile Project Management Methodologies for Improved Focus |
| Program Category | General Government |
| Submission Date | 6/24/2016 1:34:56 PM |
| County | New Hanover County |
| Employee | Elizabeth Schrader |
| Employee title | Chief Strategy & Budget Officer |
| Email | bschrader@nhcgov.com |
| County Department | Office of Strategy & Budget |
| Phone | (910) 798-7491 |
| Address | 230 Government Center Drive Suite 191 Wilmington, NC 28403 |
| County Manager | Chris Coudriet |
| Supervisor | Avril Pinder, Deputy County Manager |
| Implementation Date | 1/5/2015 |
| FLSA Designation | Exempt |
| Project Team Members | Leslie Chaney, CIO Cindy Hewett, Deputy IT Director. (It should be noted that all 30 staff FTE in the IT department participate in the process including the weekly stand-up meetings and report as team members during those meetings.) |

Description of Productivity Improvement

Faced with fewer staff and greater demands for service, the New Hanover County Information Technology (IT) Department needed a way to insure that its resources were focused on the highest priorities for the county and that it was able to deliver on its commitments in a consistent way. Building upon the county's project management academy, IT management instituted "Scrum," a subset of processes for agile project management.

Scrum breaks down projects into small pieces called "sprints." Focusing on smaller, more iterative deliverables allows IT to keep focused on the activities that will ultimately move a project to completion in a timely manner. Maintaining an active backlog of work and only "sprinting" work that is approved by the management team also insures that the entire department is working on the projects that will bring the highest return to the county.

Since implementing Scrum, IT has gone from an on-time completion rate of 50% on its priority projects for fiscal year 2015 to a projected completion rate of over 80% for fiscal year 2016, while not seeing any decline in meeting our service-level agreements on existing applications and services. This no-cost project has delivered tremendous benefits to the operations of the IT Department and ultimately the county as a whole.

Description of why this project was initiated

New Hanover County has a centralized IT Department that services all of its agencies, including those with elected department heads and individual governing boards. In 2009, the IT Department lost five positions due to the economic downturn, and those positions have not been recovered. At the same time, the service-level expectations on the department have increased dramatically. Departments striving to make up for their own losses in staff or increases in service demands looked to IT to implement technology solutions to help them be more streamlined and efficient. All of these factors contributed to a large backlog of project requests, ranging from major software implementations to routine maintenance of existing systems. All of this had to be accomplished while still maintaining the high level of service and systems availability that county agencies had come to expect. IT also had a need to make sure that its staff was focused on the projects that had the highest return on investment, using its resources in the most effective way possible.

Quantifiable results (sustainability, cost savings, cost avoidance and/or a higher level of service).

Indication of what resources were used and what was done with any accrued time savings

Using Scrum, NHC IT is able to deliver more projects on time and budget with the same number of staff. As the number of County staff have increased, the IT headcount has remained constant owing to more efficient processes like this one.

For the fiscal year that ended June 30, 2015, the county's IT department had a project completion rate of only 50%. After introducing Scrum for all projects beginning in July 2015, the department is on track to complete 90% of its projects for the current fiscal year by June 30, 2016.. Even with an increase in high-priority work, the department's completion rate has increased by 40%. This improvement is in addition to maintaining the same level of attention to the maintenance projects and even completing a large number of small, single-department requests.

Other descriptive information

Since 2013, the IT Department has required that all of its business analysts attend Project Management Institute (PMI) training and that projects be properly planned and documented. PMI is a collaboration between New Hanover County and the University of North Carolina at Wilmington. A project was loosely defined as anything that requires more than one person to complete or requires a financial commitment. Each analyst kept his or her own list of projects and supervisors were required to have a general knowledge of what each of their analysts was working on. The deliverable dates for projects were very fluid and typically changed several times during the course of a project due to competing priorities and numerous emergency requests from county departments.

This method was used for a couple of years, but with a decreased number of staff and an increasing number of requests, the IT Department became hindered by the workload. Centralized resources, such as operations team members, were stretched thin without a department-wide understanding of the projects being worked on by analysts or teams. Projects were often delayed waiting for a resource, either people or budget, creating hardships on the departments and hurting the reputation of IT as a trusted business partner.

In late 2014, the IT Department was able to hire its first assistant director. With a new management team in place in January of 2015, the department began to implement an initial pilot project with Scrum methodologies for a limited number of high-priority projects.

One of the basic tenants of Scrum is the concept of a sprint. A duration of one month was defined as the sprint length for the IT Department. Each project manager was required to break his or her projects down into tasks for a month at a time. Each month's iterative progress was required to result in tangible deliverables for the projects. This new practice proved successful, and Scrum is now an integral part of the IT Department's daily functions.

The program's sprint period includes weekly stand-up meetings each Monday morning in the IT Department where all staff members participate by answering three questions about the projects that they are working on: "What task did you complete last week?" ; "What tasks are you planning to complete this week?"; and "What impediments do you face in completing your tasks?"

By focusing on just these three questions, the meetings are quick and all team members are provided with a snapshot of the status of all projects in the department. Managers are asked to focus on removing any impediments for the teams so that they can focus on completing their tasks.

To support the weekly stand-up meetings, the back of the IT office was outfitted with very low-tech visual boards to support communication about the current sprint's work. There is a printed list of

projects for the current month's sprint; large pieces of plotter paper with the titles: "To Do," "Doing," and "Done;" and color-coded sticky notes that list the individual tasks corresponding with the projects being sprinted. Teams move their sticky notes along the back wall until, at the end of the month, most of the sticky notes are in the "Done" category. A final piece of paper gives a place for impediments to be prominently displayed until a manager removes them for the team.

Sprinting is an iterative process that involves planning the department's work a month in advance. So, the IT management team meets monthly to discuss what work will be included in the next month's sprint. Any work that is not part of the current month's sprint is included in a list of projects called the backlog. Projects in the backlog are prioritized by the director and assistant director based on their classification as a management directive, governance-selected project, routine maintenance project (SLA work), or a small project which is normally requested by a single department or user.

At the sprint planning meeting, the managers discuss which project will actually conclude in the current month and which will continue into the next month's sprint. Building on the available resources from that discussion, each item on the backlog is reviewed. Projects are moved from the backlog to the next month's sprint list by consensus of the management team and the consent of the assistant director or director. Focus is maintained on the high-priority projects, with additional projects coming off of the backlog only if they will not interfere with the promised delivery of other work underway.

One other key component of Scrum is a meeting called the retrospective. At the end of a sprint, the entire IT Department comes together to discuss how the process went. Staff discuss what things kept the department from meeting their promises and how to remove impediments more efficiently so that work can progress in a predictable way. Through these retrospectives, the IT team learns to work together to solve problems.

Scrum process manuals abound on the Internet and in bookstores. Originally used in the software development industry, the concept has found its way into project management and has blended in with traditional methods for keeping projects on track and teams focused. New Hanover County IT did not invent Scrum, but the department studied the methods and selectively applied the approaches that best fit the culture of the department and the county. The systems were chosen to provide more predictability and control of the work going on in the department as well as enhance communication across the department about the current projects and their priorities.

Going into the program, few projects had a complete set of defined deliverables with concrete due dates. Now that the structure is in place, the department is getting projects accomplished by set deadlines. These results are giving county departments more confidence in the IT Department's delivery on its promises.