

## Software Ordering Request and Approval Redesign

### **SUBMITTOR'S INFORMATION**

Kent Carpenter, Director of Service Management and PMO  
UC Merced, Office of Information Technology  
[Kcarpenter4@ucmerced.edu](mailto:Kcarpenter4@ucmerced.edu)  
Phone: 209-285-9617

### **PROJECT TEAM MEMBERS**

Kent Carpenter, Director of Service Management and PMO, Office of Information Technology  
Brian Hatt, ServiceNow System Administrator, Office of Information Technology  
Rachel Leigh Bellofatto, Office of Information, Interim Director of Academic and Emerging Technologies  
Joan Holmquist, Office of Information,  
Christy Snyder, Office of Information, Communications Director  
Alex Hernandez, Office of Information, representing the Service Desk team  
Tolgay Kizilelma, Office of Information, Chief Information Security Officer  
Sean Pamer, Procurement Services, Information Technology & Auxiliary Category Manager  
Eric Kalman, Records Management & Information Practices, Office of Legal Affairs, Director  
Terri Harris, Center for Business Services and Solutions, Executive Director  
Diane Canton, Center for Business Services and Solutions, Business Officer  
Juana Dumagan, Center for Business Services and Solutions, Business Officer  
Silas Verrinder, Center for Business Services and Solutions, Procurement Specialist  
Frankie Vasquez, Office of Research and Economic Development, Research Administrator 2

### **SUMMARY**

Ask anyone about software management and you will get a role of the eyes. Software management is a complex web of many processes that must be managed for new software requests and renewals. A campus must consider Terms and Conditions, IS-3 compliance, vendor management, Certificate of Insurance, approvals, and more. There are many I's to dot and T's to cross, which involve several teams across the campus like the Procurement, Privacy Officer, Chief Information Security Officer, and more.

As a new campus, we don't have the luxury of having dedicated software management personnel or teams to manage software orders, but UC Merced utilizes existing staff members who wear different hats. Regardless of how new the campus is, or even if we had dedicated resources, there remained a need to review software ordering practices and to develop a new and automated way to manage and track all activities involved.

The conclusion of this review showed an incredible effort by everyone involved to develop and validate a complex workflow, which resulted in an effective, efficient, and easy solution built in ServiceNow. The highly successful solution went live at the beginning of 2022 improving the ease and speed for software ordering benefiting UC Merced faculty and staff.

### **PROBLEM STATEMENT**

UC Merced had an outdated software approval and purchasing process that took more processing time than necessary and was manually intensive. Any software that required the Privacy Office or CISO review was managed by email requiring constant follow up. Additionally, the solution was not scalable and created unnecessary work and stress for an already complex process.

## THE NARRATIVE

### Listening to the Campus

Before analyzing anything related to software ordering, the first goal was to reach out to campus-users and staff members involved in the process. The feedback we received during this phase was our greatest gift and a way to strengthen relationships with our end-users. The output of this activity resulted in a comprehensive report of their feedback along with short- and long-term action items.

### Learning from Other Campuses

UC Merced does not have a dedicated Software Manager, or software department, so the best thing we did was to reach out to other campuses to find out what we could adopt or learn. This saved time and effort designing the software ordering process as their feedback had a great influence on what we did.

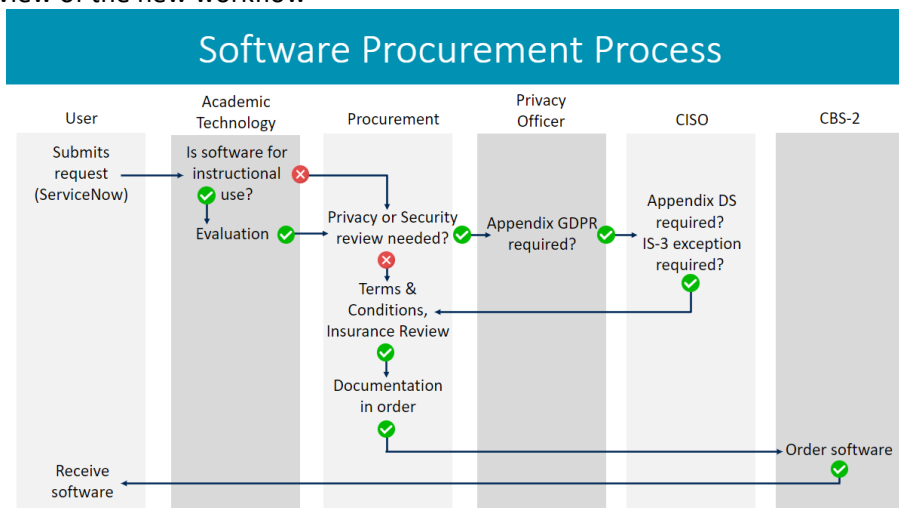
### Creating the Workflow

The next step in the redesign was to develop the new workflow. The design of the workflow required a couple of months to build. During these two months we performed many reviews, corrections, and revalidation.

As the software order is being processed, this following list represent the activities and responsible departments that participate in the review and approval process. This provides an idea of the complexity and number of people/teams involved in the software approval and purchasing process.

- Initial Review of the Request (Procurement)
- Instructional Use (Academic & Emerging Technologies)
- Review Terms and Conditions (Procurement)
- Appendix GDPR Required (Privacy Officer)
- Appendix DS Required (CISO)
- Determine Certificate of Insurance (Procurement)
- Determine “In Lue” (no Certificate of Insurance) (Procurement)

Simple view of the new workflow



### Remaining Activities

The next phase of the project was spent on building out the new solution in ServiceNow, testing what was built, and moving most software purchasing from IT to the Center for Business Services and Solutions (CBS2 – campus shared services department). Design and develop took six months and went live in the beginning of 2022.

And we received our first survey recently regarding the process:

***“Things are improving. The prior software order took almost 3 months. This was completed much faster.”***

Nigel Q.

#### **SELECTION CRITERIA**

**Complexity:** The automated workflow created was complex because it involved six different departments and 10 different task assignments. In the software request form, end-user answers are used to drive the some of the automated workflow. The different departments involved in the fulfillment of the purchase also provide answers, within the request form, to further drive automation.

**Impact:** The solution is ingenious in that we took full advantage of ServiceNow capabilities and made the process as simple as possible. Staff involved in the fulfillment of the order simply had to watch for task assignments, complete the task, and then the workflow assigned the next action to the next team. The impact is great because of this simplicity of the complex workflow and the ease at which someone fulfilling task had to do.

This new solution positively impacts the entire campus, especially for procuring **research** software, which help with the UC mission. There is also a task to review software for instructional usage which is tied back to **student success**. The new solution provides quicker turnaround times and tighter data and security IS-3 compliance.

**Team Contributions:** Everyone I worked with understood the need and were more than happy to assist, not only because of the benefits for themselves, but because more importantly, they saw the bigger picture in improving the software ordering process overall.

#### **THE LITTLE TRAIN THAT COULD**

As a growing campus with pressures to watch our budgets and to do more with less, we don't have the benefits that a larger campus might have. This is not a story of why we won't or can't help the toys get over the mountain, but a story in keeping our perseverance and knowing that we can do it. Since before instruction started at this campus in 2005, the founding staff maintained an attitude of rolling up their sleeves and getting the work done against all odds, which is still prevalent today. Our strength and energy are based on the mission the campus was built on: perspective and optimism regardless of our own self-interest.

UC Merced is not made of staff and faculty that believes “I think I can, I think I can” but of staff and faculty that lives “I know we can, I know we can”. When this software project started, the need was clear, and everyone was on board and ready to help. This was not because of the benefits it garnered individually, but for the mission of higher education. One could say, improving software ordering is just a grain of sand so why is this important? It's important because day in and day out we all add grains of sand to the pile, which eventually builds a mountain.

***“I am here for a purpose and that purpose is to grow into a mountain, not to shrink to a grain of sand. Henceforth will I apply ALL my efforts to become the highest mountain of all and I will strain my potential until it cries for mercy.”***

~Og Mandino