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## **Overview**

"You've got to start with the customer experience and work backwards to the technology."- Steve Jobs

It's not enough to use a best-in-class application like ServiceNow for service delivery. Our laser focus is on the customer experience. One thing we never lose sight of, no matter the project, is to consider the customer perspective every step of the way. The project team was guided by this principle when they set out to create a next-generation Service Hub with "total experience" in mind. This involved applying the disciplines of Multiexperience (MX), Customer Experience (CX), Employee Experience (EX), and User Experience (UX) to positively affect the "total experience" of the UC Davis Service Hub.

"Gartner defines its 'total experience' trend as combining the customer experience, employee experience and user experience to transform a business outcome. The goal is to improve the overall experience where all of these pieces intersect—from technology to employees to customers and users." (CRN, Gartner's Top Technology Trends That Will Define 2021, Nov. 3, 2020)

Attention to the concept of "total experience" was applied to the 2020/2021 upgrade of the UC Davis Service Hub which included:

- Migrating services from disparate applications to ServiceNow for a cohesive and integrated "one stop shopping" experience.
- Reducing overhead and maintenance costs of maintaining multiple platforms.
- Automating and improving efficiencies and processes with regard to campus-licensed software delivery.
- Migrating and integrating the service catalog in Drupal into the Service Hub's ServiceNow platform.
- Adding a virtual agent to further promote self-service, improve the user experience, and free up time for the help desk analysts therefore improving the employee experience.

## 1. Software Asset Management and Delivery

This part of the project involved replacing the 20-year-old software asset management website with a secure and modern tool that handles campus-licensed software asset management, purchasing, allocation, billing, and file distribution, and integrating it into the existing service portal, the Service Hub.

With the assistance of a contract UX analyst, the project team framed requirements from a customer usability perspective including developing personas for students, faculty, support staff, and administrative staff. The UX analyst compiled the requirements and created wireframe designs for the portal, service/software detail pages, order forms, receipts, etc. Our graphic designer further refined the wireframe designs with an eye toward simplicity and consistent branding. The external perspective brought by the UX analyst was vital in helping the project team overcome hidden biases that could undermine the design.

#### **Challenges and Solutions:**

Significant security risks associated with the software architecture and design due to its age: Moving to ServiceNow and integrating directly with our financial system helped us fast forward two decades in delivering a secure technology solution. Vulnerabilities in the old website were resolved simply by moving to the ServiceNow platform, which is maintained and compliant with industry security standards.

**Initial evaluation indicated every software product would require unique workflows:** A business analyst focused on identifying patterns and commonalities, rather than focusing on variations, resulting in a creative solution and "one workflow to handle all."

Manual processes requiring extensive time and resources: Previously, all software purchases were tracked by hundreds of users across campus using spreadsheets and separate databases. Today, all software is tracked and recorded in ServiceNow

and accessible to both individual users and departmental support personnel. This offers both significant gains in efficiencies but also allows for chain of custody, allocations, and license management.

**Complex processes to manage orders, billing, and refunds**: Request forms and automation workflows now handle the transactions such as bulk purchases, refunds, billing reconciliation, software distributions, customer status and receipts, and administrative reporting. Automation of the billing feed and real-time validation of billing accounts eliminates the need for manual financial checks that were dependent on the finance and budget organizations to validate.

**Limited reporting capabilities**: The capabilities for reporting purchase and refund transactions, volume, incidents related to purchases, and analytics that didn't exist before are now available for analysis.

**Calculating cost recovery was manual and time intensive:** Leveraging ServiceNow's Performance Analytics, we have automated tracking cost recovery data to understand our progress and percent return by individual software title.

**Common issues and solutions were not documented, resulting in a poor support experience**: The Knowledge Management team facilitated the building of software catalog models, items, and documentation to support customers with questions about software purchases.

### **Measuring Impact to Internal and External Customers:**

As we've streamlined the experience for others, it magnifies its importance as a tool that saves time and resources across campus.

The project team undertook extensive steps to capture the impact on customers and their desired needs for a solution. Customers were interviewed individually and in focus groups to capture the essence of their requirements for a better software purchasing experience. The new software and service portal has improved the experience for customers by encouraging the self-service approach to purchase and download software. The new catalog features also allow for departmental management of software purchasing and delivery. For internal customers, the new site allows for nimbleness and adaptability. The table-driven architecture empowers the business (software license coordination) to add, remove, and update catalog offering without requiring development resources.

In addition to vetting our new catalog with our customers, we also engaged our peers in higher ed to review the catalog and its functionality. Mitch Pautz, Educause IT Service Management Chair, said:

"In my professional experience, UC Davis is in the top 10 of all the IT software and service catalogs that I have come across. The site incorporates the best of UX design in a layout that is elegant and intuitive. The service and request catalog is easy to navigate. Services descriptions are clear and written in customer friendly language. I especially like how UC Davis has implemented the ordering and delivery of software using essentially a one-click solution." – Mitch Pautz, ITSM Sr. Service Management Analyst, University of Southern California

Additional measures of success include cost savings. The old software site required two servers, one to host the website, and another to host all of the software files to download. Migrating the website hosting into ServiceNow, and the software hosting in the cloud, saves us 14K+ dollars a year in hosting, maintenance, and backup fees.

### Collaboration enhances project success:

The project team engaged with affiliates across the campus to achieve the project goals:

- Student developers provided research, development, and testing of the technology components in the portal to expedite development work.
- Campus service managers and IT leaders provided critical insights into how service managers interact with their campus affiliates handling software purchases in various business settings.
- IET Finance and Operations provided vital information about billing procedures and drawbacks with the legacy systems.
- Kuali administration provided the standard requirements and policies needed to comply with University billing and accounting processes.

**Potential interoperability with other UCs:** Our approach of coalescing campus-licensed software into the service offering is unique in higher ed. Our extensive research of 25+ higher education software offerings showed us that in all cases, the software site license function is separate from the service offering/portal. ServiceNow is used as the common ITSM platform across all UCs. Given the ServiceNow architecture, the software catalog could be implemented by other UCs. Further, the standardized catalog content and knowledge articles are publicly accessible and could be adopted by other UCs.

# 2. Service Catalog Migration and Integration

This part of the "total experience" upgrade of the Service Hub involved the migration and integration of static content from the IT Catalog in Drupal into the Service Hub in ServiceNow.

## **Challenges & Solutions:**

Services not provided in an integrated platform. The service catalog was in Drupal and the Service Hub (including actionable request forms, IT Help, Knowledge Base, and Software Catalog) was in ServiceNow: The "total experience" Service Hub now includes a fully integrated service catalog that provides a seamless user experience when browsing and requesting services and software, and accessing related knowledge.

Manual processes for the management and reporting of service information. ServiceNow provides robust reporting capabilities on services, requests, and related knowledge.

Service managers and catalog managers have used the Service Catalog in Drupal since 2014 and had to learn a new way of managing and updating services. The project team spent a lot of time creating a workflow for and automated process to request a new service in the catalog that used to be a series of emails between the service managers and the catalog editor. In the Drupal catalog, service managers appreciated the ease of editing services so the project team aimed to replicate some of the functionality the Drupal catalog offered which helped the transition to the new platform.

## **Measuring Impact to Internal and External Customers:**

The seamless launch and transition to the catalog in ServiceNow spoke volumes. The pre-communication and consultation with campus service managers prior to launch coupled with the easy-to-use interface and functionality made for a smooth transition to the new catalog.

#### **Collaboration enhances project success:**

Campus-wide service managers were consulted throughout the migration and integration of their services in ServiceNow and their feedback was integrated into the project plan.

### Potential interoperability with other UCs:

ServiceNow is used as the common ITSM platform across all UCs. Given the ServiceNow architecture and ongoing collaboration between the UC ServiceNow Users Group (SNUG), the catalog could be implemented by other UCs. Further, the standardized catalog content and knowledge articles are publicly accessible and could also be adopted by other UCs.

# 3. Integration of AI in the Service Hub

When we were designing our virtual agent – Botrock - we wanted to delight our customers with her persona. Her antennae have a friendly flicker, which we hope elicits a smile. We want our virtual agent to create connection and ease our customers' minds about seeking help with technology.

### **Challenges & Solutions:**

**Create a virtual agent that is manageable for a team with limited resources.** We leverage our existing Knowledge Base so that we are maintaining information in just one place.

**Virtual agent's home in the Service Hub.** Botrock's home in the Service Hub makes sense but it limits customer's access to her if they need assistance via another site. The solution is to go where are customers are in their website navigation journey. To achieve this, Botrock has been added to multiple high-volume websites outside of the Service Hub. This creates an integrated and consistent experience for all users, regardless of the website they visit, and it does not require the customer to seek out answers or find the Knowledge Base.

Every March, our Service Desk is inundated with requests for help from applicants with questions about admissions process, creating their computing accounts, etc. An "Applicant Questions" topic was created in our AI chat bot, which directs students to the answers they are looking for. Furthermore, Botrock was added to applicants.ucdavis.edu to reach the students on a site they already visit.

#### **Measuring Impact to Internal and External Customers:**

In Botrock's first two months, she had 11,000 interactions representing help to 10,700 unique users.

### Collaboration enhances project success:

- The development of Botrock was a collaborative process between IT Service Management, IT Express Service Desk, and IET Communications, with the support of IET leadership.
- Provided a demo to 190 members of the higher ed IT community and answered community questions about our implementation.

## Potential interoperability with other UCs:

We presented Botrock at a UC SNug (ServiceNow User's Group) meeting, and met with individuals from other institutions to share our experience. As of this writing, we are the first UC to broadly implement a ServiceNow Virtual Agent.

# **Summary and Future Goals**

The Service Hub was designed to be appealing from the outset. Visitors are welcomed to a simple, intuitive interface with a bright, playful color scheme and easy-to-use navigation. We built our Service Hub based on how customers interact with the content and the process, not based on how the technology works or how our unit is organized. We focus on the human connection and how our customers will feel when they interact with technology. Technology can be intimidating, especially when you're confronting a problem or looking for an answer. In general, IT professionals assume their customers know how to find information, or know tech basics. In a higher education environment, it is critical to establish a foundational understanding that at least 25% of our population is new to our environment and will not be aware of the legacy websites or legacy processes. That's one of the reasons the ITSM program at UC Davis is passionate about making information and problem-solving easy and accessible. Through AI and our chatbot, our goal is to follow our customer and bring information to where the customer is, thereby removing this barrier.

Our future plan includes incorporating mission-critical processes around student engagement to take our program to the next level. Today, we have achieved ease of access to IT content. Tomorrow, our goal is to make it even easier for our customers by removing functional barriers. For instance, customers don't always understand the nuances of services that may span across multiple functions. We desire to remove those barriers and realize our vision of the "total experience" to achieve quality across all spectrums of support.

Visit the Service Hub: <a href="https://servicehub.ucdavis.edu/servicehub">https://servicehub.ucdavis.edu/servicehub</a>

Watch a Service Hub video (2:02.): <a href="https://video.ucdavis.edu/media/What+is+the+Service+HubF/1\_kreuf1zn">https://video.ucdavis.edu/media/What+is+the+Service+HubF/1\_kreuf1zn</a>