

**“It’s Complicated:”  
Technology Procurement  
at UC Merced**

OIT Behind the Scenes

Webinar Series



# Setting Expectations



## Lights!

- Camera & Audio



## Action!

- Participatory Activities



## Camera!

- Recorded Session



## Cut!

- Q & A

## **TODAY'S AGENDA**

- Intro to technology procurement
- Most frequent purchase categories & key things to know
- Current state: pains & gains
- How and when to engage OIT for help

# Technology Procurement at UC Merced



# Tech Procurement: OIT Purchases

Marisela Angel

OIT Chief Administrative Officer





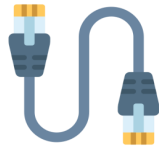
Take  
A  
Guess

# OIT Technology Procurement Overview

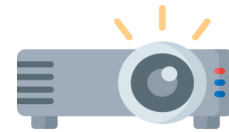
Purchases OIT Makes to Support UC Merced



Cyber  
Security



Network  
Infrastructure



Audio/Visual  
Infrastructure



Enterprise  
Solutions

# Cyber Security

*OIT invests in tools and services that help protect UC Merced users & data.*

## Examples:

- Firewalls
- DUO Two Factor Authentication (2FA)
- Anti-malware (fights spyware and viruses)
- Phishing review service (Know Before)
- Intrusion detection/prevention system (IDS/IPS)
- Security monitoring services





# Cyber Security

## Our Process:

### 1. Security need identified

- Projects/emerging risks
- Keep current with standards
- System-wide mandates

### 2. Considerations

- Risk/Mandate against campus and OIT strategic plans
- Accessibility
- Type of hardware/software
- Type of data

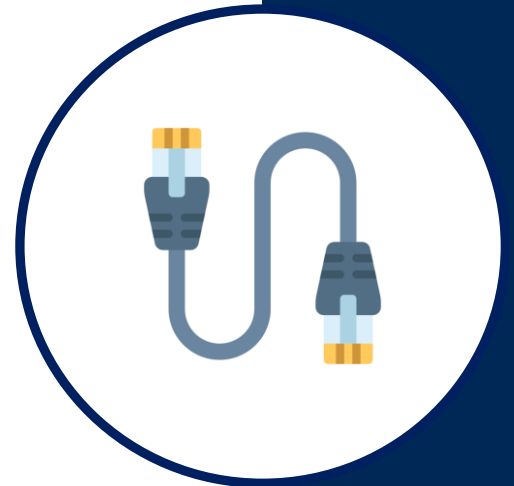


# Network Infrastructure

*OIT invests in physical equipment and support agreements to keep 10,000+ users connected and productive.*

## Examples:

- Routers
- Network switches
- Wireless access points
- Service agreements with vendors
- Monitoring services



# Network Infrastructure

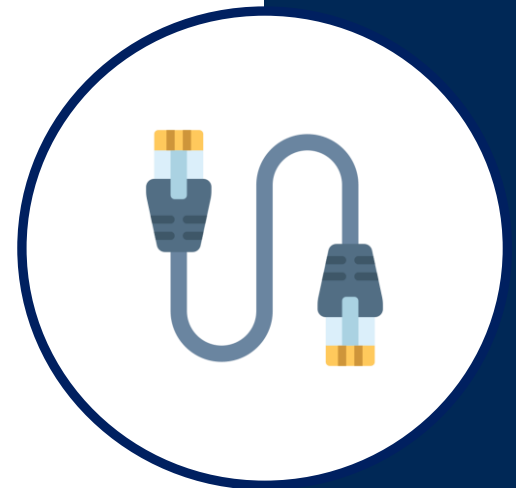
## Our Process:

### 1. Network need identified

- Campus request (i.e. 2022 Commencement)
- Equipment replacement for end of service/life hardware
- As campus grows/standards change

### 2. Considerations

- Risk of delay
- Security issues
- Refresh cycles

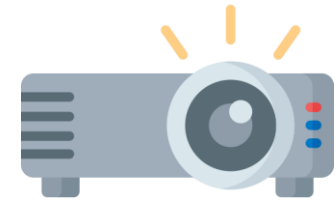


# Audio/Visual (AV) Infrastructure

*OIT invests in classroom and conference room equipment to serve instruction and campus business.*

## Examples:

- Audio (mics, speakers, amplifiers)
- Visual (projectors, screens)
- Conference (Zoom rooms, cameras)
- Instructional (visual presenters, supplemental recording)



# Audio/Visual (AV) Infrastructure

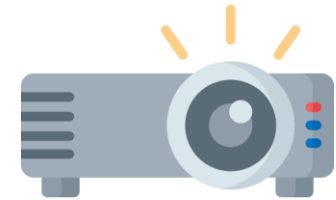
## Our Process:

### 1. A/V need identified

- End-of life equipment replacement
- Duct tape & bailing wire failure
- Request from member of campus community

### 2. Considerations

- Risk of not replacing
- Cost/Budget
- Strategic forecasting (standards change frequently)



# Enterprise (Campus) Solutions





# Tech Procurement: User Requests

Jose Hidalgo

OIT Financial Analyst



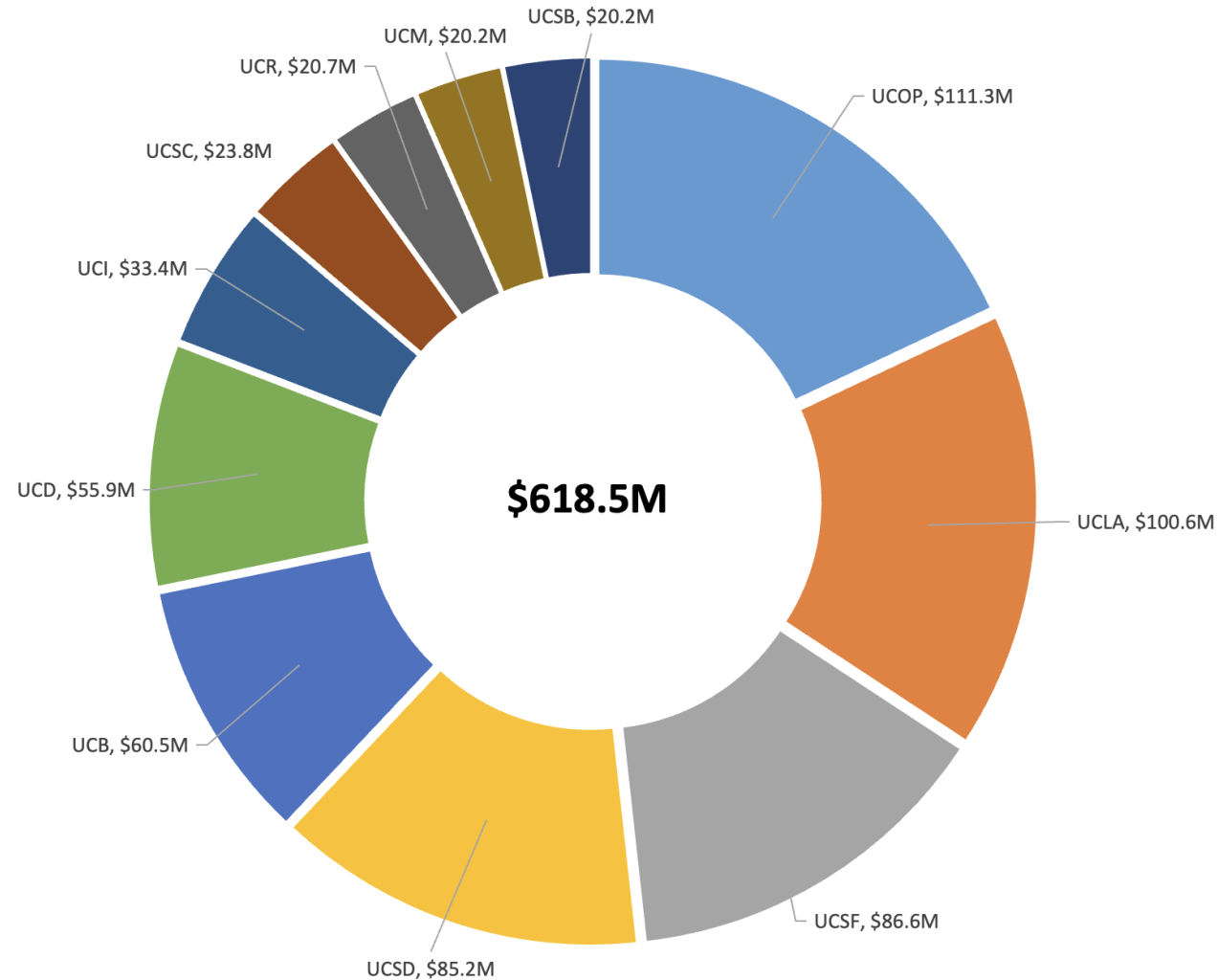
# OIT Top Technology Spend Categories

## CATEGORY

## FY 2019 SPEND

Enterprise Solutions.....	\$2,392,745
Network.....	\$ 802,031
Cyber Security.....	\$ 625,940
AV Infrastructure.....	\$ 468,296

# Technology Purchases by UC Campus (2019)



FY 2019



Take  
A  
Guess

# OIT Technology Procurement Overview

- Top categories of user-requested technology purchases



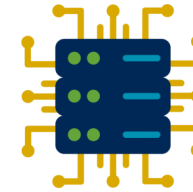
Enterprise  
Applications



Software



Telecommunications



Cyber Infrastructure &  
Research Technology

- General process to follow by category
- Considerations

# Enterprise (Campus) Solutions

*OIT assists in the purchase, integration, launch, and maintenance of campus-wide solutions that are used by all or most users at UC Merced.*

## Examples:

- Office 365 (Microsoft)
- Box
- CatCourses (Canvas)
- Banner Student Information System (Elucian)
- Oracle Financials



# Enterprise (Campus) Solutions

## General Process:

1. Need surfaced by stakeholder
  - PMO Consultation or OIT General Request ticket
2. Agreement on need, vendor, approach, funding
3. Institutional reviews
  - Procurement, security, contract agreements, etc
4. Purchase
5. Integration
6. Implementation
7. Launch



# Enterprise (Campus) Solutions

## Considerations:

1. Time
  - Could take months or years depending on complexity
  - Generally requires early agreement
2. Competing campus priorities, mandates
3. Cost & budget
4. Integration
  - Is this compatible with existing systems?
5. Potential security risks
6. Implementation & project management
7. User experience





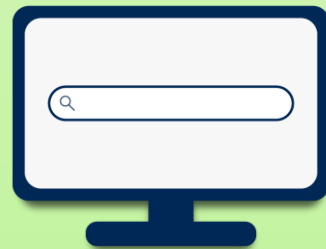
# When to Engage OIT: Enterprise Solutions



*Typical Timeline*



Idea



Investigation



Identify  
Product/Vendor



Request  
Integration

# Software

*The Center for Business Services & Solutions (CBS2) assists users requesting licenses for most software titles.*

*OIT maintains a list of common titles for campus users (some free/immediate access) and facilitates user requests for specific software types/titles.*

Examples:

- Adobe CC
- SPSS
- Microsoft Office Suite
- Matlab



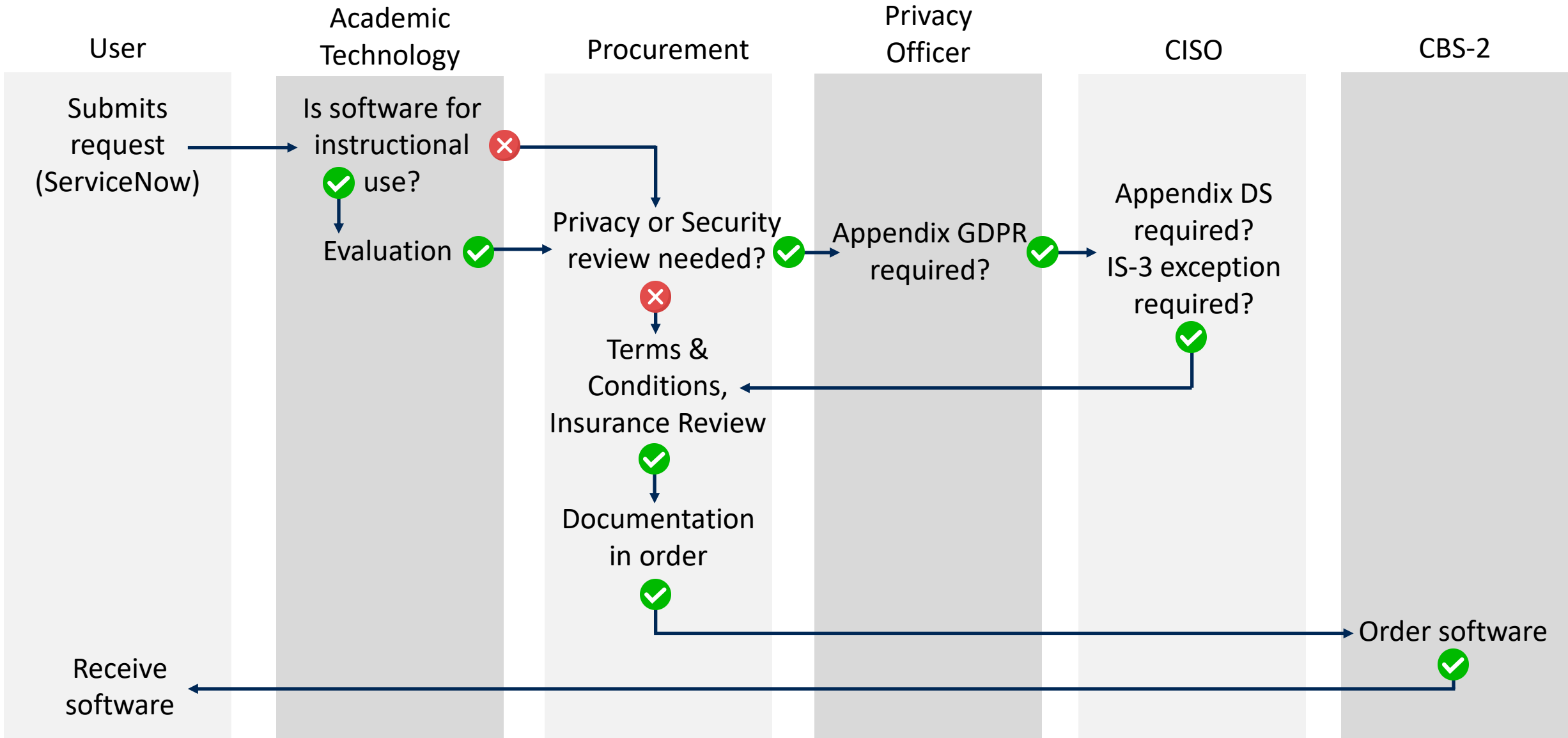
# Software

## General Process:

1. Need identified by end user
  - Review OIT list of common titles
  - Submit request via CBS2 form
2. Type of software dictates process
  - Software Review Process
  - Computer lab or academic software review by Academic Technology
  - Security/data review as necessary



# Software Procurement Process



# Software

## Considerations:

- Different process for:
  - OIT-managed computer lab software
  - Research computing software for MERCED & Pinnacles cluster
- Timing: depending on complexity, the process can take hours, days, weeks, or months



# Telecommunications

*OIT facilitates the purchase of phones and phone services for campus faculty and staff on demand.*

## Examples:

- VOIP (Voice Over Internet Protocol) lines & devices
- Mobile lines & devices
- Land lines
- Blue lights & emergency phone services
- Vendor porting (AT&T > Verizon, etc)



# Telecommunications

## General Process:

1. Need identified by end user/department
  - Equipment or line replacement
  - New staff & faculty needs
2. User submits ticket via ServiceNow

## Considerations:

- Common Services Assessment (CSA) cost model
- Equipment cost
  - Non-standard devices can be significantly delayed
- Accessibility
- Campus transition to VoIP



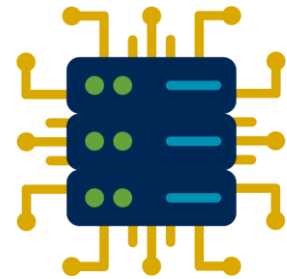


# Cyberinfrastructure & Research Technology

*OIT's Cyberinfrastructure & Research Technology (CIRT) group can assist researchers with the purchase of research computing hardware, software, and on-demand compute & storage solutions.*

## Examples:

- Colocation
- On-premises storage
- Cluster core-hour cycles (MERCED)
- Condo-model compute node purchases (Pinnacles)



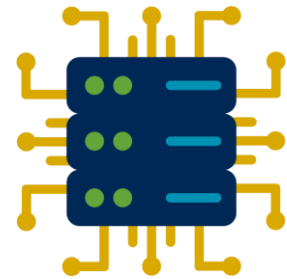
# Cyberinfrastructure & Research Technology

## General Process:

1. Need identified by researcher/group
2. User submits consultation ticket via ServiceNow

## Considerations:

- Cost:
  - Periodic charges for some services
  - Recharge model for some services (currently on hold)





# Current State: Pains & Gains

Sean Pamer

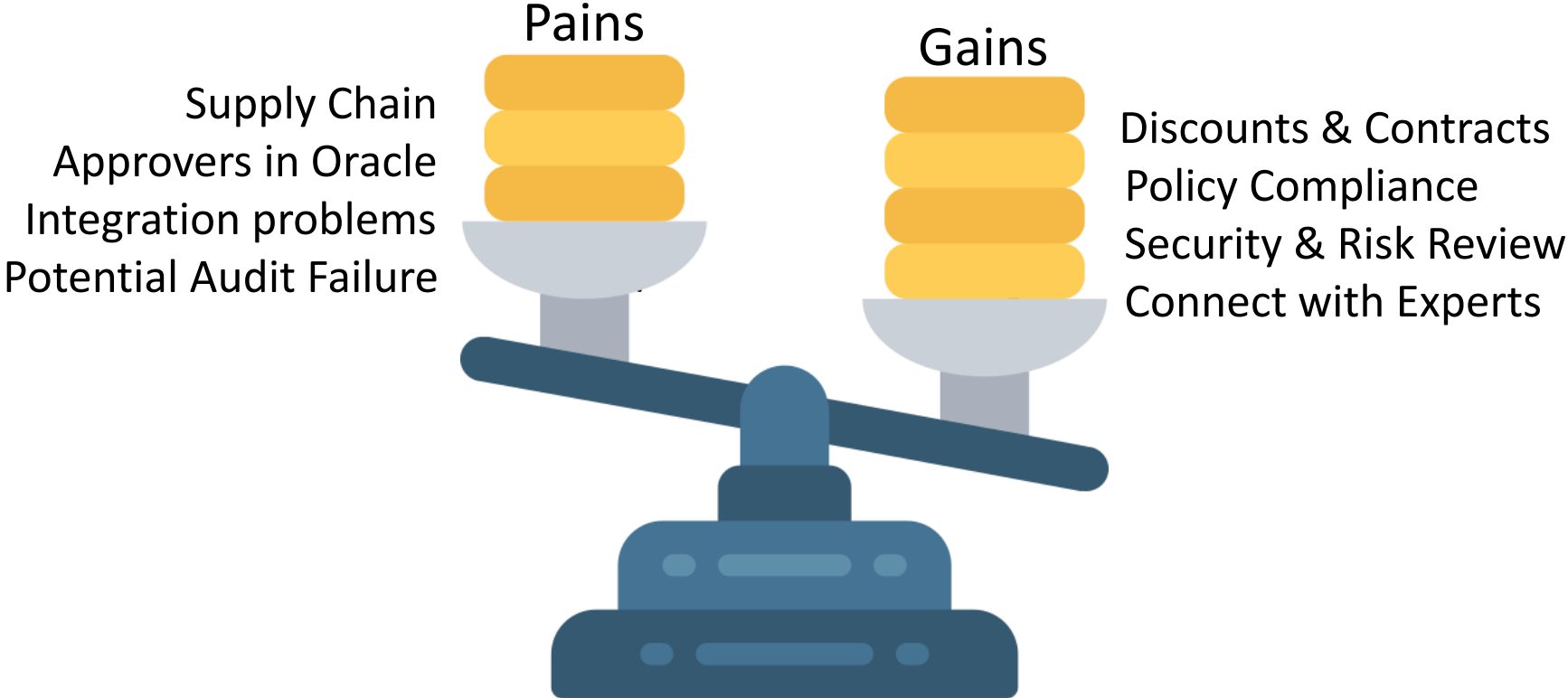
Procurement Category Manager –  
I.T. & Auxiliaries





Take  
A  
Guess

# Current State of Technology Procurement



## Pains:

### Supply Chain

Delivery times are unique for tech, lead time can be very long, and supply scarcity is increasing costs.

- Examples: Laptops, servers & other equipment
- Differences between suppliers
- Dell Monitor Example: 437 day lead time!



## Pains:

### Approvers in Oracle

The new Oracle approval process can take extra time.

- Delayed approvals = longer wait times BEFORE lead times
- Suppliers not responding



## Pains:

# Integration Problems

Leaving out experts in the beginning can cause big delays later on.

- Integration or installation plans require agreement between teams
- Parallel processes can speed things up
- Your purchase could become a paperweight!





## Pains: Audit Failure

No one wants to be on the news.

- Make sure appropriate processes are followed
- Experts are a significant barrier to audit failure



## Gains:

### Discounts & Contracts

Harness University of California purchasing power.

- Leverage campus & system-wide agreements
- Preferred vendors can save time & money
  - Preferential Shipping



## Gains:

# Policy Compliance

This isn't your main job, it's ours. Let us help!

- Campus and system-wide policies & procedures can be difficult to manage when you don't do it all the time.
- New development – Small Business First Program



## Gains:

### Security & Risk Review

Let someone else read the fine print.

- Don't agree to terms you haven't vetted!
- Terms & conditions often place liability on the end user (you!)



## Gains:

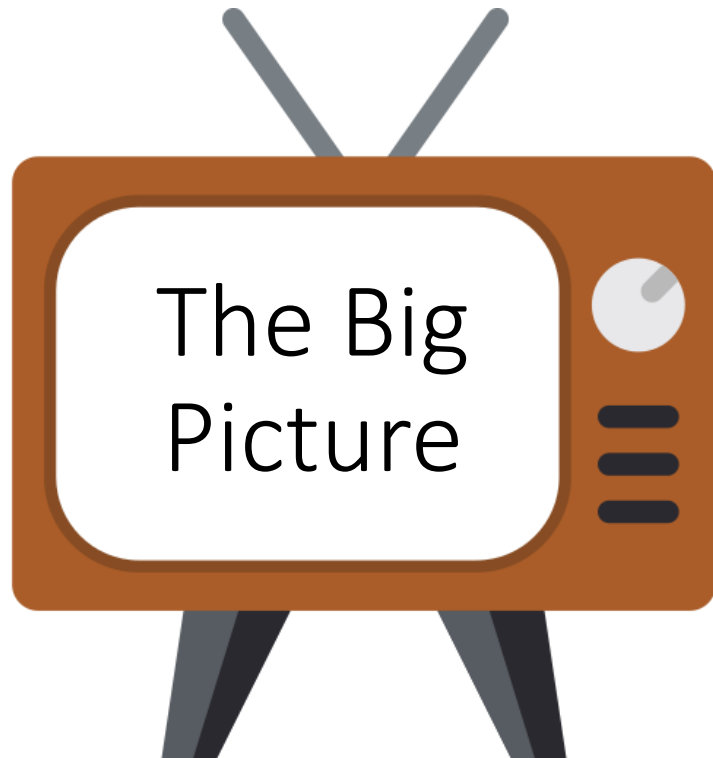
### Connect with Experts

Get expert advice to make the most of your purchasing dollars.

- Leverage OIT and Procurement experience
- Get tailored recommendations based on your specific needs



We understand that technology purchasing processes can sometimes be frustrating for end users.



- Get the best price/best stewardship of UC Merced funds
- Stay compliant with policy
- Protect UC Merced users & campus data
- Purchase smarter – leave the complicated things to us and leverage our expertise!



Q&A

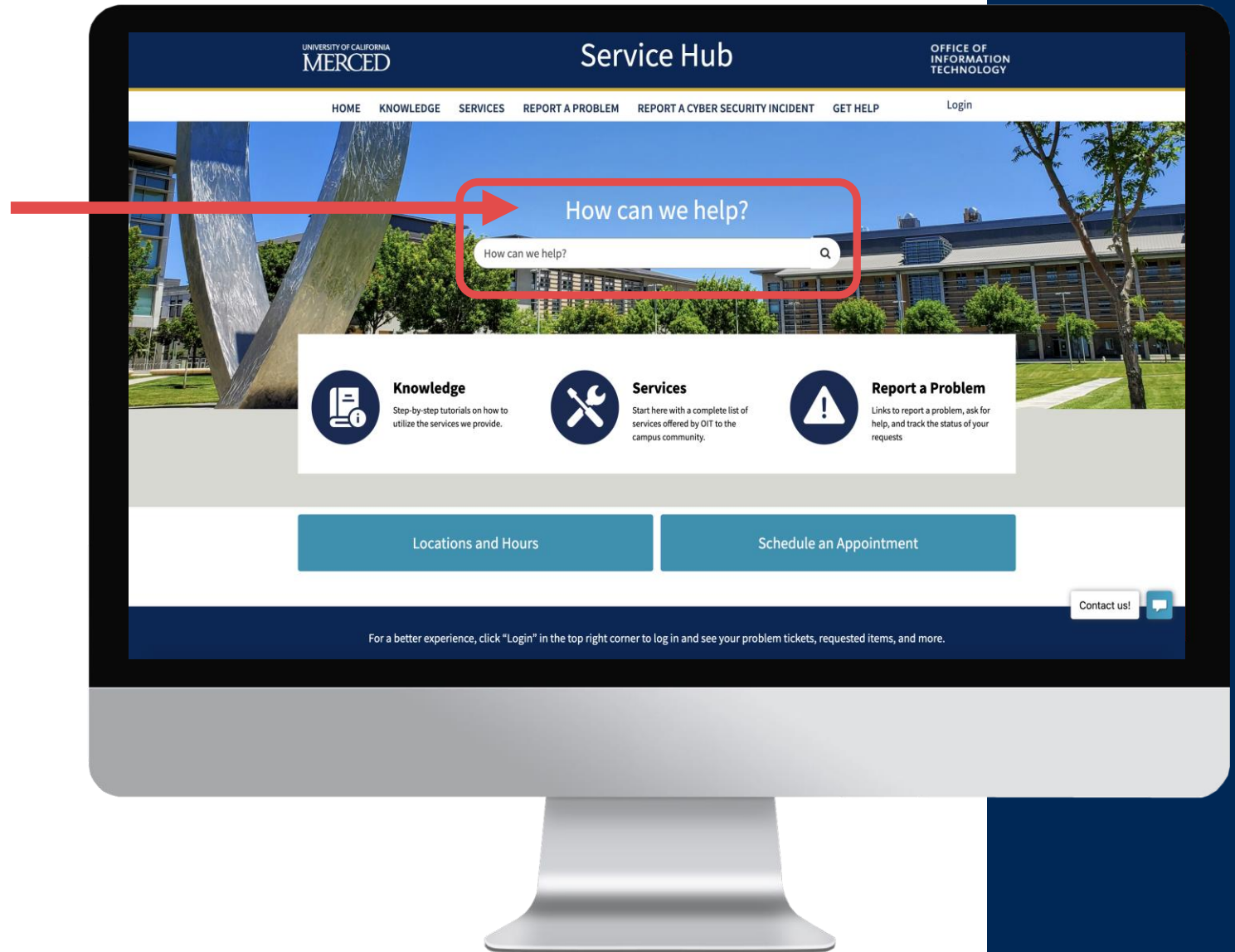
Rachel Bellofatto

Director of Learning Technologies

# Get Help

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- Search the OIT Service Hub to get started
- Reach out via the methods provided in Chat or in the Webinar Resource List



<https://servicehub.ucmerced.edu>



# We Want Your Feedback!

Feedback Survey for today's webinar:

<https://ucm.edu/TechProcurementFeedback>

Thanks in advance for helping us improve our future offerings to campus!





# Q&A



**Marisela Angel**  
Chief Administrative  
Officer



**Avi Badwell**  
Interim Deputy Chief  
Information Officer



**Jodon Bellofatto**  
Technology-Enhanced  
Spaces, Lead Analyst



**Kent Carpenter**  
Director of Service  
Management



**Nick Hansard**  
Director of Cloud  
Infrastructure



**Jose Hidalgo**  
OIT Financial Analyst



**Sean Pamer**  
Procurement Category  
Manager



**COMING SOON: MORE BEHIND THE SCENES!**

April 21: IS-3 “Ask Me Anything”

Summer: Microsoft365 Tools





<http://ucm.edu/v/oitbehindthescenes>

OIT Behind the Scenes: Cloudy with a Chance of Infrastructure was created on location at the University of California, Merced in Merced, California!

Thanks to all the OIT folks  
who put hard work into this webinar!

Marisela Angel, Subject Matter Expert

Katie Adams Arca, Webinar Coordinator  
*tries to rein in the madness*

Edson Gonzales, Webinar Support

Jose Hidalgo, Subject Matter Expert

Preethi Merugumala, Student Technology Consultant  
*is graduating!!!*

Christian Ortiz, Student Technology Consultant  
*is also graduating!!!*

Sean Pamer, Subject Matter Expert



*That's all, folks!*