INFORMATION TECHNOLOGY SERVICES

VOICE TOOL CRIB

AUDIT REPORT #19-2208

Audit & Advisory Services

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# Background

In accordance with the UCLA Administration fiscal year 2018-19 audit plan, Audit & Advisory Services (A&AS) conducted an audit of the Information Technology Services (IT) Voice Tool Crib (VTC) operations.

IT Services is responsible for the development, provision, and maintenance of an advanced voice, data, and video infrastructure, as well as related systems and services within the Campus. The infrastructure is comprised of a voice network, campus backbone data network, internet access system, cable television system, and an 800 MHz wireless radio system. IT Services administers more than 92,000 UCLA Logon accounts, 49,400 telephone lines, and 6,827 cable television connections. The Communications Technology Services (CTS) unit within IT Services supports and monitors these services 24-hours a day, 7-days a week.

The VTC consists of one main storeroom and two smaller satellite locations. The VTC storeroom group maintains an inventory of telecommunication materials and supplies to perform installation, repair, and replacement functions. The VTC utilizes the Communications Management Information Tool (COMIT) system inventory management module to manage its inventory. COMIT houses product codes and their corresponding barcodes that are assigned to all inventory items. With handheld scanners, the storeroom staff issues, transfers, and receives inventory by scanning the barcode and uploading information into the COMIT system. COMIT produces system-generated reports that are used to track and monitor the flow of inventory. Additionally, the ServiceNow system is used for inventory procurement. ServiceNow is a workflow based platform-as-a-service application used to create and automate workflow and related processes.

As of June 2018, the VTC storeroom has approximately 665 active stock items that are valued at approximately $564,000. The storeroom is operated by two full-time employees. The Associate Director of Procurement & Asset Management oversees the operation and reports to the Executive Director, Office of the Chief Information Office (CIO).

Purpose and Scope

The primary purpose of the review was to ensure that the related systems and procedures surrounding VTC’s structure and controls are conducive to accomplishing its business objectives. The secondary purpose of the review was to evaluate the adequacy and efficiency of internal controls. Where applicable, compliance with University and departmental policies and procedures was also evaluated.

The scope of the audit focused on the following areas:

* Financial Management
* Inventory
* Separation of Duties
* Systems Access Controls

The review was conducted in conformance with the *International Standards for the Professional Practice of Internal Auditing* and included tests and other procedures considered necessary to achieve the audit purpose. Interviews were conducted with VTC management and staff, and various other financial and administrative documents were examined.

# Summary Opinion

Based on the results of the work performed within the scope of the audit, VTC’s organizational structure and controls are generally conducive to accomplishing its business objectives. However, certain controls and business practices could be further strengthened by implementing the following:

* The Chief Administrative Officer (CAO) and Departmental Security Administrators (DSAs) should monitor accountability delegations by reviewing quarterly Distributed Administrative Computing Security System (DACSS) reports to ensure that the structure reflects access that is appropriate and consistent with the department’s organizational structure and job responsibilities.
* Mandatory reviewers should read their Post-Authorization Notifications (PANs) within two business days of receipt in accordance with the UCLA Financial Policy.
* Written procedures should be developed for both annual physical inventory counts and the issuance of tools and inventory on weekends and after business hours.
* Management should ensure blind counts are utilized for all physical inventory counts.
* Management should perform a final assessment of the observed boxes of Nortel Networks equipment and make a final determination as to its obsolescence, and properly dispose of the equipment, accordingly.
* Management should ensure that access to COMIT is continuously reviewed and access is removed on a timely basis. Additionally, the COMIT system should include the employee’s official name per the UCLA Payroll System and their employee University Identification (UID) to enhance the data integrity of the user listing. The UID is a unique identifier and using the employee’s official name adds uniformity.

The audit results and recommendations are detailed in the following sections of this report.

# Audit Results and Recommendations

Financial Management

The IT Services accountability structure for department 3200 (CTS) in DACSS in effect for September 26, 2018, was evaluated for effective delegation of authority in initiating, processing, and reviewing purchasing transactions, and for adherence to the UCLA Financial Policy on “Principles of Financial Accountability.” According to the policy, maintaining and securing an effective accountability structure should provide for the routine update of DACSS to ensure that proper access is granted to inquire, prepare, and/or review transactions.

The DACSS system is UCLA’s enterprise application access management system that allows campus departments to manage access to the resources and functions of all major university transaction systems such as Purchasing, Accounts Payable, and Payroll. A user’s ability to perform a transaction can be limited based on organizational hierarchy and/or full accounting units (FAU). Additionally, dollar limits can be placed on financial transactions. The CAO of a unit is responsible for identifying which individuals will have access to the applications systems, and those responsible for reviewing the transactions for each specific application. TheCAO is responsible for selecting a primary and the backup DSAs. The DSA is responsible for the input (into the DACSS system) of the access as delineated by the CAO.

Controls surrounding the CTS accountability structure, review of PANs, and the Annual CAO Certification and Accountability Matrix were reviewed. The following were noted:

### Accountability Structure

The Office of the CIO Executive Director assumed the duties of CAO on July 1, 2018, and has been proactive in seeking out resources and training to ensure that the responsibilities of a CAO were understood and an appropriate accountability structure is established. At the request of the CAO, A&AS met with the CAO and the DSA on October 10, 2018, to provide training on the DACSS Campus Data Warehouse (CDW) reports and discuss the annual CAO certification.

### The following DACSS CDW reports for department code 3200 were obtained on September 26, 2018:

### Query Data Base (QDB) Users by Appt (Appointment) Unit and Users by System Access Request (SAR) Unit.

### Users and their Access by Appt Unit, by SAR Unit, and Users with Access to a Specific Unit.

### Users and their access to Student Systems by Appt and by SAR unit.

### Reviewers for a Specific Unit and Reviewers by Home Department Code.

Data from the nine reports was used to create worksheets that provided a listing of all users and reviewers that have access to inquiry, process, and review transactions for department code 3200. The worksheets were sent to the CAO and DSAs to confirm that purchasing access is appropriate. The CAO and DSAs also provided the reports to management to ensure that all access was reviewed and updated to reflect access that is appropriate to the user’s job duties.

IT Services has submitted the DACSS CAO Certification for 2018 to the Office of the Controller and overall, the IT Services CAO has established an effective DACSS structure for the delegation of initiating, processing, and reviewing of purchasing transactions for department code 3200. However, the review did note that there were two users who had purchasing access to department 3200 and work in other departments; their access was not appropriate, and was deleted by the DSA as soon as it was identified. One user works for Asset Management and the other for the Institute for Pure and Applied Mathematics.

Recommendation: The CAO and DSAs should monitor accountability delegations by reviewing quarterly DACSS reports to ensure that the structure reflects access that is appropriate and consistent with the department’s organizational structure and job responsibilities.

Response: Concur. DSA will review DACSS report on a quarterly basis to ensure accuracy of accountability for individual users.

### Post-Authorization Notification (PAN) Review

Financial transactions must have at least one mandatory reviewer in order to be processed. Once the transaction is processed, a PAN is generated. PANs are automatically sent to mandatory and non-mandatory reviewers based on the reviewer set up in DACSS. Mandatory reviewers are required to log onto PAN and review their notifications. The PAN system provides an “inbox” for each reviewer and records a date/time stamp when the record is opened for review. Non-mandatory reviewers receive an email generated at the time of the transaction.

The UCLA Financial Policy states that mandatory reviewers read their PANs “within two business days of receipt,” all reviewers are to: “inspect each transaction to ensure the Preparer properly fulfilled their responsibilities;” “ensure that each transaction complies with policy, regulatory, and other requirements;” and “resolve all questions that arise with a transaction, or ensure the transaction is reversed until the questions are resolved.”

The PAN Aging Reports available on the web-based application Document Direct, were queried to verify that IT Services employees who are set up as purchasing mandatory reviewers for department code 3200 are not listed in the aging reports. Review of the reports as of September 29, 2018, indicated the following:

* There were no IT Services mandatory reviewers with unread PANs listed in the “PAN Aging Report Active by Mandatory Reviewers.”
* The department does not have any separated employees with unread PANs listed in the “PAN Aging Report Separate.”

* IT Services does not have any PANs that have not been read by any mandatory reviewer. The “Unread PAN by Any Mandatory Reviewer” was clear.

The CDW DACSS Reviewers by Specific Unit report was used to identify the IT Services mandatory reviewers that are set up to review purchasing PANs for department code 3200. For the 11 IT Services mandatory reviewers, A&AS examined the July 5, 2018, to December 5, 2018, Audit Review logs to verify that PANs were reviewed in a timely manner in accordance with the UCLA Financial Policy. Although the UCLA Financial Policy states that transactions must be reviewed within two working days of receipt, A&AS used a five-day criterion to account for weekends, holidays, alternative work schedules, and short absences.

A&AS found the number of PANs read more than five days from receipt by mandatory reviewer as follows:

|  |  |  |
| --- | --- | --- |
|  | **# of Unread PANs > 5 Days** | **Range of Days Unread** |
| Reviewer 1 | 200+ | 13 to 35 |
| Reviewer 2 | 200+ | 5 to 9 |
| Reviewer 3 | 71 | 5 to 20 |
| Reviewer 4 | 26 | 5 to 48 |
| Reviewer 5 | 9 | 5 to 17 |
| Reviewer 6 | 8 | 5 to 9 |
| Reviewer 7 | 7 | 5 to 6 |
| Reviewer 8 | 3 | 5 to 6 |
| Reviewer 9 | 2 | 14 to 21 |
| Reviewer 10 | 2 | 5 |
| Reviewer 11 | 1 | 5 |

Due to system limitations, only the first 200 PANs are listed.

Recommendation: Management should ensure that all mandatory reviewers read their PANs in a timely manner in accordance with the UCLA Financial Policy. In addition, management should consider evaluating the average volume of PANs for each mandatory reviewer to determine the reasonability and related effort required to complete daily reviews of transaction notifications received. If it is not practical, then management should consider revising their designated mandatory reviewers (mandatory versus non-mandatory) while still ensuring that adequate separation of duties, individual accountability, and appropriate control is maintained over financial resources as per the UCLA Financial Policy.

Response: Concur. DSA is reviewing the PAN report on a weekly basis and notifying reviewers if PAN review exceeds policy expectations. In January 2019, the designated mandatory reviewer structure was updated to designate Managers as mandatory reviewers for their respective area. This addresses the recommendation relating to the average volume of PANs per reviewer. Directors are receiving non-mandatory notifications.

Inventory – Written Procedures

Interviews and walkthroughs were conducted with VTC management to obtain an understanding of current processes and controls over inventory counts, purchasing, receiving, and issuing inventory during and after business hours. Written procedures and operating practices for controlling VTC inventory were evaluated for adherence to UCLA Policy 360, Internal Control Guidelines for Campus Departments, efficiency and effectiveness, and conformity to best practices, including stewardship responsibilities and completeness of supporting documentation. Inventory processing utilizing the COMIT and ServiceNow systems was also reviewed for adequacy.

Written Procedures – Annual Counts and After Hours Issuances

Management has not established written procedures for either annual physical inventory counts or the issuance of tools and inventory on weekends and after normal business hours.

UCLA Policy 360 requires periodic review of department operating procedures to ensure internal controls are being followed and improving on those controls when weaknesses are detected. UCLA Policy 360 also requires control activities, including operating procedures be identified and captured to enable management and staff to carry out their responsibilities efficiently and effectively. Without having adequate written procedures for key operational processes, efficiency and effectiveness of the VTC’s operations may be affected. Additionally, essential institutional and organizational knowledge could be at risk of loss in the event of staff attrition and/or unexpected separation from the VTC.

Recommendation: Management should develop written procedures for both annual physical inventory counts, and the issuance of tools and inventory on weekends and after business hours. The procedures should be disseminated to VTC staff and define each role within the workflow. Annual inventory count procedures should include required staffing for the annual count, necessary elements of controlling and documenting the count, including utilizing “blind count” methodology, appropriate review and approval, and processing of adjustments. Additionally, weekend and after business hours issuance procedures should include staff roles and responsibilities, utilization of logs, and follow-up processing on the next business day. By establishing these written procedures, management will be strengthening its current control environment.

Response: Concur. Management has developed written procedures for annual physical count of inventory and issuance of inventory and tools during weekends and after hours. These procedures have been reviewed with the appropriate VTC staff.

Inventory – Purchasing

Discussions were held with VTC management to obtain an overview of purchasing workflow processes and related purchasing reports. A judgmental sample of 40 inventory purchases was selected from the campus General Ledger from January to October 2018. The selected test items included Purchase Card (Pcard) and Low Value Order (LVO) purchase transactions, also items such as cabling and connectors, telephones, laptop computers, headsets, specialized testing tools, and various vendor provided services.

Supporting documentation for the purchases was reviewed for adequacy and completeness, including appropriateness of the purchase, authorized purchase approval, and proper payment authorization. A reconciliation was also performed of purchasing and receiving data between the COMIT and ServiceNow systems to verify the accuracy and completeness of the data.

Data analytics was utilized to assess the adequacy of purchasing controls over purchase authorization limits, duplicate vendor payments, personal purchases, and the risk of any conflict of interests.

Testing was also performed to ensure that LVO authority is not being circumvented, and to verify that goods, services and repairs for which there is a repetitive requirement for are properly made against departmental or campus-wide blanket agreements or from system-wide strategic sourcing agreements.

There were no significant control weaknesses found in this area.

Inventory – Receiving

For the purchase sample noted above, testing was performed to verify there is documented evidence of receipt of goods and services, items were inspected for quality, quantity, specification upon receipt, and that purchased items were entered into the COMIT perpetual inventory records on a timely basis. Supporting documentation including packing lists, invoices, purchase order requests, and COMIT receiving data was reviewed for accuracy and adequacy.

A&AS observed the receiving process at the VTC’s main office. The receiving process starts when inventory shipments are delivered to VTC’s front desk staff. Packing slips are stamped as “received” and the items are scanned into inventory. After scanning, inventory items are marked as received in the COMIT system, and the packing slips are scanned into the ServiceNow system. This marks the completion of the receiving process in the VTC storeroom.

From the judgmentally selected purchasing sample noted above, A&AS obtained purchase orders from COMIT and requisition reports from ServiceNow. The reports from ServiceNow were compared to the COMIT reports to reconcile the price, receiving, and quantity data.

There were no significant control weaknesses found in this area.

Inventory – Issuing and Returns

A&AS conducted fieldwork interviews with VTC management to obtain an understanding of inventory issuance and return workflow processes, electronic issuance and return data, and other relevant supporting documentation. COMIT work order data was obtained for 13 inventory issuances and seven return transactions and analyzed to determine the adequacy of supporting documentation, and confirm inventory is issued against a valid work order. For inventory that was returned to the Storeroom (such as unused cabling, connectors, molding, etc.), COMIT work order data was obtained and analyzed to confirm the adequacy of supporting documentation and to ensure that inventory is returned against the same valid work order as it was issued.

There were no significant control weaknesses found in this area.

Inventory – Physical Counts, Variances, and Adjustments

A&AS met with VTC management to gain an understanding of its periodic physical inventory counts, and controls related to inventory variances and adjustments. Periodic inventory spot counts are performed throughout the year, with one annual count. Supporting documentation for the August and September 2018 spot counts, June 2018 annual count and related adjustments were obtained from management and evaluated for completeness, accuracy, and appropriate management review. Variances are documented, and significant variances are properly investigated by management. Physical inventory adjustments posted in COMIT receive management’s written approval prior to being applied to inventory balances, and can only be performed by authorized employees with specific COMIT system privileges that have been approved by management.

Inventory Cycle Counts

Management does not utilize the “blind count” methodology when performing its inventory cycle counts. Instead, the perpetual inventory system’s on-hand balance of inventory levels are pre-printed on the count sheets prior to the start of the count. This provides the count team with knowledge of the expected outcome. This condition creates the risk that the counters might be influenced by the on-hand quantities provided to them, make assumptions that are incorrect or may not actually perform the count. The counters may look at the inventory, conclude it agrees with the provided on-hand quantity and record the on-hand balance amount as the physical count.

Recommendation: Management should ensure that blind counts are utilized for all physical inventory counts. Blind counts offer the greatest degree of assurance of accurate and reliable counts. Blind counts also offer the advantage of assessing the integrity of the inventory system as well as other related inventory controls, processes, and procedures.

Response: Concur. Management will ensure blind inventory counts will be used to assess the integrity of the physical count as well as the automated system, by removing pre-printed counts from inventory sheets.

Inventory – Physical Security

Observations were performed of the VTC’s main inventory storage and its satellite areas in order to evaluate the adequacy of physical security. Security measures include utilization of electronic keycard locks, surveillance cameras that cover points of entry, and inventory issuance counters. Doors to the storage areas are secured with a passcode lock. Security of the main inventory storage area includes a floor-to-ceiling cage built from chain link fencing, electronic BruinCard readers, and traditional, heavy-duty key locks. The security cameras monitor the inventory shelves and doors. There is another inventory area near the main inventory cage. This area is a floor-to-ceiling cage built from chain link fencing, which also has electronic locks and security cameras. This is where fiber and copper cabling, and telephones are stored. In addition to IT Services own security measures, these cages are located within the Facilities Management building. As such, the VTC inventory storage areas benefit from Facilities Management security measures as well. The satellite areas consist of storage closets within the Powell Library and the California NanoSystems Institute (CNSI) building. The entrances to these areas are secured by specific master keys issued to authorized UCLA staff by the Facilities Management Key Shop. Security cameras monitor the interior of the satellite storage areas as well.

Obsolete Inventory

Physical security testing and observation identified that heavy boxes of obsolete Nortel Networks equipment are stacked precariously from floor to ceiling in the VTC’s satellite storage closet at the Powell Library. Per VTC management, the observed equipment inventory is functionally obsolete. This condition creates a safety hazard for campus staff that enter the storage area on a regular basis. Additionally, the equipment boxes are consuming valuable storage space.

Recommendation: Management should assess the Nortel Networks equipment and make a final determination as to its obsolescence. If it is determined to be obsolete and is no longer of further use to the University, VTC staff should properly dispose of the equipment as per the most appropriate method described in UC Business and Finance Bulletin BUS-38, “Disposition of Excess Property and Transfer of University-Owned Property” (BUS-38). Doing so will reduce the risk of injury to campus staff and produce more space for current operations.

Response: Concur. The equipment is obsolete and has been disposed according to policy guidelines.

Separation of Duties

A&AS obtained an overview of inventory procedures and controls, and evaluated reconciliation processes for purchasing activity, including receiving, issuance, and return of unused VTC inventory to available stock to ensure there is an adequate separation of duties. Inventory orders, related supporting documentation and approval processes, including utilization of the COMIT and ServiceNow systems were reviewed for proper management oversight. The physical receiving of VTC inventory was assessed for proper reconciliation of items received to purchase orders, and the subsequent posting into the COMIT perpetual inventory records. Vendor invoice payment authorizations were inspected for consistency and completeness of management approval prior to payment processing. Issuance and return of inventory was tested to ensure that each occurrence of inventory issuance or return was based on a valid work order and related entry into the COMIT perpetual inventory records.

Separation of duties was found to be adequate. Controls are established that ensure no one person has complete control over key inventory functions or activity.

There were no significant control weaknesses found in this area.

Systems Access Controls

### Communications Management Information Tool (COMIT) System

The adequacy of COMIT system controls were evaluated through interviews with management and examination of user listing reports. Controls over systems access to COMIT were reviewed to verify that access has been granted based upon job classification, responsibilities, and that users are current employees.

Each user has their own unique login and password to COMIT. COMIT password controls were found to be in compliance with UCLA Policy 401, “Minimum Security Standards for Network Devices.”

Review of the 136 users who have been assigned access to COMIT showed that 126 of the user profiles are appropriate. The following issues were noted:

* Six users are former UCLA employees who have separated. The user’s separation dates ranged from September 19, 2014, to March 12, 2018.
* Four users are former contract employees who no longer work for the University and do not need access.

In addition, fifteen user’s names differ from their official name in the University Payroll System. Also, the COMIT user access listing showed that there are no unique identifiers attached to usernames, which makes it difficult to correctly identify employees in instances where employees have the same name.

Recommendation: Management should ensure that access to COMIT is continuously reviewed and access is removed on a timely basis. Additionally, the COMIT system should include the employee’s official name per the UCLA Payroll System and their employee UID to enhance the data integrity of the user listing. The UID is a unique identifier and using the employee’s official name adds uniformity.

Response: Partially- Concur.

1. COMIT will be reviewed on a quarterly basis, to ensure data integrity and former UCLA employees have been removed from COMIT.

2. We believe that changing the COMIT users’ names to match to the UCLA Payroll System name and employee UID may prove suboptimal for our customers, adding an inefficient and confusing layer. Customers generally associate with the employee based on name that they choose to use on a daily basis in the work environment and may differ from their payroll system name (in some cases substantially). Also, the common name an individual chooses to use on a daily basis may differ from their payroll name in terms of gender expression or other personal preference and we believe a more supportive environment is maintained by using the name preferred by the employee.

Moreover, COMIT sends a variety of automatic notifications to our customers to inform them of the various phases of service fulfillment, and customers may not always recognize the payroll names of staff. We are concerned that this could introduce additional customer inquiries and possible delays in service/fulfillment. It is highly recommended that IT Services proceed as is by maintaining the employee name as developed in COMIT.

### ServiceNow

A review was performed of users who have the *Asset and Inventory* level privilege in ServiceNow to ensure that access is appropriate and that users are current employees. *Asset and Inventory* level privilege provides users the ability to purchase assets over $5,000 and inventory less than $5,000.

Audit test work indicated that all 19 users who have access to the *Asset and Inventory* level privilege in ServiceNow, is limited to the appropriate staff.

There were no significant control weaknesses found in this area.

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