



Audit of Panther TECH Operations

**Report No. 23/24-06
February 22, 2024**



Date: February 22, 2024

To: Robert Grillo, Chief Information Officer

From: Trevor L. Williams, Chief Audit Executive

A handwritten signature in blue ink, appearing to read "Trevor L. Williams", written over the printed name.

Subject: Audit of Panther TECH Operations, Report No. 23/24-06

We have completed an audit of Panther TECH Operations for the fiscal year ended June 30, 2023, and have assessed the current practices through January 2024. The Panther TECH store is managed by the University's Division of Information Technology (DoIT) Business Services Office and provides hardware and software solutions to the University community.

During the audit, we reviewed the store's controls related to sales, returns, purchasing, inventory management, and information technology to ensure that processes are adequate and effective, and align with University policies and procedures, and applicable laws, rules, and regulations.

In summary, we concluded that Panther TECH has established internal controls and processes for the areas in scope. We found that, generally, some controls are designed well and are functioning effectively, while there is a need to enhance the design and effectiveness of other controls. The areas we have identified for process improvement includes the processes related to the assignment of roles and privileges in the NetSuite application, revenue recognition (matching principle), inventory reconciliations, cash management, the safeguarding of assets, and payments for trade-ins. Management has agreed to implement all recommendations offered.

We want to take this opportunity to express our appreciation to you and your staff for the cooperation and courtesies extended to us during the audit.

Attachment

C: FIU Board of Trustees

Kenneth A. Jessell, University President

Elizabeth M. Béjar, Provost, Executive Vice President, and Chief Operating Officer

Aime Martinez, Chief Financial Officer and Senior Vice President for Finance and Administration

Javier I. Marques, Vice President for Operations & Safety and Chief of Staff, Office of the President

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EXECUTIVE SUMMARY

Introduction

The FIU Panther TECH store is an on-campus technology store primarily serving members of the FIU community with computers, tablets, software, phones, accessories, and other technology that are available for purchase. FIU departments and visitors to the campus may purchase directly from the store or a vending machine located on campus. Members of the University community may benefit from discounts on selected items offered by certain suppliers, based on agreements with those suppliers.

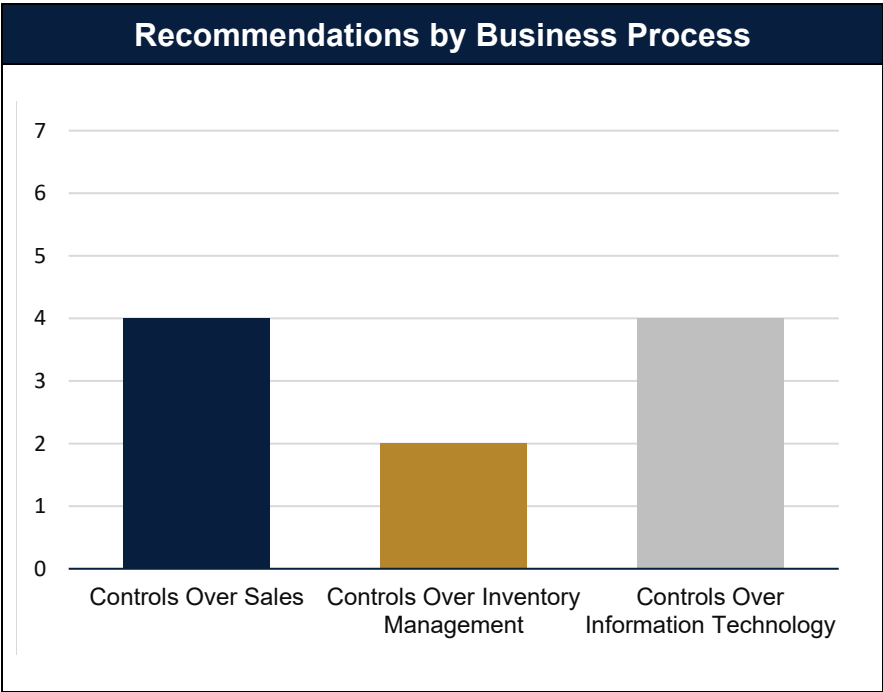
What We Did

We performed this audit to determine whether controls and practices pertaining to sales, purchasing, inventory management, and information technology are adequate and effective, and align with University policies and procedures, and applicable laws, rules, and regulations.

What We Concluded

In summary, our audit of the FIU Panther TECH Operations concluded that the unit has established internal controls and processes for the areas in scope. We found that, generally, some controls are designed well and are functioning effectively, while there is a need to enhance the design and effectiveness of other controls. We identified deficiencies in controls related to sales, inventory management, and information technology.

The following dashboard summarizes our recommendations.



Summary of Recommendations by Internal Control Criteria (Page 5):

Process Controls

- Ensure that the balance of customer payments received for goods that have yet to be received from the supplier are reflected in PantherSoft Financials as unearned revenue rather than revenue at year end.
- Reconcile ending inventory to all underlying financial transactions for the month and investigate any significant differences.
- Ensure that all cash is deposited within 24 hours of receipt.
- Periodically conduct and document cash counts of petty cash.
- Install a surveillance camera in the inventory room.
- Ensure trade-in shipments to PowerON are fulfilled on a timely basis.

Information Risk

- Collaborate with the NetSuite application vendor to assess the feasibility of creating customized roles to reduce the excessive number of administrative user accounts and conflicting permissions.
- Conduct regular access audits.
- Conduct a regular review of logged activity for critical fields.
- Resolve security gaps in the NetSuite application that allows a user who is not authenticated as a sales representative to create and execute a sale.

The conditions found and the background giving rise to the foregoing recommendations are detailed in the Observations and Recommendations section beginning on page 6 of this report. We have also included the mitigation plans management has proposed in response to our observations and recommendations, along with their implementation dates and complexity ratings.

OBJECTIVES, SCOPE, AND METHODOLOGY

Pursuant to the Office of Internal Audit (OIA) approved annual plan for the 2023-2024 fiscal year, we completed an audit of Panther TECH Operations. The primary objective of our audit was to determine whether existing controls and procedures were adequate and provided for the effective management of the sales, returns, purchasing, inventory, and IT processes for the fiscal year ended June 30, 2023. Additionally, we assessed the current practices through January 2024.

We conducted our audit in conformance with the *International Standards for the Professional Practice of Internal Auditing*, promulgated by The Institute of Internal Auditors. The audit included tests of the supporting records and such other auditing procedures, as we considered necessary under the circumstances. Sample sizes and transactions selected for testing were determined on a judgmental basis applying a nonstatistical sampling methodology. Therefore, our test results are limited to our sample and might not be representative of the population from which the sample was selected. Audit planning and fieldwork were conducted from July 2023 to January 2024.

During the audit, we:

- interviewed responsible personnel;
- reviewed University policies and procedures, and applicable laws, rules, and state regulations;
- obtained an understanding of Panther TECH's operations;
- conducted a physical inventory count;
- evaluated documentary evidence, including logs, invoices, return authorizations; and
- reviewed and evaluated in-scope controls.

We reviewed all internal and external audit reports issued during the last three years and found no reports with any applicable recommendation related to the scope and objective of this audit, which otherwise would have required follow-up.

BACKGROUND

The FIU Panther TECH store (“the store”) provides hardware and software solutions primarily to the University community.¹ The University’s Division of IT (DoIT) Business Services Office (IT BSO) manages the store, which is located in the Graham Center (GC) at the Modesto A. Maidique Campus (MMC). In addition to the GC store, Panther TECH facilitates personal sales through its website and a vending machine (containing hardware accessories) at the MMC Library.

The store operates as an auxiliary and maintains minimum inventory on-hand. The typical flow of a transaction is depicted below:

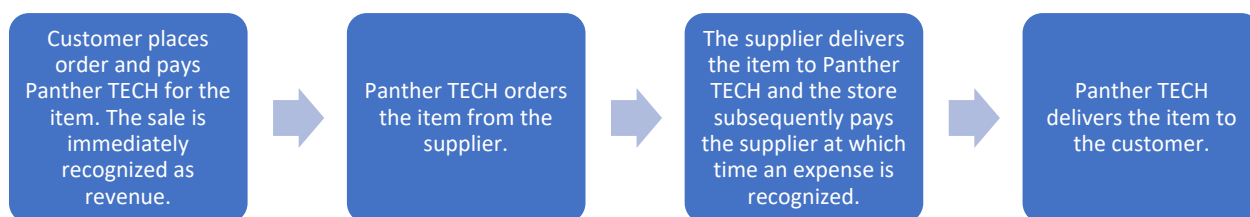


Figure 1 - Panther TECH flow of transactions.

For the fiscal year ended June 30, 2023, the store recorded revenues of \$9,236,639 and expenses of \$13,375,411. The resulting net expenses over revenues of (\$4,138,772) reduced the available Fund Balance, generating an ending Fund Balance of \$836,319. (See Observation No. 2).

The store uses NetSuite, a cloud-based retail point of sale (POS) solution, to process sales, maintain inventory, and manage its website.

¹ Students, faculty, staff, alumni, and University and Direct Support Organization departments.

OVERALL ASSESSMENT OF INTERNAL CONTROLS

Our overall assessment of internal controls is presented in the table below.

INTERNAL CONTROLS ASSESSMENT			
CRITERIA	SATISFACTORY	OPPORTUNITIES TO IMPROVE	INADEQUATE
Process Controls		X	
Policy & Procedures Compliance	X		
Effect	X		
Information Risk		X	
External Risk	X		
INTERNAL CONTROLS LEGEND			
CRITERIA	SATISFACTORY	OPPORTUNITIES TO IMPROVE	INADEQUATE
Process Controls: Activities established mainly through policies and procedures to ensure that risks are mitigated, and objectives are achieved.	Effective	Opportunities exist to improve effectiveness	Do not exist or are not reliable
Policy & Procedures Compliance: The degree of compliance with process controls – policies and procedures.	Non-compliance issues are minor	Non-compliance issues may be systematic	Non-compliance issues are pervasive, significant, or have severe consequences
Effect: The potential negative impact to the operations- financial, reputational, social, etc.	Not likely to impact operations or program outcomes	Impact on outcomes contained	Negative impact on outcomes
Information Risk: The risk that information upon which a business decision is made is inaccurate.	Information systems are reliable	Data systems are mostly accurate but need to be improved	Systems produce incomplete or inaccurate data which may cause inappropriate financial and operational decisions
External Risk: Risks arising from events outside of the organization's control; e.g., political, legal, social, cybersecurity, economic, environment, etc.	None or low	Potential for damage	Severe risk of damage

OBSERVATIONS AND RECOMMENDATIONS

Areas Within the Scope of the Audit Tested Without Exception:

Access to Inventory Areas

Panther TECH inventory is maintained within the store and a vending machine on campus. We reviewed physical access controls related to inventory and noted that access to the inventory storage area is restricted to select store employees.

Inventory Aging

We noted that Panther TECH's purchasing strategy involves procuring inventory as goods are sold to customers. As a result, the occurrence of outdated or obsolete inventory is kept to a minimum.

Areas Within the Scope of the Audit Tested With Exception:

1. NetSuite Roles and Privileges

We conducted a review of access privileges to the NetSuite application utilizing the NIST Cybersecurity Framework [PR.AC-4], which emphasizes restricting user's access rights to processes and systems to the minimum necessary to perform their tasks.² We found the following:

Excessive Administrator Accounts	
Observation	We observed six user accounts with administrator privileges. According to management, due to system limitations, there are actions (e.g., website modifications) that only work if the user is assigned an administrator role.
Risk	Having an excessive number of users with administrator privileges increases the entry point for attackers. In addition, failing to control the number of administrator accounts can lead to unauthorized changes, confusion, and data errors.
Lack of Review of User Account Privileges and Permissions	
Observation	Currently, a periodic analysis of user access is not performed.
Risk	Without regular access reviews, users may keep access privileges that are no longer necessary for their current roles. This increases the risk of unauthorized access to sensitive information or critical systems.
Lack of Periodic Activity Review	
Observation	There is no periodic review of any logs to monitor user activity within the application.
Risk	Activity reviews contribute to a culture of accountability within an organization. Without periodic reviews, it may be challenging to attribute specific actions or access-related issues to individual users.
Segregation of Duties	
Observation	Employees with administrator privileges and physical access to inventory pose a segregation of duties risk as they are granted user permissions such as "adjust inventory." We also found nine other users with incompatible permissions and roles, three could process sales and issue refunds, while six had the ability to create and delete transactions.
Risk	Lack of segregation of duties increases the likelihood of errors or irregularities occurring and going undetected.

² PR.AC-4: Access permissions and authorizations are managed, incorporating the principles of least privilege and separation of duties.

Operational Effectiveness	
Observation	We observed that a user could log into the NetSuite application and bypass the controls in place to prevent an unauthorized sales representative from performing a sales transaction. As a result, a sale can be completed without a sales representative being added to the transaction record.
Risk	Allowing an employee to login and execute a sale anonymously can result in a loss of accountability and inaccurate transaction records.

Recommendations

Division of Information Technology Business Services Office should:	
1.1	Collaborate with the NetSuite application vendor to assess the feasibility of creating customized roles to appropriately assign the required access for each employee with the purpose of reducing the excess of current administrative users in the application and eliminating conflicting permissions.
1.2	Conduct regular access audits to review user accounts, permissions, and privileges to identify any unauthorized or outdated access rights.
1.3	Identify critical fields and conduct a regular review of logged activity for these fields to ensure the security and integrity of the system information.
1.4	Collaborate with NetSuite application vendor to resolve security gaps in the point of sales application that allows a user who is not authenticated as a sales representative to create and execute a sale.

Management Response/Action Plan

- 1.1 This is a system limitation, based on the information provided by NetSuite at implementation, only Administrators can edit the website. As a result, all store managers, as well as the Software and Hardware Repair Managers, have this access. We will open a support ticket with NetSuite to see if this system requirement has changed since implementation. If after conversations with NetSuite this system limitation remains and NetSuite cannot meet expectations, recommendations 1.2 and 1.3 have been approved to mitigate risk.

Implementation date: June 1, 2024

Complexity rating: 3 – Complex

- 1.2 We will review user accounts and permissions on a semi-annual basis in March and October of every year going forward.

Implementation date: April 1, 2024

Complexity rating: 1 – Routine

- 1.3 We will review audit logs including, but not limited to, deleted records logs quarterly going forward.

Implementation date: April 15, 2024

Complexity rating: 1 – Routine

- 1.4 The restriction was working and observed by the audit and store team on January 12, 2024, during a Teams video meeting. During our second meeting on January 29, 2024, we discovered the restriction was not currently working. On January 30, 2024, we opened a Support Ticket # 5568447 with NetSuite to investigate why the restriction was not working and ensure this restriction is re-activated and works as designed. We are currently working with NetSuite Support to resolve.

Implementation date: May 31, 2024

Complexity rating: 2 – Moderate

2. Revenue Recognition (Matching Principle)

We noted that revenues and expenses at times are being recognized in separate and distinct periods. The Matching Principle, an accounting concept under Generally Accepted Accounting Principles (GAAP), dictates that entities report revenues in the same period as the related expenses. GAAP also requires the use of accrual accounting. However, Panther Tech uses the cash method of accounting, and thus, recognizes revenue when it is received and expenses when paid. Furthermore, contrary to GAAP, revenue is being recognized in advance of Panther TECH earning such revenues. The University’s *Auxiliary Guidelines* state that, “*Auxiliaries’ billing procedures should ensure that all revenues are recognized in the same fiscal year that the goods or services were provided.*”

This mismatch occurs as a result of the store’s business model (Figure 1 on page 4) and the method in which customer payments are recorded in the general ledger. The store first receives payments from customers (recorded as revenue), goods are then ordered from suppliers, and once received, the supplier is paid (recorded as an expense). However, months may pass between goods being ordered and received. This time lag often results in revenues being recorded in one month and the related expense in a subsequent month. This lag can also cross fiscal years. During fiscal year 2023, we identified 7,198 expense transactions (totaling \$13,375,411) and reviewed five such transactions totaling \$690,724 (5%) to determine if the corresponding revenues for the expenses were recorded in the same period. For all five instances reviewed, we noted that Panther TECH had recognized the revenues in a prior period (fiscal year 2022).

This inconsistency poses a risk of presenting inaccurate financial information, which can impact the stakeholders' understanding of the store's financial health and performance. It also prevents management from determining the true and accurate results of operations.

Recommendation

Panther TECH should:	
2.1	Ensure that the balance of customer payments received for goods that have yet to be received from the supplier is reflected in PantherSoft Financials as unearned revenue rather than revenue at year end.

Management Response/Action Plan

2.1 The IT BSO will work with the Office of Auxiliary and Enterprise Development to process a journal entry that will accrue unearned revenue in the correct fiscal year.

Implementation date: August 1, 2024

Complexity rating: 1 – Routine

3. Inventory Reconciliation

Management performs a periodic physical inventory count monthly. Count differences, if any, are investigated and accounted for in the NetSuite system. However, Panther TECH does not reconcile the ending inventory dollar value using period purchases and sales, to ensure a proper inventory balance.

Additionally, each quarter, management provides the Office of the Controller (“Controller”) with a detailed report of inventory balances, which the Controller uses to adjust the inventory book value in the general ledger to the ending quarterly inventory balance in NetSuite. This adjustment is required since NetSuite is not integrated with PantherSoft.

For the quarter ended December 31, 2022, the Controller recorded an adjustment of \$150,388 to reduce the inventory account balance to agree with the physical inventory count. Similarly, the Controller adjusted the June 30, 2023, inventory balance by \$5,123 for that quarter’s physical inventory count.

We attempted to reconcile the ending inventory for the quarter ended June 30, 2023, using data extracted by Panther TECH from NetSuite for the cost of all sales and purchases received during the quarter. However, we were unable to reconcile to the ending inventory balance. Management was unable to resolve the discrepancy while providing potential reasons for the difference, such as, “...there are line items for orders that were fulfilled at the end of 2022 and invoiced in NetSuite in 2023.” Notwithstanding the reasons, it is imperative that any difference is identified and resolved.

Failing to reconcile the inventory reduces the ability to detect theft and may impact the integrity of the store’s inventory records. Monthly reconciliations would ease the identification of any differences.

Recommendation

Division of Information Technology Business Services Office should:	
3.1	Reconcile ending inventory to all underlying financial transactions for the month and investigate any significant differences.

Management Response/Action Plan

- 3.1 The IT BSO will begin a process to reconcile the ending inventory on a monthly basis and align the process with Panther Tech's inventory count conducted at the end of every month.

Implementation date: July 15, 2024

Complexity rating: 1 – Routine

4. Cash Management

Cash deposits are not conducted timely and petty cash was not properly accounted for. Section 1011.42, Florida Statute, states, “*all funds received by a university, from whatever source and for whatever purpose, shall promptly be deposited...*” In order to abide by this statute, FIU’s *Cash Controls Policy (1110.010)* requires that departments deposit currency within one business day of receipt. Panther TECH informed us that the DoIT Business Services Office collects cash on a weekly basis (as noted on the Cash Receipt Log) and provides it to the Controller’s Office for deposit. This practice deviates from FIU’s *Cash Controls Policy*. The Policy states that, “*any deviation from these timeframes must be reviewed and approved by the Office of the Controller.*” Panther TECH provided us with documentation they provided to the Office of the Controller in 2014, advising of this weekly deposit process. However, during the course of this audit, the Office of the Controller informed us that they had not approved this deviation.

We visited the store on September 8, 2023, to conduct a cash count. Prior to arriving, the DoIT Business Office had passed by the store to pick up the weekly cash deposit. After reviewing the *Departmental Deposit* form, we noted that 33% of the total deposits exceeded the 24-hour timeframe for deposit set by Policy, ranging up to five days. We validated that the deposits were posted to the general ledger without exception.

We proceeded to conduct a cash count of the register and the safe. Our count of the cash register found no exceptions and totaled \$150. We emptied the contents of the safe in the presence of the store manager and counted \$255 in cash. The Office of the Controller confirmed that the store’s petty cash balance was \$500. Therefore, we identified a difference of \$95 in cash. The store subsequently informed us that they had found an additional \$95 “on the top shelf (all the way in the back) of the safe.”

Without adequate cash controls, the store may be exposed to financial loss and theft.

Recommendations

Panther TECH should:	
4.1	Ensure that all cash is deposited within 24 hours of receipt, including any cash register overages as required by University Policy, unless a deviation to this requirement is approved by the Office of the Controller.
4.2	Periodically conduct and document cash counts of petty cash.

Management Response/Action Plan

- 4.1 We have reached out to the Office of the Controller to once again obtain their approval to deviate from the University policy and allow cash deposits to be done on a weekly basis. The cash collected at Panther Tech is minimal and holding the cash in the safe is low risk. Moreover, to maintain the integrity of the cash handling process and segregation of duties, personnel outside of the store is available to assist with this process on a weekly basis.

Implementation date: April 15, 2024

Complexity rating: 2 – Moderate

- 4.2 This is our current procedure; cash counts of the cash drawer are conducted daily when the store is open for business and any reconciliation or shortage is addressed that same day. The full petty cash fund will be counted monthly and recorded on the *Monthly Petty Cash Physical Count form* and acknowledged to the Office of the Controller semi-annually via the *Petty Cash Change Fund Custodian Acknowledgement Form* as required.

Implementation date: March 8, 2024

Complexity rating: 1 – Routine

5. Physical Security

The Panther TECH store does not have surveillance cameras in the inventory room. This room houses a petty cash safe, computers, tablets, and other inventory. There is a camera, which captures activity at the entrance to the room, but there is no coverage inside. We reviewed Panther TECH's inventory count as of June 30, 2023, and noted that the store had recorded \$230,865 of inventory on hand.

We noted that the remaining six cameras adequately monitor the store and retain at least 30 days of recordings. Additionally, all items on display within the store are tagged with alarm sensors, which trigger an audible alarm if unpaid items are removed from the store.

Not having surveillance cameras in the inventory room deprives Panther TECH's management of an effective deterrent and detective controls mechanism and increases the risk of loss or theft.

Recommendation

Panther TECH should:	
5.1	Install a surveillance camera in the inventory room.

Management Response/Action Plan

5.1 We will work with our camera vendor to install a video camera in the inventory room.

Implementation date: May 31, 2024

Complexity rating: 2 – Moderate

6. PowerON Payments

The store is not shipping products timely to the University's trade-in solution merchant, PowerON, resulting in delayed receipt of trade-in credit payments.³ We reviewed five (of 30) trade-ins and noted that payments from PowerON averaged 103 days from the date of the initial quote.⁴ We were informed by management that the delay was a result of the store not shipping trade-ins timely to the merchant.

If trade-ins are not timely shipped to PowerON, then there is a risk that devices could become obsolete and/or that trade-in values may fall below the amount of store credit already provided (and possibly incurred) to the customer.

Recommendation

Panther TECH should:	
6.1	Ensure trade-in shipments to PowerON are fulfilled on a timely basis to avoid payment delays and potential loss on sales when discrepancies exist from the original quote.

Management Response/Action Plan

6.1 Effective January 2, 2024, all trade-ins are shipped to PowerON on a bi-weekly basis, every other Friday. We will use NetSuite to track trade-ins individually by PowerON quote number and fulfilled and invoiced once shipped. Once payment is received from PowerON the payment will be applied to the invoices.



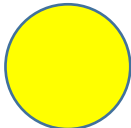



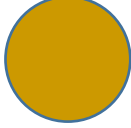
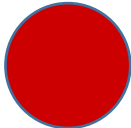

Implementation date: January 2, 2024

Complexity rating: 1 – Routine

³ A service for customers to exchange their old electronic devices for credits towards new purchases.

⁴ Estimated trade-in value, based on preliminary device information that is provided by the customer. Once PowerON receives and reviews the condition of the device, the actual value may be adjusted.

APPENDIX I – COMPLEXITY RATINGS LEGEND

Legend: Estimated Time of Completion		Legend: Complexity of Corrective Action	
	Estimated completion date of less than 30 days.		Routine: Corrective action is believed to be uncomplicated, requiring modest adjustment to a process or practice.
	Estimated completion date between 30 to 90 days.		Moderate: Corrective action is believed to be more than routine. Actions involved are more than normal and might involve the development of policies and procedures.
	Estimated completion date between 91 to 180 days.		Complex: Corrective action is believed to be intricate. The solution might require an involved, complicated, and interconnected process stretching across multiple units and/or functions; may necessitate building new infrastructures or materially modifying existing ones.
	Estimated completion date between 181 to 360 days.		
	Estimated completion date of more than 360 days.		Exceptional: Corrective action is believed to be complex, as well as having extraordinary budgetary and operational challenges.

*The first rating symbol reflects the initial assessment based on the implementation date reported by Management, while the second rating symbol reflects the current assessment based on existing conditions and auditor's judgment.

APPENDIX II – OIA CONTACT AND STAFF ACKNOWLEDGMENT:

OIA contact:

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Contributors to the report:

In addition to the contact named above, the following staff contributed to this audit in the designated roles:

Brian Del Pino (auditor in-charge)

Natalie San Martin (supervisor and reviewer)

Manuel Sanchez (supervisor and reviewer)

Vivian Gonzalez (independent reviewer)

Definition of Internal Auditing

Internal auditing is an independent, objective assurance and consulting activity designed to add value and improve an organization's operations. It helps an organization accomplish its objectives by bringing a systematic, disciplined approach to evaluate and improve the effectiveness of risk management, control, and governance processes.