Digital Forensic Report

Objective

This digital forensic investigation, conducted on 2/24/2024 by Investigator Farzaneh Noroozi, pursued two main objectives: to detect instances of employee fraud and identify policy violations within the customer returns dataset. The primary focus was on uncovering fraudulent activities and policy breaches with a specific emphasis on financial implications. The analysis utilized PowerShell to query the SQLite database, aiming to efficiently identify suspicious patterns and deviations from standard return procedures.

Findings

Policy Violations:

Among the employees, two individuals stand out as policy violators, albeit not involved in fraudulent activities. John Mason and Anthony West Jr. have processed returns without receipts and issued refunds back to credit cards, violating company policies regarding returns without proper documentation. While their actions may not be fraudulent per se, they demonstrate a lack of adherence to established procedures and highlight the need for additional training to ensure compliance with company policies.

Fraudulent Activity:

The primary perpetrator of fraudulent activity within the organization is identified as Mark Moore. Moore exhibits a pattern of processing a significantly higher number of returns without receipts compared to other employees, indicating potential fraudulent behavior. Further analysis reveals consistent anomalies in Moore's transactions, including processing returns to multiple credit cards and gift cards without proper documentation. This pattern suggests deliberate attempts to exploit company policies for personal gain, making Moore the focal point of the fraudulent investigation.

Additionally, the analysis uncovered 85 returns lacking required gift card scanning, indicative of potential procedural lapses in the returns process. However, while these instances represent policy violations, they do not necessarily constitute fraudulent activity. Further investigation is required to determine the extent of any fraudulent behavior associated with these returns and identify any additional perpetrators involved in fraudulent activities beyond Moore.
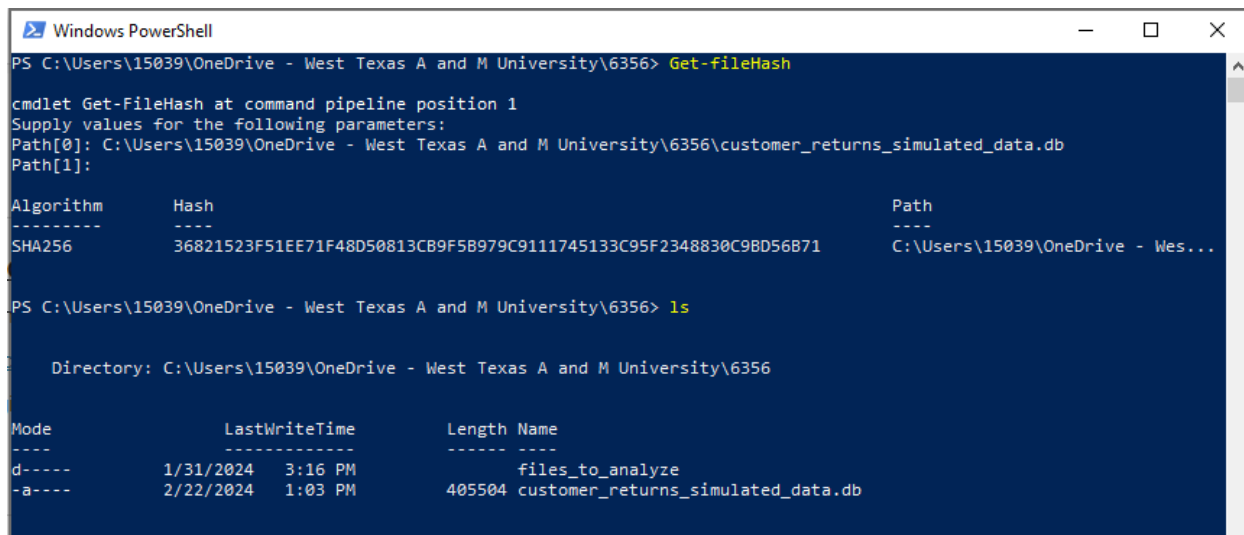
Tools Used

PowerShell: Used for hash verification and querying SQLite databases.
DB Browser (SQLite): Used for analyzing the customer returns simulated data.

Hash Verification

The integrity of the database file, **customer_returns_simulated_data.db**, was meticulously verified using the SHA256 hash algorithm. The calculated hash (**36821523F51EE71F48D50813CB9F5B979C9111745133C95F2348830C9BD56B71**) was found to match the reference hash, unequivocally indicating that the file remained unaltered throughout the investigation.

Image 1: Verification of Hash and File Information

The provided image (Picture 1), is v erification of Hash and File Information, depicting the execution of PowerShell commands **Get-FileHash** and **ls**. This visual representation confirms the file's integrity through the SHA256 hash calculation, aligning seamlessly with the reference hash. Additionally, the subsequent **ls** command provides essential file attributes such as size, modification timestamps, and name. This thorough verification process is crucial for establishing the trustworthiness of digital evidence, assuring that the file underwent no alterations during the forensic analysis.

Non-Red Flags Checked

Path Verification: Ensured the database file path matched the expected location.
Hash Verification: Confirmed the file hash matched the reference, indicating file integrity.

Objective 1: Audit for Potential Fraud in Customer Returns

1. Returns Processed by the Same Employee without a Receipt

```
SELECT E.EmployeeID, E.Name AS EmployeeName, COUNT(*) as NumReturns
FROM Returns R
JOIN Employee E ON R.EmployeeID = E.EmployeeID
WHERE R.IsReceiptPresent = 'False'
```

```
GROUP BY R.EmployeeID, E.Name
HAVING NumReturns > 1;
```

Num	EmployeeID	EmployeeName	NumReturns
1	7857	Mark Moore	135
2	3277	John Mason	23
3	259	Marcus Gilbert	13
4	1085	Selena Barker	13
5	2687	Daniel Johnson	13
6	2160	Dawn Braun	12
7	3419	Wanda Black	12
8	9663	Anthony West Jr.	12
9	8506	Elizabeth Martinez	11
10	5300	Jillian Jones	9
11	6441	Erin Erickson	9
12	8806	Elizabeth Flores	9
13	8971	Kathryn Anderson	9
14	658	Christopher Blevins	8
15	4534	Mia Hill	8
16	7795	Charles Whitehead	8
17	8685	Mr. John Castillo	8
18	1057	Susan Jones	7
19	6027	Adam Edwards	7
20	8438	Jennifer Cisneros	7
21	787	Tammy Kirby	6
22	3342	Geoffrey Morris	6
23	4799	Timothy Joseph	6
24	7220	Brandon Bender	6
25	297	Erin Elliott	4

Table 1: Returns Processed by the Same Employee without a Receipt

Interpretation: The analysis of returns processed by employees without a receipt provides valuable insights into potential fraudulent activity within the organization. Among the employees, one outlier, Mark Moore, stands out significantly, processing 135 returns without a receipt. This observation prompts further investigation into the activities of Mark Moore.

To delve deeper into the data and identify outliers, we calculated the average and standard deviation of returns processed by each employee. The average number of returns for all employees, including Mark Moore, is 14.4. However, excluding Mark Moore, the average drops to 9.4, indicating that Mark Moore's volume of returns significantly skews the overall average.

Similarly, the standard deviation analysis reveals notable insights. With Mark Moore included, the standard deviation of returns is 25.4, whereas excluding Mark Moore reduces the standard deviation to 3.9. This substantial decrease indicates that Mark Moore's returns are far outside the norm compared to other employees.

Analyzing the range within one standard deviation of the average, returns between five and 13 are within the expected range for approximately 68% of employees. However, Mark Moore's 135 returns clearly exceed this range, indicating potential fraudulent behavior.

Furthermore, considering the range within two standard deviations, John Mason's 23 returns also raise concerns, although they fall within this range. However, Mark Moore's outlier status persists, with his returns being many times beyond the third standard deviation.

Other employees such as Selena Barker, Marcus Gilbert, and Daniel Johnson with 13 returns each, as well as Dawn Braun, Wanda Black, and Anthony West Jr. with 12 returns each, also warrant further investigation due to their relatively high number of returns.

2. Returns with Debit/Credit Card Refund and No Original Receipt

```
SELECT E.EmployeeID, E.Name AS EmployeeName, COUNT(*) as
NumReturnsWithoutReceipt
FROM Returns R
JOIN Employee E ON R.EmployeeID = E.EmployeeID
WHERE R.IsReceiptPresent = 'False' AND R.CreditCardNum IS NOT NULL
GROUP BY E.EmployeeID, E.Name;
```

EmployeeID	EmployeeName	NumReturnsWithoutReceipt
3277	John Mason	13
7857	Mark Moore	68
9663	Anthony West Jr.	4

Table 2: The count of returns without receipts processed by each employee

Interpretation: The analysis of 85 returns processed with debit/credit card refunds and no original receipt reveals notable insights into potential policy violations within the organization.

By querying the database, we identified three employees who are clearly violating company policies regarding returns without receipts. Mark Moore stands out significantly with 68 returns processed without a receipt, indicating a clear pattern of non-compliance. This observation positions Mark Moore as an outlier among policy violators, suggesting potential fraudulent behavior. With 52 weeks in a year, Mark Moore's frequency of accepting returns and refunding them back to credit cards without a receipt present is alarming, occurring more than once a week. Comparatively, Anthony West Jr. processed only four returns without receipts, signifying a relatively lower level of non-compliance. John Mason falls in between, with 13 returns processed without receipts. While this number may seem significant, further investigation is required to determine the legitimacy of these returns.

John Mason's 23 total returns may seem high, but it's important to note that not all returns are necessarily policy violations. However, of those 23 returns, 13 were processed without receipts and issued back to credit cards, warranting further scrutiny.

Returns Processed by John Mason Without Receipts and with Credit Card Transactions

```
SELECT EmployeeId, CustomerName, CreditCardNum
FROM Returns
WHERE IsReceiptPresent = "False" and CreditCardNum is not NULL AND EmployeeID
= 3277
```

Num	EmployeeId	CustomerName	CreditCardNum
1	3277	Evan Howard	6011339567342520
2	3277	Bianca Rice	346186858771207
3	3277	Matthew House	4920167637305090
4	3277	Emily Johnson	4367683685748400
5	3277	April Wade	180019686756752
6	3277	Ariel Mason	501844818325
7	3277	Paul Johnson	4616791944214600
8	3277	Stephanie Swanson	60411583325
9	3277	Mrs. Lisa Aguilar	4453262025577
10	3277	Anthony Stokes	377972225412902
11	3277	Cynthia Campbell	4244034561773870
12	3277	Logan Monroe	3583288266614420
13	3277	John Hodges	4594822973432

Table 3: The returns without receipts processed by John Mason

Interpretation: The query results, detailing returns processed by John Mason without receipts and with credit card transactions, reveal a notable observation. Despite the absence of receipts, each return was associated with a different credit card number. This suggests that while John Mason violated company policy by processing returns without receipts, the returns were legitimate in the sense that refunds were issued back to different credit cards, indicating less likelihood of fraudulent activity. Since it would be difficult for the employee to benefit personally from refunds to various credit cards, the interpretation leans towards the returns being legitimate, albeit a clear violation of company policy. As a recommendation, it is advised to provide additional training to ensure adherence to company policies and procedures, thereby mitigating future occurrences of policy violations.

Returns Processed by Anthony West Jr. Without Receipts and with Credit Card Transactions

```
SELECT EmployeeId, CustomerName, CreditCardNum
FROM Returns
WHERE IsReceiptPresent = "False" and CreditCardNum is not NULL AND EmployeeID
= 9663
```

EmployeeId	CustomerName	CreditCardNum
9663	Jacob Brown	38147972095314
9663	Ryan Rose	5570938974367840
9663	Andrea King	3594500839453650
9663	Andrew Smith MD	347696664444111

Table 4: The returns without receipts processed by Anthony West Jr.

Interpretation: The query results, detailing returns processed by Anthony West Jr. without receipts and with credit card transactions, reveal four returns associated with different credit card numbers. Despite the absence of receipts, each return corresponds to a distinct customer, indicating compliance in issuing refunds to different credit cards. While Anthony West Jr. has violated company policy by processing returns without receipts, the diverse credit card transactions suggest that the returns are legitimate and not indicative of fraudulent activity. It is recommended to provide additional training to ensure adherence to company policies and procedures, as well as to monitor the employee's behavior for any further policy violations. Continued monitoring will help assess whether the policy violation persists or if further investigation into potential fraudulent activity is warranted.

Returns Processed by Mark Moore Without Receipts and with Credit Card Transactions

```
SELECT EmployeeId, CustomerName, CreditCardNum
FROM Returns
WHERE IsReceiptPresent = "False" and CreditCardNum is not NULL AND EmployeeID
= 7857
```

Num	EmployeeId	CustomerName	CreditCardNum
1	7857	Alex Andrews	40077653923591
2	7857	Jodi Schmidt	40077653923591
3	7857	Kevin Smith	40077653923591
4	7857	Lisa Morales DVM	40077653923591
5	7857	Joseph Figueroa	40077653923591
6	7857	Colleen Mejia	40077653923591
7	7857	Daniel Schroeder	40077653923591
8	7857	Craig Klein	40077653923591
9	7857	Christian Luna	40077653923591
10	7857	Raymond Smith	40077653923591
11	7857	Ronald Mcgee	40077653923591
12	7857	Scott Walker	40077653923591
13	7857	Darryl Wade	40077653923591
14	7857	Sandra Hamilton	40077653923591
15	7857	Erin Williams	40077653923591
16	7857	Brittney Fry	40077653923591
17	7857	Andrew Scott	40077653923591
18	7857	Vanessa Jones	40077653923591

19	7857	Amanda King	40077653923591
20	7857	Alexis Molina	40077653923591
21	7857	Kimberly Kemp	40077653923591
22	7857	Natalie Wallace	40077653923591
23	7857	Anna Scott	2703144240071230
24	7857	Jeffrey Monroe	2703144240071230
25	7857	Edwin White	2703144240071230
26	7857	Paul Thompson	2703144240071230
27	7857	Katherine Ochoa	2703144240071230
28	7857	Sherri Snyder	2703144240071230
29	7857	Joshua Faulkner	2703144240071230
30	7857	Jason Johnson	2703144240071230
31	7857	Samuel Thompson	2703144240071230
32	7857	Cassandra Mcclure	2703144240071230
33	7857	Darin Conley	2703144240071230
34	7857	Michael Perez	2703144240071230
35	7857	Penny Gilmore	2703144240071230
36	7857	Timothy Maddox	2703144240071230
37	7857	Julia Montgomery	2703144240071230
38	7857	Cassandra Clark	2703144240071230
39	7857	Julia Rocha	2703144240071230
40	7857	Andrew Terry	2703144240071230
41	7857	Shannon Johnson	2703144240071230
42	7857	Nancy Gross	2703144240071230
43	7857	Derek Williams	2703144240071230
44	7857	Amber Rich	2703144240071230
45	7857	Mark Miller	2703144240071230
46	7857	Michelle Chavez	2703144240071230
47	7857	Joshua Rodriguez	2703144240071230
48	7857	Brittney Bonilla	2703144240071230
49	7857	Holly Diaz	2703144240071230
50	7857	Marcus Nguyen	2703144240071230
51	7857	Michael Noble	2703144240071230
52	7857	George Jones	2703144240071230
53	7857	Jose Hoover	2703144240071230
54	7857	Tommy Webb	2703144240071230
55	7857	Kristin Moreno	2703144240071230
56	7857	George Alvarado	2703144240071230
57	7857	Jason Chen	2703144240071230
58	7857	Joshua Thompson	2703144240071230
59	7857	Adam Sullivan	2703144240071230
60	7857	Dr. Brenda Brown	2703144240071230
61	7857	Sharon Garcia	2703144240071230

62	7857	Todd Smith	2703144240071230
63	7857	David Clark	2703144240071230
64	7857	Kimberly Chen MD	2703144240071230
65	7857	Andrea Hess	2703144240071230
66	7857	Sarah Mahoney	2703144240071230
67	7857	Kristine Taylor	2703144240071230
68	7857	Tracy Weber	2703144240071230

Table 5: The returns without receipts processed by Mark Moore

For EmployeeID 7857

```
SELECT EmployeeId, CreditCardNum,count(returnid)
FROM Returns
WHERE IsReceiptPresent = "False" and CreditCardNum is not NULL AND EmployeeID
= 7857
group by CreditCardNum
```

EmployeeId	CreditCardNum	count(returnid)
7857	2703144240071230	46
7857	40077653923591	22

Table 6: The count of returns without receipts processed by Mark Moore

Interpretation: The query results depict 68 returns processed by Mark Moore without receipts, wherein each return corresponds to a different customer name, but all are linked to the same credit card number. This pattern raises suspicions as it is highly improbable for multiple customers to share the same credit card number. Further investigation reveals that Mark Moore processed returns to only two credit card numbers, with 46 returns attributed to one credit card and 22 returns to another. Such consistency in credit card usage points towards fraudulent activity, suggesting that Mark Moore was processing returns to his own credit cards. Additionally, the query findings prompt scrutiny of gift card transactions, with a total of 68 returns associated with gift cards. Given this evidence, it is likely that Mark Moore retained the funds from these gift card returns, further indicating fraudulent behavior. While not all returns to gift cards may be fraudulent, the consistency in fraudulent credit card returns underscores the necessity for thorough investigation and potential disciplinary action against Mark Moore.

Returns Processed by Mark Moore Without Receipts and with Gift Card Transactions

```
SELECT EmployeeId, CustomerName, CreditCardNum
FROM Returns
WHERE IsReceiptPresent = "False" and GiftCardNumber is not NULL AND EmployeeID
= 7857
```

Num	EmployeeId	CustomerName	CreditCardNum
1	7857	Kyle Houston	
2	7857	Leslie Williams	
3	7857	Andrew Zuniga	
4	7857	Patty Foster	
5	7857	Christopher Cordova	
6	7857	Jose Fowler	
7	7857	Heather Hutchinson	
8	7857	Mary Johnson	
9	7857	Kim Garrison	
10	7857	Larry Stein	
11	7857	Aaron Frank	
12	7857	Vanessa Pugh	
13	7857	James Wilson	
14	7857	Heather Wood	
15	7857	Jeremiah Fields	
16	7857	Kevin Patrick	
17	7857	Cindy Stewart	
18	7857	Michael Johnson	
19	7857	Eric Perez	
20	7857	Kimberly Gomez	
21	7857	Joshua Prince	
22	7857	Bridget Garza	
23	7857	Kevin Mccall	
24	7857	Carrie Sutton	
25	7857	David Welch	
26	7857	Hannah Mckenzie	
27	7857	James Wright	
28	7857	Kevin Moore	
29	7857	Tristan Watson	
30	7857	Brandon Hill	
31	7857	Joshua Henderson	
32	7857	Michelle Hudson	
33	7857	Christina Dillon	
34	7857	Nathan Morgan	
35	7857	Stephen Brooks	
36	7857	Melissa Murphy	
37	7857	Kimberly Gilbert	
38	7857	Joe Armstrong	
39	7857	Mrs. Elizabeth Wilson	
40	7857	Ronald Russell	
41	7857	Ashley Morton	
42	7857	Christopher Daniels	

43	7857	Melanie Hamilton	
44	7857	Michael Black	
45	7857	Angela Bishop DDS	
46	7857	Rachel Jordan	
47	7857	Jennifer Salazar	
48	7857	Sarah Johnson MD	
49	7857	Gary Larson	
50	7857	Bridget Parrish	
51	7857	Lisa Bailey	
52	7857	Deanna Taylor	
53	7857	Roy Bauer	
54	7857	Tom Ball	
55	7857	George Singleton	
56	7857	Mario Cox	
57	7857	Kelsey Taylor	
58	7857	Gabrielle Taylor	
59	7857	Lindsay Porter	
60	7857	Thomas Hall	
61	7857	Danielle Jones	
62	7857	Jennifer Thompson	
63	7857	Mark Burgess	
64	7857	Yvonne Hogan	
65	7857	Katie Pratt	
66	7857	Abigail Moore	
67	7857	Bradley Reyes	

Table 7: Returns Processed by Mark Moore Without Receipts and with Gift Card Transactions

Interpretation: The query results reveal 67 returns processed by Mark Moore without receipts but with associated gift card transactions. While it's not conclusive evidence of fraud, it raises suspicion due to the consistent pattern observed in these transactions. Given the previous findings of fraudulent credit card returns associated with Moore, it is likely that a significant portion of these gift card transactions could also be fraudulent. Although it's challenging to provide definitive proof, the pattern suggests a systematic approach by the employee to exploit company policies by fabricating customer names and issuing gift cards without proper documentation. Further investigation into the standard deviation of gift cards issued by other employees could provide additional insights into the anomalous behavior exhibited by Moore.

Count of Returns Without Receipts and With Gift Card Transactions by Employee

```
SELECT E.EmployeeId, E.Name AS EmployeeName, COUNT(R.returnId) AS GiftCardCount
FROM Returns R
JOIN Employee E ON R.EmployeeID = E.EmployeeID
WHERE R.IsReceiptPresent = 'False' AND R.GiftCardNumber IS NOT NULL
```

```
GROUP BY E.EmployeeID, E.Name
ORDER BY GiftCardCount;
```

Num	EmployeeID	EmployeeName	GiftCardCount
1	297	Erin Elliott	4
2	787	Tammy Kirby	6
3	3342	Geoffrey Morris	6
4	4799	Timothy Joseph	6
5	7220	Brandon Bender	6
6	1057	Susan Jones	7
7	6027	Adam Edwards	7
8	8438	Jennifer Cisneros	7
9	658	Christopher Blevins	8
10	4534	Mia Hill	8
11	7795	Charles Whitehead	8
12	8685	Mr. John Castillo	8
13	9663	Anthony West Jr.	8
14	5300	Jillian Jones	9
15	6441	Erin Erickson	9
16	8806	Elizabeth Flores	9
17	8971	Kathryn Anderson	9
18	3277	John Mason	10
19	8506	Elizabeth Martinez	11
20	2160	Dawn Braun	12
21	3419	Wanda Black	12
22	259	Marcus Gilbert	13
23	1085	Selena Barker	13
24	2687	Daniel Johnson	13
25	7857	Mark Moore	67

Table 8: Count of Returns Without Receipts and With Gift Card Transactions by Employee

Interpretation: The table presents the count of returns without receipts but with gift card transactions processed by each employee. Mark Moore stands out significantly with 67 such transactions, a stark contrast to the nearest employee who has only 13. Even considering the average number of transactions among employees, Mark Moore's count is 54 standard deviations beyond the norm, indicating a substantial deviation from the typical pattern. This suggests a high likelihood of fraudulent activity, especially given the magnitude of the deviation. Even if a few returns were legitimate, the vast majority appear to be outliers, warranting further investigation into potential fraudulent behavior by Mark Moore.

Objective 2: Audit for Improper Policy Violations in Customer Returns

1. Returns with Missing Customer Information

SELECT * FROM Returns WHERE CustomerName IS NULL OR Street IS NULL OR City IS NULL OR State IS NULL OR CustomerPhone IS NULL;

Results: 0 rows returned in 11ms

Interpretation: The absence of returns with missing customer information, as indicated by the query results showing 0 rows returned, is a positive sign of adherence to company policy and no violation.

The company's policy mandates that employees manually record essential customer details, including name, street address, city, state, and phone number, into the return POS software for all returns. The fact that no returns with missing customer information were found suggests a commendable level of completeness in the recorded data.

2. Returns without Required Gift Card Scanning

SELECT * FROM Returns WHERE IsReceiptPresent = 'False' AND GiftCardNumber IS NULL;

Image 2: Returns without Required Gift Card Scanning

Results: 85 rows returned in 67ms

Interpretation: The discovery of 85 returns lacking required gift card scanning prompts a thorough examination of procedural lapses in the returns process. While not indicative of fraud, it emphasizes the need to assess employee training, system prompts, consistency in adherence, and conduct a root cause analysis.

3. Returns with Gift Card Refund and Debit/Credit Card Option

SELECT * FROM Returns WHERE GiftCardNumber IS NOT NULL AND CreditCardNum IS NOT NULL;

Results: 0 rows returned in 6ms

Interpretation: The absence of returns with both gift card refunds and debit/credit card options reflects compliance with company policies and no violation. This indicates that the established procedures effectively prevent potential ambiguities or policy violations in this aspect, affirming the system's operation as intended and ensuring that returns are processed in accordance with company guidelines, with no instances of issuing returns without providing any refund, whether through a gift card or debit/credit card option.

Conclusion

The analysis of customer returns data using PowerShell and DB Browser (SQLite) revealed significant insights into potential fraudulent activity and policy violations within the organization. Through meticulous hash verification, the integrity of the database file was confirmed, ensuring the reliability of the data for forensic analysis.

Objective 1 focused on auditing for potential fraud in customer returns, primarily examining returns processed by employees without receipts. Mark Moore emerged as a key outlier, processing a disproportionately high number of returns without receipts compared to other employees. Further analysis of returns processed by Moore revealed consistent patterns suggestive of fraudulent behavior, including processing returns to multiple credit cards and gift cards without proper documentation.

Objective 2 aimed to audit for improper policy violations in customer returns, including missing customer information and improper gift card scanning. While no returns with missing customer information were found, 85 returns lacked required gift card scanning, highlighting potential procedural lapses in the returns process.

Overall, the analysis underscores the importance of robust internal controls, employee training, and continuous monitoring to detect and prevent fraudulent activity and policy violations. Addressing identified weaknesses and implementing corrective measures will enhance compliance with company policies and safeguard against future incidents of fraud and non-compliance.

Recommendations

The digital forensic analysis of the `customer_returns_simulated_data.db` database has revealed potential areas of concern related to fraud and procedural violations in customer returns. To address these findings and enhance the integrity of the returns process, the following recommendations are provided:

Employee Training and Awareness:
Implement comprehensive training programs to educate employees on proper return procedures, emphasizing the importance of adhering to company policies and accurately recording customer information.
Establish regular awareness sessions to keep employees informed about potential fraudulent activities and the significance of maintaining procedural integrity.

Enhanced Monitoring and Supervision:
Introduce a systematic monitoring system to track returns processed by the same employee without a receipt, especially instances where multiple returns are processed.
Implement supervisor reviews for returns with debit/credit card refunds and no original receipt to ensure proper authorization and validate the legitimacy of such transactions.

Data Completeness Checks:
Implement automated checks to ensure completeness of customer information in returns, minimizing the likelihood of errors and omissions.
Regularly audit and validate the completeness of data fields, including customer name, address, and contact information, during the returns process.

Reinforce Gift Card Scanning Procedures:
Strengthen procedures for gift card scanning during returns by providing additional training and reminders to employees.
Introduce system prompts or checks to enforce the mandatory scanning of gift cards, reducing the possibility of oversight.

Periodic Audits and Reviews:
Conduct periodic audits of the returns database to identify and rectify any inconsistencies or irregularities.
Establish a review committee to analyze returns with both gift card refunds and debit/credit card options, ensuring compliance with company policies.

Continuous Improvement and Collaboration:
Foster a culture of continuous improvement by encouraging feedback from employees involved in the returns process.
Collaborate with IT and security teams to implement advanced monitoring solutions that can proactively identify and flag potential fraudulent activities.