Phishing Email Analysis Report

1. Email Summary

- **Subject:** Urgent: Verify Your Account
- **From:** "Phishy Bank" security@phishybank.com
- **To:** victim@example.com
- **Reply-To:** "Phishy Support" support@phishybank.com
- **Date:** Tue, 23 Sep 2025 12:08:06 +0530

2. Header Analysis

Tool used: MXToolbox – Email Header Analyzer

Key Findings:

- **DMARC:** (Domain-based Message Authentication, Reporting, and Conformance) No DMARC record found for `phishybank.com` → domain vulnerable to spoofing. **SPF:** (Sender Policy Framework), What it does:Tells what to do if SPF or DKIM fails
- SPF authenticated for `192.0.2.123`, but this does not prove legitimacy (SPF alone can be

abused). What is does: Tells which mail servers are allowed to send emails on behalf of domain.

- **DKIM(**DomainKeys Identified Mail**):** No DKIM-Signature present → integrity of the email cannot be verified. What it does: adds a digital signature to the email so the recipient can check for integrity of the email.

- **Received chain:** Multiple hops (`203.0.113.55 → mail.phishybank.com → mail.example.com`) with a **601-second delay** → suspicious relay pattern.
- **From vs Reply-To mismatch:** Different addresses (`security@phishybank.com` vs `support@phishybank.com`). Classic phishing technique to redirect responses.

3. Body / Content Indicators

- Uses **urgent language**: “Verify your account immediately” → creates panic.
- **Suspicious URL:** Text shows `https://www.paypal.com/verify` but actual

link points to `http://login.verify-now[.]ru/secure?id=ABC123`.

- **Generic greeting:** “Dear Customer” instead of addressing recipient by name.
- **Threatening tone:** “Your account will be suspended within 24 hours.”
- **Brand spoofing:** Pretends to be PayPal but uses a fake domain.

4. URL & Domain Analysis

- **URL found:** `http://login.verify-now[.]ru/secure?id=ABC123`
- **VirusTotal check:** Marked malicious by multiple vendors.
- **urlscan.io check:** Shows redirects to `maliciouscdn[.]xyz` and a fake PayPal login page.
- **WHOIS lookup:** Domain `verify-now.ru` created only 2 weeks ago, registered with privacy protection → suspicious.

5. Phishing Traits Identified

1. **No DMARC/DKIM** – poor domain authentication.
2. **Reply-To mismatch** – classic phishing tactic.
3. **Suspicious links** – mismatch between displayed and real link.
4. **Urgent language** – pressure to act immediately.
5. **Brand impersonation** – PayPal spoof.

6. Conclusion

This email is a **phishing attempt** designed to steal login credentials.

The combination of missing DMARC/DKIM, suspicious relay chain, mismatched URLs, and social engineering tactics confirms it as malicious.

7. Recommendations

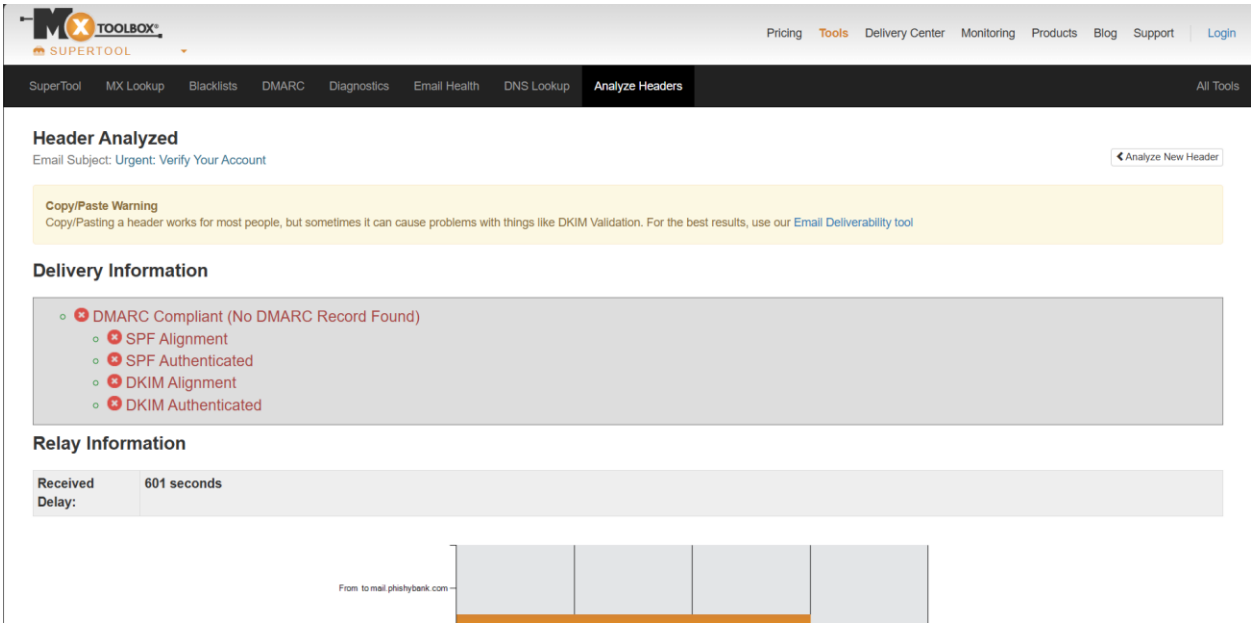
- **Delete the email** and mark as phishing.
- **Block domains/IPs**: `phishybank.com`, `login.verify-now.ru`, `203.0.113.55`, `192.0.2.123`.

- **Implement DMARC** on legitimate domains to prevent spoofing.
- **Enable MFA** to reduce damage if credentials are compromised.

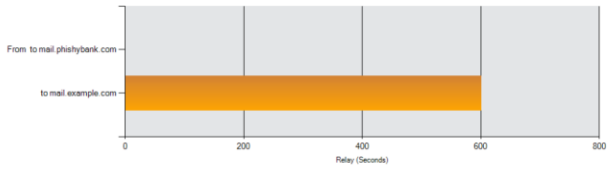
8. Evidence

Phishing Email Header:

MIME-Version: 1.0 Date: Tue, 23 Sep 2025 12:08:06 +0530 Message-ID: <CAH9V34sK1m3YrBChg=6M6_dMXWb1iW7+9ja6WU_y3op_iuaDng@phishybank.com> Subject: Urgent: Verify Your Account From: "Phishy Bank" <security@phishybank.com> To: victim@example.com Reply-To: "Phishy Support" <support@phishybank.com> Content-Type: multipart/alternative; boundary="000000000000f43809063f722d66" Received: from unknown (HELO mail.phishybank.com) (192.0.2.123) by mail.example.com with SMTP; Tue, 23 Sep 2025 12:08:07 +0530 Received: from 203.0.113.55 by mail.phishybank.com with SMTP; Tue, 23 Sep 2025 11:58:06 +0530



Delay:



Hop	Delay	From	By	With	Time (UTC)	Blacklist
1	*	203.0.113.55	mail.phishybank.com	SMTP	9/23/2025 6:58:06 AM	✅
2	10 minutes	unknown 192.0.2.123	mail.example.com	SMTP	9/23/2025 7:08:07 AM	✅

SPF and DKIM Information

dmarc:phishybank.com Show Solve Email Delivery Problems

spf:phishybank.com:192.0.2.123 Show Solve Email Delivery Problems

Dkim Signature Error:
No DKIM-Signature header found - more info

Dkim Signature Error:

Dkim Signature Error:
No DKIM-Signature header found - more info

Dkim Signature Error:
There must be at least one aligned DKIM-Signature for the message to be considered aligned. - more info

Headers Found

Header Name	Header Value
MIME-Version	1.0
Date	Tue, 23 Sep 2025 12:08:06 +0530
Message-ID	<CAH9V34sK1m3YrBChg=6M6_dMXWb1iW7+9ja6WU_y3op_iuaDng@phishybank.com>
Subject	Urgent: Verify Your Account
From	"Phishy Bank" <security@phishybank.com>
To	victim@example.com
Reply-To	"Phishy Support" <support@phishybank.com>
Content-Type	multipart/alternative; boundary="0000000000f43809063f722d66"