



The 60-Minute Fraud Finder

4 Excel Tests to Catch Thieves

Majid Mumtaz

The 60-Minute Fraud Finder

4 Excel Tests to Catch Thieves

By Majid Mumtaz

Table of Contents

1. **The "Benford" Sanity Check** - Finding unnatural invoice patterns.
 2. **The Round Number Trap** - Why \$5,000.00 is suspicious.
 3. **The Weekend Warrior** - Catching Sunday night theft.
 4. **The "Bun-to-Burger" Ratio** - Using inventory data to find hidden cash sales.
-

Test 1: The "Benford" Sanity Check

Theory: In any large, naturally occurring dataset of **Vendor Invoices** (AP Ledger), the leading digit is not random. It follows a specific logarithmic probability.

The Auditor's Benchmark: Compare your data against this expected distribution.

Leading Digit	Expected %	:---	:---		1	30.1%	2	17.6%	3	12.5%	4	9.7%		
	5 	7.9%		6 	6.7%		7 	5.8%		8 	5.1%		9 	4.6%

⚠ CRITICAL WARNING: CONTEXT MATTERS

Do NOT use this on Menu Sales. If your burger costs \$25, your sales data will start with "2" almost 100% of the time. That is not fraud; that is a menu.

USE THIS ON: Vendor Payments, Expenses, and Procurement data (which span from \$10 for toner to \$100,000 for rent).

REAL-WORLD EXAMPLE: "THE FAKE MARKETING AGENCY"

An Auditor ran this test on "Marketing Expenses." The digit "**7**" appeared 20% of the time (should be 5.8%).

The Find: The Marketing Director was approving fake invoices for **\$7,500** and **\$7,800** to a shell company he owned, keeping them just under his \$8,000 approval limit.

HOW TO DO IT IN EXCEL:

1. Extract the First Digit:

- Column A: Invoice Amount
- Column B: First Digit formula: =LEFT(A2, 1)

2. Pivot Table:

- Rows: First Digit
- Values: Count of Invoice Amount

3. Calculate %:

- Show Values As: % of Column Total
-

Test 2: The Round Number Trap

Theory: Real business transactions are messy. Taxes, discounts, and exchange rates make numbers ugly (e.g., **\$4,982.13**).

The Fraud: Bribes and fake expenses are often round numbers (e.g., **\$5,000.00**). Humans crave simplicity.

REAL-WORLD EXAMPLE: "THE PHANTOM CONSULTANT"

We scanned a General Ledger for numbers ending in .00.

The Find: A recurring payment of **\$2,500.00** labeled "Govt Relations Consulting."

The Reality: There was no invoice. The employee created a "Payment Request Form" for a vague service. This created a channel to siphon money out of the company to pay cash

bribes to inspectors. Real service providers usually have "messy" bills (e.g., \$2,500 + \$125 VAT = \$2,625).

HOW TO DO IT IN EXCEL:

1. Identify Round Numbers:

- Formula: =MOD(A2, 1) = 0 (Finds amounts with no cents)

2. Filter:

- Filter for TRUE.

3. Context Check: Rent is round. Catering is not.

Test 3: The Weekend Warrior

Theory: Most B2B transactions happen Monday to Friday, 9-5.

The Fraud: Fraudsters often work when the controls are weak—nights and weekends.

REAL-WORLD EXAMPLE: "THE SUNDAY CREDIT NOTE"

We filtered for manual Journal Entries (JE) posted on Sundays.

The Find: A Sales Manager posted a **\$50,000 Credit Note** at 11:30 PM on a Sunday. He was wiping out a debt for a friend's company before the Monday morning aging report was run.

HOW TO DO IT IN EXCEL:

1. Extract the Day:

- Formula: =TEXT(A2, "dddd")

2. Filter:

- Select Saturday and Sunday.
-

Test 4: The "Bun-to-Burger" Ratio (Inventory Yield)

Theory: In a restaurant or factory, inputs (inventory) should correlate perfectly with outputs (sales). Every burger sold **must** consume one bun.

The Fraud: "Skimming" is when a manager sells a burger for cash but doesn't ring it up in the system. The money goes in their pocket, but the inventory still disappears.

REAL-WORLD EXAMPLE: "THE PHANTOM FEAST"

We compared the purchase orders for burger buns against the POS sales data for a specific franchise.

The Find: The store bought 10,000 buns but only recorded 8,000 burger sales.

The Question: Where did the 2,000 buns go? "Waste" was reported at only 1%.

The Verdict: The manager was selling 20% of his burgers for cash and pocketing the money. He couldn't hide the "**Un-Financial**" evidence: the missing bread.

HOW TO DO IT IN EXCEL:

1. Map your Inputs to Outputs:

- Find your "Anchor Ingredient" (something that is used in almost every sale and is hard to substitute, like buns, cups, or specific packaging).

2. Calculate Theoretical Yield:

- $\text{Opening Stock} + \text{Purchases} - \text{Closing Stock} = \text{Physical Usage}$.

3. Calculate Variance:

- $\text{Physical Usage} - \text{POS Sales Quantity} = \text{The Gap}$.

4. Flag the Outliers:

- If $\text{The Gap} > 3\%$ consistently, you don't have a waste problem; you have a theft problem.

Want to go deeper?

Excel is a powerful starting point.

For those managing complex operational risks, my book **The Un-Financial Risk Manager** provides a detailed examination of advanced strategies used by modern audit functions.

Topics covered include:

- **Forensic Data Analytics:** Moving beyond simple checks to automated fraud detection.
- **Operational Integrity:** How to audit supply chains, food safety, and franchise networks.
- **The Risk Mitigation Ledger:** A framework for reporting risk value to the Board.

AVAILABLE ON AMAZON

The Un-Financial Risk Manager

Majid Mumtaz Internal Audit Director | Ex-KPMG, EY, McDonald's