USING EXCEL TO FERRET

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"LOOSE LIPS SINK SHIPS" aptly describes what thwarted Kelly's fraud scheme against his former employer, Buckhoff's Market, Inc., a multibillion dollar company that operates hundreds of grocery stores nationwide. Having been fired for looking at "inappropriate" websites using a company computer, Kelly was mad at his former employer, and he desperately needed a regular source of income. Consequently, he persuaded Mark, who had replaced Kelly as the purchasing department supervisor, to jointly perpetrate a fictitious-vendor scheme against Buckhoff's Market. Five years into the scheme each had pocketed $900,000 from it, and things were going smoothly—

that is, until Kelly drank to excess one night at a local bar and bragged about the scheme to a stranger sitting next to him. Kelly explained in great detail how he and Mark had stolen $1.8 million from Buckhoff's Market, even divulging the name of the fictitious vendor.

Thinking the "tip" he had received might have some monetary value, the stranger called the victim company and was forwarded to Mary, Buckhoff's Market's chief loss prevention specialist. The stranger offered to sell the incriminating information to Mary for $250,000—a bargain considering how much the fraud scheme was costing the company. Mary counteroffered with $25,000, but the stranger refused, arguing that the scheme was costing Buckhoff's Market millions of dollars. The phone call ended, and Mary now knew that she had a vendor fraud problem.

OUT FRAUD

HERE'S A STEP-BY-STEP GUIDE ON HOW TO CHECK YOUR COMPANY'S RECORDS AND UNCOVER ANY POTENTIAL MISDEALINGS.

But she didn't know an efficient way to follow up on this tip since Buckhoff's Market regularly does business with tens of thousands of vendors. She decided to hire an experienced fraud investigator, who in a couple of hours identified six vendors with two of three suspicious characteristics. The investigator examined invoices from the six vendors, quickly identifying the most suspicious of the six, and questioned Mark—who had approved payment on the suspicious invoices—about the suspect vendor. Mark admitted to the scheme and implicated Kelly as the mastermind. The fraud investigator turned over his report to the FBI, and both men were prosecuted, convicted, and incarcerated.

While the names of the victim company and the individuals involved have been changed to protect their privacy, the case is true, and similar schemes could happen to other companies. We'll demonstrate how the investigator used Excel's Autofilter command to quickly ferret out the suspicious vendors in case you want to try it at your company. To conduct a computer-based fraud investigation, you must have basic proficiency in Excel and knowledge of the red flags common to vendor fraud schemes. For ease in following our example, we use two different typefaces: **Boldface** type is used to identify the names of all menu commands, while *italics* are used to indicate information that users should type in.

WHERE TO BEGIN

First, let's take a look at some of the red flags. A shell company is a fictitious entity created for the sole purpose of committing fraud. It is a business on paper only and, as such, provides no goods or services. In a scheme involving fictitious vendors, the fraudster uses a shell company to bill the victim company for goods or services never received. Red flags common to fictitious-vendor schemes include:

◆ Vendors without a taxpayer identification number or with an invalid one. A valid taxpayer ID number has nine digits with the first two digits separated by a hyphen, as follows: 12-3456789.

◆ Vendors with only post office box addresses or vendor addresses that match employee addresses.

◆ Vendors with no phone number or using an answering service.

◆ Invoices created using an Excel-generated invoice template.

◆ Invoices with fold-mark anomalies. Examples include: (1) invoices without fold marks or creases, indicating they haven't been mailed, or (2) invoices with fold marks different from the tri-fold indentations typical of invoices coming through the mail.

◆ Invoices with even dollar amounts, no taxes included, or other anomalies.

◆ Consecutively numbered invoices from the same vendor, indicating the vendor has no other customers.

◆ Vendor-related cancelled checks that bear handwritten endorsements on the back.

◆ Invoices for unspecified consulting or other vaguely defined services.

◆ Vendors with company names consisting only of initials. Fraudsters often use their own initials when setting up dummy companies (e.g., Robin U. Blind establishes a fictitious company named "RUB Enterprises").

You can often detect suspicious vendors by querying the vendor database for the first three red flags listed above (invalid taxpayer ID numbers, post office box addresses, no phone numbers). Most vendor databases can be easily downloaded into Excel, which contains some powerful fraud-detecting functions. In the Buckhoff's Market case, the investigator used Excel's Autofilter function to search through tens of thousands of vendors to identify those with one or more of the three red flags.

TABLE 1

VENDOR	TAXPAYER ID	VENDOR NAME	ADDRESS	CITY	ST	ZIP	PHONE #
AAAPZ	12-3456789	AAA Pizzeria	1421 Appaloosa Road	Pullman	WA	99163	509-555-2536
ALMMK	23-4567890	Allied Meat Market, Inc.	876 Aspen Ridge	Spokane	WA	99208	509-555-4796
ARSHD	36-2984632	Airshire Dairy, Inc.	987 Kagy Blvd.	Moscow	ID	83843	
DDLSN	24-5656567	David's Delicatessen	PO Box 234	Fargo	ND	58108	701-555-0987
EDBKC	58-9274814	Eddy's Bakery Co.	1904 Yellowstone Street	Everett	WA	98208	425-555-2233
FFZFD	36-8394525	Frank's Frozen Foods, Inc.	2621 Highland Blvd.	Corvallis	OR	97330	541-555-6789
FNCFL	8-3425160	Fancy Flowers Co.	987 Main Street	Bismarck	ND	58501	
JSFDS	96-8473924	Joe's Foods	1983 Sunlight Circle	Idaho Falls	ID	83401	208-555-0011
KLKKS	87-6453219	Kyle's Kookies	1413 Summer Tree Road	Great Falls	MT	59405	406-555-8321
TMTNS	89-123456	Thompson Transportation	P. O. Box 123	Bozeman	MT	59715	406-555-1234

All data in this table was made up by the authors for illustration purposes only

USING THE AUTOFILTER FUNCTION

The database the investigator used was in a format like that shown in Table 1. For illustration purposes, however, we have made up a simplified database containing a total of only 10 vendors. The first task in your quest is to insert a column that will keep track of the number of red flags exhibited by each vendor. To do this, move the cursor to cell "A1" and click on **Insert**, then **Columns**. Label your new column "*Flags*." To activate the Autofilter function, click on **Data**, **Filter**, then **Autofilter**. A small box with a down arrow should appear next to each of the column labels. Click on the arrow box next to the "Taxpayer ID" column and select (**Custom…**). A custom Autofilter box will appear with the words "Show rows where:" above the words "Taxpayer ID." Click on the arrow next to the box containing "equals" and you'll see a variety of powerful logical operators that can be used with the Autofilter function. Select **does not equal**. Move the cursor to the upper-right box and type "*??-???????*" since a question mark represents any single character. Now click **OK**. Excel filters out two vendors whose Taxpayer ID numbers don't conform to the expected pattern. Enter a "*1*" in the "Flags" column next to the two vendors to indicate that each one now has one of three red flags. Your results should look like those contained in Table 2.

IDENTIFYING VENDORS WITH ADDITIONAL RED FLAGS

Return to the full, unfiltered spreadsheet by clicking on the arrow box next to the "Taxpayer ID" column and selecting (**All**). We will now flag vendors with P.O. Box addresses. To do this, click on the arrow box next to the "Address" column and select (**Custom…**). A custom Autofilter box will appear with the words "Show rows where:" above the words "Address." Click on the arrow next to the box containing "equals" and select **begins with**. Move the cursor to the upper-right box and type "*P**" since "*" represents any series of characters. Now click **OK**. Excel filters out two vendors whose addresses begin with "P" followed by any series of characters. David's Delicatessen has a blank in the "Flags" column, so enter a "*1*" there. Thompson Transportation already has a "1" in the "Flags" column, so change the "1" to a "*2*" to indicate that it now has two of three red flags. Your results should look like those contained in Table 3.

Return to the full, unfiltered spreadsheet by clicking on the arrow box next to the "Address" column and selecting (**All**). Now we'll flag vendors without phone numbers. To do this, click on the arrow box next to the "Phone #" column and select (**Blanks**). Excel filters out two vendors without phone numbers. Airshire Dairy, Inc. has a blank in the "Flags" column, so enter a "*1*" there. Fancy Flowers Co. already has a "1" in the "Flags" column, so change the "1" to a "*2*" to indicate that it now has two of three red flags. Your results should look like those contained in Table 4.

WHICH VENDORS TO INVESTIGATE?

Return to the full, unfiltered spreadsheet by clicking on the arrow box next to the "Phone #" column and selecting (**All**). Now let's filter out vendors with two or more red flags. To do this, click on the arrow box next to the "Flags" column, and select **2**. Excel filters out two vendors with a "2" in the "Flags" column, indicating that each has two of the three red flags. Your results should look like those contained in Table 5.

If you want a list of all vendors with any red flags,

TABLE 2

FLAGS	VENDOR	TAXPAYER ID	VENDOR NAME	ADDRESS	CITY	ST	ZIP	PHONE #
1	FNCFL	8-3425160	Fancy Flowers Co.	987 Main Street	Bismarck	ND	58501	
1	TMTNS	89-123456	Thompson Transportation	P. O. Box 123	Bozeman	MT	59715	406-555-1234

TABLE 3

FLAGS	VENDOR	TAXPAYER ID	VENDOR NAME	ADDRESS	CITY	ST	ZIP	PHONE #
1	DDLSN	24-5656567	David's Delicatessen	PO Box 234	Fargo	ND	58108	701-555-0987
2	TMTNS	89-123456	Thompson Transportation	P. O. Box 123	Bozeman	MT	59715	406-555-1234

TABLE 4

FLAGS	VENDOR	TAXPAYER ID	VENDOR NAME	ADDRESS	CITY	ST	ZIP	PHONE #
1	ARSHD	36-2984632	Airshire Dairy, Inc.	987 Kagy Blvd.	Moscow	ID	83843	
2	FNCFL	8-3425160	Fancy Flowers Co.	987 Main Street	Bismarck	ND	58501	

TABLE 5

FLAGS	VENDOR	TAXPAYER ID	VENDOR NAME	ADDRESS	CITY	ST	ZIP	PHONE #
2	FNCFL	8-3425160	Fancy Flowers Co.	987 Main Street	Bismarck	ND	58501	
2	TMTNS	89-123456	Thompson Transportation	P. O. Box 123	Bozeman	MT	59715	406-555-1234

you could select (**NonBlanks**) from the arrow box menu. You can then decide which of these vendors you want to investigate.

BUCKHOFF'S MARKET CASE RESOLUTION

In the Buckhoff's Market case, the investigator identified six suspicious vendors, each of whom had two red flags, from a database containing literally tens of thousands of vendors. No vendor had three red flags. He then examined invoices from each, looking for additional red flags common to fictitious-vendor schemes. One vendor stood out from the others: Its invoices were numbered consecutively (suggesting Buckhoff's Market was its only customer), provided vaguely described services (transportation), billed even amounts at an increasing rate over time, had been created using Excel, and contained fold-mark anomalies (suggesting the invoices weren't mailed). The vendor did have a phone number, though. The investigator called it and discovered that an answering service was paid to answer the phone in the company's name.

The prime suspect in a fictitious-vendor scheme is the person who approved payment on the false invoices, which in the Buckhoff's Market case was Mark. When questioned about the suspicious vendor, Mark confessed to the scheme. The investigator filed an employee dishonesty insurance claim on behalf of Buckhoff's Market, who was then restituted $1 million by their insurance provider.

Both men were convicted and sentenced to prison, and Kelly was forced to relinquish a $300,000 401(k) retirement account he had accumulated during his employment with Buckhoff's Market.

OTHER USES

Excel's Autofilter feature can also be used effectively to detect ghost employees. As you did when looking for fictitious vendors, you can apply this technique to an employee database and identify personnel with invalid or missing employee ID numbers, invalid or missing social security numbers, or missing pay deductions, for example.

Searching for fraud can be like looking for a needle in a haystack, but Excel's Autofilter function can help direct us to the part of the haystack where we should begin our search. Those who can use Excel effectively as a fraud-detecting weapon will uncover more fraud than those who can't. ∎

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