Executive Summary

In the last month, myself and three of my friends have joined together to create an "Investment Club." The investment club is named WRMP and it is simply a way for us to legally pull our money together and invest it as one entity. Our trading strategy was to not analyze specific stocks but to analyze industries as a whole. To analyze the industries in the stock market we needed a macro that could keep track of specific industries daily. It was for this purpose that we wrote this macro for our final project.

We downloaded all companies both on the New York Stock Exchange and The Nasdaq. This was a sheet with tons of raw data. We then created a macro that would divide up all the companies into industries. We were interested to see how certain a company's quarterly earnings within an industry would affect the other stocks in the industry. We created a web query that would pull which companies were coming out with their quarterly earnings for that day (from rttnews.com).

Then we created another sub procedure that would grab (from finance.yahoo.com) the percent change in price for each of the stocks that were released on the present day and met the certain parameters that we were looking for (market capitalization, markets listed on, etc.). We would then grab other info including: EPS estimate, time of quarterly release, the actual EPS, and number of analysts researching the stock. All this information is then filtered to each industry tab that we created. As we daily run the macro, slowly the tickers would be identified and their information (the columns) would be filled out. The last step was creating a sheet that would keep track of each industry and what the percentage of the stocks had released their quarterly earnings. This would give us one sheet that we could take a snap-shot of the market and know which industries to examine more closely.

Implementation Documentation

We had quite the process to get our data updated and in a format that would be useful. The steps we took are listed.

1. We started with a sheet with 9,312 rows of raw data. An example of the data base we started with is shown below.

3058.	RICKS CABARET INTERNATIONAL INC	RICK	83,527	NASDAQ National Market	7224	722410	713120	5813
	RICKS CABARET INTERNATIONAL INC	RICK	83,527	NASDAQ National Market	7224		511120	
	RICKS CABARET INTERNATIONAL INC	RICK	83,527	NASDAQ National Market	7224		517919	
1601.	MONRO MUFFLER BRAKE INC	MNRO	1,218,852	NASDAQ National Market	8111	811111	811112	7538
2485.	MIDAS INC	MDS	128,092	New York Stock Exchange	8111	811118	531120	7539
	MONRO MUFFLER BRAKE INC	MNRO	1,218,852	NASDAQ National Market	8111		811191	
	MONRO MUFFLER BRAKE INC	MNRO	1,218,852	NASDAQ National Market	8111		811118	
	MONRO MUFFLER BRAKE INC	MNRO	1,218,852	NASDAQ National Market	8111		811198	
2185.	FURMANITE CORPORATION	FRM	243,518	New York Stock Exchange	8113	811310	238110	7699
	FURMANITE CORPORATION	FRM	243,518	New York Stock Exchange	8113		238390	
	FURMANITE CORPORATION	FRM	243,518	New York Stock Exchange	8113		238990	
	FURMANITE CORPORATION	FRM	243,518	New York Stock Exchange	8113		332811	
	FURMANITE CORPORATION	FRM	243,518	New York Stock Exchange	8113		332911	
779.	REGIS CORP	RGS	948,274	New York Stock Exchange	8121	812112	812111	7231
1057.	WEIGHT WATCHERS	WTW	4,293,821	New York Stock Exchange	8121	812191	517919	7299

Our first step was to create a macro that would sort each company into a corresponding industry. The way we would identify which company would go to which company was through the company's NAIC

code (seen in the 6th column above). The sub procedure runs and sorts every industry (according to its NAIC code into its own tab.

2. Our next step was to create a sub procedure that would use a web query from rttnews.com (see below) to identify which companies are coming out with their quarterly earnings for that day. The sub procedure grabs the company's ticker, how many analysts are watching the stock, what their EPS estimate was, and what the companies actual EPS was. In addition, to grabbing this data from the web, the procedure organizes the data to be able to be used by our next sub procedure.

Sun	Mon	Tue	Wed	Thu	Fri	Sat
4/8/2012	4/9/2012	4/10/2012	4/11/2012	4/12/2012	4/13/2012	4/14/2012

Company	Symbol	Period	Estimated EPS	Year Ago EPS	Actual EPS	Time	Details
Aeromechanical Services Ltd.	AMA.V	Q4 11	$ N/A	$ N/A	$	Time Not Supplied	,
Innovaro, Inc.	INV	Q4 11	$ N/A	$ N/A	$	After Market Close	-
Art`s-Way Manufacturing Co Inc	ARTW	Q1	$ N/A	$ N/A	$ 0.05	Time not Supplied	-
RICHARDSON ELECT L	RELL	Q3 12	$ 0.10	$ 0.01	$ 0.09	After Market Close	,

3.
4. The next sub procedure goes through the stocks pulled from rttnews.com, formats them to fit the format our current tickers have, and then checks to see if the stocks pulled are in our raw data sheet. If the tickers are not in our raw data sheet, the sub procedure deletes them from the worksheet.
5. The next step was to create another web query, this time from finance.yahoo.com. This sub procedure goes through the remaining stock tickers and grabs their information from yahoo's website. The two things we needed to pull was what the stock price closing price was at yesterday, and what the stock's price closed at today (this sub procedure is designed to work once market hours are closed). It was easy enough to grab the previous day's price. However, to grab the current stock price was more difficult because it was hard to identify on the web query

and the cell that it was located on was combined with other information (see below).

96	Insider Roster	
97	Financials	
98	Income Statement	
99	Balance Sheet	
100	Cash Flow	
101	Advertisement	
102	Hollywood Media Corp. (HOLL)	
103	-NasdaqGM	
104	1.05 Apr 10, 3:41PM EDT	
105	Add to Portfolio	
106	Prev Close:	1.05

As you can see from above, cell "B106" would give us the previous day closing price. However, in Cell "A104" was the current closing price of the stock mixed with other words. After analyzing the problem, we noticed that this cell was the first one on the web query to start with numbers. We did a loop that included a "left function" and an "Isnumeric function." The loop would start at the top of the web query and check to see if the first character on the left was a number. This loop allowed us to identify which cell was holding the closing stock price. We then used a "split function" to grab the full price.

6. The next procedure calculated the percent change in the stock's price using the two numbers grabbed in the previous step.
7. We then used a sub procedure that would take all the data we had grabbed and calculated (% change in price, ticker symbol, # of analysts, EPS estimates, EPS actual) and ship it to the industry NAIC tab that we created in step 1. We would run this sub procedure every day after the market closes and it would update our industry tabs to help us analyze what's going on in an each specific industry. An example of an industry NAIC tab is below.

	A	B	C	D	E	F	G	H
1	Naics 2007 Primary Code	Ticker	Quarterly Earning Release Date	% change in price on Quarterly Earning Release	# of analyst	Analyst High Expectations of EPS	Actual EPS	% above or below analyst estimations
2		AAC						
3		STK						
4		FEO						
5		SVN						
6		JMF						
7		PSF						
8		MITT						
9		XYL						
10								
11								
12								
13								
14								
15								
16								
17								
18								
19								
20								
21								
22								
23								
24								
25								

Industry 9281 | Industry 2111 | Industry 9999 | Results | Web Query for Upcoming Earnings | Display Upcoming Ear

Although it is hard to see, this picture illustrates how the macro will match the ticker in the second column and fill out the information to the right.

8. Our last sub procedure goes through each “Industry tab” and calculates how many of the companies within the industry have released their quarterly earnings. It lists this percentage on the “Industry List” tab.

58	3261	0
59	3262	0
60	3272	0.25
61	3273	0
62	3274	0
63	3279	0
64	3311	0
65	3312	0
66	3313	0
67	3314	0
68	3315	0
69	3321	0
70	3322	0
71	3323	0
72	3324	0
73	3325	0
74	3328	0
75	3329	0
76	3331	0.047619048

This allows us to look at this sheet and see which industries are being close to being filling out. Once we know this, we can further examine these industries and purchase the remaining stocks in the industry if we feel the industry is doing well.

Discussion of learning and conceptual difficulties

We ran into two main problems:

- The First problem was simply dealing with such mass amounts of data, we were trying to take 9,000+ rows of data and organize them in a way that we could locate, update, and keep track of single stocks. I know VBA is designed to automate huge amounts of data; however, it was simply overwhelming at first. After a couple of attempts and failures, we got out some pen and paper and laid out exactly how we want the data to be filtered and how we wanted the sub procedure’s to flow.
- The second problem was discussed with step 4. We never doubted that it could be done; it just took us awhile to figure out the easiest way to locate the cell with the price and isolate the price.

2.5 Assistance: If you had substantial help from another person or persons on this project, please disclose the nature and amount of help you received in this section. If you did not receive substantial assistance, state so here.

Assistance

This was a "partnership" project done by Mitchell Wright and Robert Matthews. We didn't receive any help or assistance from others.

Write-up Detail

In summary the Macro created:

- Organizes the 9,000+ company data into separate tabs depending on each company's NAIC industry classification.
- Creates a web query that grabs information of companies that are releasing their quarterly earnings today.
- Checks to see if the tickers grabbed are in our workbook.
- If the tickers grabbed are not in the workbook, they are deleted. If they are, they are formatted to fit our format.
- Another web query is created that analyzes the remaining tickers, and grabs their previous closing price and their current closing price.
- The two prices grabbed are used to create the stocks percent change in price over the last day.
- All the information grabbed from the web queries is formatted and moved to the companies corresponding industry tab. The new info fills in the row that has the corresponding ticker.
- A new sheet is created that keeps track of the percentage of the industry's companies that are "filled in."