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## Cool Tech

by Matthew Wilson

- |   |   |
|---|---|
| <p><b>1 Cool Tech</b><br/><i>by Matthew Wilson</i></p> <p><b>2 Editor's Notes</b><br/>Principle-based reserves update.<br/><i>Howard Callif</i></p> <p><b>3 Letter from the Chair</b><br/><i>Timothy Rozar</i></p> <p><b>11 R Corner</b><br/><i>Steve Craighead</i></p> <p><b>16 The End Users Justify the Means: II<br/>The Wrath of Numerate Decision-Makers</b><br/><i>Mary Pat Campbell</i></p> | <p><b>22 Book Review</b><br/><b>The Analysis of Insurance Earnings:</b><br/>An Enterprise Approach<br/>by John McGarry and Kevin Pledge<br/><i>Reviewed by Carol Marler</i></p> <p><b>23 Book Review</b><br/><b>Customer-Centered Products,</b> by Ivy F. Hooks and Kristin A. Farry<br/><i>Reviewed By Stephanie Young</i></p> |
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Welcome to the third edition of Cool Tech. This is where I point out cool things on the Web. In this edition I'll also be talking about free forum software, forum strategies, search engines, Google Adwords/Adsense, free meetings on the Web, Open Courseware, The Learning Annex, Virtual Learning Environments (VLEs) and a derivatives spreadsheet that I wrote.

From getting my Amazon.Com clones wiped out, handling Russian forum spammers and getting run-over by bad-boy search bots, I've found that it's not always easy playing around on the Web. However, I have picked up a thing or two along the way. Hopefully I'll be able to save you a little time, or at least give you some new ideas.

### A LITTLE HISTORY

Back in 2003 I read an interesting article about a guy who created a Web site that provided book pricing information from several different Web sites. Apparently, he had a program that would gather data from multiple Web sites at the same time. The whole idea of scraping Web site data from multiple Web sites at the same time fascinated me. So I decided that I was going to create a similar Web site. My only problem was that I was starting from ground zero.

To make a long story short, I eventually accomplished my goal. The only problem was that it took me a few years to do it, and by then these types of Web sites were a dime a dozen. In the process I learned Perl, Regular Expressions (RegEx), PHP, MySQL and a whole lot more.

By the way, if you haven't looked at RegEx, you're missing out. One can implement amazing search and/or replace scripts. Using RegEx made it

CONTINUED ON PAGE 6

possible to scrape book data from other Web sites. For example, RegEx gives you the ability to pull items that change, like book prices, based on surrounding items that don't change.

I recommend going through this tutorial if you want to learn more about RegEx: [http://www.1913intel.com/demo/RegEx\\_Tutorial.zip](http://www.1913intel.com/demo/RegEx_Tutorial.zip)

Going through the examples in this tutorial really helped me to get a handle on RegEx. This tutorial is copyrighted, but free redistribution is allowed. The original link for this tutorial is <http://perldoc.perl.org/perlretut.html>.

I've installed both forums in the past and found them to be pretty good.

You can download my RegEx examples for Excel here: [http://www.1913intel.com/demo/RegEx\\_Examples.zip](http://www.1913intel.com/demo/RegEx_Examples.zip)

Getting back to my story. I had this cool Web site up and running, but I wasn't getting much traffic. The site was based on Amazon.Com data, but it also grabbed data from other Web sites on the fly. The advantage of my Web site was that search results returned 200 books at a time instead of Amazon.Com's 10, and you could get pricing data from other Web sites. Then I got the bright idea to use the browse nodes at Browsenodes.Com to create over a million of pages of data. These pages were all generated on the fly. This strategy actually worked for about a year. I was actually starting to earn a little bit of money each month.

I got an even brighter idea to grab my own browse nodes from Amazon.Com in order to effectively clone it. I created Amazon.Com clones for America, Britain, Canada, France and Germany. Then a weird thing started happening. For some unknown reason I was selling a lot more toys than books or anything else for that matter. I was not able to figure out why before Google decided to change the rules. Google decided that affiliate Web sites that replicate other sites should not be in their database. That means Google didn't like

my Amazon.Com clones, so it wiped me out of their database.

I took the hint and moved on to other things.

Want to add Amazon.Com search to your Web site? Check out these scripts: <http://www.chipdir.nl/amazon/>

You want the amazonv4.php script: <http://www.chipdir.nl/amazon/amazonv4.php>

You will need to play around with the HTML code to get the look and feel you want. You can also set this up for browse nodes.

Now it's time to discuss some current topics.

## FORUMS

If you've been snooping around on the Web then most likely you ran into a forum or two along the way. They are really a great way for a group of people with similar interests to communicate. They are also one of the most difficult things to start. You have to overcome the chicken and egg problem. They will come if you have content, but you can't get content until they come. Even if you get enough visitors, that doesn't mean you'll have a lot of posters. Most people don't post but rather just read posts.

Let's look at a couple of open-source forums: phpBB and SMF.

I've installed both forums in the past and found them to be pretty good. So it's just a matter of personal taste as to which one to choose. PhpBB is probably the most popular open-source forum software.

Installation of both these packages is pretty quick. Both use PHP and MySQL. Just make sure you have a database created before you start the installation.

You can find out more about phpBB at <http://en.wikipedia.org/wiki/PhpBB> and SMF at [http://en.wikipedia.org/wiki/Simple\\_Machines\\_Forum](http://en.wikipedia.org/wiki/Simple_Machines_Forum).

You can download phpBB at <http://www.phpbb.com/downloads/> and SMF at <http://www.simplemachines.org/download/>

If you install phpBB then you're going to need this program too:

[http://www.1913intel.com/demo/starfoxtj\\_toolkit.zip](http://www.1913intel.com/demo/starfoxtj_toolkit.zip)

The Starfoxtj toolkit gives you the ability to make mass changes to the phpBB database. Why do you need to make mass changes? Because this will help you get rid of spam posters. I noticed that a lot of people were registering on my forum but not posting. Then I noticed that the e-mail addresses didn't look right, and they were mostly Russian. They looked computer generated. Then I started getting spam posts from these people. The Starfoxtj toolkit gave me the ability to wipe out these spammers easily.

Before I installed the phpBB forum I had installed the punBB forum. The spammers really loved the punBB forum. So I ported this forum over to the phpBB package. The spamming stopped for a while before it started again.

If you build it they will NOT come unless you have a strategy. You are going to need two or three guys (or gals) to help you with daily posting. You should probably expect to spend a couple of hours a day on this project for months until you reach critical mass. Critical mass means to have enough contributing visitors to keep it going without your daily input. I suggest you hire a forum boosting service, and think about hiring a virtual assistant in India to make daily posts. Try Elance.Com to hire a virtual assistant.

A forum boosting service makes posts to your forum for a fee. Generally, you should expect to use them to respond to given posts. They don't charge much, but you get what you pay for.

Using a virtual assistant in India is a good way to make quality posts. Just explain what you're looking for and monitor their activity. Then your forum boosting service can respond to these posts.



The whole idea is to make your forum look like it is busy with a lot of people posting. You will need to do this until you get enough regular visitors.

Another very good forum software package is vBulletin. This package costs \$180, but it's one of the best forum packages out there. It also uses PHP and MySQL.

<http://www.vbulletin.com/>

Expect to advertise on Google Adwords to boost the number of visitors.

<https://adwords.google.com/select/Login>

## SEARCH ENGINES

If you're new to the Web then you might be wondering about submitting your Web site to various search engines. Here's a tip: only hand submit your Web site to three search engines. All of the other search engines tend to be a waste of time.

The top three search engines: Google, Yahoo! And MSN.

1. Google - <http://www.google.com/addurl/>
2. Yahoo - <http://siteexplorer.search.yahoo.com/submit>
3. MSN - <http://search.msn.com/docs/submit.aspx>

Probably something on the order of 95 percent of your traffic will come from those three search engines.

There is no need to pay a service to submit your Web site to thousands of search engines. This is just a waste of money.

CONTINUED ON **PAGE 8**

Once you start advertising, and get other Web sites to link to you, then some of the other search engines will find you. How can you get another Web site to link to you? For starters, try asking them. If your site is relevant then they just might do it. Also, if people find your site interesting, then they'll link to it without you asking.

A few years ago I had my first experience with the bad-boy search bot from Ask.Com. After it found my Web site it was so aggressively sucking up Web pages that my Web host at the time kicked me off of their server. They shut down my Web site, zipped it up and e-mailed it to me. One day everything was fine, and the next I was out of business. Thanks Ask.Com!

My current host, Dreamhost.Com, actually tries to work with me over issues like bad-boy bots and scripts that run amok.



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## GOOGLE ADWORDS/ADSENSE

Use Google Adwords to bring visitors to your Web site. Make up a small ad that when clicked will bring people to your site. Your ad can appear two ways: when people search and on Web site ads as a content ad.

You can set up several ads and several different keywords in order to see what works.

Here's a strategy that worked for me at 1913 Intel. I only bid .01 per click. So my ad would not show up during a search, but it did show up on Web site ads as a content ad. Using this strategy I got 400 people a day to visit my Web site. The key for me was finding the right keywords. I guessed at a lot of keywords, but it wasn't until I used "Foreign Policy" that my ads really took off.

Here's another tip: sometimes it took a week to see the results when I changed keywords. Initially, my clicks would go down, later they would go up.

It's not that I had some brilliant strategy to get clicks. I just stumbled into this strategy. I was getting poor results initially as I guessed at keywords that never seemed to bring traffic. Keyword changes only brought less traffic. Then I got really fed up with my poor

results so I just ignored Adwords for a month. When I finally checked back with Adwords I was absolutely stunned to find out that I was getting 400 clicks a day. What happened?

Since my strategy used content ads, I had no way of knowing which keywords were bringing in the traffic. By using a process of trial and error I was able to isolate "Foreign Policy" as keywords that brought in all of the traffic. I had guessed at this right before I gave up.

Have you ever heard of advertising arbitrage? That's where you hope to make a spread between Adwords and AdSense. You can find out more here: <http://www.salarymap.com/google-encouages-arbitrage.cfm>

I was paying \$.01 per click on Adwords, and I was displaying AdSense ads on my Web site. I was hoping to make a spread. Ultimately, I broke about even, which means I was getting 400 visitors a day for free. Currently, I do not advertise with Adwords because I get enough search engine traffic for free.

Here's the Adwords tutorial: <http://www.google.com/adwords/learningcenter/>

Here's the link to Adwords and AdSense: <http://www.google.com/intl/en/ads/>

Google AdSense gives you the ability to display ads on your Web site. Unfortunately, most Web sites won't make a lot of money from AdSense. The goal should be to use several methods of advertising to improve your ability to make money.

John Chow's Web site will show you how he makes money online: <http://www.johnchow.com/>

Make sure you go to John Chow's site, NOT John Cow's site. John Chow has a report on how he went from \$0 per month to \$30,000 per month. John makes money telling people how he makes money. That's a nice job if you can get one.

In the Adwords section, Google gives you the ability to get analytics code. You can imbed this code in your

Web site footers and get statistics about your visitors. I recommend that you do this. It seems to generate much better statistics than those from my host.

## FREE MEETINGS ON THE WEB

If you're part of a small business then you might like this free software package: Dimdim. Dimdim allows you to conduct free meetings on the Web. You can share your desktop, show slides, collaborate, chat, talk and broadcast via Web cam. No attendee downloads are required. You can host meetings with up to 20 people for free. You can upgrade to the Pro version for \$99 per year for bigger meetings and for customization. Visit: <http://www.dimdim.com/>

## OPEN COURSEWARE

MIT really kicked off the open courseware revolution back in 2001. That's when it announced the idea of Open Courseware. Later it started making available the content from some 2,000 courses. MIT made available just about everything: book lists with links to Amazon.Com, video lectures, course outlines and more. Now people all over the world are using these online courses.

Check out what Wired Magazine had to say about this program: <http://www.wired.com/wired/archive/11.09/mit.html>

Here's the link that will take you to the course material: <http://ocw.mit.edu/OcwWeb/web/home/home/index.htm>

You can sign-up for their free newsletter to get monthly updates: <http://ocw.mit.edu/OcwWeb/jsp/subscribe.jsp>

Do you need help finding an online course? This Web site will help you to snoop around more efficiently: <http://oedb.org/library/features/236-open-courseware-collections>

## THE LEARNING ANNEX

The Learning Annex produces seminars, lectures, classes and workshops throughout the United States and Canada. The Learning Annex provides a wide variety of online (for fee) topics from "50 Sure-Fire Ways to Break the Ice & Improve Your Conversations" to "How to

If you're part of a small business then you might like this free software package: Dimdim.

Invest in Tax Delinquent Properties For Pennies on the Dollar." Visit: <http://www.learningannex.com/>

## VIRTUAL LEARNING ENVIRONMENTS (VLES)

A VLE is a software package that will allow you to set up courses online for teaching various subjects. Read more about VLEs here: [http://en.wikipedia.org/wiki/Virtual\\_learning\\_environment](http://en.wikipedia.org/wiki/Virtual_learning_environment)

Moodle.Org is one popular open source package for learning and teaching online. My Web host (Dreamhost.Com) installs this package for free. You can learn more about this package and download it for free here: <http://moodle.org/>

If this package sounds very interesting to you then I suggest you check out some of the Web sites that use Moodle. You can get a list of these websites here: <http://moodle.org/sites/>

Snoop around and see what other people are doing.

Web Options 2.6 (Derivatives Calculator)

Each quarter I will try to release one or two programs that I've written. In the "A Little History" section I gave you a link to an Excel spreadsheet that uses RegEx. Here's the link again in case you missed it: [http://www.1913intel.com/demo/RegEx\\_Examples.zip](http://www.1913intel.com/demo/RegEx_Examples.zip).

In the VBA section of the spreadsheet, it shows you how to set up and use RegEx within Excel.

Another program I've written is WO\_2\_6.xls. It is an Excel program I wrote several years ago to value various kinds of derivatives. Here's a list of its features:

1. European Options
2. European Options - Binary Tree
3. European Options - Monte Carlo Simulation

CONTINUED ON PAGE 10



4. European Options - Finite Differences
5. American Options
6. American Options - One known dollar dividend
7. American Options - Binary Tree
8. American Options - Finite Differences
9. Asian Options
10. Asian Options - Monte Carlo Simulation
11. Barrier Options
12. Barrier Options - Monte Carlo Simulation
13. Binary Options
14. Lookback Options - Floating Strike
15. Lookback Options - Fixed Strike
16. Chooser
17. Probability of Default (Credit Risk)
18. Swaption
19. Calculation of Spot Rates
20. Warrants

If you're interested in derivatives then you might enjoy playing around with the spreadsheet. All macros are open.

You can download this program here: [http://www.1913intel.com/demo/WO\\_2\\_6.zip](http://www.1913intel.com/demo/WO_2_6.zip)

If you have any cool ideas or links for Cool Tech then shoot me an e-mail at [matt\\_wilson@farmersinsurance.com](mailto:matt_wilson@farmersinsurance.com). ■

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