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**March 20, 2015**

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## Finding Stuff on the Web

When looking for high tech answers, it's not always easy searching the Web.

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*by Digital Dave*

Digital Dave answers your tech questions.

Can't Send to a Gmail Account; Google Chrome Annoyance; IP Packets and the Internet.

#### [Finding Stuff on the Web](#)

*by Jack Dunning*

Favorite High Tech News Sites and Getting Better Web Search Results

With all the Web clutter it can be difficult to find useful information. This is how Jack does it.

#### [Coming Soon! More, Rather Than Less, AutoHotkey](#)

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AutoHotkey Is Not Going Away Anytime Soon!

Some people may want to see less AutoHotkey, but not Jack. Plus, the Kindle version of the Spanish translation "A Beginner's Guide to AutoHotkey" is now available at Amazon.

#### [Wally Wang's Apple Farm](#)

*by Wally Wang*

The Real Innovation is Value

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Computer and Internet tips, plus comments on the articles and columns.

"Free Windows 10 Upgrade," "Net Neutrality," "Web Programming"

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# Digital Dave

**“Digital Dave answers your tech questions.” by Digital Dave**

*Can't Send to a Gmail Account; Google Chrome Annoyance; IP Packets and the Internet.*

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## Can't Send to a Gmail Account

*Dear Digital Dave,*

*I am using Windows 7 with Microsoft Outlook 2010. I have Outlook configured to use with my Hotmail and Gmail account. There is one person in my address book with a Gmail account whom I am unable to send an e-mail. When I attempt to it comes back "Undeliverable. The recipient has been deleted or has no email address." Yet, I have no problem sending an e-mail to this person from my cell phone. Nor do I have a problem sending an e-mail to other Gmail accounts from Outlook.*

*Poz  
San Diego, CA*

Dear Poz,

This may not be your problem. Whenever an e-mail bounces back as "undeliverable" it is the action of the receiving server. Since it only happens with this one e-mail address, there must be some unusual type of incompatibility somewhere along the route. I've seen situations where two e-mail servers have trouble connecting with only each other. There is something in the combination of your Outlook, your e-mail server, and Gmail which is trapping that particular address—we just don't know what it is.

You should check the header of the e-mail you're sending and make sure that the e-mail address in there is correct. The address is usually masked by the person's name in the Outlook e-mail editor so maybe there is a typo in the address and you can't see it.

Does the recipient have similar problems with other people sending e-mail to him or her? If so, they should get another (non-lethal) e-mail address. In the meantime, use your cell phone.

Digital Dave

## Google Chrome Annoyance

*Dear Digital Dave,*

*When I click on the Google Chrome icon I get this message: "An administrator has installed Google Chrome on this system, and it is available for all users. The system-level Google Chrome will replace your user-level installation now." I then must find a way to open it as an administrator. Sometimes this option doesn't appear when I right click the icon. How can I get rid of this problem?*

*Bob Geiberger  
La Mesa, CA*

Dear Bob,

I'm assuming that you have multiple users (user logins) on the same computer—even if they are all you. It sounds like you have two installations of Google Chrome. One which was installed in a "not to be shared mode" and one in the "share with other users" mode. I'm guessing that one of these installations needs to be uninstalled to stop the message. In the worse case, you may need to completely uninstall all installations and re-install just one—a shared installation.

Digital Dave

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## IP Packets and the Internet

*Dear Digital Dave,*

*A short while ago, you clarified how a Tabbed Browser uses different ports for keeping multiple data streams straight (thank you). Thereafter, several questions occurred to me:*

- (1) What is the structure/layout of IP Packets, such that they not only determine destination, but ports, etc.?*
- (2) Is the current IP system robust enough to accommodate the explosion of all the IP driven devices coming on the market?*
- (3) On a slightly different tangent—could all/many of the big data breaches (e.g. "Sony", "Target", etc) be avoided if they kept all of their internal data encrypted? And, could other intrusions be avoided if all Web sites went to SSL (i.e. - "https://")?*

*Thanks much for your informative/educational column.*

*AJ Dalton  
Bonsall, CA*

Dear AJ,

The short answer to question one is the URL takes the form IP (xxx.xxx.xxx.xxx) then the port separated by a colon and the port number (e.g. 192.168.1.1:8080). Of course the port number is maintained in the background by the Web server and the browser so you never see it. For a full description of how IP packets are structured, see [this page](#).

You may be shocked to learn that the Internet has already run out of IP addresses. This problem, [IPv4 address exhaustion](#), was first recognized in the 1980's and came to fruition in 2011. That's why IPv6 was developed and accounts for why we have not yet run out of addresses. IPv6 allows for approximately  $8 \times 10$  to the 28th power more addresses than IPv4. It's not likely that we will run out of addresses in the foreseeable future.

Interestingly we never actually ran out of IPv4 addresses. The problem is that they were assigned in blocks to particular entities. While many of the addresses within the blocks were used, many others sit idle. The number of unused IPs is estimated as over 30% (one billion).

On your third question, unfortunately the techniques used in the major hacking scandals had little to do with encryption or the use of the Web sites. For example, in the Target break-in a piece of software was placed on the Point-of-Sale (POS) terminals. The data from the magnetic scripts was read from memory almost immediately after the card was scanned—before any encryption. It was later uploaded to a hacked Web server where the bad guys could manually download the data. These cybercrimes depend upon the ability of the hackers to place software directly on certain computers.

Encryption is used by the companies, but if a hacker can break in, they may also be able to get the encryption keys or find a way around it. The use of HTTPS has little to do with the problem since most hackers are using alternative protocols to get access.

The problem with the data breaches is not that they happened or that the systems were vulnerable. The problem is the way credit cards work. A secret number that you have to tell to everybody you do business with is not going to be a secure system. In a good system, it wouldn't matter if somebody knew your card number. In any case, steps are beginning to be made in this country to introduce some multi-factor authentication (i.e. chips in your card). That's a start.

Digital Dave

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## Finding Stuff on the Web

**“Favorite High Tech News Sites and Getting Better Web Search Results”** by Jack Dunning

*With all the Web clutter it can be difficult to find useful information. This is how Jack does it.*

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*"Every man should have a built-in automatic crap detector operating inside him. It also should have a manual drill and a crank handle in case the machine breaks down."*

*—Ernest Hemingway in an interview for the US magazine Atlantic in 1954.*

Since it was announced last week that next week will be the last weekly issue of *ComputerEdge* Online, there have been a couple of requests for "other useful publications to fill the void." The best approach is for me to tell you how I find both ideas for articles and more detailed information on the topics. Even if I do say so myself, I've gotten pretty good at locating good information quickly while weeding out the chaff—with which the Internet is loaded. Nothing is more pertinent than the above quote from Hemingway.

The Web is chock full of come-ons, scams, redundant pages, and other noise which makes the task of sifting through the clutter exceedingly difficult. Whether the topic I choose is inspired by an event in my life, an interesting article on the Web, or a question from a *ComputerEdge* reader, I always dig deeper. When I start, I may not hold an opinion on the topic or only have an inkling of a direction for the new article. I just start reading as much as I can on the subject, copying links and pertinent quotes. As I work through the information, I usually find a theme developing and my opinion starts to coalesce.

# Finding High Tech and Computer Ideas

While there are many sources for high tech and computer related articles, two Web e-magazines have provided me with the most inspiration. They are both dedicated to all things high tech.

The first is [Ars Technica](#)—founded in 1998 when Founder and Editor-in-Chief Ken Fisher announced his plans for starting a publication devoted to technology that would cater to those he called "alpha geeks." The site is filled with articles on a wide variety of subjects (see Figure 1). I look for something that sparks my interest before I make a decision. (There is nothing worse than writing about something that bores me. It almost guarantees that the readers will be bored as well.)

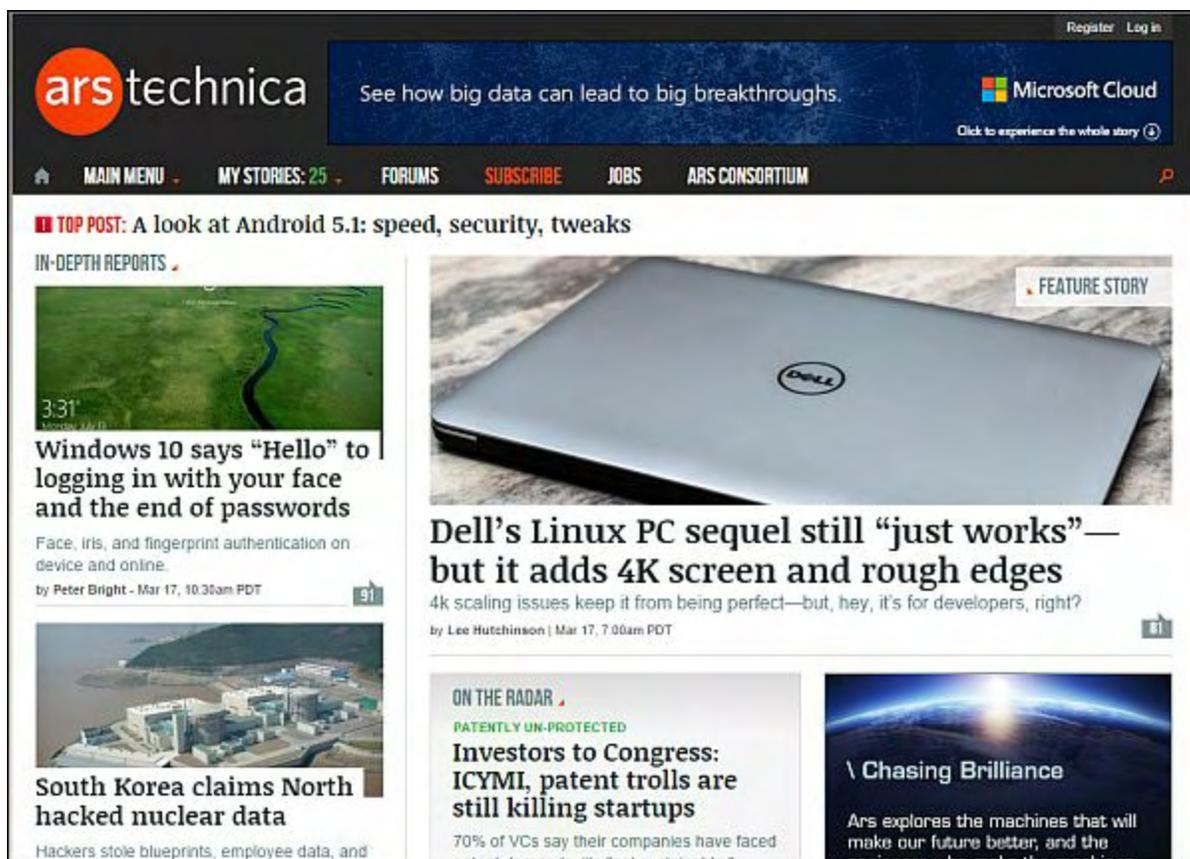


Figure 1. Ars Technica is an excellent source for high tech news.

My second source for ideas is the British site [The Register](#) (see Figure 2). Their slogan, "Biting the hand that feeds IT," says it all—in spite of the pun. While there are no doubt many other sources of high tech info found on the Web, eventually most seem to be repeating each other, I've found that these two do everything that I need.

The Register  
Biting the hand that feeds IT

DATA CENTER SOFTWARE NETWORKS SECURITY BUSINESS HARDWARE SCIENCE BOOTNOTES VIDEO FORUMS WEEKEND EDITION

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COMMENT Imports cost the Asian giant \$10.2bn in 2014  
41 mins

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COMMENT Boffins may need to expend energy on software issues  
1 hr

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2 hrs

**Buffett Admits This is a "Real Threat"**

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Figure 2. The Register gives high tech news with a British slant.

My position is that there is no point in regurgitating what can be found everywhere else. While I know that the information may be new to some *ComputerEdge* readers, I take a little more time to find more details and interject my thoughts—even if they turn out to be wrong. This brings up one of major cautions about using the Web—just because a lot of people say something, doesn't make it true.

## Tautology, the Scourge of the Internet

It's an obscure word, but [tautology](#) describes the dangers in using the Internet (or, as it turns out, the media in general) to inform your opinions. With tautology truth is seeming established "by repeating the same concept or assertion using different phrasing or terminology." Only on the Web people don't even bother to change the phrasing or terminology.

I found this to be all too true when researching the article I wrote on [Radon Gas and the Internet](#). There were literally thousands of articles about Radon found on the Web all stating exactly the same thing—word for word. (If you wonder if an article is merely a clone, copy a section of text then use it as the search key. A clone article will list hundreds of the same type

of page while unique writing will likely only show the original source or an occasional quote.) As with the case of radon gas, the problem of tautology gets so bad that it may be almost impossible to find a dissenting opinion. This Web redundancy leads to statements such as "Ninety-nine percent of all scientists agree..." That's stupidity in itself.

Saying that "Ninety-nine percent of all scientists agree..." implies that scientific truth is a matter of voting and polling. That's ridiculous. The truth doesn't change, just our knowledge of the truth. Any amount of agreement on a topic neither establishes nor discredits the truth. The problem with truth is not that it changes, but that we usually don't know what it is.

For example, O.J. Simpson either killed Nicole Simpson or he didn't. Whichever is the truth will never change. O.J. knows (and possibly he told someone else), but any other opinion can only be based upon evidence. If a jury acquits O.J. (which it did), that does not make him innocent. It merely means there was not enough evidence—in the jury's opinion—to convict him. But it does not change the truth.

When digging through the Web for information let your inner "crap detector" alert you when you start reading the same words over and over again. You could be falling into the trap of false proof through repetition.

## Hone Your Googling Ability

The problem is how to get past the tons of similar Web pages which add no useful new information since they all mimic each other.

### *1. Use Long Keyword Searches*

We tend to think that using too many words in a Google search will yield either no results or confusing unrelated pages. The opposite is true. I often find that typing the entire question as a search key is helpful.

For example, "how does 3D TV work" will provide a diverse variety of results, whereas "3D TV" gives advertising and a Wikipedia entry. The former works because it uses words which often appear in title and/or the text of an article. Many publications use an abbreviated form of the title in the Web page URL—which is a major factor in Web search results. In fact this may be the one most important tip for getting high rankings in Web searches for a Web page: Get the keywords into the URL of the Web page. Since the search keywords include many of the article title keywords (which are included in the Web page URL), the results tend to be spot on.

### *2. Change the Search with Negative Words*

Add negative or modifying words to get the outlying results. I've found that while many searches such as "3D TV" give lots of commercial sites, adding one word such as "problem",

"issue", "scam", "review", or "comparison" yields more useful results. Or, adding the word "versus" as in "PC versus Mac" will get more variety.

### 3. Google the Exact Error Message

If you're working to resolve a computer error problem, Google the exact error. That's a start, but, if you get no satisfying results you may need to modify the search with words such as "solution." Many forums have the answer to a variety of computer problems buried deep within them. If you use the right keywords, then the search might take you directly to an answer which will work for you. (The worse situation is when you find plenty of people with similar problems asking the same question, but there is no answer.)

I don't have any help sites or forums which I always check before doing a general Web search. While I do see many popular sites come up regularly (LifeHacker, How-To Geek, Tom's Hardware, etc.), I let the search engine be my guide. If I'm not getting satisfactory results, then I try a modified search.

*ComputerEdge* has never been *the* resource for computer information. It has been more a weekly dose of education and entertainment. I always felt that the comments contributed by the readers were just as relevant and important as anything else in the magazine. That's why we publish the comments a couple of weeks later in "Editor's Letters." That gives everyone the opportunity to review the tips and thoughts whether or not they had read the original article. Occasionally, I've seen those answers come up on my own Google searches.

*ComputerEdge* is not going away completely, but it will not remain in its current weekly form. I will talk more about the plan developing in my head next week.

\* \* \*

*"You can tell me, "That's just your opinion!" as much as you like, but my opinion contains truth, while your opinion is just plain wrong."*

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*Jack is the publisher of ComputerEdge Magazine. He's been with the magazine since first issue on May 16, 1983. Back then, it was called The Byte Buyer. His Web site is [www.computoredge.com](http://www.computoredge.com). He can be reached at [ceeditor@computoredge.com](mailto:ceeditor@computoredge.com). Jack is now in the process of updating and compiling his hundreds of articles and columns into e-books. Currently available:*

Recently released is Jack's FREE AutoHotkey book, [AutoHotkey Tricks You Ought to Do with Window](#), available exclusively at ComputerEdge E-Books in the EPUB for e-readers and tablets, MOBI for Kindle, and PDF for printing formats.

ComputerEdge E-books is offering his [AutoHotkey Applications](#), an idea-generating

intermediate level e-book about using the AutoHotkey Graphical User Interface (GUI) command to write practical pop-up apps for your Windows computer. (It's not as hard as it sounds.)

[\*Hidden Windows Tools for Protecting, Problem Solving and Troubleshooting Windows 8, Windows 7, Windows Vista, and Windows XP Computers.\*](#)

Jack's [\*A Beginner's Guide to AutoHotkey, Absolutely the Best Free Windows Utility Software Ever!: Create Power Tools for Windows XP, Windows Vista, Windows 7 and Windows 8 and Digging Deeper Into AutoHotkey.\*](#)

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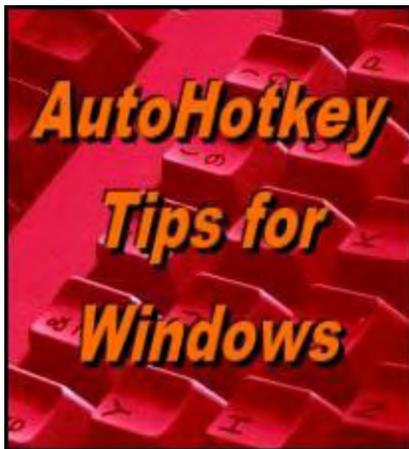
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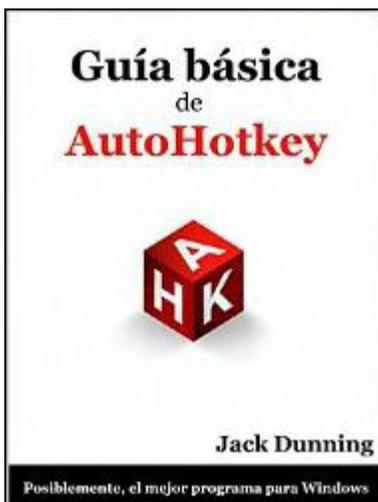
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The Spanish translation of *A Beginner's Guide to AutoHotkey* ([Guía básica de AutoHotkey](#)) is now available at Amazon for all Spanish speaking readers. The book will also be available in other formats at ComputerEdge E-Books within the next couple of weeks.

\* \* \*

Last week from Arthur:

*"Sad to see yah-all go, but, at least, 'no more AutoHotkey stuff.'"*

Unfortunately for Arthur, one of the reasons that I'm discontinuing the weekly edition is so that I can spend *more* time on my passion: AutoHotkey. I'm not exactly sure how I will approach it, but I'm looking at establishing a blog or other forum for discussing and promoting AutoHotkey. I continue to feel that AutoHotkey is the single most important free utility that anyone can use to customize their Windows computer experience for their particular needs. It's simple enough to learn that virtually anyone can be writing short, useful scripts within minutes. At the same time, as people develop their scripting capabilities, they can venture into writing specialized apps which will fill in the gaps when running any Windows software.

Rather than "no more AutoHotkey stuff," there will be a lot more AutoHotkey stuff. One of my personal missions is to acquaint as many people as possible with its power and usefulness. AutoHotkey won't go away anytime soon since it also runs under Windows 10.

Sadly some people will decide that writing AutoHotkey scripts is not for them—even though it strengthens and rejuvenates the brain. But they can still get the benefits on their Windows

computer by introducing it to that nerdy kid next door—who'll be more than happy to write scripts for free. It's not just about AutoHotkey, but it's also an easy introduction into the world of programming. You start with a few simple hotkeys and eventually end up writing full-blown apps. While entering this world of logic may be a little scary, it's certainly one of the most rewarding things you can do. There is nothing more satisfying than writing a short program which actually works.

You can get your start at our [Introduction to AutoHotkey](#) page. Not sure why you ought to use AutoHotkey? Get the free e-book [AutoHotkey Tricks You Ought To Do With Windows!](#) This e-book includes both those tips and the reference material (Table of Contents and indexes) from the other three AutoHotkey books. Pick up a copy free and share it with your friends.

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and [That Does Not Compute!](#), brilliantly drawn cartoons by Jim Whiting for really stupid gags by Jack about computers and the people who use them.



# Wally Wang's Apple Farm

“The Real Innovation is Value” by Wally Wang

## Wally Wang's Apple Farm

*The Real Innovation is Value; Prototyping Program Ideas; Microsoft Office 2016 for the Macintosh; Intel's Woes; The Coming Wearable Revolution with the Apple Watch; Function Keys.*

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Like most companies, Apple is in business to make money. However, where most companies go wrong is that their sole goal is to make money at the expense of the customers, the quality of their products and services, and even their own workers. When companies focus only on the bottom line, they'll try to build the cheapest products, use deception in their marketing, look at customer service as a liability instead of as a marketing tool, and ignore the needs of their own workers and customers.

What Apple does is focus on the customer. If you can satisfy your customer, then that customer will likely buy from you over and over again. In any business, it's expensive to attract new customers but it's far more profitable to sell to repeat customers. The easiest way to stay in business is to sell multiple products to repeat customers, but the only way you can get repeat customers is by making them happy.

What makes people happy isn't necessarily the money they save buying a product since they'll quickly forget that. What makes people happy is feeling they constantly get value from a product or service they bought no matter what the actual price might be.

Thomas Pynchon, the author of the novel [Gravity's Rainbow](#), once said that "If you can get people to ask the wrong questions, they'll never find the right answer." The wrong question to ask is how to make more money? The right question to ask is how to create more value for the customer?

If you compete on price or features, you're playing a losing game since anyone can always undercut you in price or add a trivial feature like a slightly faster processor that fails to translate into improved customer experience.

However, if you're like Apple, you compete on value because satisfying the customer is more than just worrying about the bottom line on an accounting spreadsheet or cramming a laundry

list of technical specifications into a product and believe that's innovation.

Creating value is about solving problems. Solve a small problem and you earn a small amount of money. Solve a big problem and you earn a large amount of money. Solve a small problem for a lot of people and you can still earn a lot of money. It doesn't matter what you do as long as you solve problems for others.

So with few exceptions (Ping, MobileMe, etc.), Apple just looks for ways to solve problems that typically focuses on eliminating the current, frustrating user experience with existing products.

The Macintosh makes computers easier to use than Windows PCs. The iPhone makes smartphones easier to use than Blackberry or Nokia smartphones. The iPad makes mobile computing simpler than lugging around an underpowered netbook. The iPod and iTunes makes finding and buying music far more convenient than visiting a music store and buying music stored on bulky CDs. Apple Stores make it easy to test products, learn about them, and get problems solved by an expert.

When you solve problems for others, customers will eagerly give you money. When you try to deceive, cheat, and frustrate customers, you'll always drive away repeat customers and rely solely on price and deception to attract new customers.

Providing value indirectly earns more money. Pursuing money at the expense of value will always earn less money. Apple's innovation isn't in making fancier products but in making products and service that minimizes frustration and maximizes productivity. Apple products may not always be the cheapest, but they're usually the best in terms of physical quality, user experience, and customer support.

As long as you focus on making more money, you'll always struggle to make more money. As long as you focus on solving problems and reducing the frustration of others, you'll always make more money as a result. The way to make more money isn't to cut costs and cheat the customer. The way to make more money is to please the customer and that's Apple's greatest innovation that rivals have yet to copy.

## Prototyping Program Ideas

Almost everyone has an idea for an app. The problem isn't that most ideas aren't good. It's that most ideas aren't polished. Too often, people rush from having an idea to creating an app. Then they release their app on the market only to find out that it's missing features or too confusing to use.

To avoid this problem, don't go straight from a great idea to a working app. Instead, create a prototype. The idea behind prototyping is to create a working mockup of your app so you can see how it might look and work, and get feedback from others. Your initial great idea might

not be so great after all, or someone might have an idea you could add to make your initial idea even better, but you'll never know unless you create and test a prototype first.

One way to prototype app ideas is to use Keynote. However, a far better solution is to use [Balsamiq](#), a rapid wire framing tool to help you get the rough ideas of your user interface design on the screen. To prevent you from falling in love with your initial prototype, Balsamiq makes every design look as if you had drawn it by hand. That way you can see the rough shape of your design without getting attached to any particular appearance.

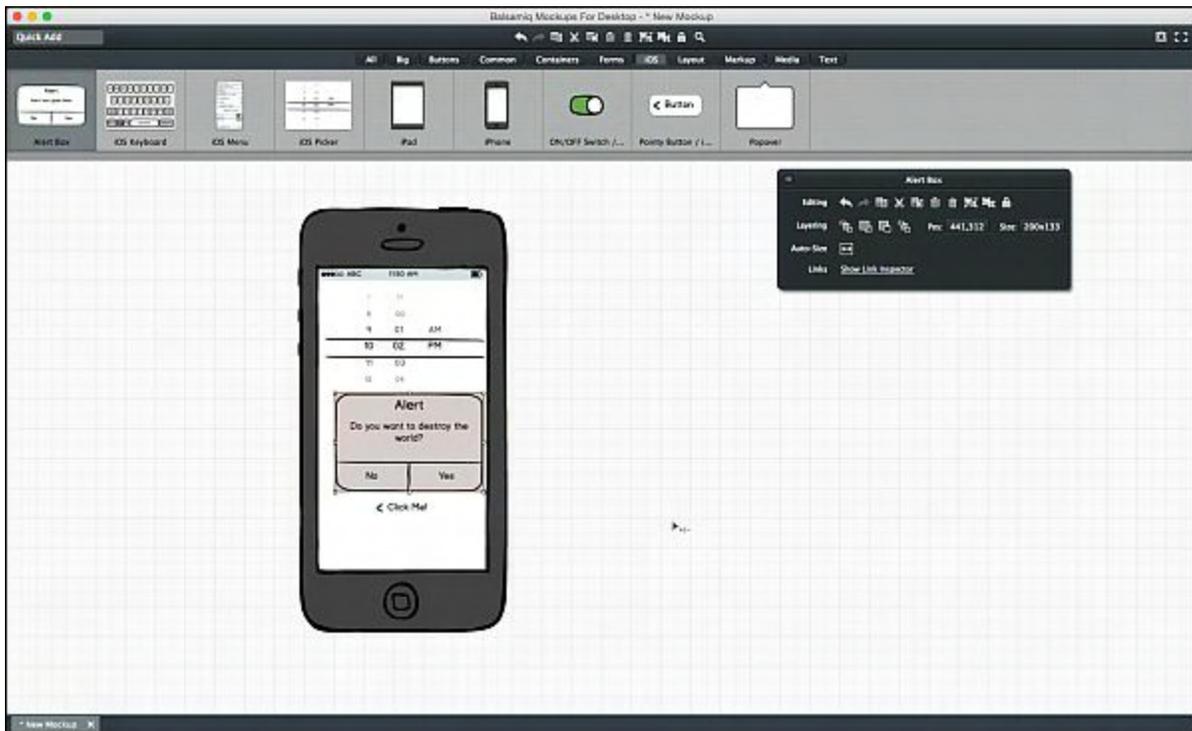


Figure 1. Balsamiq lets you design prototypes of desktop or mobile apps.

Starting with a blank canvas, you can drag and drop common user interface items on the screen such as text fields, tables, or buttons. Then you can customize them and slap together a design quickly and easily. If you need to make changes, just delete or modify an item in seconds.

In comparison if you had created a working app instead, making even the smallest changes could require hours of work. Then you might have to get feedback only to find out that your latest changes need to be thrown away once more. Trying to create and design your app at the same time is a sure path to frustration. Prototyping your idea with Balsamiq means you can spend more time experimenting with your design until you finally get it right.

If you're creating a desktop prototype, you can just drag and drop user interface items like windows and dialog boxes directly on the screen. If you're creating a smartphone or tablet app, you can draw an iPhone or iPad image and place your user interface items within the confines of the fake iPhone/iPad screen.

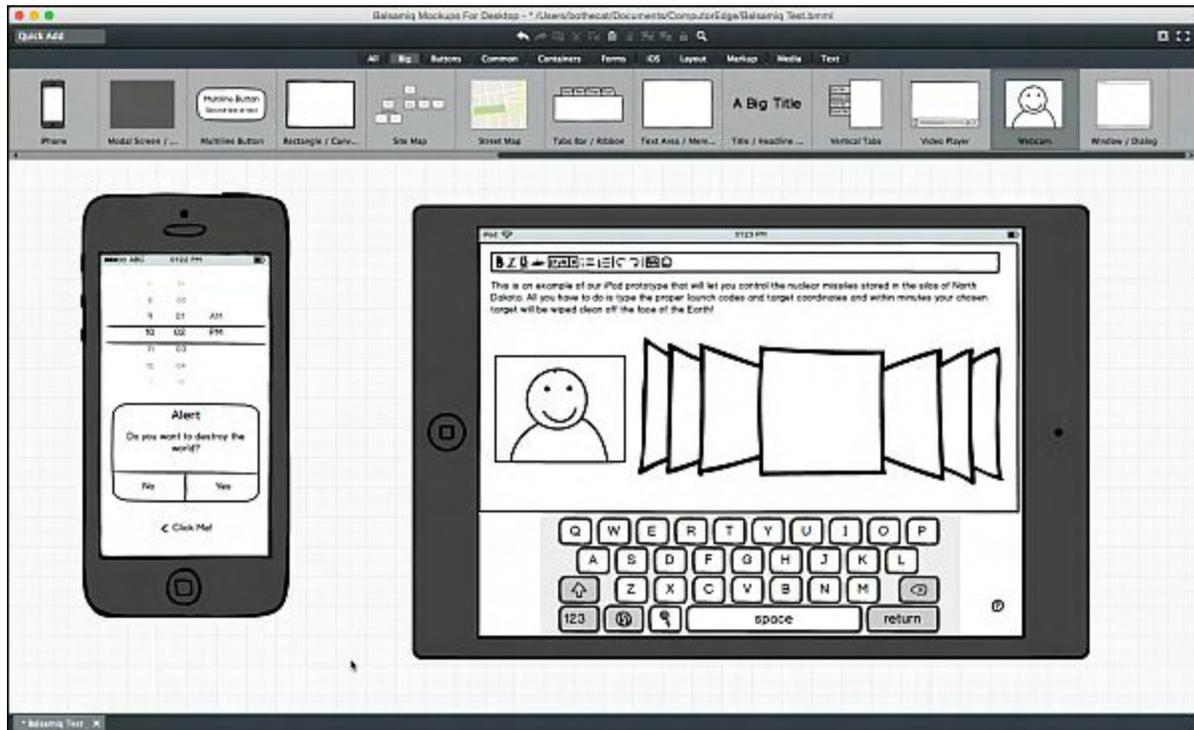


Figure 2. Balsamiq makes it easy to create iPhone and iPad prototypes.

By providing common user interface items that you can customize, Balsamiq makes it easy for anyone to rapidly create prototypes of their idea and share it with others. Save your mock prototypes as png graphic files, but for limited interactivity, create a clickable PDF file. Now when people view the PDF version of your mockup, they'll be able to click on buttons to see how the user interface of your design works.

Unlike many programs that require a steep learning curve before you can even do anything remotely useful, Balsamiq is amazingly easy for anyone to use. If you know the basics of dragging, dropping, and resizing items, you can use Balsamiq's library of user interface controls to design your next program.

Balsamiq runs on both OS X and Windows, but also offers a Web-based version as well. No matter which version you use, you'll find Balsamiq makes prototyping simple and fun, which encourages you to experiment with various ideas. The more ideas you explore, the more likely you'll find the exact design that will work for your idea.

If the selection of user interface controls provided by Balsamiq don't meet your needs, just visit Balsamiq's Web site where you can find plenty of community-donated wireframe images that you can use. By exploring these image libraries, you can even find images to help you design Windows 8, Android, or iOS prototypes.



Figure 3. The Balsamiq community offers plenty of additional wireframe images to help you create custom prototypes.

If you're a developer, you can't afford not to prototype your designs before starting to code. With a tool like Balsamiq, you can make prototyping the most creative and enjoyable step of turning a great idea into a great program. Once you have a solid prototype in place, then coding will be much easier and faster because you'll know exactly what you need to create, thanks to the simplicity and power of a prototyping tool like Balsamiq.



Figure 4. You can create detailed prototypes with community-supported image libraries.

## Microsoft Office 2016 for the Macintosh

The last version of Microsoft Office for the Mac came out in 2011. Now Microsoft has released a public beta of the new Microsoft Office 2016 for the Mac. If you're familiar with the user interface of Office 2011 for the Mac, you may be in for a surprise as Office 2016 for

the Mac looks and behaves mostly like Office for Windows. That means Office for Windows users should have no trouble using Office 2016 for the Mac.

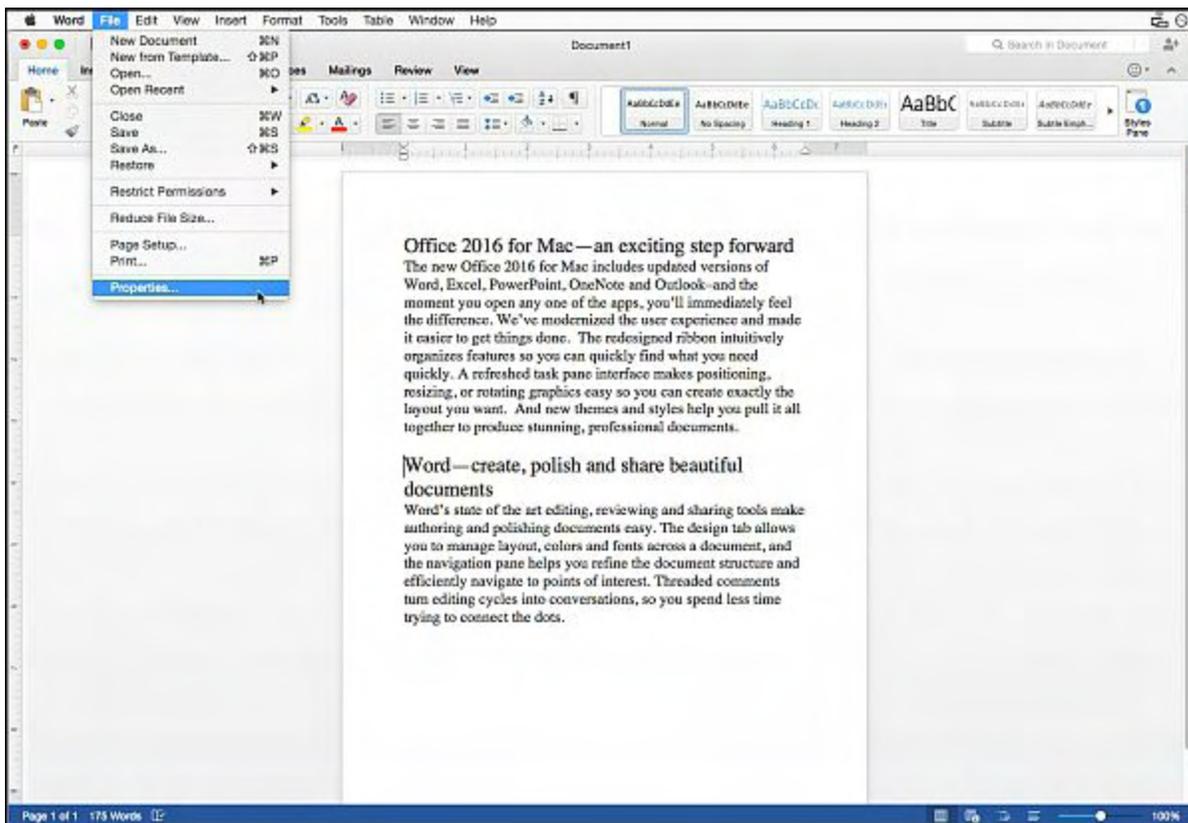


Figure 5. Microsoft Word 2016 looks and behaves like Word 2016 for Windows.

One particularly handy feature of Office 2016 for the Mac is that it uses both pull-down menus and the Ribbon interface, unlike the Windows version that forces everyone to use the Ribbon interface. Some people like the Ribbon interface but many others do not. By offering both the Ribbon interface with familiar pull-down menus, Office 2016 for the Mac gives you both. Since Office 2016 for the Mac and Office 2016 for Windows are largely identical, that's actually one more incentive for Windows users to switch to a Macintosh.

If you're interested in trying the beta version of Office 2016 for the Mac, download a [free copy](#). Just be aware that it's still beta and some features don't work so you don't want to use it for anything important.

Microsoft promises to release Office 2016 for the Mac in the second half of 2015, so if you need to stay within the world of Office file formats, you'll probably want Office 2016 for the Mac. Until then, try the preview and see what you think. Microsoft's goal is to keep everyone hooked on using Microsoft Office whether they're using Windows, OS X, Android, or iOS. Let's just hope that Office 2016 for the Mac will finally be equivalent to Office 2016 for Windows. If so, then that will just be one more reason to use a Macintosh.

## Intel's Woes

Intel recently reported a [disappointing quarter](#), blaming the slowdown of PC sales on Windows XP users who refuse to upgrade. That's likely part of the reason because how does Vista/Windows 7/Windows 8/Windows 8.1/Windows 10 make people more productive? If someone uses Excel on Windows XP, they won't suddenly become more productive if they use Excel on Windows 8.1.

Software always drives operating system upgrades. If a newer version of a program is compelling enough, people will gladly upgrade their operating systems to run the latest version of a necessary program. If a newer version of a program doesn't offer any compelling feature, people won't see a need to upgrade to this newer version.

In the old days, rapid advances in Microsoft Office encouraged businesses to upgrade to the latest version of Windows. Nowadays, most advances in Microsoft Office are minor so there's little reason to upgrade to the latest version of Microsoft Office. That also means there's little reason to upgrade to the latest version of Windows as well.

With fewer corporations buying new PCs, there's less of a need for Intel's latest chips. For many companies, a Windows XP PC still gets the job done. Upgrading to Windows 8.1 will simply cost time and money while creating possible incompatibility problems. In return for upgrading to Windows 8.1, corporations then have to retrain users to perform the tasks they already knew how to do with Windows XP. That means decreased productivity in return for additional expenses. Is it any wonder why PC sales have slowed?

## The Coming Wearable Revolution with the Apple Watch

On April 24, the world will finally get a chance to buy and use an Apple Watch. Once again, critics insist that the Apple Watch [will flop](#) because they see no compelling reason for it. Then again, many people saw no compelling reason for personal computers, smartphones, or tablets either. In fact, PC Magazine ran [an article](#) back in 2010 listing 42 reasons why a netbook was better than an iPad. Apparently none of those reasons translated into convincing people to continue buying netbooks.

A wearable computer is as different as a smartphone is from a PC. Smartphones solve problems that PCs can't. Likewise, wearable computers like the Apple Watch will solve problems that smartphones can't.

When you think how far computers have come from desktop units to laptops to smartphones and tablets to wearables, you can see that the form factor of computers keeps changing. Each time they change, they open up new opportunities, but only for people willing to open their

eyes. After April 24, you can see the effect the Apple Watch will have to change the world once more.

\* \* \*

Function keys are generally useless. That's why most keyboards assign hardware controls to function keys such as controlling the screen brightness or volume. However, sometimes you may want a function key to work like a function key. For temporary use, just hold down an Fn key when pressing a function key.

If you need to use function keys often, you may just want to reset the default behavior of your keyboard. To do that, click the Apple menu and choose System Preferences to open the System Preferences window. Now click the Keyboard icon and select the "Use all F1, F2, etc. keys as standard function keys" check box.

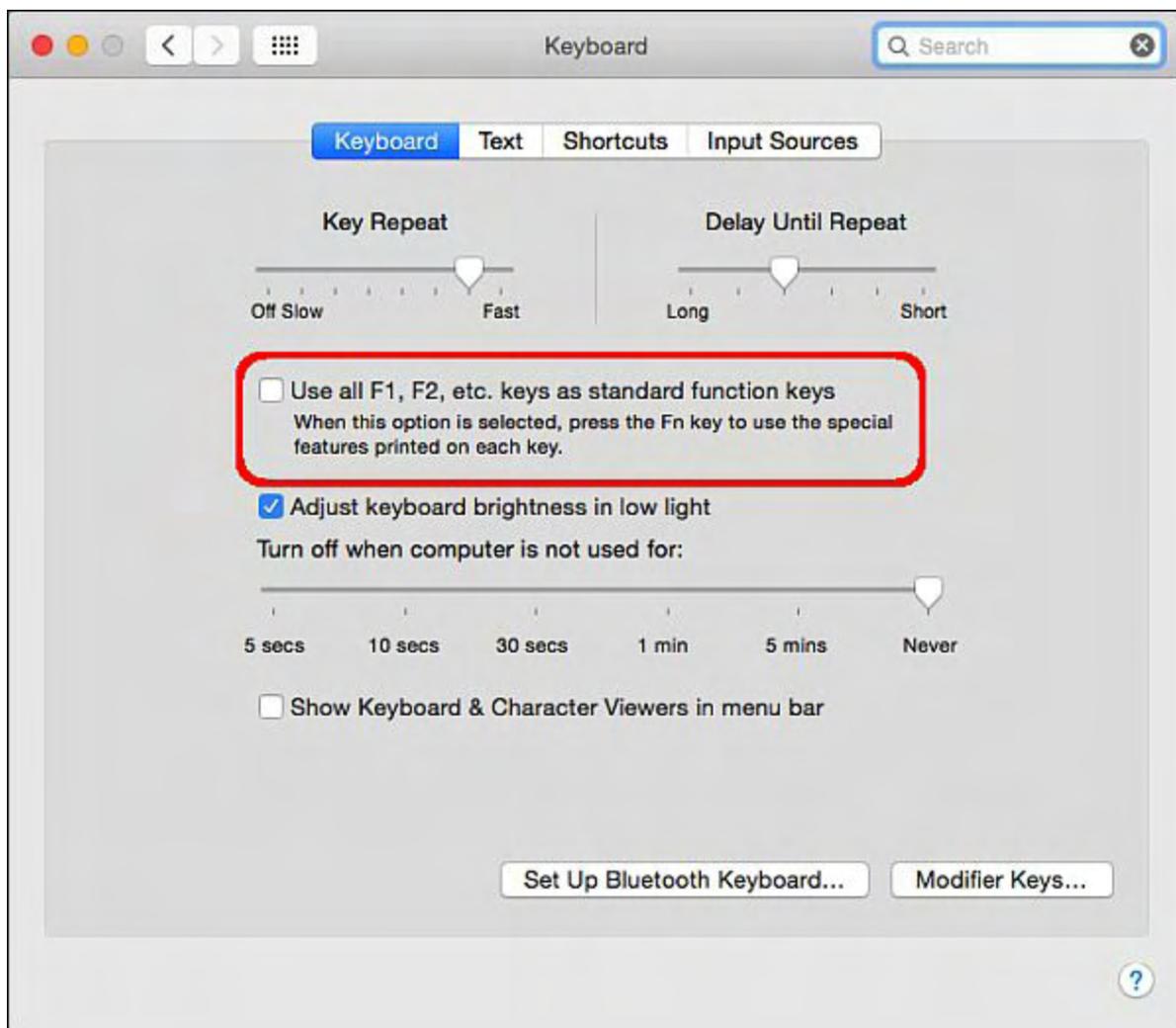


Figure 6. You can make function keys act like function keys.

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*In the early days, before Wally became an Internationally renowned comedian, computer*

book writer, and generally cool guy, Wally Wang used to hang around The Byte Buyer dangling participles with Jack Dunning and go to the gym to pump iron with Dan Gookin.

Wally is responsible for the following books:

[Microsoft Office 2013 For Dummies](#)

[Beginning Programming for Dummies](#)

[Beginning Programming All-in-One Reference for Dummies](#)

[Breaking Into Acting for Dummies with Larry Garrison](#)

[Strategic Entrepreneurism with Jon and Gerald Fisher](#)

[How to Live with a Cat \(When You Really Don't Want To\)](#)

[The Secrets of the Wall Street Stock Traders](#)

[Mac Programming For Absolute Beginners](#)

[Republican Fairy Tales \(Children's Stories the 1% Tell About the Rest of Us\)](#)

[The Zen of Effortless Selling with Moe Abdou](#)

[The 15-Minute Movie Method](#)

[Math for the Zombie Apocalypse](#)

[How to Write a Great Script with Final Draft 9](#)

[Making a Scene: The Science of Scene Structure.](#)

In his spare time, Wally likes blogging about movies and writing screenplays at his site "[The 15 Minute Movie Method](#)," finding interesting news stories about cats at his site "[Cat Daily News](#)," giving advice to authors who want to self-publish e-books at his site "[The Electronic Author](#)," and providing the type of advice he wishes someone would have told him when he was much younger at his [personal Web site](#). Wally can be reached at [wally@computoredge.com](mailto:wally@computoredge.com) or you can follow him on Twitter [@wallacewang\\_com](#).



## Editor's Letters: Tips and Thoughts from Readers

“Computer and Internet tips, plus comments on the articles and columns.” by ComputerEdge Staff

*"Free Windows 10 Upgrade," "Net Neutrality," "Web Programming"*

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### Free Windows 10 Upgrade

[Regarding Jack Dunning's March 6 [article](#), "Microsoft's Surprising Windows Move":]

I don't understand how this is a free upgrade. I get that it is free for the first year but then what? If I don't pay up does that mean I can't use my computer? Is it going to be a periodic service fee? Once it is on my computer what keeps Microsoft from extorting whatever price they want? I suppose I could image my Windows 7 and put it back on in the event Microsoft charges more than I think Windows 10 is worth. I have to ask myself do I even want to hassle it, after all Windows 7 is bought and paid for and works just fine. Am I missing something?

-Kurt Heffner, San Diego

*Hi Kurt,*

*I guess I didn't write that very clearly. I meant to say that the upgrade to Windows 10 would be free for Windows 7 users as long as it is completed within one year after the release of Windows 10. There is no additional charge or any expiration.*

*As for Windows 7 working fine, my guess is that there will be millions of Windows 7 users who won't upgrade. After all, "if it ain't broke, why fix it?" See "[Windows 10—The Last Version](#)."*

-Jack Dunning, ComputerEdge

### Net Neutrality

[Regarding the March 6 [Digital Dave column](#):]

Responses from my congressman and senator expressed doubts about FCC control. My response to them is "So do your job—make a law that works better!"

-Don Bishop, Golden Colorado

The Internet backbone was originally owned by the U.S. government—if I'm not mistaken. If that were still the case, it could likely control it in whatever way it pleased. But the government chose to privatize it, thereby relinquishing much control. You've made your bed, Uncle Sam, now you have to lie in it.

-Werner Maurer, Vancouver, Canada

## Web Programming

I've heard of Joomla, PHP, WordPress, etc. I'm wondering how does one choose a program and a programmer who specializes in one of these if they want to build a business system Web site and with customer interaction included?

-Paul Anthony, San Carlos

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