



## December 2013-January 2014

Visit our website at [www.pcs4me.com](http://www.pcs4me.com)

Ken Johnson, Newsletter Editor

# CALENDAR

SIG = Special Interest Group

### This Week's Schedule

January 18 - Saturday - 1:00-3:00 PM  
General Meeting - Leader: Ray Carlson  
Location: Prescott Public Library

#### Dealing with unwanted software

The focus for this month's General Meeting will be downloading unwanted software -- how to avoid it and what to do if it happens. We will start by describing the sites commonly used for downloading software you want and their apparent policies about adding in unrequested software or search engines or the like. We will also discuss how such extra software can be added when certain commonly used programs like Java are updated. We will demonstrate step-by-step how to avoid getting these extra programs and some common ways to eliminate them if you do receive them.

As usual we will encourage those attending to describe their own positive and negative experiences with such programs. The focus will be on programs added to sell advertising and the like, but we can also address downloading viruses if questions on that latter topic arise.

In addition, if time permits, Phil Ball will add some of his always useful Tips and Tricks.

In addition to the presentations, the following are typical events which take place at our General meetings:

- 1) We hold an informal Flea Market in which you are encouraged to bring in your excess computer equipment or software and make them available for others to enjoy at no charge. Please deposit give-away items on the table in the back marked "Free Stuff." Any items left here at the end of the meeting are subject to disposal.
- 2) If you have items that are just too good to give away, you may set up a separate table and hold your own sale.
- 3) We conduct a raffle of new computer items at the end of the meeting, so make sure to get a pair of tickets from whoever is in charge and place one on the item you'd like to win.
- 4) We will also accept your used ink and toner cartridges for recycling. They are turned in to Think4Inc for credits which PCS uses to purchase office supplies from them.

## Future Meetings

**January 25 - Saturday - 1:00-3:00 PM**

Joint meeting with [PMUG](#) (Prescott Mac User Group) - Leader: John Carter  
Location: Prescott Public Library

John will discuss managing and organizing photos in iOS 7.

**January 30 - Thursday - 6:00-8:30 PM**

[Board of Directors](#) meeting - Prescott Public Library; Elsea Room

All PCS members are welcome to attend but you are asked to first [contact Ray Carlson](#) in order to ensure that there will be room available for you.

## Recycle your old computer.

A volunteer organization in the Prescott area refurbishes old computer equipment and gives systems away to disadvantaged youths and seniors. The volunteers wipe your old hard drive clean, reformat the hard drive, and install a fresh version of Windows. No trace of your data is left on the refurbished systems.

Over the past several years, more than 600 computer systems have been given away through this program in the Tri-Cities area.

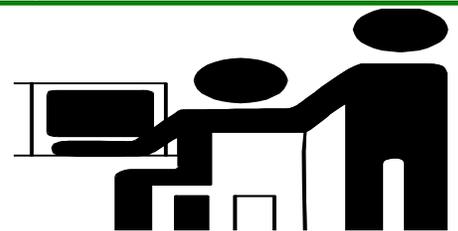
If you have computer equipment you can no longer use, please Call Jim Perry, 458-5058, or [perryjeb@gmail.com](mailto:perryjeb@gmail.com) and he will pick it up from your home. If you prefer to wipe your hard disk before you give the system away, he will provide a program for you to use.

*Note that these dates are correct at time of publication but are subject to change.  
Up to date information can be found on our website, [www.pcs4me.com](http://www.pcs4me.com)*

*Unless otherwise noted, our meetings are usually held in the  
Founder's Suite at the Prescott Public Library.*

## Prescott Computer Society

*Where you share  
what you know,  
and learn what you don't.*



### Prescott Computer Society Officers & Board of Directors 2012-2013

#### Officers:

President	Ray Carlson
Vice Pres	Phil Ball
Secretary	JB Burke
Treasurer	Edi Taylor-Richards

#### General Directors:

Joan Baum	Murray Smolens
John Carter	
Joan Fullmore	
Rich Knapfel	

## CD-R and DVD+R Longevity: How Long Will They Last?

By John Langill, Newsletter Editor, Southern Tier Personal Computing Club, NY

August 2013 issue, Rare Bits

Although there are today many data storage alternatives, I'm sure that there are many such as me who in the past stored various kinds of information on optical media, CD-Rs in particular. To cite just two examples; I have scanned hundreds of family slides, organized the digital images, and saved them on CD-Rs. Similarly, I did the same with several hundred of digital photos from my two-month visit with my son and daughter-in-law in Australia in 2003. The purpose of doing so was to have a convenient form in which archive the digital images and to share them with other members of the family; while at the same time conserving space on the hard-disk—then a more precious commodity than it is today.

Thinking back 10 or more years, one may recall that a single CD-R then offered a relatively large data storage capacity in a form that could be easily and inexpensively mailed anywhere in the world—something that could not be accomplished via the Internet or with other “portable” media at the time.

While acknowledging that the images stored on these CD-Rs—and others even older—could now be transcribed to another medium, I confess that I'm reluctant to devote the time and effort to doing so at this point. Accordingly, the durability and life-expectancy of the CD-Rs that I created 10, 20, and even 30 years ago, has become an increasing concern.

In the early '90s when the first CD-R discs were introduced manufacturers said the media had a data life in excess of 40 years. In the late '90s when the first DVD-R discs appeared on the scene producers proclaimed a data life of at least 100 years. However, in the time since their introduction it has been discovered that these early discs are susceptible to media “rot” (i.e., “bit rot”) that can eat your information—audio, video, or data—in as little as two years after it is written. (According to research fairly recently conducted by J. Perdereau, CD-Rs may have an average life expectancy of not more than 10 years—*Journal de 20 Heures*, March 2008.)

Because CD-R and DVD+R media is used to archive nearly everything today, it does make one worry;

especially if these discs are the only repository in which your precious, and irreplaceable, family memories— photos and movies—as well as vital family, personal, and company data/documents are stored.

So where does the truth lie? Somewhere across the complete spectrum.

Most people who successfully burn a disc believe they have quality media. Unfortunately that only tells you the disc will be compatible (able to be played) in the vast majority of CD or DVD players. More importantly all better quality CD and DVD burners include technology called over burn/under burn protection making “coaster production” a thing of the past. The basic construction of both disc technologies enable you to burn your data in a very precise, very controlled manner.

### Test Options

There are only two foolproof ways of proving the data life of the discs you use:

1. Write a few CD-Rs or DVD+Rs, then wait about 25-50 years and check if they still hold the correct data.
2. Use a CD/DVD analyzer that is specially designed to retrieve very accurate information about your media and your data after accelerated aging in test chambers where the discs are subjected to excessive temperature and humidity tests.

The first is typically impractical. Nonetheless, from personal experience I can attest to the fact that the first CD-R I ever burned—selections from a vinyl LP album—plays just fine and the music still sounds great 25 years later. However, I have also had some CD-Rs become unplayable in just a matter of months. Fortunately, such occurrences have been few.

The second provides only theoretical limits and doesn't take into consideration how you use, handle, and store the media. However, even assuming proper handling, temperature and humidity can adversely affect the data-life of even quality media.

Between the CD-R discs produced in the early 1980s and today's double-layer DVD+R discs there has been considerable progress in write performance, capacity, quality, and cost.

Following the test procedures of the International Standards Organization (ISO), quality media manufacturers have been able to predict data-life spans ranging from

*Continued from pg 3:*

50-200 years. But keep in mind there are wide differences between low-budget media manufacturers and quality media manufacturers. In addition variations in manufacturing methods, materials and processes/procedures can dramatically affect the data life of the media you use. Or as auto manufacturers like to say... "Your mileage may vary."

### **Understanding Your Discs**

It isn't vital that you understand the construction of CD-R or DVD+R media to produce a quality disc that can be read years from now any more than you need to understand the internal combustion engine to drive a car. But understanding the difference between quality and cheap media may help you avoid losing family photos or videos later on.

Most people consider DVD+R discs little more than overgrown CD-Rs but, while they are similar, they are also quite different. In particular, the grooves are narrower and more closely spaced and the structure (pattern) of "pits" and "lands" is very much smaller with a DVD+R in order to enable a greater data storage capacity. Precision is very critical.

Writable CD-R and DVD+R discs start with a piece of polycarbonate substrate into which very precise grooves are molded to guide the tracking of the laser beam. A dye layer is then precisely applied to the substrate followed by a reflective layer and one or more protective layers. A few of the leading media manufacturers have initiated the policy of applying two very resistant layers for added data protection when the discs are used, handled, and stored.

Because of the faster read/write performance users now expect, leading manufacturers have developed new stamper technology for optimum groove (storage area) shape and ultra-precise molding technology. The molding is critical when the media must withstand being rotated at extremely high speeds during the write process—up to 52x for CD-Rs, and 8x to 16x for DVD+Rs. The engineering margin that was once reserved for manufacturing tolerance has been used for data capacity instead, leaving no tolerance for manufacturing; for these discs to be truly compliant with the Orange Book standard, the manufacturing process must be perfect.

### **Media Problems**

The quality of your media is directly related with the time the media will last without losing information. As you can see there are a number of areas where manu-

facturers can shave a few cents in the overall cost of the media and areas where production can go amiss to dramatically shorten the data life of your stored information.

There are conflicting claims and consumer beliefs on which media is best for data retention of 30, 50, 100 years—green, gold, or blue dye; and gold or silver reflective layer. It is somewhat immaterial today. Manufacturers of quality writable discs have developed significantly improved, more sensitive and more stable dyes, and better reflective materials that virtually eliminate data loss during high-speed read/write processes and enhance long-term reliability.

CD and DVD rot (i.e., bit rot) is not the problem today that it was with earlier LaserDiscs because the media use different dye technologies to store data and make it much less susceptible to that kind of degradation. The truth is that deterioration arising from delamination and oxidation is the greater problem.

Delamination and oxidation usually occur at the outer edge of the disc and are often the result of the adhesive not being properly applied and cured during the production process. This usually happens when price-oriented manufacturers use equipment that is 2 to 3 generations old and the least expensive materials possible.

When it does happen the laser is unable to read the data on the reflected layer. It is usually caused by:

- Oxidation when air comes in contact with the reflective layer
- Galvanic reaction between the layers and coatings
- Chemical reaction caused by impurities in the disc's adhesive or aluminum coating.
- Excessive heat and humidity are known to accelerate and exacerbate delamination and oxidation.

### **The Real Culprit**

If you have purchased quality media from a quality manufacturer, you are still not assured of 50-100 years of data life!

The greatest danger to the data longevity of your personal, family, and business information is you alone; that is, by the way you handle and store your discs.

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The environment—temperature and humidity—can stress the materials. Gravity also can bend and stress the discs. Fingerprints and smudges can do more damage than scratches.

But by following a few Do's and Don'ts you can ensure your precious family and friend pictures, movies, family records, and business files have the maximum data life.

**Do not**

- Touch the surface of the disc.
- Bend the disc... especially when removing it from its case as this can cause a fine crack to develop at the rim of the hub-hole which will render the disk useless. This is a particular problem with DVDs.
- Store discs horizontally for a long time (years).
- Open a recordable optical disc package if you are not ready to record.
- Expose discs to extreme heat or high humidity.
- Expose discs to rapid temperature or humidity changes.
- Expose recordable discs to prolonged sunlight or other sources of UV light.
- Write or mark in the data area of the disc (the shiny side that the laser "reads").

Clean in a circular direction around the disc.

**Do**

- Handle discs by the outer edge or the center hole.
- Use a non-solvent-based felt-tip permanent marker to mark the label side of the disc.
- Keep dirt or other foreign matter from the disc.
- Store discs upright (book style) in original jewel cases that are specified for CDs and DVDs.
- Return discs to their jewel cases immediately after use. Because the label side is more delicate and susceptible to damage, I recommend storing any CD or DVD disc label-side down in its jewel case.
- Leave discs in their spindle or jewel case to minimize the effects of environmental changes.

- Remove protective wrap only when you are ready to record data on the disc.
- Store in a cool, dry, dark environment in which the air is clean—relative humidity should be in the range 20% - 50% (RH) and temperature should be in the range 4°C - 20°C (approx. 40 to 70°F).
- Remove dirt, foreign material, fingerprints, smudges, and liquids by wiping with a clean cotton fabric in a straight line from the center of the disc toward the outer edge.
- Dampen the cloth with a lens cleaner to clean your discs. Dry with photo lens tissue. For tough problems use Windex or a similar glass cleaner, diluted dish detergent, or rubbing alcohol. Rinse and dry thoroughly with a lint-free cloth.

Check the disc surface BEFORE recording.

**Reliable Medium**

There is a lot of cheap CD-R and DVD+-R media that has marginal quality. For some applications like games, quality isn't critical. For irreplaceable, vital data like family photos, special events, vacations, and family/friends memories quality does matter. If you are backing up mission-critical data on your home or business computer, quality matters. Then it is important to select a brand of media that will keep your data safe, secure and available for years to come.

Quality and low prices just don't seem to mix!

The next step to long-term data reliability is to handle and store the media with the respect your data deserves.

Cory Adams  
Bill & Anne Brye  
Dodd Norman  
Diane Nichols

Barbara Huey  
Roger Kneisl  
Dave Rothgery

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## Your humble editor has decided that you deserve extra pages of this outstanding publication due to the lack of December meetings and Messenger Publication.

Enjoy these words of wisdom and use them wisely.

### Free Internet Faxing Services: No Fax Machine Required!

by Bob Rankin, Ask Bob Rankin

[www.askbobrankin.com](http://www.askbobrankin.com)

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<http://goo.gl/Jhh9XE>

Dump your fax machine, the Internet has made this dinosaur obsolete. Think of the savings on toner, paper, and time when all you really need these days is a cell phone, PDA, or PC. I have a big list of sites for you that offer free Internet faxing services. Some of them are completely free, while others offer free or limited trials. Pick the online fax service that suits you best...

**FaxZero** lets you send free faxes from a simple web-based interface. Just enter the sender and recipient info, type in your message, and hit the "Send Free Fax Now" button. The rich-text editor lets you add basic formatting, highlighting and fonts to your text. You can also fax a file from your hard drive.

Supported file formats include PDF, Microsoft Word (DOC, DOCX or RTF), Excel spreadsheet (XLS or XLSX), image files (PNG or JPG), TXT, HTML, and PowerPoint (PPT). You can attach multiple files, but the combined size of all attachments must be 20MB or less.

And yes, it's really free to send a fax to anywhere in the USA or Canada. You can send five free faxes per day, each with a maximum of three pages. No ads are inserted on your faxed pages, but the FaxZero logo will appear on the cover page of your outgoing fax. You can even use FaxZero to fax your U.S. congressperson or senator. I've written more about FaxZero in my Send a Free Fax article.

**GotFreeFax** is basically a clone of FaxZero, with some minor differences. You can send 2 free faxes daily to the USA or Canada, with a 3 page per fax maximum. No ads or branding appear on the cover page.

GotFreeFax supports PDF, Microsoft Word, Open-Document Text (.odt), and Rich Text (.rtf) file formats only. One unique feature is the ability to substitute tokens in the message, such as {RECEIVER\_NAME}, {RECEIVER\_COMPANY}, and {RECEIVER\_FAX}.

**PamFax** is another free faxing service that offers 3 free outgoing pages (after signup) with no ads. You can also get a free fax number for inbound faxes. PamFax has an address book for convenience, integrates with Outlook, and works with popular cloud services such as DropBox, Google Drive, and SkyDrive.

**PopFax** is yet another free fax sending service. Like the others, you can input a brief text message, or upload a document from your hard drive. But I can't recommend PopFax for several reasons. In the Terms of Use on their website, it says that PopFax does not guarantee "the possible alteration of the data sent by the User nor the service availability." It also says they are not liable for damage "following to an alteration of the User data transfer." This could be badly translated legal mumbo-jumbo, but yikes! Also my Chrome browser crashed when trying to send a DOC file with PopFax. On another attempt, it said my fax number was "invalid." After sending a test fax to another number, it never arrived. Of course, your mileage may vary, but with so many other choices, I'd steer clear of PopFax.

**Sign up with K7**, a messaging system that will send free faxes and voicemail to your email address, with an option to view or listen to your messages via the web. You get a free fax/voicemail number which you can give to your family, friends, and business buds. Just sit back and wait for the faxes to start dropping into your inbox as email attachments. If a K7 number is inactive for 30 days (no incoming voice or fax messages), it will be terminated. K7 cannot be used to send outgoing faxes. My companion article Free Inbound Faxing goes into more detail about Faxaway, an almost-free service that forwards incoming faxes to your email. My companion article Free Inbound Faxing goes into more detail about Faxaway,

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an almost free service that forwards incoming faxes to your email.

**eFax** claims that they are the largest online network on the planet with over a million subscribers in 2,500 cities and 27 countries. Also known as Zipfax, you can send and receive faxes as email attachments. You simply use the recipient's fax number and eFax's address. The 30-day freebie allows you to send or receive up to 150 pages. If you don't cancel during the initial month, you will be charged \$16.95 per month. See also Free Inbound Faxing for more details on eFax Limited Accounts, a free service that forwards incoming faxes to your email.

**Nextiva Fax** offers a 30-day free trial, including 500 free faxes. Send a fax by email, or send and receive faxes from Microsoft applications. Instead of hitting the print button, simply select "fax" right from Word, Excel, etc. Nextiva also lets you send and receive faxes from mobile devices. After the trial period, you'll be \$8.95 per month, unless you cancel.

**RingCentral** is designed for small businesses, not only can you receive and send faxes via email, they can supply you with toll-free fax numbers, custom greetings, an auto-receptionist, voice-mail, and multiple extensions. The company offers a 7-day free trial, during which you get 500 free fax pages. After the trial period, you'll be \$7.99 per month, unless you cancel.

I couldn't find a smartphone app that sends free faxes. There's an app called scanR that's supposed to do that, but apparently it's defunct.

**CamScanner** is a free app that turns your iPhone or Android smartphone into a scanner, fax machine and PDF creator. Take a picture of a document, receipt, business card, etc. CamScanner turns it into a searchable PDF that you can fax, print or upload to various cloud storage services. Faxing costs 99 cents per page.

### It's time to renew your dues

if you haven't already done so.

The good news: **again this year, dues are only \$24.** Please make checks payable to "PCS" and present them to any Board member (gold nametag).

## How to Find a Lost Document & Other Filing Tips

By Nancy DeMarte, 1<sup>st</sup> Vice President, Sarasota PC Users Group, FL

August 2013 issue, PC Monitor

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I suppose you're thinking this could never happen... until it does. You have a large number of folders full of documents and photos on your computer. One day you need to find a letter that you wrote and saved a week ago, but can't remember what name you gave it or which folder you saved it in. Here are some ways to find that document:

Look in your Recent Documents list: Open Word 2010 or 2007 and click File, and you will see a list of documents you opened recently. If you haven't opened more than about 20 documents since you saved the letter, it will be on the list. If you find the letter, you can open it from the Recent Documents list. But before you do that, it's a good idea to take note of its "path," so you'll know exactly where it's stored. The path of a document file in Word 2010 is shown below its name in the Recent Documents list. It is represented by a string of folders, starting with the largest folder, My Documents, and ending with the sub-folder in which the document is stored. As shown, the path for this article is "My Documents\1 SPCUG\Office Talk Column\ Files and Folders." In Word 2007, the path is missing in the Recent Documents view, but with a few steps, you can find it. Open Word 2007 and click the Office button to open the Recent Documents list. Click a recent document to open it. Then click Office button – Save As. In this window the path of the document appears in the address bar across the top. The last folder in the string of folders is where the document is stored.

You can keep or "pin" any Recent Document to the list for easy future access by clicking the pushpin icon next to it. You can also right click a recent document in Word 2010 and select "Remove from list." Recent files lists exist in most 2007 and 2010 Office programs.

Search your computer: In Windows 7, click the Start button at the left end of the taskbar, then type in the search box one or more words which you guess are part of your lost letter's name. If your guess is correct, the letter should appear in the Files list and can be opened

from there. Sometimes, however, a Windows 7 search does not find files stored too deeply in sub-folders. Windows 8 offers a more targeted search. Open the Charms from the Start Screen and click the category of item you're looking for, such as Mail or, in this case, Files. Then type your search words in the Search box. This tool searches inside all levels of sub-folders in the category and returns a list of possibilities. It searches not only file names, but also the body of the document.

**Make use of File Views:** The contents of any folder on the computer can be viewed in various ways, but some views fit certain kinds of files better than others. It's easiest to find a document in a file list using the Details view, which is a list which includes File Name, Date Modified, File Type, and Size. A photo is best viewed as an Icon or Tile, which shows a thumbnail of the photo, its name, and file size. To change the view of a file list in Windows 7, open a folder, then click the Views icon at the right end of the menu bar. By moving the slider, you can preview how different views affect your list before making your selection.

If your letter does not appear in Recent Documents and is not found with a Search, you can open My Documents and scroll to the bottom of the list of folders to see unfiled documents. If it isn't there, then open a sub-folder where you guess it might be. Set the view to Details, and sort the list by Date Modified, which will put recently opened files at the top of the list. To sort, click the heading of the Date Modified column. Reverse the sort order by clicking the heading again. File names sort alphabetically; dates chronologically.

**Add folders to your Favorites:** Much like the Favorite websites list you keep in your Internet browser, Windows provides a convenient spot for you to park folders that you open frequently. Open Libraries. In the Explorer Window, at the top of the navigation pane on the left, you'll see a section called Favorites. A few folders are listed there by default, but you can customize this list with your own folders. I keep my SIG Schedules and Office Talk Column folders there because I open them frequently, and because opening a Favorite folder takes only one click. To add a folder to Favorites, make it visible in the main Explorer window (but don't open it), then click and drag it left onto the word Favorites, or use Copy and Paste. A Favorite folder is synchronized with the original one. Whenever you make a change to files in the original folder, the change will also appear in the Favorites version and vice versa. File Management is one of the most diffi-

new version of Windows changes the system just enough to cause confusion.

The more you understand how files and folders are stored and organized on your computer, the more control you'll have of your documents and other important files. You won't have many lost documents, either.

### Nomad Bag

Review by George Harding, Treasurer and Program Review Chair, Tucson Computer Society, AZ

June 2013 issue, TCS eJournal

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Many of us have a laptop, which makes us mobile, but we need something with a convenient handle in which to carry our laptop to keep it from being dropped, damaged or scratched. Enter the Nomad bag from STC! Here is a perfect solution to all these

problems. This bag provides a nifty laptop sleeve which fits most 15" laptops and has a protective interior so you don't get scratches on the screen.

That's not all, by a long shot. This is a beautifully tailored, strong shoulder bag with many pockets for storage of all your stuff. The exterior is a pleasing tan color (also comes in black and gray) and the quality construction is evident.

The outside has a zippered pocket in the cover flap which opens to provide 5 pockets, as well as a storage space for those things you may need to get to easily.

At the top is a carrying handle or, if you wish, a shoulder strap with a comfy pad for your shoulder.

The backside has a zippered opening from which you can extract the laptop sleeve. It's easier to get the sleeve out from the inside, though. The cover flap is fastened by two C-shaped metal fasteners that hook easily into two loops extending from the cover flap.

Inside is a wealth of opportunities to store stuff! As you lift the cover flap, there are two fairly large

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zippered pockets with two more pockets behind. Further inside is the laptop sleeve, a sturdy black zippered container for your laptop with padded interior and carrying handles for either end-wise or top-wise carrying. There is also an outside pocket for papers. In addition to the laptop sleeve, inside there is one large space for,

perhaps, a folder and a smaller outer pocket for a small tablet or smart phone.

This is one fine bag, fully equipped for any challenge to which you may wish to put it!

The manufacturer also offers many other products of a similar nature, designed to carry your laptop, mobile device and your stuff: backpacks, laptop bags and sleeves, and carrying cases for a whole range of devices.

About: Nomad Bag

Vendor: [www.stmbags.com](http://www.stmbags.com)

Price: \$86 to \$130 online

### **Need Help With Computers?**

Did you know that the Prescott Public Library has a program of Computer mentoring on a one-on-one basis? They have several experienced volunteers who will work with you using one of the Library computers.

All you need to do is make an appointment with either the "Ask a Librarian" personnel or go to <http://www.prescottlibrary.info/>.

## How to Write, Publish and Promote Your Book for Free Using Technology

By Bohdan O. Szuprowicz, Member, Sarasota PC Users Group, FL

July 2013 issue, PC Monitor

[www.spcug.org](http://www.spcug.org)

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Millions of people all over the world want to write and publish a memoir, a novel, or share their grandmother's favorite recipes. They spend months and years chasing agents and publishers only to face endless rejections.

But times have changed. The latest technologies make it possible for anyone who can get on the Internet to become an author, publisher, and promoter of anything he wants to write, whenever he wants to do it, and all without spending any money in doing so.

All you have to do is write your stuff, edit it, and follow instructions of various services to format your text, design a cover, price the book, select a publicity program, and boast about your achievement to book review editors, on Facebook, Twitter or your own E-mailing lists.

Yes, all those functions are being offered to would-be authors at a price by masses of editors, agents, consultants and promoters. They took the trouble of reading the instructions and now they try to cash in on it. You do not need them if you follow the instructions yourself.

The simplest way to start is to go to Amazon's website, which is the largest online seller of books. You are looking for Kindle Direct Publishing (KDP) which will provide you with a free instruction booklet how to format your manuscript in Microsoft Word for publication by Amazon as a digital book. So you just write your book in Word and follow simple instructions about spacing, page ends, chapters etc. Once your manuscript is finished you follow the instructions how to publish it on Kindle and that's all there is to it.

You also set the price that you may vary at will as time progresses. Amazon sells your book and you get a royalty of 35% to 70% depending on arrangements. There are close to 2 million titles on Amazon so it's important that your book has a

cover that is distinctive and attractive to readers. You can design your own cover using Picasa collage functions which is also free. It offers hundreds of fonts and colors and you can include any photographs or images you like. The important thing to remember is the fact that on the screen of a tablet or an E-reader these covers are thumbnail-size. As a result you should make sure that the size of title lettering and colors are contrasting and show up clearly in black & white on many E-reader devices.

Once your book is on Kindle you want to let the world know that it has been published and where to find it. If you stick to digital publishing there is no problem of distribution or costs of sending the book by mail. It is delivered via the Internet to the buyer who can read it on about a dozen devices such as E-readers, iPads, PC's, iPhones, and various smart phones.

There are several publicity websites that can be used to announce the publication of your book. Most offer a basic free service as well as paid versions depending on distribution requirements. Once you follow instructions of a press release site you can also include the image of your book cover and send the whole package to book review editors, TV or radio talk show producers, and your personal E-mail lists completely free of charge.

Better still, the URL's of such press releases can be copied and simply pasted into other messages you are sending out. PRLOG is such a service used by the author and examples can found at <http://www.prlog.org>

Twitter and Facebook are the two most popular social media services that you can use freely to promote your book. Although Twitter allows only 140 characters per tweet, you can easily include the URL of your press release and also another link to an image, which may be a Picasa collage of your book cover, prices and reviews, as well as author biography and a photograph of yourself with your pet alligator. You can also use the Twitter search window to send such promo packages to selected recipients like your preferred talk show hosts, and book review editors, many of whom maintain distinct Twitter accounts. Other social media like LinkedIn, Pinterest and such, can also be used in providing free publicity for your book.

In short, the technology is here to be used and most of it is free. What it means is that anyone can become a published author literally overnight.