After the crash

Computers are great. Really great. Well, really great until they stop working. Then they are a really great big pain. Everything was going well then all of a sudden Barbara can no longer send email, Alan can send emails but not receive, Mary can't print, and Stevens PC crashes to a blue screen with a gobbledygook error message. And, strangest of all, when you ask any of them if they messed with the computer just before the problem appeared, the answer is always "no". So you do the only thing you can and call in a tech support guy. He fiddles around with it for a few hours and manages to get it all going again, and all is well again. Well, until the next time something goes wrong.

Have you ever wondered how large corporations manage this problem? How do they keep say 8000 PC's all humming along 24/7? Do they have a huge "PC workshop" somewhere full of geeks who beaver away day and night feverishly repairing these things, trying out "this latest driver" or "that latest update"? Well of course they don't. Corporations manage computers very differently to home and small business users, and they never waste any time fixing messed up computers.

They do this by following two simple rules:

- Rule 1: No data on the desktop
- Rule 2: A standard PC image

"No data on the desktop" means that ALL files employees work with are saved or synchronised to a shared drive on the cloud or an internal server on the local network. Following this vital rule means that it no longer matters if the particular PC a user is working on suddenly stops. IT support simply give him or her another one and that user pick up from where they left off. No data is lost because none of it was ever stored locally on that PC.

"A standard PC image" means that corporations make a standard pre-built image of a computer that has all the software their employees need (Windows, Microsoft Office, Chrome, Adobe Reader, etc), and then constantly re-use this one "gold" image to transfer onto every new (or broken) PC. If any PC starts giving any trouble all, they do not waste a minute trying to fix it – they simply blast the standard image back onto its hard drive, overwriting everything that was on it. No questions asked! Because they follow rule 1 (No data on the desktop) they know that there is no risk of data-loss when they reimage.

Some companies take this one step further. When a user logs in in the morning, if any changes are detected on the hard drive the computer automatically reimages itself right there and then, and a warning letter is sent to the employee (and cc'd to HR)!

So there you have it – that's how the big boys do it. But what about your average kiwi business – could any of this be useful to us?

Even without the resources of a large corporation, NZ has such good internet connectivity that the first rule is quiet easy for us to implement. Make sure everyone in your business is saving his/her files to a central location. There are many cloud-based options out there that are cheap, secure and reliable, such as Dropbox, OneDrive and Google Drive. These solutions are also easy to use. For instance, Dropbox just clips into file explorer and works just like a normal drive! These cloud-based storage options give the

added bonus that your files are now also readily available from your mobile phone. If you feel you need a bit of help, your IT support person can help you with setting this up.

The second rule, ""A standard PC image" is a bit more problematic. I can almost hear you protesting about this. You are saying something like "Jon, you don't understand. My small business does not have an IT department capable of managing computer images, and furthermore one standard image will not work for us because just about everyone uses different software! Peter uses Photoshop, Bob uses MYOB, and Marg has a special CAD program"

You're absolutely right. The "one size fits all" standard image approach just does not work for small businesses, but we can adapt it to fit. Instead of having a standard image, why not make a complete backup image of every single computer in your business? These images can either be stored on the hard disks of each computer, or better yet on an external drive that is stored off-site (in case of fire). You might also decide to refresh these images once every year or so to keep pace with Windows updates and other system/software changes you may have made.

There are lots of products out there that can do this sort of thing, for instance Deep Freeze, Acronis True Image, Paragon Hard Disk Manager 15 and Macrium Reflect. Most of these products will allow to you perform a "bare metal recovery", meaning they will put the PC back how it was before it crashed, even if you have installed a brand new hard drive! Again, if you feel you need a bit of help, your IT support person can help you with setting this up and including it as part of you standard operating procedures.

A bit of disaster recovery planning and setup now, could save you many hours of wasted time and avoidable expense further down the track.