



## Lesson 1 - Your Online Toolbox

On completion of this lesson you should be able to:

- Understand the key software and equipment required for running an online business
- Understand what a browser is
- Understand what a search engine is
- Understand the difference between internet speeds including bandwidth, downloads and uploads
- Be aware of key Government websites from where you can get support to run your online business and important security information
- Understand the importance of regular back-ups

Welcome to your first lesson!

If you were a builder, you wouldn't dream of starting work on a construction site without the right tools in your tool kit, your builder's belt strapped on and of course having undergone all the necessary safety training and ensuring you were wearing safety equipment too!

Similarly, we can't have you start an online business, or start working on your existing online business without having your 'toolbox' in place.

In this lesson, we will be looking at all the appropriate tools and equipment you must have in place order to use the internet confidently and safely.

We will also give you small quizzes throughout the program content to test that you are capturing key concepts.

Even if you are already using lots of online tools, we encourage you to complete the lesson as you may get some ideas on new tools you can try or gain insights or updates to things you are already familiar with.

## Equipment and Software

In order to run a successful online business you will need:

- A reliable internet connection, at an acceptable speed (more on this in a future lesson)
- A computer that can connect to the internet and function reliably, and at an acceptable speed. As a general rule, computers over 3 years old don't have processors that are fast enough to keep up with modern software
- Software on the computer that allows you to complete core business tasks including sending emails, browsing the internet and opening files
- Software that protects your computer and any other internet enabled devices from viruses & spyware
- An appropriate email account
- Knowledge of how to use the equipment and software efficiently

Some of you will already have these things in place, and some of you may be starting from the very beginning. Regardless, it is a worthwhile exercise to review the current status of each of the items above to make sure you are well equipped to continue your business, and this program successfully.

If after completing this lesson you are feeling overwhelmed (or at any point during this program), please don't forget you can access the incredible team of mentors who are available to assist you on your journey.

We also encourage you to surround yourself with a team – this could be your staff or other industry specialists – that you can delegate to concerning areas that are outside of your ability and available time. There is a lot to do to achieve online success, and it doesn't have to be you and only you that does each and every task.

### Tips for choosing hardware and software

- Keep your business and marketing objectives front of mind when evaluating what may be relevant to you
- Take your time and if you have a choice of suppliers – shop around
- Negotiate the best deal possible (don't be afraid to walk away!)
- Consider who will install your hardware before you purchase it – you may need assistance
- Carefully research support, warranties and/or money back guarantees

## Getting Mobile

More people are accessing the internet through their mobiles and internet enabled devices than ever before. If you are serious about your online business succeeding, we'd highly recommend that either you upgrade to a mobile that will allow you to access the internet and emails on the run, OR you consider it when your current plan expires.

Like accessing the internet via a computer, there are some risks associated with accessing your emails or internet via your mobile, however it's certainly not a reason not to do it!

### EXERCISE

a) Make some inquiries with your current mobile phone company as to what your options might be to upgrade to a phone which has email and internet access, now, or when your current plan expires. Evaluate the costs and benefits in relation to your own business.

b) [Find out how to secure your mobile](#)

## What is the NBN?

The Internet is the system that ties together millions of computers like yours into a network over telephone lines, cables and satellites. The system is made up of hardware, software, lines and cables, and the laws, rules and conventions that enable the hardware and software to work, most of the time.

Broadband is not the same thing as the internet. Think of the internet as a city. Broadband is the highway leading there. If it is wider, it allows you to get to the city (the internet) faster.

The internet is a collection of networks and computers all joined together using the same basic communications technology. A broadband service is simply a fast, always-on way of linking your premises to the internet and other services.

The Australian Government committed to investing in the infrastructure necessary to deliver faster internet speeds across Australia through what is called the NBN or National Broadband Network. The original plan was that 93 per cent of Australian homes, schools and businesses will have access to the NBN through optic fibre to the premises, capable of

providing broadband speeds of up to one gigabit per second and that the remaining 7 per cent of premises will have access to the NBN through next-generation fixed wireless and satellite technologies, providing peak speeds of 12 megabits per second, which is 4-5 times faster than it currently is.

With the change of Federal government, NBN Co was forced to rethink its plans when the Coalition vowed to scale back the national fibre rollout. To read about the current plan for the NBN rollout see: [http://www.communications.gov.au/broadband/national\\_broadband\\_network](http://www.communications.gov.au/broadband/national_broadband_network).

Want to learn more about the NBN? [See http://www.nbnco.com.au/](http://www.nbnco.com.au/). You may also like [to view these FAQs about the NBN](#).

## Web Browsers

A web browser is the free program that you use to view websites. Each browser has slightly different features and for this reason some people prefer one web browser over another.

The most common web browsers are listed below, however web browser popularity is ever changing, and to some degree, which browser you choose to use is really just personal preference:

**1. Internet Explorer (IE)** - is a web browser made by [Microsoft](#) and included as part of the Microsoft Windows line of [operating systems](#). Many people are familiar with this browser which is the blue 'e' which features in your task bar if you are using Microsoft products. It has been the most widely-used web browser since 1999 however in January 2010, the Federal Government issued warnings about Microsoft's web browser Internet Explorer, which has come under attack from hackers. The French and German governments warned internet users in Europe to avoid Microsoft's popular web browser. Whilst web users can install temporary fixes from Microsoft to reduce their risk, we encourage you to avoid it completely. Don't believe us? Read this: <http://www.abc.net.au/news/2010-01-19/govt-issues-ie-security-warning/1214238>

**2. Firefox** - Mozilla Firefox is an open-source, cross-platform web browser which is developed by the Mozilla Corporation and a large community of external developers. It includes advanced features such as tabbed browsing, incremental find, pop-up blocking, live bookmarking and a download manager. It is also highly customisable allowing downloadable extensions, theme plugins and advanced preferences. It also has extensive support for most web standards and is very popular amongst the online community.

**Download it for free from here:** <http://www.mozilla.com/en-US/firefox/all.html>

**3. Safari** – If you use an Apple product, chances are you use Safari. Like Chrome, Safari runs the speedy WebKit rendering engine for snappy page loads.

**Download it for free from here:** <http://www.apple.com/safari/>

**4. Google's Chrome** – Google doesn't just make search engines. It also has a browser on offer! While Internet Explorer is the most popular browser in the world today, Google Chrome is following very close behind.

**Download Google's Chrome from here:** <http://www.google.com/chrome>

## EXERCISE

a) If you currently use Internet Explorer only, download at least one other browser from the list above and try using them. Whilst it may take a little getting used to, you may be pleasantly surprised with the change.

b) Find out how to configure smart security settings for your web browser here:

[http://www.staysmartonline.gov.au/home\\_internet\\_users/secure\\_your\\_computer/use\\_smart\\_settings\\_for\\_your\\_browser](http://www.staysmartonline.gov.au/home_internet_users/secure_your_computer/use_smart_settings_for_your_browser)

Learn more about browsers - <http://youtu.be/BrXPcaRIBqo>

# Search Engines

A search engine is different to a browser. If a browser is the 'vehicle you choose to travel in' then the search engine, as the name suggests is the engine that powers it.

Search engines are the true wonder of the Internet. They have indexed everything in those billion pages and can find any word, in any page, in milliseconds.

The main search engines are; Google, Bing (formerly MSN), Yahoo and Alta Vista.

## EXERCISE

a) If you currently use a certain search engine, download and try at least one other search engine from the list above.

b) Search your company name on the various search engines and note how your position on the search engine varies. We'll teach you why this is the case in future lessons, and how to improve your position on the search engines too!

## Online Security

Online security, also known as electronic security or e-security, is about having the appropriate security measures in place on your system, and keeping security in mind when using any internet-enabled device i.e. a computer, laptop, iPad, tablet or smart phone.

In recent years, sophisticated and malicious online attacks have emerged on the internet. Many of these attacks are now being targeted towards home users and small businesses to siphon identities and money.

With this in mind however, there is no reason NOT to be excited about running an online business just because there is risk involved.

The way I explain it to people who express their concerns is, 'would you not drive a car just because you might have an accident?' Of course not! You'd simply take the precautions of wearing a seat belt, driving safely and as you go forth I'm sure you will enjoy your journey from A to B and beyond!

Here are 8 tips to make sure you stay safe online from [staysmartonline.gov.au](http://staysmartonline.gov.au) (a great resource to refer to):

1. Install security software that includes a firewall, anti-virus and anti-spyware (more relevant if you are on a PC rather than a mac). Ensure that it is updated automatically.
2. Develop a backup strategy for your critical data. A good strategy includes daily backups, an additional weekly or monthly backup and offsite storage of at least the weekly back-up media. Test that you can recover with back-up data (more on back ups in future lessons).
3. If you do not have a dedicated IT Manager, assign at least one person in your organisation to have responsibility for network security (password, backups, AV updates).
4. Develop clear policies for staff using your computer or network. Ensure that staff understand how they are allowed to use email and the internet.

5. Develop a 'culture of security'. Businesses need to have Internet security measures in place and make sure staff are aware of and follow internet security practices.
6. Use software from reputable sources. Keep your software patches up-to-date.
7. Use spam filters to reduce the amount of spam that your business receives. Know how to manage the spam that gets through and ensure your staff know how to recognise scam and hoax emails and to avoid clicking on links or opening attachments from suspicious emails.
8. Keep yourself informed about the latest cyber security risks. Subscribe to email notification services that keep you informed about the latest cyber security risks and solutions. See our Alert Service.

You may also like to watch this short video clip - <http://youtu.be/efolNBcftFQ> featuring some of Australia's top sports stars which outlines how you can stay smart online.

## Getting Connected

All modern computers and devices are capable of connecting to the internet.

In order to get connected to the internet you will need:

- **An internet enabled device**— traditionally people would access the internet on a Personal Computer (PC) or Macintosh (Mac or Apple). These days it is also possible to connect to the internet via tablets (like iPads), smart phones (mobile phones which can access the internet) and other internet enabled devices like iPods and eReaders. The computer itself doesn't necessarily have to be a high powered machine to access most things on the internet but to properly experience some of the newer multimedia features such as sounds, digital movies and interactive software (and to run an effective online business) you may require one of the more powerful machines available.
- **An internet access account** - your internet access account lets you connect your computer to the computer of an Internet Service Provider (ISP) which will then have a connection to the rest of the Internet. Your Internet Service Provider should provide you with any instructions and software you need to connect. They will also provide you with a password that ensures nobody else can use your account. Most providers have a wide range of account types that cost different amounts depending on how much you want to use the Internet.
- **A connection point** - You can either connect through a cable to your telephone socket, preferably the master phone socket or through wi-fi. **WiFi** is a local area network that uses high frequency radio signals to transmit and receive data over distances of a few hundred feet. You may wish to establish a wi-fi connection at your home, work place or to connect to it in a public space. On a Mac wi-fi is accessed by clicking on the icon in the top right which looks like sound waves, and selecting the wifi network you wish to

join. On a PC, wi-fi is accessed by clicking on the bar graph usually located in the bottom right hand corner. It is a good idea to secure your network by using a strong password, to prevent other people from accessing your internet connection. If you are in a public place, you simply select the network of the password you wish to use. Some public spaces will not require a password, while others will. To gain the password, simply ask the operator of the location you are hoping to connect to i.e. cafe, hotel management etc.

Major service providers in Australia include (but are not limited to) Telstra, Optus, iiNet, Internode and Primus.

Depending on the location of your home or work place, the main choices for a reliable, high speed internet connection are either ADSL, Cable, Wireless or Satellite. In metropolitan areas, you will have the most choice, whereas regional areas tend to have less options. Free access to the internet is also being provided in an increasing number of public venues such as cafes, hotels and libraries.

In May 2011 the Australian Government announced the roll out of the NBN (National Broadband Network). The NBN is a next-generation broadband network that will provide more reliable, high-speed broadband access to all Australians.

| To find out when the NBN rollout will reach your area  
see: <http://www.nbnco.com.au/rollout/index.html>.

| It is likely that your service providers i.e. Telstra/Optus/Dodo etc. will notify you when the NBN is available in your area and whether it will affect your current plan with them. NBN Co deals with service providers and is required to allow all service providers to plug into the network for the same price. So the price you pay for internet should not change with the arrival of the NBN, however this will ultimately be up to the service providers.

## Getting the Right Internet Plan

Internet plans are generally expressed in terms of download and upload speeds. The higher the speed the less time it will take you to view a web page or download a file. If you are going to operate an online business, it is recommended you get the most reliable and fastest internet speed you can afford!

High speed broadband will allow you to do all tasks online quicker and easier such as transferring funds online, shopping online, sending an email or browsing your favourite social networking site. You will notice a notable difference in the experience if you are dealing with big files i.e. downloading or uploading a document, streaming music or a video. Rather than the file lagging behind, doing these tasks with high speed broadband should be a seamless experience.

There are a number of factors which determine the speed of your internet.

### **Understanding downloads, uploads and bandwidth**

Consider bandwidth the railway tracks. Downloads would be a train (or data) coming down one side of the tracks and uploads would be a train (or data) coming down the other side of the tracks. Put simply, bandwidth refers to how much information (downloads & uploads) can be sent through a particular channel i.e. your internet connection. The components of bandwidth are measured as a bit rate expressed in bits/s or multiples of it (kb/s Mb/s etc.).

There are 1000 bytes per kilobyte (KB). There are 1000 kilobytes per megabyte (MB) or 1,000,000 bytes. There are 1000 megabytes per gigabyte (GB) or 1,000,000,000 bytes per gigabyte.

The bandwidth you require will depend on the type of activity you want to be able to perform on the internet.

Here are some indications of the average bandwidth per activity of some common internet activities:

- One hour of text-based IM chatting – Less than 0.01MB
- Sending one e-mail via webmail (Gmail, Hotmail etc) – 0.2MB if email is plain text with no attachments
- Uploading a photo to Flickr – Less than 1MB if the photo is resized to 1024×768 pixels
- Downloading a 3 minute song from iTunes – 2-5MB, depending on the song and encoding quality

- Watching a five minute video clip on YouTube – Less than 5MB (1MB per minute on average)
- Using video chat on Skype for 15 minutes – 2.7-14.4MB
- Watching a 2 hour streamed movie – 2GB at 640×480 resolution

### **What is downloading?**

Downloading is the process of retrieving data from another computer on a network, for example text, pictures or sound. Downloads also occur when you simply view a webpage on the internet.

The volume of downloads is monitored by your Internet Service Provider (ISP) and contributes to any download limits placed on the user's account by the (ISP).

### **EXERCISE**

**1)** Go to <http://speedtest.net/>. This site will test the speed of your current internet connection. To test your speed, click on the green button 'begin test'. (Note: once you have performed the test, it is up to you whether you choose to share the results or type in the downloads and upload speeds you are promised as part of your internet plan if you know them).

**2)** Go to <http://bc.whirlpool.net.au> and type in your phone number (you'll need to include the area code i.e. 07 5444 4444). This will tell you which telephone exchange you are connected to and what class/zone it is in. It will give you an indication of whether this exchange has been enabled for ADSL (broadband) service and will give you a list of possible internet service providers for this area.

**3)** To calculate what broadband plan you may need go to:

- <http://www.comparebroadband.com.au/>
- <http://broadbandguide.com.au/>

## **Back Ups**

Every sensible business owner, whether they are running an online business or not, should make a back-up copy of all key business data on a periodic basis.

How regular you should back up really depends on how often you work on your computer and how much you are willing to lose. Just think if you were to lose everything on your computer tomorrow could your business continue? How long would it take to get up and operational again? If that statement struck the fear of God into you, back up daily!

Your back up options:

- **Basic (but not recommended)** – if you are only dealing with a small amount of data, you may be able to back up to a USB, CD or DVD (DVD's hold more). This method is not recommended however as these items can easily be lost, scratch or broken.
- **Better (but still not 'fool proof')** - External hard drives are extremely cost effective these days – you can purchase around 500GB of storage from around \$99 and it is even possible to purchase 1TB (terabyte) of storage if you have a lot of data. These can be purchased from all good electronic stores. The reason however they are not 'fool proof' is that they can become corrupt. It is recommended you inter-change two separate hard drives to reduce the risk of loss of data and that you store one copy off site so if you are ever affected by fire, theft, flood or other major disasters, hopefully you will still have one copy in tact.
- **Best** – It is also possible to back up data to 'the cloud' that is the internet. This is an excellent option as even if your workplace or home experiences a major disaster, you will potentially be able to relocate to a new, safe venue that has internet connection without any loss of data. This will improve the 'down time' and therefore the impact the disaster has on your business.

## Email Communication

An email address will allow you to communicate with your customers, clients, suppliers, bank and anyone else you do business with or who wants to do business with you.

You have two choices for selecting the name of your email address.

Either

1. Accept an address that piggy-backs off your Internet Service Provider's name – e.g. freshfruitmart@ispname.com.au this is a relatively inexpensive option but associates your name with your ISP.

Or

2. Register your own Internet name (called a domain name) with the registration authority in Australia and have your ISP establish an email address using that name – e.g. sales@freshfruitmart.com.au

We would always recommend option 2, as it gives a much more professional front for your online business and also means that you don't have to notify everyone who has this email address if you decided to change your internet service provider.

If some customers see an @bigpond or @optus or @internode or similar email address, it will scream 'amateur' to them and they may choose to use another company that 'has got it together'.

If you need an @yourdomain email service, click here to obtain one: <http://www.thecreativecollective.com.au/domains>.

## Google Apps

Most people use Google on a daily basis to search for products, services, businesses and answers to all life's questions!

But what many people don't realise is that Google boasts a growing suite of free applications (apps) which can help most business owners save a significant amount of time and money.

Let us introduce you to some of the Google Apps you may like to review if they are suitable to use to perform some of your core business functions.

Best of all, these Google Apps are FREE (though they do have a paid solution too).

Watch this short 5 minute video [http://youtu.be/T\\_upX2Js72g](http://youtu.be/T_upX2Js72g) to gain a better understanding of how Google Apps for Business can help your business keep up with new business challenges. Find out what it means to work in “the cloud.”

## **EXERCISE**

Download the Cloud Computing workbook which is located in ‘Resources’ and/or watch this Cloud Computing one hour webinar which - [http://youtu.be/hfSXbR\\_M9BE](http://youtu.be/hfSXbR_M9BE) explains in more detail what Google Tools are and which ones may suit your business.

## Support

### **Asking for help**

There will be situations during this program, or when running your online business, where you may need help. Whilst you have access to mentors and the Private Facebook group as part of this program for support, sometimes it can be advantageous to pay someone to assist you to solve your problem rather than enduring the issue or spending un-necessary time on the issue yourself when you may not have the necessary expertise.

If you do reach out for help, providing the following details to the IT consultant, web developer, Internet Service Provider or similar could assist to resolve the problem more quickly:

- How long have you been experiencing the problem?
- What error message are you experiencing (take a screen shot of this where possible)
- What activity were you performing or trying to perform when the issue arose?
- What browser are you currently using? (if the task is being performed on an internet browser)

### **Getting training**

We understand that for one reason or another, you may at times feel out of your depth and need training in addition to the training you will receive as part of the program. But don't despair; there are options to upgrade your knowledge if you or your staff requires assistance. And just think, if you improve your skills, imagine the increased productivity you'll enjoy!

If you feel you or your staff could do with some general computer training (i.e. training in Microsoft Word, Powerpoint, Excel) go to <http://training.gov.au/Training/Details/BSBITU101A> and click on the link ‘Find RTOs approved to deliver this unit’ which lists a range of Registered Training Organisations throughout Australia who offer basic computer training courses.

If you feel you would like some live, hands on and interactive training on topics related to online success, please note that The Creative Collective runs half day and full day sessions all over Australia on a regular basis. See a list of upcoming trainings here: <http://www.thecreativecollective.com.au/events>.

## Resources

### **Sources & helpful links for more information related to this lesson**

#### [Department of Broadband, Communications & the Digital Economy](#)

Department of Broadband, Communications and the Digital Economy page provides resources to assist users to make the most of the Internet – including information on domain names, spam and on support for small business and rural users to connect to broadband services.

#### [Broadband for Seniors](#)

Broadband for Seniors forms part of an Australian Government initiative to provide older Australians with access to computers and the Internet via free Internet kiosks; and to support seniors to gain confidence and build skills in using new technology.

#### [Australian Communications and Media Authority \(ACMA\)](#)

The Australian Communications and Media Authority (ACMA) is responsible for monitoring internet content, enforcing Australia's anti-spam law and making rules about accessing the internet via premium mobile phone services.

#### [National Broadband Network](#)

The National Broadband Network (NBN) is an Australian Government initiative which will deliver high speed broadband to all Australians. The NBN is a new, wholesale only, open access high speed broadband network.

#### [NBN Co Limited](#)

NBN Co Limited is a Government Business Enterprise (GBE) created on 9 April 2009, to build first high-speed national broadband network that will enable advanced digital services to be provided to all Australians.

## Stay Smart Online

Stay Smart Online is the Government's cyber security website designed to help Australians understand cyber security risks and educate home and small business users on the simple steps they can take to protect their personal and financial information online.

### **Social networks you may like to review and connect with:**

Join the Digital Economy conversation on Twitter ([@DBCDEgov](https://twitter.com/DBCDEgov))

Join the NBN Co conversation on Twitter [@NBNCoLimited](https://twitter.com/NBNCoLimited)

Facebook: <http://www.facebook.com/staysmartonline>

Youtube Channel: <http://www.youtube.com/staysmartonline>

### **Department Broadband, Communications and the Digital Economy:**

Youtube Channel: <http://www.youtube.com/user/AusGovDBCDE?gl=AU&hl=en-GB/>

### **NBN:**

Youtube Channel: <http://www.youtube.com/user/NBNgovau>

**THAT'S ALL FOR NOW!**