Is Cloud Storage the Future?

Why not hard drives?

Hard drives: reliable, durable, and secure. But is this enough? It's 2020 and with technology becoming increasingly smarter individuals and businesses have to keep up with it. This is where Cloud storage comes in, with benefits including ease of use and increased measures in security, the Cloud is designed to help you in so many ways.

Although some people may be comfortable with hard-drives and solid state drives (SSD's), arguing that they are more affordable as well as being specifically designed to exist inside your physical computer- an element which people can find reassuring. But, as prices become cheaper within SSD's, it is suspected that Cloud services will also be looking at reducing their price.

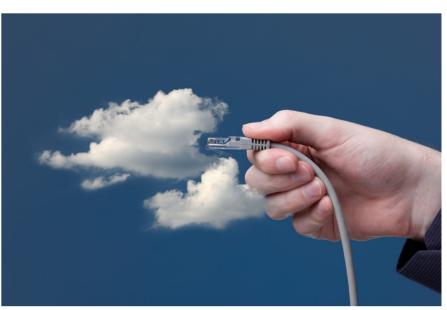## Switching to the Cloud: the benefits…

This is somewhat true already, as Cloud providers often buy storage in bulk, therefore allowing them to become more cost friendly to users. SSD's can also be difficult to insert into your PC/ laptop in comparison to easy Cloud storage. This, among many more reasons, is why companies are switching to the Cloud, especially seeing that impressive features such as forms of artificial intelligence are being implemented into Cloud technology.
Examples of this technology can be found in, for example, wanting to locate a specific photograph within your gallery based within the Cloud, including face detection, geographical detection and object recognition. This makes it an extremely useful feature, along with the fact that all your photos would be stored in one place as opposed to being spread over multiple devices.

Upgrades are also easy as you can directly buy more storage from the Cloud provider you are with and you will effectively have an extension of storage to store more data. However, if a hard-drive is full there is little you can do about it, other than to buy another hard-drive. Consequently, this means data can be easily stolen or corrupted, being physically backed up in a device that can be easily lost instead of being backed up on secure servers like Cloud technology is.

Cloud systems such as this are so beneficial to users as they make sure data is being stored on multiple hard drives managed by the Cloud provider. This makes hardware failure irrelevant, as providers keep multiple versions of files, ensuring your data is being kept safe. Tiered storage also

makes the ability to retrieve data easy, including cold storage such as files that may no longer be needed or are used extremely rarely.

But, how secure is it?

Security is a common issue mentioned when discussing the Cloud and whether it is safer and more reliable than traditional hard-drives and SSD's. However, the Cloud is all based online behind an account login that can only be accessed this way and only by the people you want accessing it. The reason it is so secure is mainly due to the fact that the setup is completed with either MFA or 2FA (multi-factor authentication/ or 2 factor authentication- using 2 security measures) making the account secure. Identification in a few varied forms is also used in order to make logging into Cloud storage all the more personalised and secure.

These variations include providing knowledge and information only you as the user would know - supplying a 'possession' such as a one-time password or inherence such as fingerprint scans, retina scans, or voice/ face recognition. Extreme and precautious measures such as these are taken as, if your account was hacked, it could lead to serious data breaches, wire fraud etc. Consequences of stolen data such as these are also the reason why your data, when using the Cloud, is stored within secure data centres, being physically secure unlike small hard-drives. Finally, behind this high level of security are firewalls constantly being maintained, tested and upgraded, with all drives securely being disposed of at the end of their life.

All businesses, large and small, benefit from having their data secured in the Cloud, especially small businesses which are being subjected to around 55% of hacking activity each year. This means that the data needs protecting and storing somewhere that hackers cannot easily reach - somewhere secure and only you can access, like the Cloud.

Another great advantage Cloud storage has for small businesses is the fact that it comes at such a low cost whilst simultaneously consuming no physical storage space as all the data is on the Cloud rather than using servers or datastores to hold company data. Consequently, this can free up space needed for other things that were previously being used up by the servers.

Finally, running a small business using on-site systems means there are more limitations surrounding how you work and backing it up physically can make your confidential data extremely vulnerable and easy to lose. However, when using the cloud, nothing can be lost so productivity and security is never effected, as your information can be so easily retrieved.