## A HARD SELL



Our previous articles have generally reflected on tech and software trends; this month we're looking at hardware. Specifically, there is an industry change that is invading all types of equipment: **Solid State Drives** (**SSDs**).

For non-techies, the "drive" is understood as the "C" drive on a PC and is where information such as the operating system, programs and files are stored....think of it as a big closet: you store stuff in it. The main drive in most computers is responsible for the communication between the device itself and programs used, so when a hard drive fails, the whole system fails...it's kind of like the engine or the "brain" of your computer (the processor being the active brain).

Until now, computers came with traditional **Hard Disk Drives** (**HDDs**) wherein the aforementioned data was stored on the surface of magnetic platters and whose polarity was changed in order to store that data. To read or write data on a magnetic HDD the platters turned, the data was searched for and located, thus making it a very mechanical process.

SSDs, on the other hand, do not have moving parts; you could relate them with flash drives which we now use in cameras, mobile devices, etc. In addition, the variety called *NAND* is being favored as it does not need electricity to maintain data storage capacity (the RAM in most computers loses stored data when it loses power). What else makes the SSD better? It's faster to initiate (if your old computer took up to 2 - 3 minutes to boot, this takes up to 20 seconds), is super-fast in processing data, is silent and tends to be very reliable, (manufacturer issues notwithstanding). Plus, SSDs consume up to 60% less energy. The down side to them is cost which is still relatively high but is quickly diminishing as some PC manufacturers are using both types of drives in their latest models and, with the latest advances, is becoming more affordable. INTEL Corp. SSDs have the longest warranty, are rugged and reliable with excellent customer support.

So, is it for <u>you</u>? If you want to go from booting to browsing in seconds, want faster access for most applications and gaming, want a quieter and more eco-

friendly PC, and never want to defragment your hard drive again (not applicable to an SSD), then the answer is "yes." Another advantage is if you have both types of drives, you could use the more traditional HDD to store large files and retain the "hot" SSD for the rest of your operations.

In effect, you could upgrade your old PC by migrating to an SSD at a fraction of the cost of a new PC, often as low as 1/10<sup>th</sup> of the price of a new unit. Even though we are slowly edging toward a tablet existence, PCs and laptops still offer much more so we'll probably be hanging on to these for a while.