This piece continues the series of Peter's predictions for computing and communications technology that were presented in June. Moving on from connections, keyboards and operating systems he considered:

APPLICATIONS

The number was forecast to grow rapidly. The big applications for word processing, spreadsheets and databases already cover more than most users need. They are becoming so large and expensive that smaller, free, versions are developing that will do enough for most people.

Niche applications (Apps) will proliferate to satisfy specialist needs and hobbyists. Some will provide fun; some will be useful and some will grow to become mainstream applications: think of Facebook and Twitter. Who would describe eBay, Google or Amazon as Apps now? They are most definitely big businesses.

No-one can predict the next big App, but there a quite a few people trying to write it. Potential rewards are huge.

COMPONENTS

Apart from completely new stuff there will be ongoing improvements to existing products.

Digital cameras already do high-resolution still photos and video with sound and flash. Soon they will (if so instructed) automatically upload the results to the web, whether to a website for general viewing or something like Dropbox for controlled access. GPS will enable the location to be attached to the picture.

Accelerometers already tell a display device in which orientation to display in accord with how it is being held.

Tilt meters and **gyroscopes** know which way a device is facing. Add a camera facing the user and a device will be able to detect if the user is looking at it. If not, it will switch of the display to save power and turn it back on when the user looks again at the screen.

Light detectors will be able to alter the level of screen illumination to suit lighting conditions.

Microphones and speakers will improve for better sound quality. **Audio playback** will be Hi-Fidelity; welcomed by music lovers and interviewers.

GPS is built into phones if you want it. Walkers will record their walk and note the true distance travelled allowing for terrain rise and fall.

USB DATA TRANSFER.

Connections between devices will be easier and quicker. **USB (Universal Serial Bus)** started life in 1996, providing convenient and simple connections for the transfer of data. **USB2** came along in 2000 and was over 20 times faster and labelled *'HI-SPEED'*. After various tweaks, by the end of 2008 **USB3** became available and labelled *'SUPERSPEED'* as it is over 10 times faster than USB2. Even as Peter was predicting improvements in June **USB3.1** was being announced and is around 3 times faster than USB2, or around 1000 times faster than the original USB. It has been christened '*SUPERSPEED+*' and is compatible with the earlier versions 2 and 3. As users update their machines over time the benefits will be appreciated.