

You may have seen in the press a few predictions about what the future will bring. Some forecasters are bright and have good ideas, but as far as computing is concerned there have been some spectacularly wide of the mark.

In 1943 T J Watson, President of IBM was reputed to have said “I think there is a world market for maybe five computers” At that time the building of Colossus at Bletchley Park was highly secret and for years computers were so costly as to need a national budget and so large that people walked round inside them.

In 1949 Jon von Neumann thought that the limits of what computers could do had been reached. Although he had developed the basic design of computers that is still in use today, he could not envision the possibilities. He had sense enough to note the possibility that he could look a bit silly in a few years time.

In 1949 computers could weight over 20 tons. Popular Mechanics foresaw that this could be reduced and suggested that in future they would weigh well under two tons. They were right, but way out because some now fit into a small briefcase.

In 1962 Dennis Gabor, who won the Nobel Prize for the invention of the hologram, recognised that the transmission of documents by telephone was possible. However, he also thought that the process would be so expensive that it would never be a practical proposition.

As late as 1977 the founder of the Digital Equipment Corporation (DEC) publicly thought: “There is no reason for any individual to have a computer in his home.” (What he thought about a woman owning one is not recorded.)

When personal computers became available no-one realised what they would be called on to do. When Bill Gates of Microsoft released his Disk Operating System (DOS), he thought that 640kB of memory “should be enough for anyone.” Modest computers these days use about 10,000 times that amount.

It might surprise you to learn that the most accurate ‘prediction’ was one that wasn’t made at all.

The transistor arrived to displace valves commercially in 1956 and was incorporated into computer chips. In 1965 Gordon Moore (founder of Intel) noticed that the number of transistors built into an integrated circuit on the chip had doubled about every two years. He merely mentioned the trend in a talk he gave. When it continued to hold true it became known as Moore’s Law. It has been predicted to reach its limit several times, but each time a new development has enabled it to hold true for over 50 years.

It is currently expected to hit the buffers around 2020, but seven years from now, who knows. It might continue to hold true. IBM tech. people speculate that a supercomputer will eventually be reduced to the size of a sugar cube.

