Describe the advantages and disadvantages of some innovative technologies

Technology

Technology, in general, has done a lot for human beings. Without the development in technology it is possible that the pyramids would never have been built and neither would we be able to communicate with each other from remote places all over the world. Recent advances in DNA technology have enabled law makers to solve crimes that were previously unsolvable or otherwise unresolved for decades.

Cases where all leads have gone cold are suddenly revived and justice is served because of advances in other forms of technology that have allowed law makers to gather information that they could not previously obtain. In fact, due to all the new equipment that was only available to top notch research institutes law makers are able to make sure that the right people go to jail. The justification for the expensive technology infrastructure in forensic science laboratories is that it allows the law makers to solve crimes much faster and also ensure that justice is served.

Previous law enforcement methods and forensic science procedures allowed for a larger margin of error. This means that sometimes the wrong people are sent to prison, as has been shown in the recent court cases where people were sent to prison for 20 years only to be released and found innocent after a DNA test. Instances such as these have been dramatically reduced because of the technology infrastructure. The advantage of all of this high tech forensic equipment is due to the fact that the criminals are becoming high tech as well.

A pitfall in the improvement of technology comes from the fact that it becomes accessible to law makers and criminals alike. As the culprits take advantage of technology to further their nefarious deeds so must law makers

in able to catch these people. Criminals these days use every tool at their disposal to get away from the law makers as such it is imperative that the law makers have every tool at their disposal to catch these people. To argue, therefore, that there is no need for high tech laboratory equipment would be to deny justice.

Another innovation is the speed by which computing and processing speeds have increased exponentially over the past few years in accordance with Moore’s Law, which theorizes that computer speeds will just continue increasing as technology allows for more transistors per chip every few months. Over the years, Moore’s Law has been shown to be true and in the July 28, 2008 article of Barbara Grady for the Oakland Tribune entitled “ Intel Says Get Set For Faster Computers”, a new breed of even faster processors has been developed.

The Quad Core line of microprocessors of Intel are said to be the fastest up to date and are 40% faster than previous models while using 40% less power. With 65 nanometer processing technology, these new microprocessors have the capacity to hold 291 million transistors in a tiny piece of silicon, roughly the size of a fingernail. These new processors are capable of meeting the growing demands of the market for accessing and showing video on the internet as well as getting access from mobile devices.

" This is huge huge for Intel and huge for the industry,” according to Brookwood, analyst for Insight 64, “ this (chip) enables all kinds of smaller devices, and cooler devices and data centers to operate with lower costs," he said. " It could enable handheld computers to do serious jobs. " The problem

with this type of processor, however, is that while it makes millions if not billions of computations per second its full potential is not met.

The hefty price tag that its research and development entails does not meet the market need. At present, only a handful of programs are able to utilize all that computing speed. The commercial application, for which the chips were originally designed, still utilizes old software programs that need minimal specs. As such, this presents a problem wherein computing speeds increase exponentially but demand remains at a steady growth rate.