

**Emerging Technologies Performance**

The growth of the IT industry has led to constant innovation with new emerging technologies appearing all the time. Businesses need to and are expected to embrace these technologies in order to keep up with competitors and to try and gain an advantage over them.

Technology	Impact on Performance
<b>Virtual Reality</b>	This requires powerful graphics processing capabilities and large main memory in order to use. Video game console manufacturers are having to release upgraded consoles to provide VR capabilities to keep up.
<b>Media Streaming</b>	Home networking & internet connections are often not fast enough for smooth media streaming. This is especially true for 4K content driven by emerging technologies in the TV industry, such as Ultra-HD TV screens.
<b>Self-Driving Cars</b>	Lidar sensors, mobile broadband communication & powerful processing are all required for self-driving cars. Tesla said the computer used for their self-driving cars is 40 times more powerful than previously used.

**Personal Use of Emerging Technologies**

Emerging technologies can often drastically change the way we live our personal lives. This is often for very positive reasons, but it can be negative too.

<b>Smartwatches</b>	A wearable device that provides similar functionality to a smartphone, such as accessing messages, email, phone calls & even games. It often includes health functions too like heart rate monitoring or run tracking.
<b>Smart Speakers</b>	Devices like the Amazon Echo that allow us to automate our home by speaking to a device to turn on the tv, music system, central heating, etc. This is very convenient for many people.
<b>Self Driving Cars</b>	Vehicles that can drive without human intervention. This isn't something we can buy right now but it is being tested on the roads extensively. These can reduce accidents & congestion to save lives and reduce commuting time. It can also allow disabled people to get around easier.

	
<ul style="list-style-type: none"> <li>Convenience</li> <li>Accessibility</li> </ul>	<ul style="list-style-type: none"> <li>Cost</li> <li>Over-reliance on them</li> </ul>

**Organisational Use of Emerging Technologies**

Businesses are constantly being impacted by emerging technologies. In many cases, there is pressure on businesses to adopt new technologies early in order to keep a competitive advantage and not fall behind.

<b>Augmented Reality</b>	Superimposing a computer image on a real-world view. This could allow for targeted advertising in the real world for example. Some mobile apps use a basic form of this and the Microsoft Hololens is a specialist AR device.
<b>Internet of Things</b>	Time-consuming tasks can be limited through IoT devices. For example, smart sensors can be used to monitor the temperature in a warehouse to avoid spoilage.
<b>3D Printing</b>	Simplifying the manufacturing of parts & products by simply printing them out from a design. We see this used in architecture for creating scale models of designs, dentists for producing false teeth, and

	
<ul style="list-style-type: none"> <li>Productivity</li> <li>Reduced errors</li> </ul>	<ul style="list-style-type: none"> <li>Cost</li> <li>Staff training</li> </ul>

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