**9.1: Explain the impact that emerging technologies have had on organisations. (P2)**

**Task 1:** Research and complete the table:

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| Emerging Technology | **Description of the development with two examples.** | **How this is currently impacting organisations and individuals.** |
| **Internet of Things (IoT)** | It improved from having to search on your computer or phone with your keyboard or an ai like ok google / siri to asking alexa or google home to search things for you. | This is currently being used to transmit and view data globally and makes everyone's life easier.  These devices remove need for human input and saves you a lot of hassle. |
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| **Increasing Automation (eg robotics, exoskeletons)** | It has improved from simple robots like rc toys to self-driving cars that don’t require human input. | They can take up jobs that usually need humans to do them and they can help with rehabilitating people after injuries. |
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| **A current development – eg AI, Smartwatches, Wearable Technology** | Smartwatches can take calls and do everything that phones can do in a smaller form and are strapped to your writs to not get lost, another wearable technology is Body-mounted sensors that monitor and transmit biological data for healthcare purposes these are more sophisticated and has greater use in the scientific and medical fields. | This makes tech easier and more accessible, the increase in portability also allows for it to be used on the go |
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**Task 2:**

* Research robotics and discuss in detail the possible impact this technology is likely to have on organisations ***in future*** as it develops and becomes more widely adopted.
* Investigate the technology and support your discussion with quotes from your research.

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| Emerging Technology – Robotics:  An example of emerging technology in robotics is Elom Musk’s neuralink, he explains the device as “a Fitbit for your brain, with wires”. It charges wirelessly through electromagnetic radiation and will be installed into the human brain by a custom-built surgical robot, it would drill a hole into your skull and insert the piece of tech in your brain then pull the skin of your scalp over the hole, hiding it from sight. The goal of it is to merge humans and ai, like an advanced version of the google glass.  This is likely to have a large impact on organisations in the future as it would make information gathering and retrieval much easier as you simply need to think something and the neuralink could search it. Musk promises the ‘downloading of new skills’ which makes learning something like how to drive or be a surgeon or play an instrument easy and requires no actual effort.  This can help study the electrical signals of the brain and help cure various medical problems and can help us understand how the brain works in more clarity.  There have been some ethical concerns about privacy and security as this device could potentially be used to monitor people. It is said that the companies behind tech like neuralink are “in danger of getting so wrapped up in what they can do, that they lose sight of the ethics behind what they should do”, ethics are of utmost importance in the field of neuro technology as it interferes with the brain; which is seen as the place that defines your very being as it stores all of your memories, emotions and consciousness.  One such concern is the potential risk of paralysis or lasting brain damage in the case that the implementation of the device via surgery fails, this is the case with anything that tampers with the brain and is always a risk with things such as brain surgery. There are also concerns with essentially ‘turning your brain into a computer as you could be ‘brain hacked’ or ‘mind jacked’, some people imagine a dystopian future where the world is ruled by machines and their worries are the fact that this could be the gateway to that possibility occurring.  Another concern is the risk of potential physiological impacts occurring due to the act of embedding hundreds to thousands of miniscule metal electrodes into the human brain when setting up this device. It will be very hard to ensure that this is a safe task which is why there is a custom-made surgical device to use for it to minimise the risk of human error as even the best surgeons can have slightly shaky hands.  There is also a chance of the neural interfaces altering or somehow influencing your behaviour and mental state, but this will be more of an issue in the future when neurotechnology moves on from remedial purposes for helping fix or train people to enhancements such as removing the limiters on a human's body or granting eidetic memory.  An example of behavioural impacts could be the possibility of behavioural changes or being addicted to the gains from the tech. There is the fear of a long time gap between this technology being widespread and the risks of this technology on the users mental state and psyche being discovered. There is a great risk if people start to be reliant on this tech in their everyday lives before any drawbacks and issues that result from them are understood.  Finally, there is the severe societal impact that this technology could potentially have once the neuralink moves on from its current role of developing the medical field to the company’s end goal of ‘artificial internet-connected overlay to the brain that enables users to interface with future intelligent machines’. This audacious goal will most definitely shake society if it is properly implemented,    https://onezero.medium.com/neuralinks-technology-is-impressive-is-it-ethical-812afb38b19e |