The mounting problem of planned obsolescence

Electronic waste is a mounting problem in the modern world. In an age where being, 'thrifty' has become an emblem of stylishness in fashion circles; you would hope that some of this sentiment would trickle down to the world of technology. So far little appetite for reusable tech appears to exist. We live in a world that values newness over longevity, with over 1.43 billion mobile phones being sold in 2021, Gartner (2020). This excessive purchasing of electronic goods has exacerbated our wastage problem. According to a report from the Platform for Accelerating the Circular Economy (PACE), UN E-Waste Coalition (2019), the global e-waste production rate is expected to be at 120 million tonnes per year by 2050. To truly quantify the issue an article in the Financial Times reports that this is around 7.3kg of e-waste per person.

As we hurtle our way towards a climate disaster, we are used to hearing damning statements when it comes to the climate crisis; it can often feel difficult to make a tangible difference. However, when it comes to e-waste consumers can genuinely influence the extent of the problem and in turn influence the climate crisis. Unfortunately, getting people to purchase less is harder than it seems. Especially in the current age of rapidly updated consumer electronics.

If your phone battery died you would not spend hours fixing and soldering, welding, and gluing a new one in-place. Nathan Proctor when speaking to the Guardian Newspaper emphasised the issue, "Here's this thing, it's going to be awesome, and it'll cost $1,000. But the manufacturers are going to glue the battery in, and you are supposed to get rid of it when the battery wears out. You would have thought that notion was completely bananas." More people are appearing willing to overlook this lunacy. Only 8 years ago Samsung's flagship Galaxy 5 had a removable plastic cover with a convenient removable battery. Sadly, in an effort to cut prices and optimise space Samsung has opted for an immovable battery, with the majority of tech companies following suit. Often companies look purely at their sales in the short term and do not think of the end of life potential for their products.

Yet, thinking about the lifespan of a product would allow for new innovative ways to provide consumers and create new revenue streams. A compelling reason to start thinking about reforming planned obsolescence practices in tech is the possibility of gaining revenue by making devices modular and reparable, this way manufacturers can sell replacement parts and gain access to a long-term stream of revenue. This model has been employed successfully by Fairphone who's phone design allows for parts to be easily switched in and out, thus reducing e-waste.

On the less hopeful side of the coin in 2018 Apple made headlines around the world due to their use of planned obsolescence within their products. Apple admitted that older models were in fact deliberately slowed down through iOS software updates, but claimed this was in order to, 'extend the lives of older phones. This is deeply concerning as despite the €25 million fine Apple received in 2018, little appears to of changed. In 2020 Apple paid $113m, £85m to settle another planned obsolescence case, this time in the US. Under the settlement, Apple did not admit to any wrongdoing or breaking any law. Planned obsolescence sadly is not limited to just Apple.

This issue goes back a long way, with planned obsolescence being brought up in a 1986 paper by Yosef S.Sherif and Ellen L.Rice. Further back in time in Arthur Miller's poignant play on capitalism, Death of Salesman (1949) "The refrigerator consumes belts like a goddam maniac. They time those things. They time them so when you finally paid for them, they're used up." This sentiment has become all too well known

Sadly, the UK Government is one of the worst offenders when it comes to e-waste - engaging in what could be seen as waste colonialism. Highlighted by Basel Action Network, reporting that the UK is 'the worse offender in Europe for illegal e-waste exports to developing countries at 24.9kg a person per year - around 10kg more than the EU average.

It will require government intervention to properly fix the multitude of issues, especially in the UK where there is no law on planned obsolescence. The WEEE law offers little and is feared to not go far

enough when it comes to preventing the huge amount of e-waste production. In practice very few companies have been fined and often the fines are insignificant for large companies. The UK government desperately needs to start policy making on the issue of planned obsolescence and ensuring that consumers and the environment get a better deal.

Technology uptake is only increasing and so, without proper, enforced regulation e-waste could spiral out of control. This is a problem both for consumers and companies. Proper recycling of e-waste can be both profitable for the economy due to the vast amounts of rare metals in devices and could help to assuage the climate crisis by reducing landfill. As well as this responsible end of life manufacturing can extend the lifecycle of our devices, with companies becoming an affordable and fair repairer of goods.

A New Circular Vision for Electronics Time for a Global Reboot In support of the United Nations E-waste Coalition PLATFORM FOR ACCELERATING THE CIRCULAR ECONOMY PLATFORM FOR ACCELERATING THE CIRCULAR ECONOMY. (2019). Available at: http://www3.weforum.org/docs/WEF_A_New_Circular_Vision_for_Electronics.pdf.

Apple investigated by France for 'planned obsolescence'. (2018). BBC News. 8 Jan. Available at: https://www.bbc.co.uk/news/world-europe-42615378 [Accessed 21 Sep. 2022]

Gartner (2022). Global Smartphone Sales Grew 6% in 2021 Available at: https://www.gartner.com/en/newsroom/press-releases/2022-03-01-4q21-smartphone-market-share. [Accessed 20 Sep. 2022].

channels.ft.com. (n.d.). The growing problem of e-waste. Available at: https://channels.ft.com/en/rethink/growing-problem-ewaste/ [Accessed 21 Sep. 2022]

Clayton, J. (2020). Apple to pay $113m to settle iPhone 'batterygate'. BBC News. 19 Nov. Available at: https://www.bbc.co.uk/news/technology-54996601

Electronic waste — what can designers do? (2021). Financial Times. Available at: https://www.ft.com/content/91d7538a-158c-402a-a8f7-9c566b822174 [Accessed 15 Sep. 2022].

Harris, J. (2020). Planned obsolescence: the outrage of our electronic waste mountain. The Guardian. Available at: https://www.theguardian.com/technology/2020/apr/15/the-right-to-repair-planned-obsolescence-electronic-waste-mountain [Accessed 20 Sep. 2022]

Office for Product Safety and Standards (2018). Regulations: waste electrical and electronic equipment (WEEE). GOV.UK. Available at: https://www.gov.uk/guidance/regulations-waste-electrical-and-electronic-equipment [Accessed 21 Sep. 2022]

Sherif, Y.S. and Rice, E.L. (1986). The search for quality: The case of planned obsolescence. Microelectronics Reliability, 26(1), pp.75–85. doi:10.1016/0026-2714(86)90776-6