Planned Obsolescence

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The Apple Computer Corporation offered its first iPhone for sale in June of 2007 and roughly every year since then, Apple has released a new hardware model with incrementally improved specifications and features. In 2017 when the iPhone 8 was making its debut, Apple offered a software update to users of older iPhones that owners say slows down the performance of their device. At least 59 separate lawsuits (Mickle & Grind, 2018) have been filed against the technology giant that purport the updated iOS operating systems slowed the central processing unit (CPU) of iPhones flagged with older batteries, and that the company did not take sufficient steps to disclose this to customers and shareholders.

**The Lawsuits**

The 2017 lawsuits brought against Apple accused the company of covertly throttling the iPhone 6, 6S, 7, and SE models of iPhone’s CPU chips to run slower than their factory default in a process known as underclocking. The lawsuits further alleged that Apple withheld disclosing this issue to owners of the iPhones, shareholders (Apple is a publicly-traded company), and government agencies such as the securities and exchange commission (SEC). The plaintiffs face a long and difficult battle with the technology giant. With newer models of the iPhone costing around $1,000 USD, people are replacing their devices less frequently and holding onto older models of their smartphones for longer, even after new models are released. In Apple’s defense, the company claims that they were not underclocking their devices CPU’s to cause consumers to upgrade their hardware sooner, but rather to protect the electronic components in older devices from problems like emergency shutdowns that can arise from low voltage situations that could occur more frequently with older batteries. There is substance to their argument, one of the reasons to reduce the clock speed in a computer has to do with the added reliability that running a processor slower can provide. “ Underclocking reduces the operating frequency below that normally specified, reducing power consumption and increased reliability.” (Uht & Vaccaro, 2004)

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From a consumer’s standpoint, the idea of a device designed to be short-lived and replaced as soon as the next generation is released appears to be unethical and profit-driven at the expense of the customers of the devices. Apple’s customers have theorized for many years that the company was artificially causing their iPhone devices to become obsolete through software updates that seem to get released as soon as a new model of iPhone comes out, forcing them to spend relatively large amounts of money to upgrade their devices. Consumers may be inclined to believe that this planned obsolescence is something that technology companies do to improve their profit’s bottom line, however, the researcher Taiwo Aladeojebi (2013) presents several additional factors regarding planned obsolescence’s impact on a product’s artificially shortened economic lifetime. Aladeojebi says that while planned obsolescence has the primary goal of reducing competition from devices being sold in the secondhand used electronics market, other advantages of this strategy include the ability to recycle a greater number of electronic components, many of which use rare-earth materials in their manufacture, as well as subsidizing funding into research and development for future improvements of the product’s capabilities. These benefits, it seems, are worth the costs to the company in public brand image, lawsuits, and new regulations that may be imposed on Apple by consumer watchdog agencies.

Underclocking is not the only approach that Apple takes in making its new devices to have an artificially short life. Another issue that is designed into iPhones since the 5th generation model is that of irreparability. For example, the batteries in these devices are permanently affixed into the handsets, using industrial strength glue in order to prevent users from being able to simply replace a fatigued battery in an otherwise problem-free device. The consumer has no choice but to send the device back to Apple for slow and costly upgrades. Many consumers would simply rather purchase a new device rather than be without their phones for the time that it takes to ship their phones to the factory, undergo repairs, and ship back. With a life span of just “300-500 charges or just over a year” (Keeble, 2013 p.31) iPhone batteries seem to have artificially short lifespans compared to the lifespans of other device’s batteries.

**Ethical Approaches**

Apple understands that the issue of underclocking legacy devices through software updates, without disclosing the practice to consumers, has damaged its brand image in the eyes of the world. To this end, they have come up with some solutions that attempt to pacify the angry consumer base who feel that they are being taken advantage of. For example, Apple has substantially lowered the price of replacing the batteries of older devices from $89.95 in 2013 (Keeble, 2013 p.31) to just $49.95 in 2019. (Apple, 2019) Apple quotes an 8-9 day turnaround time for a battery replacement that needs to be mailed in, and many iPhone models can be taken to a physical store for a 3-5 day service turnaround. Another area where Apple is looking to defend its planned obsolescence model of business is a buyback program where a consumer can get a credit toward the purchase of a newer model of iPhone by trading in their older model. Apple seems to be less competitive than its best competitor Samsung in the price offered for buybacks. For instance, an Apple customer trading in an iPhone X can expect only up to $400 for a device that was previously $999 when it was new, whereas a Samsung customer can receive up to $600 to trade in a Galaxy 10+ that had a similar price to the iPhone X when buying new.

The damage to Apple may have already been done in the bad publicity it has received from its planned obsolescence system. In July 2019 Apple reported revenue for its iPhones in Q2 was down 12% from the previous year. It seems that more people are now replacing their phone batteries rather than buying new devices, and many customers have lost loyalty to the Apple brand as the underclocking court cases continue to drag on, now as a class action suit. If Apple been more forthcoming in describing what was in the updates, perhaps they would have been able to spin the idea in a positive light, but they did not, and now it is beginning to show in their bottom line. Apple claims that the update for the iPhone 11, to be installed on older iPhones will address this issue. Apple’s chief electronics engineer was said that Apple “is releasing iOS 12 to every phone that could run iOS 11. More importantly, it has vowed that iOS 12 will be faster on every iPhone, not just new ones.” (Koebler, 2018) It seems that Apple may be trying a new way to win back lost customers with this approach to improve the efficiency of older models through its newest update, but is it too little, too late? Apple previously had a market presence of over one trillion dollars until it lost approximately 20% of its value, due primarily to fewer iPhone sales when it reported its 2018 Q4 earnings. Perhaps this change in strategy will win back lost customers and attract new ones through a more sustainable policy when it comes to planned obsolescence.

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