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1. The Windows Phone is often forgotten about as it really did not show much impact to the market at all. Microsoft knew that they should work on a mobile device but were essentially blinded by their own success in the personal computer market. Microsoft clearly knows what they are doing because they have Windows to prove their success, although it is here that answers why the Windows Phone failed so miserably. The need for smartphones was ever growing especially in the times of Blackberry’s reign on the market, and Microsoft failed to see that these devices would be standalone, rather than desktop companions. The customers simply wanted the next best options available from a phone, and it was the company who could deliver things such as internet access, games, calculations, and a camera all in one package that would win over the market. Microsoft delivers on these needs of the market; however, they were simply too late while lacking a unique feature to separate them from the competitors. Their intended approach is that it could be integrated with the desktop version of Windows, but instead provided a rather clunky operating system that could not compete with the options offered from Apple and Android. The Windows Phone offered customers the chance to integrate their phones and Windows-based desktops, something that really has not been available yet for Windows computers. The pricing of the phone was also rather affordable to begin with, but many licensing issues occurred, and prices subsequently rose. Meanwhile producing the phone for Microsoft means that it can enter into the phone market, thus increasing company revenue. Also, if the phone sells well, it may persuade more people to convert to the Windows systems altogether, resulting in more users and income. Producing the Windows Phone simply required resources that Microsoft has access to, and the rest is investing in the potential of the phone selling well. However, Apple and Android had Microsoft beaten to the point that not many people even knew the Windows Phone was released. Both Apple and Android released phones with very similar features years before the first iteration of the Windows Phone was released. Microsoft was not offering any distinct features that made users want to swap from either iOS or Android, as Apple offers easy connections between MacOS and iOS, while Android offers high quality hardware with customizable software.

Overall, the Windows Phone simply missed its mark to the consumers. Microsoft’s late arrival without any separating features result in the market not caring about the phone enough to switch from whichever platform each consumer already sides with. Years after the failure of the Windows Phone it is obvious that it has not had much impact on Microsoft’s finances, but it has been a testament that success is not a guarantee for everything in technology. While Microsoft’s phone market is now gone, these lessons learned can be applied to all business in that they must be willing to take the risk in order to reach the possible success.

1. While Charles Babbage’s difference engine is the basis of a need for computing, and the ENIAC is the first non-mechanical computer, it seems that the first “real” computer is something between the two. This time would be where the Turing Machine falls. The Turing Machine is the middle ground between the electronic computers that are mostly thought of when talking of computers, and the previous mechanical versions that laid the path for the future electrical components. The Turing Machine connects the ideas from Babbage’s difference engine and implements the feature of being programmable through feed-tapes. On top of the addition of being programmable, a variation of the Turing Machine has enough computational power to solve any equation it is given. The combination of these two things, results in the concept that something is Turing complete. Almost all modern-day programming languages are Turing complete if finite memory is dismissed as a limitation, which strengthens the argument that the Turing Machine is the pivot point from mechanical computation to a more modern style of computing. Turing Machines are the first time that many ideas found in modern computing are introduced, alongside programs, these machines function like a CPU, features single and double stacks, and being a choice-based machine to conclude at a certain state.

Babbage’s difference engine mainly addressed the need for computers; as

previously computing was done through “human computers” and very large tables of numbers. While it could be argued that the difference engine is the first “computer”, it was mainly used as the basis of similar ideas, as Babbage never produced a complete difference engine as support from the government was shut down. This difference engine is a proof of concept that calculations can be done by something non-human through algorithms, which is the base for the future of computing. While the ENIAC takes the concept of being “Turing complete” and applies the same concepts to an electrically driven computer, rather than mechanical. The ENIAC takes the main shortcoming of the Turing Machine, the computation time, and improves it through the quick travel of electricity. The main reason for saying that the ENIAC is not the first computer is that it mainly improves what has already been accomplished by Alan Turing. It is much closer to what is now considered a computer than the Turing machine, since the switch from mechanical-based to electricity-based is a great step forward, but the foundations of ENIAC were put in place by Turing.

1. Many-to-many scope is very relevant to the case of Waze displaying police locations as it is information now accessible virtually worldwide. Beforehand the police force’s locations were unknown to the general public, whereas now Waze has given people a platform to publicize that information. Also relevant is distinctive identity conditions, as everyone that posts updates to Waze are simply referred to as “Wazers” unless the user specifies otherwise. This gives most users a feeling of disconnect from the others while still obtaining and uploading the information. This sense of disconnect aids in users feeling less like they are attached to what information the upload, and thus more likely to post updates. Also, the reproducibility assists in a consistent experience for all users since the same information is available to all of them at the same time.

Ethical Relativism is essentially the idea that there is no proper right and wrong,

but rather it is determined by the person and by the society. In the case of Waze displaying sobriety checkpoints, this ethical theory is rather indeterminate. This is because depending on a person’s upbringing and surroundings, they could be heavily for or against the display of these locations. There are cases for both sides to be made, such as the statistic that these checkpoints are actually more effective in stopping drunk driving when the public knows about them through fear of getting caught in the act, as well as the counter-argument that displaying the police’s location puts their safety in danger. A utilitarian view would argue that leaving these sobriety checkpoints as public information benefits the majority, even more so as more people start to use Waze. Leaving this information public helps most people avoid the traffic build up and hassle by showing them ahead of time to plan an alternate route. Using this theory, Waze is very correct in keeping this information public. Deontologists would also say that Waze keeping this information public is ethically correct. The main argument for taking the information away is that it puts the police’s lives in danger is put to the wayside as the main motivation to posting this information is to help others with their commutes. In this case, it is seen as a consequence to doing the right thing, which would be supplying information to the public. With the Rawlsian social contract, the most important aspect of it is that it believes the largest amount of liberty is achieved with the only caveat that it does not infringe on another’s liberties. Using this logic, it would seem as though Waze should withhold the sobriety checkpoint locations because while it does provide people with the option to avoid the checkpoints, it also counters the police’s ability to do their job properly. In all of these theories, the research that has been done to show that sobriety checkpoints are more effective when made public knowledge is nothing to scoff at, as it counters the police force’s main argument that their job is made less relevant.

1. The parties involved in the 8chan dilemma are the users themselves, 8chan as a website, and the companies that are hired to keep the site secure, in this case mainly Cloudflare. As a website, it is 8chan’s responsibility to keep their user’s information safe and provide a “quality” user experience. In order to do these things, they hire an internet service provider (ISP) to assist in delivering these objectives. In this case, it is the ISP’s responsibility to keep their client’s website safe from cyber-attacks and their data safe from harm. Meanwhile the users of the website are responsible for creating discussion and keeping the threads on the site going. Some of the possible outcomes for the 8chan situation would be to either keep the site protected, disconnect service, or keep protecting the site based on the moderation levels. If an ISP were to continue service to 8chan, the website would continue as it currently is, so the revenue would continue for the site. As for the users, they would be enabled to continue using 8chan as their platform for anonymous activities. While the ISP in this case would be incentivized to keep them as a customer and keep the income from the site, while also having public backlash as it would likely be a very unpopular decision. If the ISP were to disconnect service, they would lose the income from the site, the site would likely go down in security and user population, and the users would be de-platformed and forced to move to another similar site. In the middle of those options would be to require more strict moderation in exchange for the ISP’s services. This would allow the ISP to keep 8chan as a customer, allow 8chan to still be live and protected, but would still likely force the users elsewhere as the main appeal of the site is the freedom of speech without moderation. In two of these three outcomes, it is mainly the userbase that suffers, as they are likely de-platformed or moderated. Even if the site would be moderated, that action alone would push a large majority of the users to a new site, essentially making it equivalent to having the site shut down and leaving the compromise irrelevant. This leaves two real options, leaving the site protected or letting it go unprotected. The final decision of this dilemma ultimately comes down to whether deontological or utilitarian ethics are preferred. A deontologist would likely argue that the ISP should continue providing service as they are simply doing the job they were hired to, and what happens as a result is not directly their responsibility. Meanwhile, a utilitarian viewpoint would argue that although it would frustrate the site’s users greatly, it would likely generate more overall happiness by most of the population if the site were to be left unprotected. Personally however, it seems as though deontological ethics should be applied in this case, since the company itself is not responsible for the content that users post. From this view, the main argument that 8chan-type forums create extremists out of people is a bit of a stretch, as it seems unlikely that someone that does not think that way would stumble across such a hidden and underground website. In this case, freedom of speech is being exercised, but in a place where there are no opposing viewpoints, which lets misinformation fester into something dangerous. So while the ISP’s should still protect 8chan, it should also be argued that those users should have their discussions in more open forums where different ideas can be expressed.