Capture Quality with iPhone

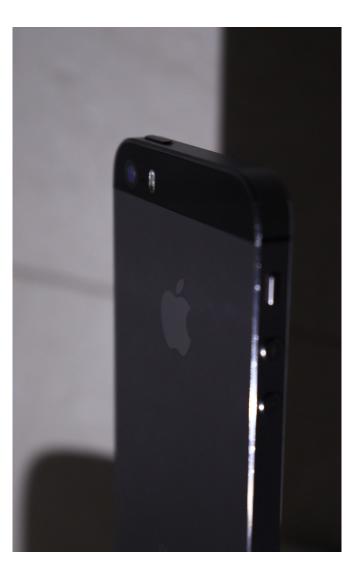
Do you need professional cameras? Do people really need better phone cameras?

Recycling your iPhone

Elias Mokhtar & Claudio Zimmatore

The development of the iPhone has dramatically impacted society and how we live as a whole. It interferes in everything we do such as work, the way we communicate, shop, travel and find entertainment. But one development of the iPhone that has been created is one of its most important features, the camera. The camera has been able to take away the need of a dslr or another hand held camera. Throughout the years of the iPhones development, the camera has rapidly changed from being a simple capturing device to a tool which can compete with current high-end quality cameras.

The iPhone, like many things, is made in China but the camera has been developed by two separate companies. The rear camera being Japanese, Sony and the front camera being United States, Omnivision. Sony have been producing iPhones rear cameras for a while and have always had the tendency to improve the camera with every new model. In 2019, Sony developed a new 3D sensor that uses Time of Flight technology, which uses a sensitive laser



to capture reflective light of different objects in frame. Omnivision have been creating Apple's front cameras since the release of the front camera since the iPhone 3G. Although the front cameras are not as well performing as the rear, they still improve with every model. The iPhones materials are mainly aluminium, iron, lithium, gold and copper but when in regards to the camera it uses sapphire crystal for its lens covers and Corning Gorilla Glass. Sapphire crystal is a form of aluminium which is a material known for its longevity and hardness, and also has the ability to be recycled many times. Gorilla Glass is a thicker and tougher glass which can be recycled. Also the way in which Gorilla Glass is created is no worse for the environment than regular glass. These materials created for the technologies for the iPhone camera, by these companies have had in consideration of the environment as they are mostly recyclable.

The Apple iPhone camera has impacted people heavily as it has helped make things a lot more easy and convenient for regular things

such as taking pictures efficiently, interacting with others, access to the camera, networking and overall quality throughout the years of development.

Throughout years of development on the iPhone camera, people have slowly started relying on it more as its use is much more beneficial now. With the upgrades of the iPhone cameras, they are currently competing with actual photographic dslr cameras as the iPhone camera quality and tools continue to increase and overtake its competitors. The differences between dslr and iPhone cameras is that most people own an IPhone meaning they can access a higher quality camera and can also quickly upload and send its images wherever unlike the dslr which has a longer process as the files need to be transferred. This makes the Apple iPhone camera work more efficiently. In comparison to the dslr cameras, the iPhone camera is much easier to use for those who do not have experience with professional cameras as it mostly does all the work for you.

The work it does is provide multiple different modes such as portrait pictures, slow-motion recording, time-lapse recording, high quality and FPS recording etc. Along with the addition of multiple modes, the iPhone also has created the ability for users to adjust the lighting, colours and filters of their images in order to help gain the feel and atmosphere they want in their photographs. Due to the rapid increase in the iPhone camera quality many people have been able to network with others through uploading fast images on social media creating new opportunities for many. The Apple iPhone has created an impact on users around the world by helping create interaction, easier access to cameras, efficient usability and social interactions.

All in all, the production of the iPhone camera has gone through many phases of experimentation and was worked on by many companies in Japan and the USA along with the help of brands such as Sony. The iPhone camera has also been developed in a way which affects interactions efficiency, access and overall quality.



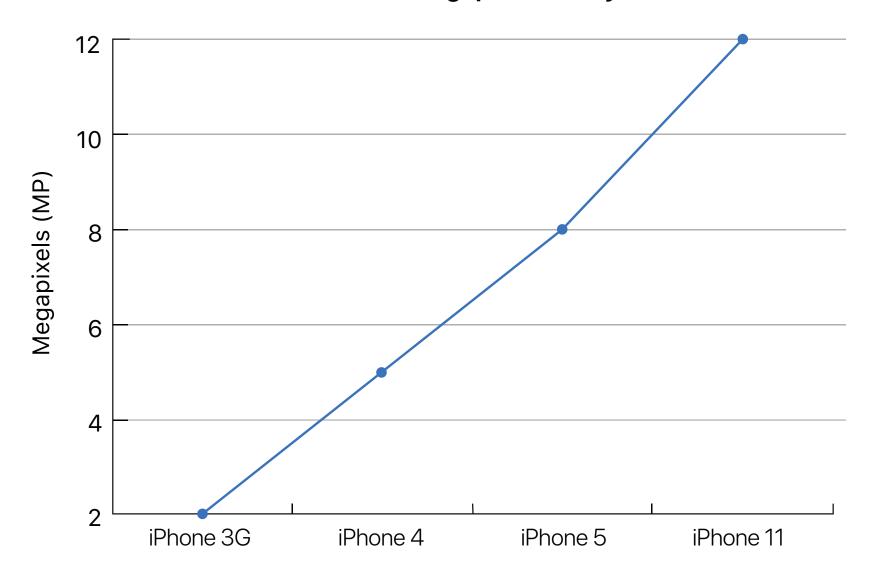
Dvorak, J. C. (2016, September 21). How iphone cameras changed society. PCMAG. Retrieved October 20, 2022, from https://www.pcmag.com/opinions/how-iphone-cameras-changed-society Adedun, S. (2020, October 21). Infographic: 12 Years of iphone camera evolution (includ. 11 pro max). NetBookNews. Ignatov_DSLR-Quality_Photos_on_ICCV_2017_paper.html Retrieved October 24, 2022, from https://www.netbooknews.com/tips/evolution-of-iphone-cameras/ Hradská, I. (2022, March 3). Where is the apple iphone made? the origin of the components may surprise you!: Www. Xplore. Retrieved October 24, 2022, from https://ieeexplore.ieee.org/abstract/document/8600857 fixservis.sk. FixServis. Retrieved October 24, 2022, from https://www.fixshop.eu/blog-new/where-apple-iphone-

made-origin-components-may-surprise-you/

Ignatov, A., Kobyshev, N., Timofte, R., Vanhoey, K., & Van Gool, L. (1970, January 1). DSLR-quality photos on mobile devices with deep convolutional networks. CVF Open Access. Retrieved October 20, 2022, from https://openaccess.thecvf.com/content_iccv_2017/html/

Nguyen, M., Le, H., Qi Yan, W., & Dawda, A. (2018). A vision aid for the visually impaired using commodity dual-rear-camera smartphones. IEEE

No. of Megapixels Every iPhone



iPhones

Evolution of iPhone Cameras

2013

The iPhone 5s started out as a regular phone like the others but with a camera that did its job at the time.



iPhone 5s

2018

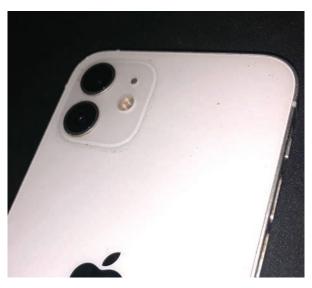
The iPhone X developed a new horizontal camera which had the ability to professionally capture imagery.



iPhone X/10

2020

The iPhone 12 developed a new and larger camera which had the ability to compete with other dslr-like cameras with improved quality and photography tools.



iPhone 12

Most used Camera on Flicker in 2017

