

Ella Murtagh

Evolving mug shots

iPhone cameras keep upgrading each year, but what exactly are they improving?



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The iPhone, launched back in 2007, was easily five years ahead of its time. The world finally had access to one single piece of intelligent plastic and hardware that could do incredible things. It brought together a telephone, an internet browser, a music player and a camera all in one. Now every few years a new iPhone will come out with better and more advanced technology than ever before. We are constantly building the latest and greatest pieces of technology and that's what the consumer wants: the best.

So how has the iPhone camera got to where it is now? As hard as it is to imagine, there was once an iPhone that couldn't take panoramas and 4k videos, let alone just video in general. The first iPhone was only capable of capturing images with a 2-megapixel camera. From there the camera would only get better, increasing the number of pixels.



Megapixels

Each megapixel contains one million pixels, and pixels have become smaller over time. This means that Apple has been able to increase the number of megapixels in their iPhones. The first two iPhones came with a 2-megapixel camera, creeping up to 3.15 in the 3GS, and then leaping to a 5-megapixel camera in the iPhone 4. With the release of the iPhone 4, the camera started to become an important and popular feature, especially with the front facing camera. This model was not so coincidentally released at the same time as Instagram. The world of sharing photographs became instant and global. Then, when the 4S came along the megapixels jumped to 8 where they stayed until the iPhone SE which had a 12-megapixel camera. The number of megapixels has remained at 12 ever since.

So, how can Apple create a quality camera with smartphones that are only getting thinner? They can't have a very big sensor, which tends to be the real hardware that improves picture quality in cameras.

One thing that changed the smartphone camera game was the introduction of the dual camera by HTC back in 2014. This allowed for a higher quality image without compromising on size.

Dual Camera

The dual camera definitely sounds all fancy and is basically just two lenses on one camera, but what does each lens do? On the left we have a wide-angle 23mm lens, meaning you can fit more into your frame, while on the right we have a lens that offers a double focal length, equivalent to a 56mm lens, making far away objects look much closer. With the combination of these two lenses, you get the best image possible, overlapping both photographs from each lens to create a cleaner more detailed shot. However, these dual cameras do not work as well in low light conditions.

According to BMO Capital Markets analyst Tim Long, 700 million iPhones currently in use worldwide. That is how many people

References:

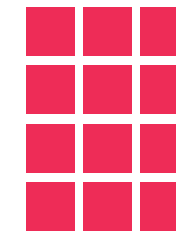
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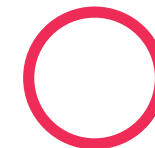
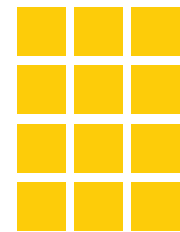
have a loaded ready to use camera at all times. The iPhone took the world by storm, creating a cult following of people willing to buy their products no matter what the cost. In 2016, it was estimated that 85% of photographs taken in 2017 were taken by mobile devices, which has risen from 81.3% in 2016. DSLR digital cameras are fading out, being trampled by smartphones, with Apple being the biggest competitor.

So, where is the iPhone camera going take us next? Only time and a hell of a lot of money will tell.....

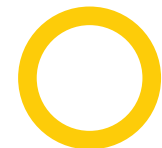
iPhone X



12 Megapixel
Dual Camera



wide-angle
lens: f/1.8



telephoto
lens: f/2.4



Wide-angle lens



Telephoto lens

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iPhone 3G

2-Megapixels

iPhone 4

5-Megapixels
f/2.8 aperture
1/3.2" sensor

iPhone 4s

8-Megapixels
f/2.4 aperture
1/3.2" sensor

iPhone 5s

8-Megapixels
f/2.2 aperture
1/3" sensor

iPhone 6

12-Megapixels
f/2.2 aperture
1/3" sensor

iPhone 6s

8-Megapixels
f/2.2 aperture
1/3" sensor