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A Snapshot in Time

Take a trip through the lens of your
Iphone camera and explore its evolution!

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These days, the standard camera and photo editing features included in the iPhone provide remarkable detail and professional-level finishing, making it a major selling point for users. The cameras on the iPhone have come a long way since the first iPhone. Apple's iPhone camera development is fascinating.

In 2007, the first iPhone did not have many of the features that today's iPhone has. Flash, video, pinch to zoom or even front-facing cameras for selfies were not available. It was not until the iPhone 4 was created that a forward facing selfie camera was included. The only thing on the original iPhone camera app was a shutter button. When taking photos on the first iPhone, it was much more zoomed-in as the lens view field is equivalent to 37mm. The rear camera resolution was 2 megapixels with a camera hole of 4.5mm in diameter, an aperture of f2.8 and a pixel size of 163 ppi. It also had trouble taking photos in the dark because the lens is not particularly fast and it had no optical image stabilization (OIS). OIS allows the shutter of the camera to open longer to

let in more light in and it generally captures sharper pictures with lower light.

Jumping by some years, to 2014 where iPhone 6 was first released. It was a step up from the original, as it included a small sensor and a small pixel measuring just 1,5µm in dimension and an 8 MP iSight camera. The small pixel and sensor meant that noise was reduced further. The iPhone 6 had an integrated flash with a fixed f/2.2 aperture on the lens. Like the first iPhone, OIS was not available, but optical image stability was provided for iPhone 6 Plus. It also has features such as focus pixels which enhance autofocus performance, better exposure control, better face detection and more. The camera enables users to make time-consuming videos and also provides high-quality video files. It had features such as High Dynamic Reaching Range (high dynamic range, HDR), enabling the shadows and highlights to be retrieved when dealing with difficult lighting situations. The Panorama Mode was also included.

Currently, the iPhone 13 camera doesn't differ much from the iPhone 12, but the 13 Pro shows a completely new camera

system. Two rear camera lenses are available on the iPhone 13, where the Pro has 3. The 13 has a wide (f / 1,6 aperture) and ultra-wide (f / 2 and 4 aperture) lens, which now holds 1.7 microns in pixels, allowing up to 47% more light than the iPhone 12, making images brighter and more vivid. The principal camera of all models also features sensor-shift stabilisation, which allows the sensor to move in place of the camera lens. A sensor helps the ultra-wide camera work better in the dark on the iPhone 13 series. Apple claims that the ultra-wide lens, now f/1.8, "is improved to 92% by low light." The most notable upgrade is the evening mode and telephoto lens, which is now less open than its predecessor but has a capacity of 77mm. This enables users to zoom closer in remote scenes without sacrificing image quality. The iPhone 13 includes Marco mode, which enlarges the subject to even close as two centimetres. Both phones also include photographic styles in which local edits are applied while the picture is being captured and a Cinematic Mode that allows users to shoot video.

Apple made it a point to improve their iPhone camera with each new model since the very first release in 2007. Each new launch from Apple adds new functionalities and up-to-date features to help improve the user experience. A camera that leaves a professional appearance but is easily usable and continues to improve. It's no wonder Apple's iPhone is popular among many and has made its name amongst the best smartphone companies.

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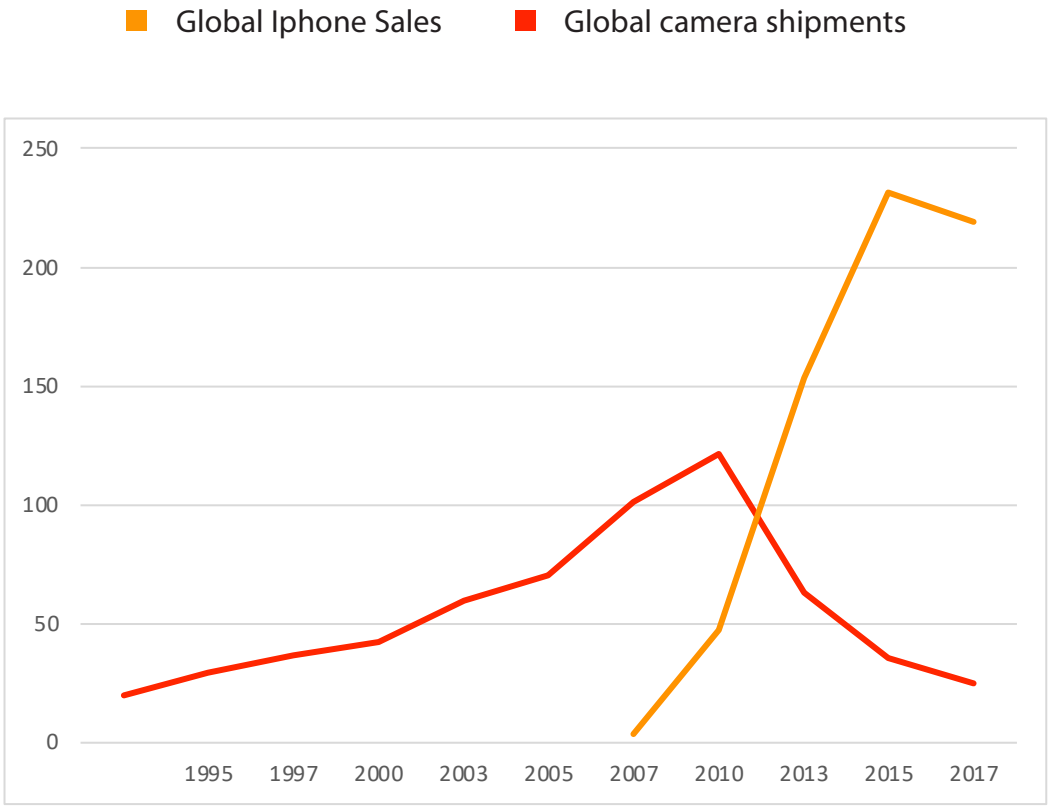
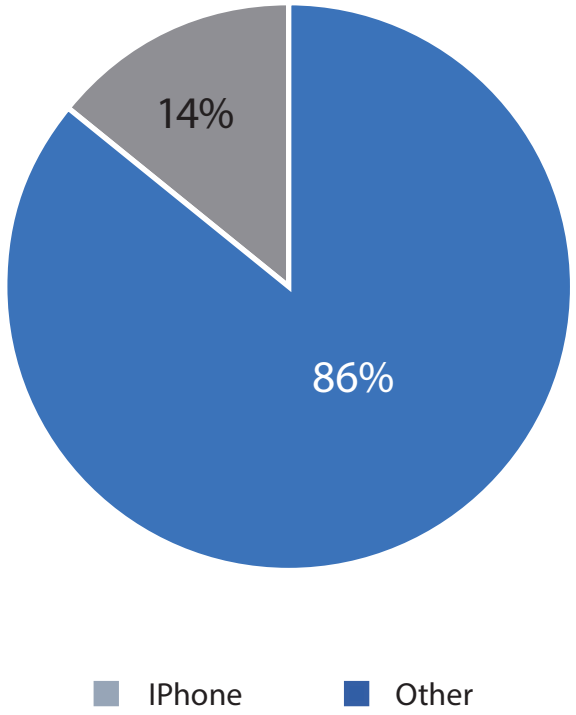
SALES (MILLION OF CAMERAS VS IPHONES



TYPE OF SMARTPHONE CAMERA MOST OFTEN USED FOR TAKING PHOTOS



IPHONE (FIRST GENERATION)

» 2.0 MegaPixels

IPHONE 8 PLUS

» Telephoto
» Wide
» 2x Optical zoom range
» 12 MegaPixels

IPHONE 13

» Telephoto
» Wide
» Ultra Wide
» 2x Optical zoom range
» Cinematic mode in 1080p at 30 fps
» Dolby Vision HDR video recording up to 4K at 60 fps
» 12 MegaPixels

IPHONE 6

» Wide
» 12 MegaPixels

IPHONE XS MAX

» Telephoto
» Wide
» 2x Optical zoom range
» 12 MegaPixels

IPHONE 13 PRO/ PRO MAX

» Telephoto
» Wide
» Ultra Wide
» 6x Optical zoom range
» LiDAR Scanner for Night mode portraits, faster autofocus in low light and next-level AR experiences
» Cinematic mode in 1080p at 30 fps
» Dolby Vision HDR video recording up to 4K at 60 fps
» 12 MegaPixels