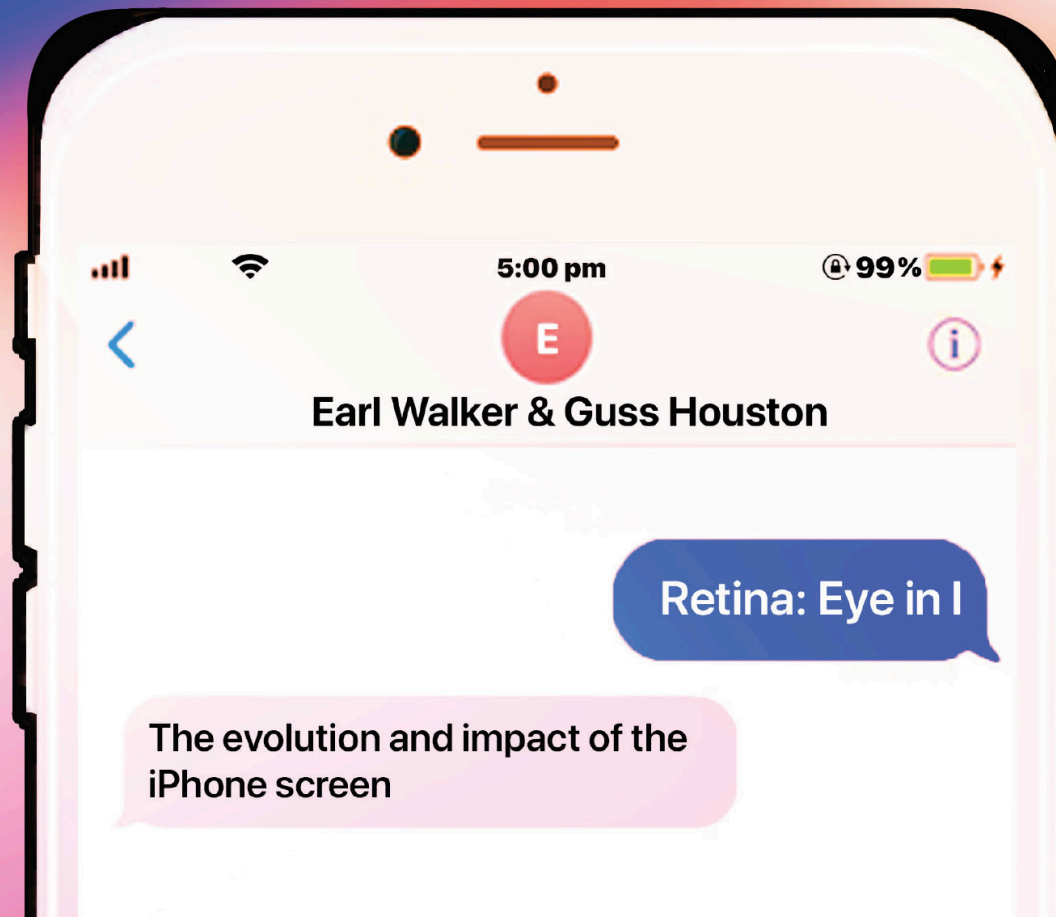


Earl Walker & Guss Houston

Retina: Eye in I

The evolution and impact of the iPhone screen



Retina: Eye in I

Earl Walker & Guss Houston



Apple's iPhone has pioneered the display element of smartphones since its inception in 2007. While technically it wasn't the first to implement a touchscreen, it brought them into the mainstream, setting a trend for others to follow, as well as being at the forefront in terms of resolution up until recent years. The 'Retina Display' is not only a screen but a window into pop culture and entertainment, communication and education. This article will cover history, technicality, and the cultural impact of the iPhone's display on modern society.

In the early 2000's the co-founder of Apple "Steve Jobs" believed that mobile phones were going to become important devices for portable information access, and that every mobile phone needed ground-breaking software. Apple's push for an innovative phone was clear with the announcement of the first iPhone in 2007. The iPhone gained instant worldwide attention as it was the first phone to deter from the physical keyboard and to introduce an innovative multi-touch interface, inertial scrolling, rubber

banding, and the ability to easily multitask from music to call to web to email and back. As each new iPhone came out this became a common ground for the industry and Apple introduced further innovative software additions such as the "App Store" to buy Apple applications, the use of Retina Display, the smart assistant Siri and many other innovative additions that show Apple's consistency in creating powerful technology. The future for iPhones appears to be endless as each new release is created with a new unique form of technology.

The basic principle of the touch screen has remained the same since its inception, however Apple have found ways to make improvements and outsmart their competitors. Most smartphones of the time used resistive touch screens, whereas the iPhone used capacitive multi-touch technology. Multiple fingers touching the screen could be detected for gestures like 'pinch-to-zoom'. Over the years, Apple have improved the responsiveness and made additions like 3D Touch to the screen. One thing that

has constantly improved is the resolution, an important aspect with the prevalence of photography and video. The original resolution of 320 x 480 pixels pales in comparison to the current 750x1334 in the iPhone 8 and upcoming 1125 x 2436 in the iPhone X. With the iPhone 4S came the introduction of the Retina Display, a marketing term Apple coined to mean a display where the viewer can't distinguish individual pixels. Such a display has around 300 pixels per inch or more.

Resolution has a bright future, always able to improve despite coming a long way in the past decade.

The screen of the iPhone is considered the main contributor to the user experience. Through the constant improvement of the screen quality it has allowed a growing range of options of what the consumer can do when using the iPhone. Apple's constant improvement in screen quality has made the modern user of an iPhone accustomed to the technological standards of the screen and has become a dominant presence in the modern-day

person's life. Modern applications thrive on the screen culture of the iPhone, with dominant film and music streaming services such as Netflix and Spotify both creating innovative user experiences for the screen. Apps related to everyday life such as shopping, web banking, travel, gambling and transportation have become a normal necessity to all iPhone users and constantly improve in look and user options through the screen interaction. Social media and iPhone cameras are the biggest example of success through screen culture as millions of people around the world have great visual access to apps such as Instagram and Facebook and connect to each other from around the world. The new screen culture is constantly changing and it is clear the relationship between the user and screen is vital to the future of the iPhone.

The iPhone's display has had a major impact on not only the world of technology but society and culture itself. It is essential element of the phone's user experience, providing the user with an aesthetically

pleasing visual representation of the vast capabilities of the technology.

It is a window to all the information in the world, small enough to fit in one's pocket despite having resolutions as high as televisions in the current iterations.

References:

Landmark Advances in the iPhone's History

1 - "The App Store"

The app store allows users to browse and download apps developed on Apple's iOS software. The launch of the app store featured a whopping 500 apps, many of which were available for free. The store now features over 2.2 millions apps.

2 - "Retina Display"

Introduced through the iPhone 4 in 2009, the iPhone screen display of text and images became extremely clear and crisp, so pixels are not invisible to the users eye. The retina display has improved since every release and has become a standard for Apple consumers.

3 - "Siri"

Apple introduced a groundbreaking smart assistant to the iPhone 4S in 2011. Siri supports a large range of user commands and has received global praise for its voice recognition and knowledge of user information. Since it's release it has become an integral part of Apple products.

4 - "Camera"

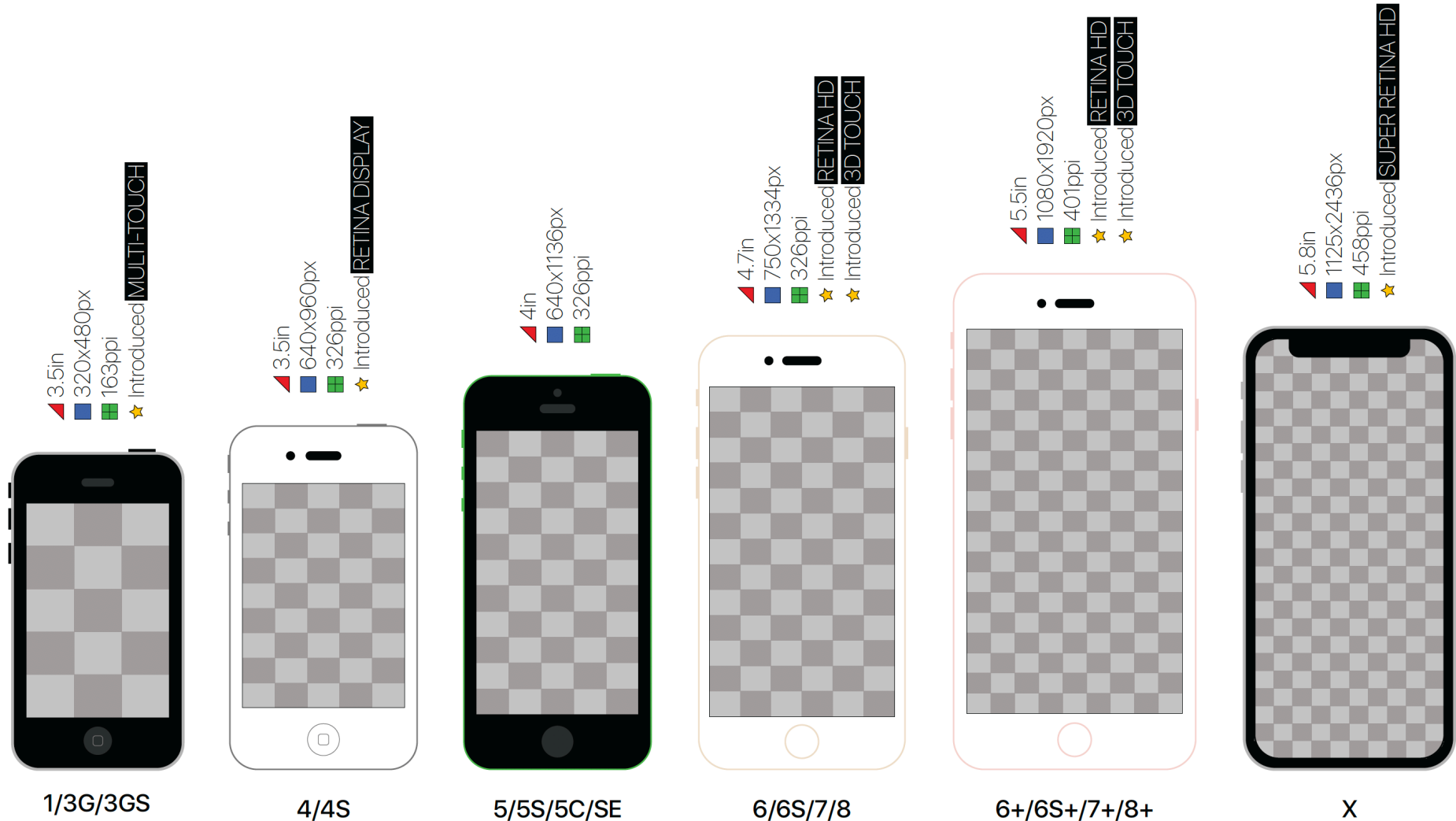
The iPhone became not only a successful phone but also a great camera in every users pocket. The iPhone camera has improved rapidly over the years with technological features such as touch to focus, true tone flash and live photos that augmented your images with sound and motion.

5 - "3D Touch"

The 3D touch has proven handy since it was first introduced in 2015's iPhone 6s update. The feature allows a variety of options such as replying to notifications, previewing messages and links when you vary the amount of pressure you apply to the screen. It's an innovative addition to the iPhone iOS that lets you move around faster than ever.



iPhone Display Evolution



Screen cultures leading applications.

