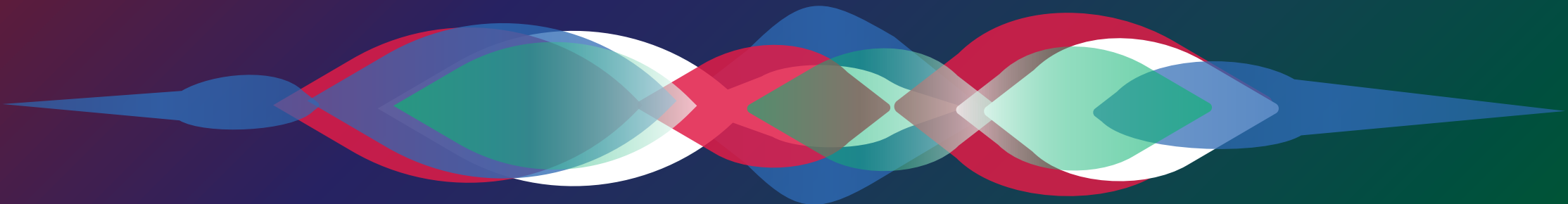
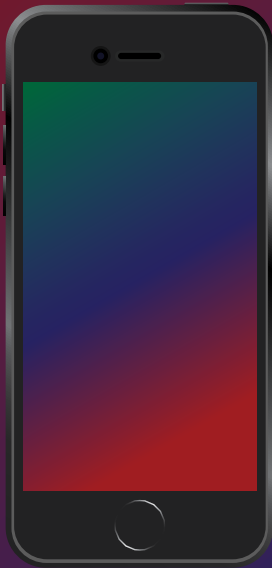


Austin London & Isaac Stefas

The Human Touch

An analysis of Apple's external and
internal user interface



The Human Touch

Isaac Stefas & Austin London

It's no secret that Apple is one of the biggest brands in the world, leading the way in technological advancements and simple, clean, user friendly devices. We will focus on this as one of two major aspects of the iPhone's design, to which the other will be focused mainly on how these screen ergonomics interact with the internal user interface the consumers interact with daily.

Since its inception, Apple has kept up the tradition of launching a new lineup of phones every year, with some phones inheriting different sizes in screen real estate. Their smallest being the iPhone 13 Mini with a display size of 5.42 inches/137.668 mm, and their largest iPhone yet is the iPhone 13 Pro Max, with a display size of 6.7 inches/170.18 mm. Apple's motive for bigger phones every year stems from advancements in technology, and changing social standards over time.

Apples making bigger phone screens not only allows the phone to have more power input from the 5G network, it also allows for a more immersive experience. With the bigger screen



real-estate, it allows for a more immersive viewing experience whether streaming videos or mobile gaming. As stated by Tech Evaluate. (2022), "More screen means more to see, more to engage with, and the possibility for better quality visuals and videos that aren't squished down to a tiny screen". With a bigger screen and a larger pixel density, content such as apps, icons, and text appears much bigger, clearer, and visually distinct. This creates an immersive entertainment on a mobile scale.

With this factor being a big selling point for Apple, it's no surprise that companies such as The general social consensus usually tends to go, 'smaller hands, smaller phones, bigger hands, bigger phones'. While the bigger screen can prove to be too big and bulky for some users with smaller hands and some have to resort to using two hands to navigate. Luckily Apple has developed a reachability function to allow for single handed use on bigger phones. This is done by pulling all the contents on screen halfway down with just a swipe. it also

gives people with a bigger hand size more of a choice.

While the reason for the larger phones is overall more of a marketing push, it is safe to say that inclusion of different hand sizes and more power were welcome side-effects of this result.

While initially, it would seem the main concern when designing mobile devices is the size of the device and all its other external issues: storage, durability, etc. It is in fact simply one half of the equation. The internal user interfaces are just as important and contain their own set of equally imperative parameters. These parameters consist of the following components: interaction, navigation, and a level of user satisfaction, likely through comfortable visual design. In order to follow these imperatives, it's all brought together with the touch screen feature in which the user can interact with it using gestures like swiping and tapping the screen. It's this interactive design between user and interface that shows

the importance of the varying screen sizes, influencing the market and the consumer's preference

In terms of preference for the user, the size of the phone doesn't just affect the physical, external interaction with the iPhone but also how the user interacts with the contents of the phone itself, namely the user interface. Research has suggested that the larger screens being capable of showcasing more information and contents of the apps seen on the screen can also affect the user's preference, driving them to choose a larger phone. In addition, the larger screens of the iPhone 13 Pro Max, with a screen size of 6.7 inches can contain larger keyboard buttons and greater space for reading, thus increasing productivity that would not be found in a smaller screen. This would in turn naturally increase the market for these various screen sizes as some with larger screens would be intentionally greater used for professionals, such as writers.



References:

Phones are too big and Apple could have fixed this. (2021). Retrieved 22 October 2022, from <https://www.trustedreviews.com/opinion/phones-are-too-big-and-apple-could-have-fixed-this-4159101>

Why Do Phones Keep Getting Bigger? | Tech Evaluate. (2022). Retrieved 13 October 2022, from <https://techevaluate.com/why-do-phones-keep-getting-bigger/>

Potter, G. (2008). iPhone to IMAX : the social implications of screen size. Retrieved 13 October 2022,

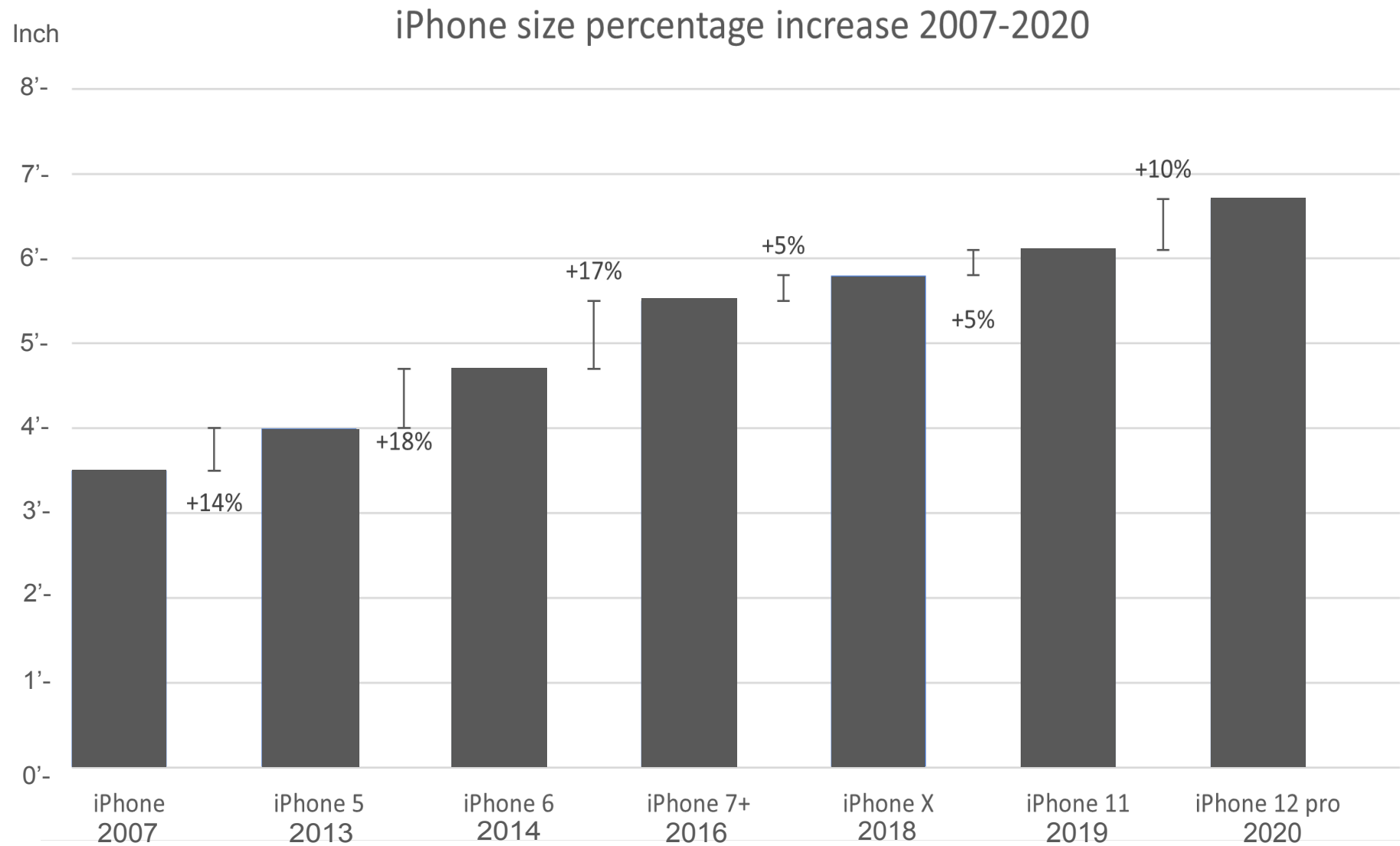
from <https://scholarworks.montana.edu/xmlui/handle/1/2073>

Geoff Hackworth (2020) | How Ios Apps Adapt to the various iPhone 12 screen sizes.

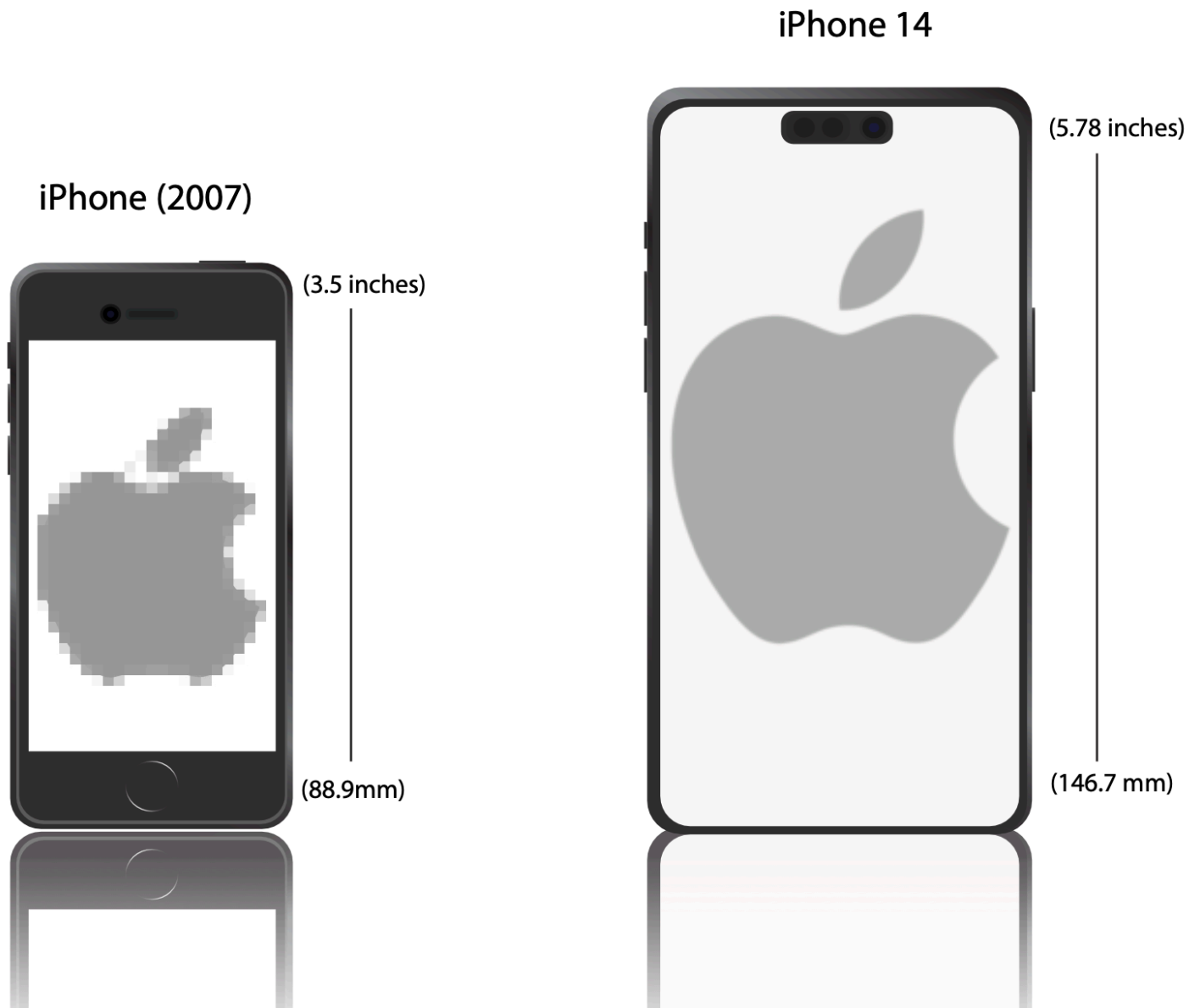
<https://hacknicity.medium.com/how-ios-apps-adapt-to-the-various-iphone-12-screen-sizes-e45c021e1b8b>

Eric Kurniawan & Restyandito Sutarno (2017) | The Effect of Screen Size and Interaction Style on Mobile Device Usability pg 1-3.

https://www.researchgate.net/publication/322715528_The_Effect_of_Screen_Size_and_Interaction_Style_on_Mobile_Device_Usability



The iPhone Resolution



Visual comparison between the resolution capabilities of both devices.

-On the left: the original iPhone from 2007, boasting a 320x480 resolution LCD screen at 163 ppi that measures about 3.5 inches diagonally. This is notably much bigger than other phones of the time.

-On the right sits the recently released iPhone 14 with a resolution of 2556 x 1179 with 460 pixels per inch. Quite impressive but, it should be noted that it was quickly surpassed by the iPhone 14 pro, which sits at 796 x 1290 with 460 pixels per inch. Regardless, both devices sport a pixel density that effortlessly puts previous devices to shame.