

The iPhone X in context



So, there is another line of iPhones out – big deal? The iPhone 8, 8 Plus, and the X. The iPhone X – or, for people without knowledge of Roman numerals, the [one-phone-ten](#) – has a brighter and more advanced screen, can recognise you through 30,000 facial features, and has a number of other improvements over the previous versions. It is not cheap, which has resulted in the collective Internet imagination going in hyper-drive with commenters on Twitter sarcastically suggesting they will be selling [a kidney as payment](#).

In most ways, a new version of this iconic device, which kicked off the dramatic change to the way most people access the Internet, will always disappoint, because of the high expectations consumers place in it. The iPhone has, more than any other consumer product, excited a broad global public. No one ever queued around the block for a new mobile phone before the iPhone arrived a decade ago. Now it has become a tradition for the faithful, and for those making a handsome return on their time by reselling the sought-after device.

Device UX

Apple co-founder Steve Jobs returned in 1997 to a struggling company and negotiated a cash injection of \$150 million from Microsoft, along with Bill Gates' promise that their Office suite would continue to be supported on the Mac. Now Apple is one of the world's most valuable and richest firms. On the surface, all largely due to the iPhone, but digging deeper, more fundamentally due to Apple's stubborn obsession with user-friendly human-computer interaction. Design thinking in general and user experience (UX) in particular are now trendy concerns for many organisations, but it has always been at Apple's core. (Please see [here](#), [here](#) and [here](#).)

While important for large-screen personal computers and laptops, incessant attention to user experience (UX) turned out to be a critical factor in rendering the smartphone a dominant consumer technology. The iPhone gestures focused on dynamic finger movements with the bouncing of lists when the fingers reached the top of the screen. Tapping, dragging, pinching, sliding, and rotating has now become an integral part of the repertoire with which all smartphone users interact with their device, irrespective of manufacturer and operating system. Combining such gestures with a highly responsive touch-screen has allowed the small screen to seem much bigger and more useful for a great variety of tasks, whether doing work or just being.

Smartphone user-friendliness has placed the gadgets permanently close to our bodies, instantly available for interaction. This shortening of the distance from intent to action is far from unproblematic, raising serious concerns about addiction, first coined for the business people armed with email "[crackberries](#)".

However, the technology has enabled organisations to redefine the boundaries between individual workers' applying own discretion to deal with unanticipated situations where they may find themselves, while also acting according to organisational rules and regulations potentially placed [right in their hands](#).

The iPhone as a gateway to the app ecosystem

While Apple has led the development of, and all manufacturers and service providers provide much better user experiences on, handheld digital devices, an improved UX is only one small element of the last decade's smartphone revolution. The transition from a user-friendly web-browsing and mobile telephony device, to a general-purpose gateway to an ecosystem of millions of apps forms the cornerstone for both Apple and Google's recent mobile successes.

Steve Jobs initially resisted opening the iPhone to any outside developers, but [his hand was forced](#) by the Apple board of directors pointing to the fact that users in their tens of thousands were voting with their feet and "jailbreaking" their devices. I was one of them, and less than half an hour after I had purchased my first iPhone at the Chicago Apple Store, it was jailbroken back at the hotel and all sorts of apps were installed on a device that was only meant to allow open access via the Safari web browser. The official opening of the iPhone to outside developers a year after the launch of the phone, implementing a strict quality assurance process, enabled third-party developers direct access to Apple consumers globally.

Generative digital platforms

The resulting digital platform implements a multi-sided market and has provided an explosive growth in smartphone apps, providing an end-to-end integrated [development and delivery mechanism](#) between developers and consumers. With installed bases of around 2 million iOS apps and 2.2 million Android apps, other entrants have found it very difficult to compete with this duopoly. Indeed, the then Nokia CEO Stephen Elop pointed out in 2011 in his [Burning Platform Manifesto](#) that device quality was much less important than [commanding a digital platform](#). The smartphone platforms are [generative](#) in that the digital resources they provide their community of developers can produce results entirely unanticipated by the platform owner, but also ones that possibly challenge the [owner's interests](#).

Apple and Google's successful command of two generative digital platforms with millions of active customers and their credit cards implies that there is relatively little to do in the way of scale as the market is reaching maturity. Hopefully, the available diversity of apps, the user-friendliness of the device and operating system, along with the lock-in of consumers having invested in purchasing apps, render them loyal to the platform.

Equally, the platform owner can hope for a new phone luring some to switch over from the competitor platform. However, further innovation of the platform is necessary to enable a broader scope of engagement with it. The iOS story is one of new phones enabling new services through new sensors, new integration of other platforms, and new devices, such as TV-boxes, tablet computers, smart watches, home automation support, and voice-activated entertainment devices.

In this light, the new iPhone X is an essential part of Apple's strategy to forge deeper relationships between developers and consumers based on this core device. This is possible as the mobile phone is often paid through the line-rental agreement, and as people tend to have rapid replacement cycles of smartphones. Furthermore, the upgrades of apps and operating system can basically be fully automated by the end-user, thus allowing for a rapidly moving and homogenous installed base of devices.

Internet of Things will possibly challenge the Apple-Google duopoly

Full-stack services, provided by a single app that supports users with a wide variety of their everyday communications, coordination, scheduling, and commerce needs, such as Tencent's [WeChat](#), impose a challenge to this kind of platform arrangement as most users spend almost all their mobile phone time within this one app, therefore making a switch from one device and operating system provider to another very easy. Also, the diversity of the device ecology when the digital platforms expand into The Internet of Things will possibly [challenge the current duopoly](#) of Apple and Google.

Several articles have sought to draw attention to the dangers of smartphone face recognition, such as the feature on the iPhone X. In the concrete case, the face print is stored securely on the chip and not in the clouds. Similarly, fingerprint data from touch-id is also stored locally on the phone in a way making it impossible for others to retrieve.

Nonetheless, other technologies on other platforms increasingly seek to gain more user-friendly services through cloud-based synthesis of fingerprints and faces, thus adding fuel to two essential debates; **our right to privacy**, and **the need for digital platforms to be subjected to regulation**. With the growing importance of digital data and the increased centralisation of private data within global digital platforms, there is a need for a comprehensive discussion of how to regulate the platforms serving as market makers and as aggregators of such datasets. (Please see [here](#), [here](#) and [here](#).)

So far, this debate on how to understand both the innovation dynamics of digital platforms and their regulation is at its early beginnings. Much work is needed, and little reliable data is available from the traditionally highly secretive platforms.



Notes:

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