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The iPhone 4 is a smartphone made by the computer software and personal computer maker Apple Inc. It is the fourth generation of the iPhone, having succeeded the iPhone 3GS, the other two previous models are the original iPhone and the iPhone 3G. The iPhone 4 has been hailed not only as a breakthrough internet communication gadget, but also as a revolutionary touchscreen device and has altered the way people view smartphones.

One may ask; why do we refer to the iPhone 4 as revolutionary? How is this smartphone different from the other smartphones out there?

Design and Function

The iPhone 4 is a completely new design, combining and improving all technologies from previous iPhone models, and introducing newer ones to improve user experience. To begin with, the exterior design of the device features a metallic back casing unlike the plastic casing in several smartphones currently available in the market. The casing protects the phone's delicate components from damage through physical intrusions. The screen is made of glass that Apple says is "chemically strengthened to be 20 times stiffer and 30 times harder than plastic, theoretically allowing it to be more scratch resistant and durable than the previous models" (Diaz, 2010). Smartphone screens have a tendency to have scratches on their surfaces with time, however, the exceptional treatment of glass used on the iPhone screen ensures it remains scratch-free for a very long time, this is not possible in other smartphones, most of which spot scratches after a few

months of usage. The phone is also slightly slimmer at 0.37 inches as compared to the 0.

48-inch thick iPhone 3GS, at the keynote speech, Apple CEO Steve Jobs called the iPhone 4 the “thinnest smartphone on the planet: almost 25 percent thinner than the iPhone 3GS” (Helft & Wortham, 2010). The slim iPhone 4 is easily portable and fits in limited spaces. Other physical advances on the iPhone 4 include the stainless steel band around the phone as opposed to the plastic cover in many smartphone models, a front-facing camera (most smartphones have a single rear camera), an LED flash adjacent to the rear camera to capture high quality pictures and videos even in poorly lit conditions, and a higher resolution display, marketed by Apple as a “Retina Display”.

The term arises from the fact that iPhone 4’s display offers the highest resolution that the human retina can perceive, and the best in any smartphone. The display enables users to read even extremely small text on eBooks or web pages without straining their eyes, it also improves clarity during video calls. The iPhone 4 is the first smartphone to feature this form of display and this makes it a smartphone of choice for many. These are just few of the visible changes made on the iPhone 4 that make it the best smartphone in the world.

The interior improvements are just as significant as those on the exterior, perhaps more. Speed is a very important feature of any smartphone, and the iPhone 4 does not fail at this. The device runs on an Apple A4 processor that significantly improves its speed while using low power, increasing the battery

life. This reduces heat dissipation too. Top-notch smartphones use Qualcomm, Nvidia and Marvell processors, these are no match for the Apple A4 chip.

The rear camera is greatly improved over its predecessors, with an LED flash, backside illumination, and is 5 megapixels, compared to 2 or 3. 2 megapixels in most smartphones. The camera can record in HD, a feature that is exclusive to the iPhone 4. The rear-facing camera has a 5X zoom function and makes use of the tap to focus feature to improve clarity of video and photos as opposed to the maximum 4X zoom capability in most smartphones other than the iPhone 4.

The final significant improvement on the iPhone 4 is the introduction of the gyroscopic sensor, which perceives motion along the X, Y and Z planes. The gyroscope, first introduced on the iPhone 4 smartphone, works simultaneously with the accelerometer, which has been present in most smartphone models and detects the phone's movement along all axes. These two features enable the device to detect the approximate speed of movement in all directions and greatly improve the gaming experience on the iPhone 4. The most important aspect of the iPhone 4 that distinguishes it from other smartphones is the operating system it runs on: the iOS 4, which is the most highly developed mobile operating system in the world. The operating system enables all the applications and features to run smoothly and position the iPhone 4 as the best smartphone in the market. The iOS4 interface is easy-to use and this has led to the creation of more than 350,000 applications.

This large amount of apps allows each user to download and install apps of their choice thereby realizing the full potential of the device. Although other smartphones have a similar platform, Apple's App Store still dominates the application market and makes the iPhone 4 the smartphone of choice. The iOS4 user interface provides multiple user interaction and incorporates the concepts of direct input and touch.

Powered by Apple's A4 chip, response to user input is swift and smooth, with multi-input options such as swipe, tap, pinch, and reverse pinch. This is a robust feature of the iPhone 4 as most smartphones only allow input through the touch motion, but the iPhone 4 goes past this and offers several input options. Unlike other smartphones that offer a basic media player, the iOS4 combines the technologies used in the iPod and makes the iPhone 4 a powerful media device (Apple). Other features of the iOS4 include wireless printing and support for video calls through the FaceTime feature.

iOS4 is the world's most inventive technology in the mobile industry and its exceptional capabilities have definitely changed the world's view of the mobile phone. Another fact that differentiates iPhone 4 from other smartphones is the company itself: Apple Inc. The company has been in existence since 1976, designing products that employ cutting-edge technologies such as the Powerbook laptop, iPod, iPad, Apple TV, Mac Air laptop, among several devices. The company has continued to be a leader in personal computers and a trendsetter in the mobile phone devices. It is one of the most successful companies in the world and continues to register huge growth. Besides, its stock prices have risen phenomenally in the last

three decades: \$2 in the early 1980s, \$25 in the early 1990s, \$200 in 2007, and currently at \$337 in the NASDAQ stock exchange.

Perhaps this is not important in our discussion of the iPhone, but the figures indicate a company that has been growing gradually for the past 30 years, and points to its stability, and this extends to the products. No other smartphone company has had such a huge success story. Besides, Apple has always embraced innovation in all of its products and is never afraid to take risks in designing new products, this is evidenced by the iPod, iPad and even the iPhone. Apple Inc. has continually provided upgrades to its product lines in response to technological advancements and user opinions, of which the most recent release of the iPhone 4 operating system is the iOS 4.

3. 1. At the release of the iPhone 4, many users complained of a drop in signal strength when the gadget was held in a certain way, an anomaly that resulted from the integration of the antenna to the external metallic case. Apple responded by informing users to avoid touching the lower end of the phone while making calls. The company also issued a software update to help fix the problem, and later on, issued free cases to users who still encountered the problem (Helft, para. 4). The company Apple's amazing customer service, I have personally replaced my iPhone one time when I had a few issues with it.

Apple's immediate response to consumer opinions has endeared it to many users and this has partly contributed to its success, and in the elevation of the iPhone 4 as the most advanced smartphone. Constant upgrades, new product development, and embrace of new technologies now and in the

future will ensure that iPhone 4 remains the smartphone of choice for many users even as competitors try to come up with models aimed at pushing the iPhone 4 out of the market. Each newer version of the iPhone continues to be a trendsetter in the smartphone market by introducing new and improved features and technologies. However, to continue their market dominance, Apple Inc. will have to address minor problems associated with the iPhone 4, and test their future products comprehensively before launch.

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