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KAIOS TECHNOLOGIES

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ABSTRACT

KaiOS is the most popular mobile operating system you probably haven't heard of. Instead of designing software for full-blown smartphones, Hong Kong-based KaiOS Technologies (pronounced ky-O-S) has exceeded 150 million global users by powering what it calls the "smart feature phone." Far more spartan than iPhones and Samsung Galaxy models, these devices—which sell for as little as \$15—run must-have apps such as YouTube, Google Maps, Facebook, and Whats-App, with more available from the KaiOS app store. The KaiOS is the platform has over 100 million users worldwide, and that number is only increasing.

Keywords: *[mobile operating system, operating system, KaiOS's features, KaiOS's challenges]*

INTRODUCTION

KaiOS is a mobile operating system based on Linux, developed by KaiOS Technologies (Hong Kong) Limited, a company based in Kowloon, Hong Kong, with largest shareholder being Chinese multinational electronics conglomerate TCL Corporation. It is forked from B2G OS (Boot to Gecko OS), an open source community-driven fork of Firefox OS, which was discontinued by Mozilla in 2016.

KaiOS has quietly become a global powerhouse in the mobile industry, bridging the gap between feature phones and smartphones. The so-called smart feature platform is designed for phones with a physical keypad and more modest specs than even Android Go devices.

Popular and Trusted

It is actually the second-most popular mobile phone platform in India, largely due to the success of the JioPhone range. KaiOS has also since made its way to the Nokia 8110 4G, prepaid feature phones in North America, and now Africa via Orange and MTN handsets.

Background

Kai OS is being developed by Mozilla. Kai OS is the developed version of FirefoxOS which is based on Linux. Recently Google has invested \$22Million to develop KaiOS. KaiOS Technologies powers an ecosystem of affordable digital products and services, and exists to empower people around the world through technology. Its flagship product, KaiOS, is the leading mobile operating system for smart feature phones with more than 110 million devices shipped in over 100 countries. KaiOS is based on HTML5 and other open web technologies. Devices running on the platform require limited memory, while still offering a rich user experience through access to apps like the Google Assistant, WhatsApp, YouTube, Facebook, and Google Maps.

KaiOS Team

The team behind KaiOS currently numbers more than 280 people and continues to grow rapidly. Headquartered in Hong Kong, Kai has offices around the world, including the U.S., China, India, and France. The company has won several awards, including the most recent “Changing Lives Award” at AfricaCom 2019, was ranked among TIME’s Best Inventions in the Social Good category for 2019, and was named to the GSMA 100. Earlier in 2018 we received the Best Mobile Technology Breakthrough at MWC Asia 2018, and was named Best Emerging Tech by Digital Trends at MWC Barcelona 2018. Kai has also received indirect recognition through its integration with the JioPhone, which won Fortune’s Company Change the World award and Nikkei’s product excellence award.

METHODOLOGY

KaiOS’s Features

The primary features of KaiOS bring support for 4G LTE E, VoLTE, GPS and Wi-Fi with HTML5-based apps and longer battery life to non-touch devices with optimized user interface, less memory and energy consumption. It also features over-the-air updates. A dedicated app marketplace (KaiStore) enables users to download applications. Some services are preloaded as HTML5 applications, including Twitter, Facebook and YouTube. On 1st April 2020 there are 500+ apps in KaiStore. The operating system is comparatively lightweight on hardware resource usage, and is able to run on devices with just 256 MB of memory.

KaiOS claims to be the Emerging OS. The main goal of The KaiOS is to make feature phones a bit smarter. Many of the most famous smartphone manufacturers of the day are using the KaiOS on their built-in feature phones. For example, HMD Global is using KaiOS as the default operating system for the current Nokia feature-phones, made by HMD Global.

The OS Extra adds some features and functionality to the features-phones that are used by The KaiOS, although it also requires extra functionality in the hardware of the feature phones. For example, Forge Support, WiFi support, NFC payment support, apps support, progressive web app support, etc.

5 Big Features of KaiOS

Though the cost of KaiOS supported mobile phones is very low but it has many features. Because of all these features this OS will attract the mind of people. So some of the features are as follow:

1. It supports 4G, Bluetooth, GPS, and many other file transfer apps.
2. This OS supports all the world's most popular mobile application.
3. Using Google Assistance, you can use voice to open apps, navigate and type.
4. It supports many low-cost mobile devices.
5. market share of kai operating is increasing.

KaiOS's Advantages

1. This new kid in the block is getting many head turns in India because of the Jio Phone and the associated low cost 4G data packages (15% OS user base!). This thing became so popular that its user base is now more than that of iOS. KaiOS is a feature phone OS, made for basic tasks and focused on people who are shifting from Feature phones to Smartphones.
2. It is an efficient and lightweight OS, so it does not need a Snapdragon 835 with 8 gigs of RAM and 5000MaH battery. It is made to run on weak and affordable hardware. This is the biggest advantage of KaiOS over Android.
3. It has a good browser, Google Assistant, and presently, it internally supports WhatsApp, Facebook, YouTube and many more.



KaiOs Phone

Even for a KaiOS phone, the MTN Smart S core specs are not impressive on paper. It has a dual-core 1.3Ghz UniSoc chipset (7731E) with 3G connectivity, a 2.4-inch non-touch display, 256MB of RAM, and 512MB of expandable storage. Clearly this is not in the same league as the 4G-toting JioPhone, with its 512MB of RAM and 4GB of expandable storage. There are several other notable specs here though, such as a 2,000mAh battery, dual SIM slots, and a 1.2MP camera on either side of the device. Furthermore, it also got Wi-Fi, Wi-Fi hotspot/tethering functionality, Bluetooth and GPS and it does worth the price that comes with it.

Navigation System

System navigation from here is very simple too. Hitting the right direction key takes you to the camera, pressing up takes you to the quick toggle settings menu, and pressing the centre key takes you to your app drawer. General navigation is also very intuitive, with the end/reject call key serving as your back button and the center key used to accept whatever is highlighted.

RECOMMENDATIONS

The Similarities

Conceptually, the KaiOS is no different from a store for apps on other devices. You can browse app categories, like social media and games. You can read a preview, find info on the developer, and download the apps you like. Many are free, some are paid, others offer in-app purchases. KaiOS also supports push notifications, just like a regular smartphone. The KaiOS will be great if they can provide some new and better app with features for the users in competing with other brands.

Closing the digital divide

Reducing digital inequality does not end by solving device affordability, digital literacy, and data pricing (more details on these issues in this post). Resolving these problems is crucial, but they are only the beginning. The next important step is to create relevant content (including apps) specifically for those who access the (mobile) internet for the first time. For example, they can partner with Google and make Google Assistant available in the KaiStore. Users can use their Google Assistant to find answers, get things done and open apps using nothing but their voice – all they have to do is press and hold Google Assistant button to get started. Simple and convenient! So in the coming months and years, they will be turning more of our attention to help bring more apps to the KaiStore that are developed with this unique target audience in mind.

CONCLUSION

KaiOS the smartphone OS presents the opportunity for a person to step away from the Google bubble and enter a more open web model that Firefox users on the desktop love about that product. There is an appeal of minimalism to this operating system. One that operates on the web and is lightweight enough to work well on low-end hardware.

There is a simple fact that cheap Android smartphones do not offer the greatest experience in the world, as they are trying to do everything that a more expensive Android phone is trying to do with much less hardware capability. A KaiOS smartphone would not have this problem, as from day one the platform was designed around maximizing limited hardware. In computer terms, I would look at the budget phone like the \$300 laptop. Windows can run on this price tier but not well, whereas Chrome OS is designed to run on \$300 hardware. KaiOS in many ways can be the Chrome OS of the mobile phone world.

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