Alternative OS for mobile devices

Seminar: Wednesday, odd week

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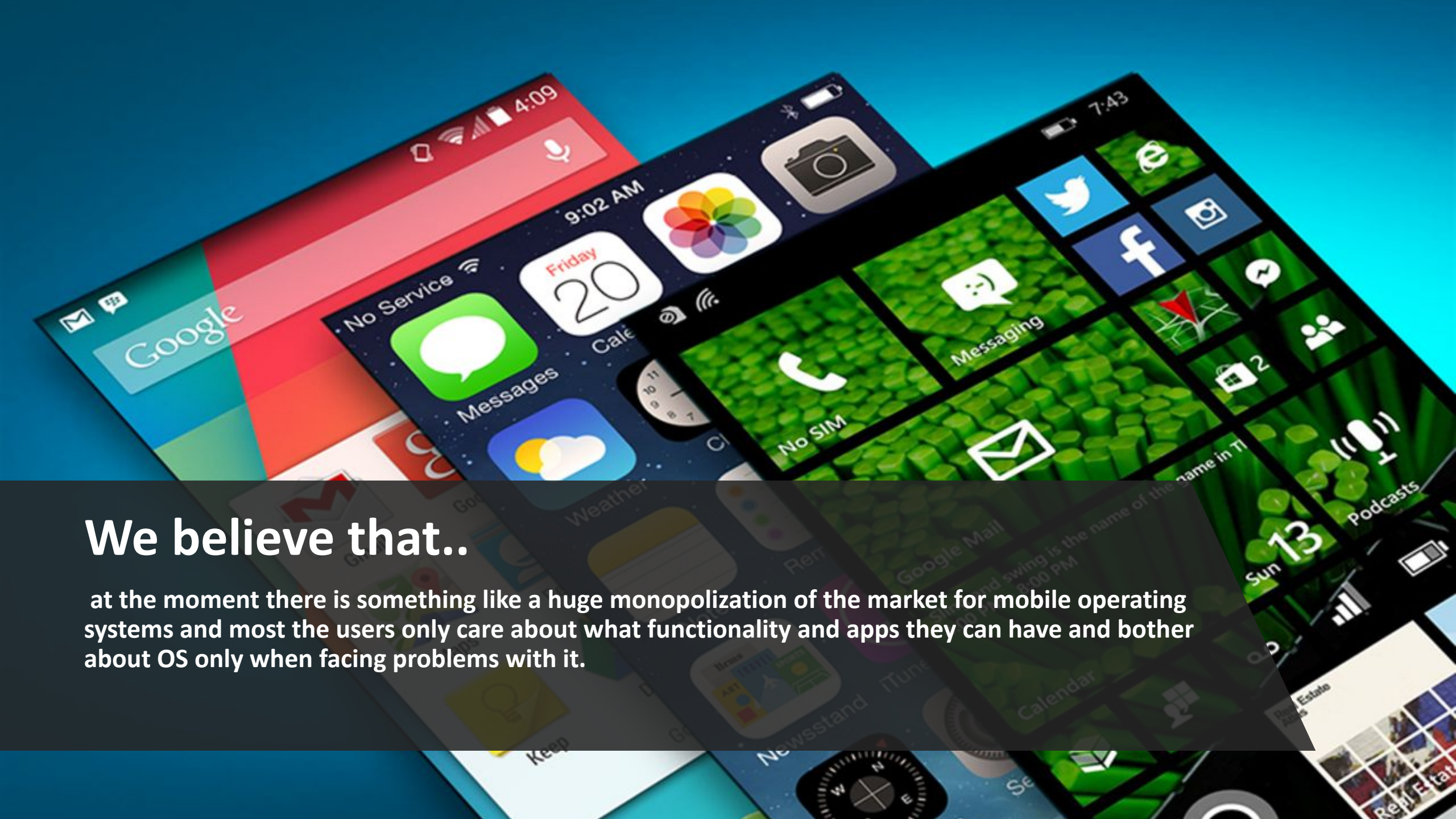


We believe that..

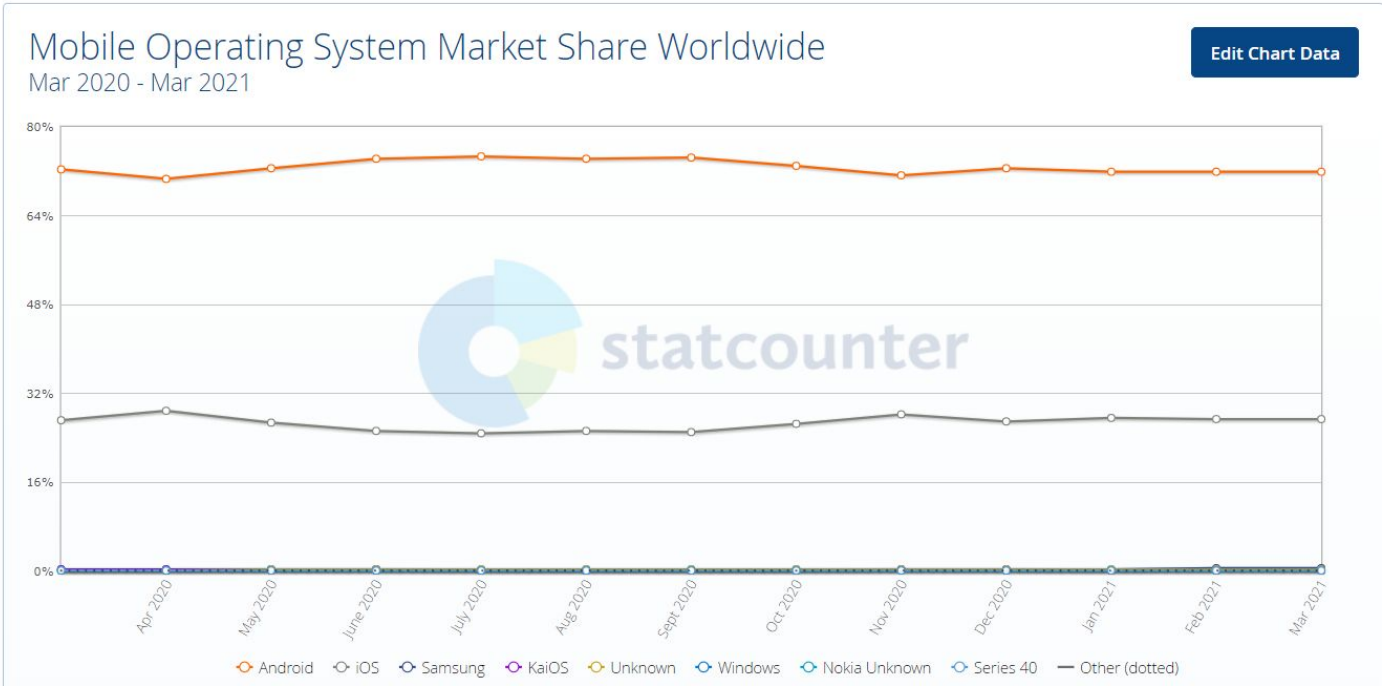
at the moment there is something like a huge monopolization of the market for mobile operating systems and most the users only care about what functionality and apps they can have and bother about OS only when facing problems with it.

Problem Characteristics or for what we need alternatives for Android and IOS?

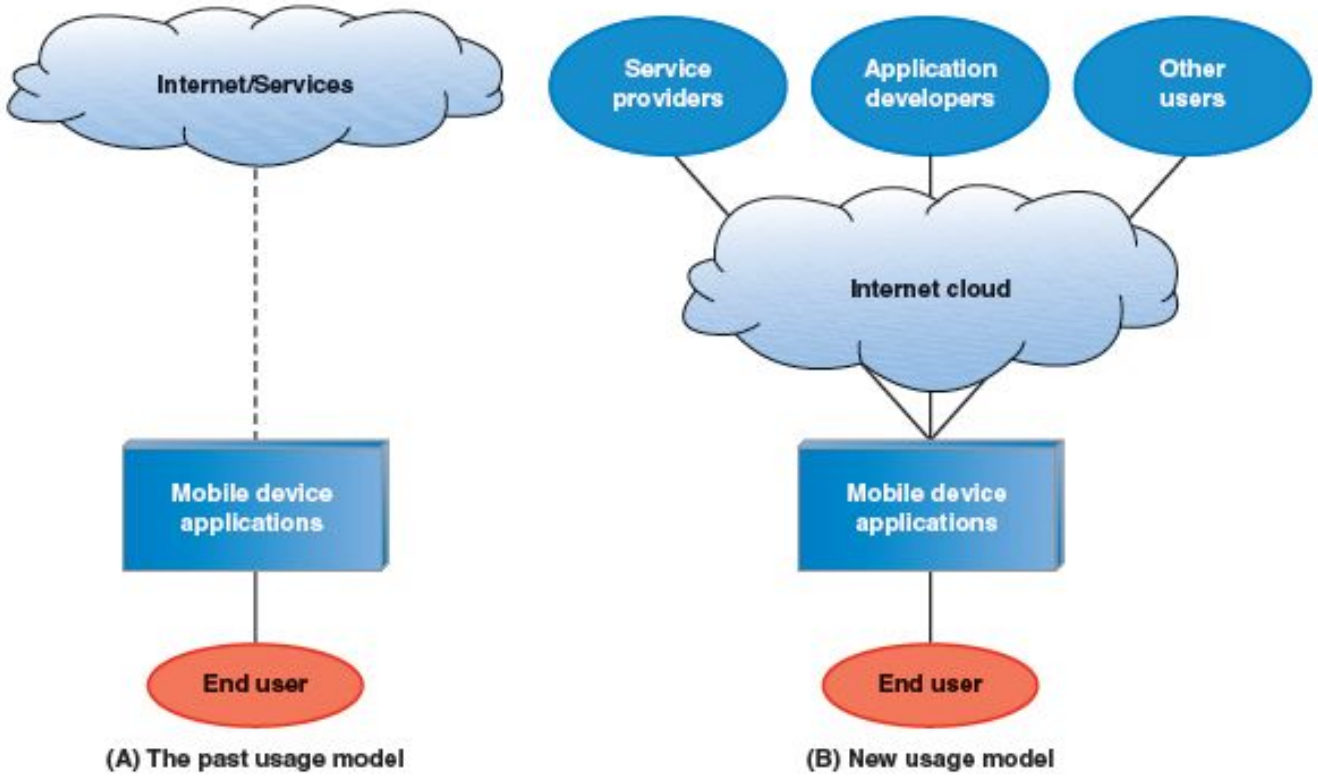
- Google is really working hard to keep Android relevant and dynamic, but as with most of things, there are a number of reasons why we need an alternative.

Android	iOS	Samsung	KaiOS	Unknown	Linux
71.81%	27.43%	0.38%	0.14%	0.14%	0.02%

Mobile Operating System Market Share Worldwide - March 2021



There is a tendency to preserve ideas at the sacrifice of innovation by focusing on earlier usage models, rather than on implementation of more modern ones.



Internet of things and how it affects mobile operating systems.

- The structure of the IoT system is a complex of three main modules:

1) The IoT device is a fairly simple and autonomous hardware and software platform and its task is exclusively to transmit "raw" data and receive ready-made control commands.

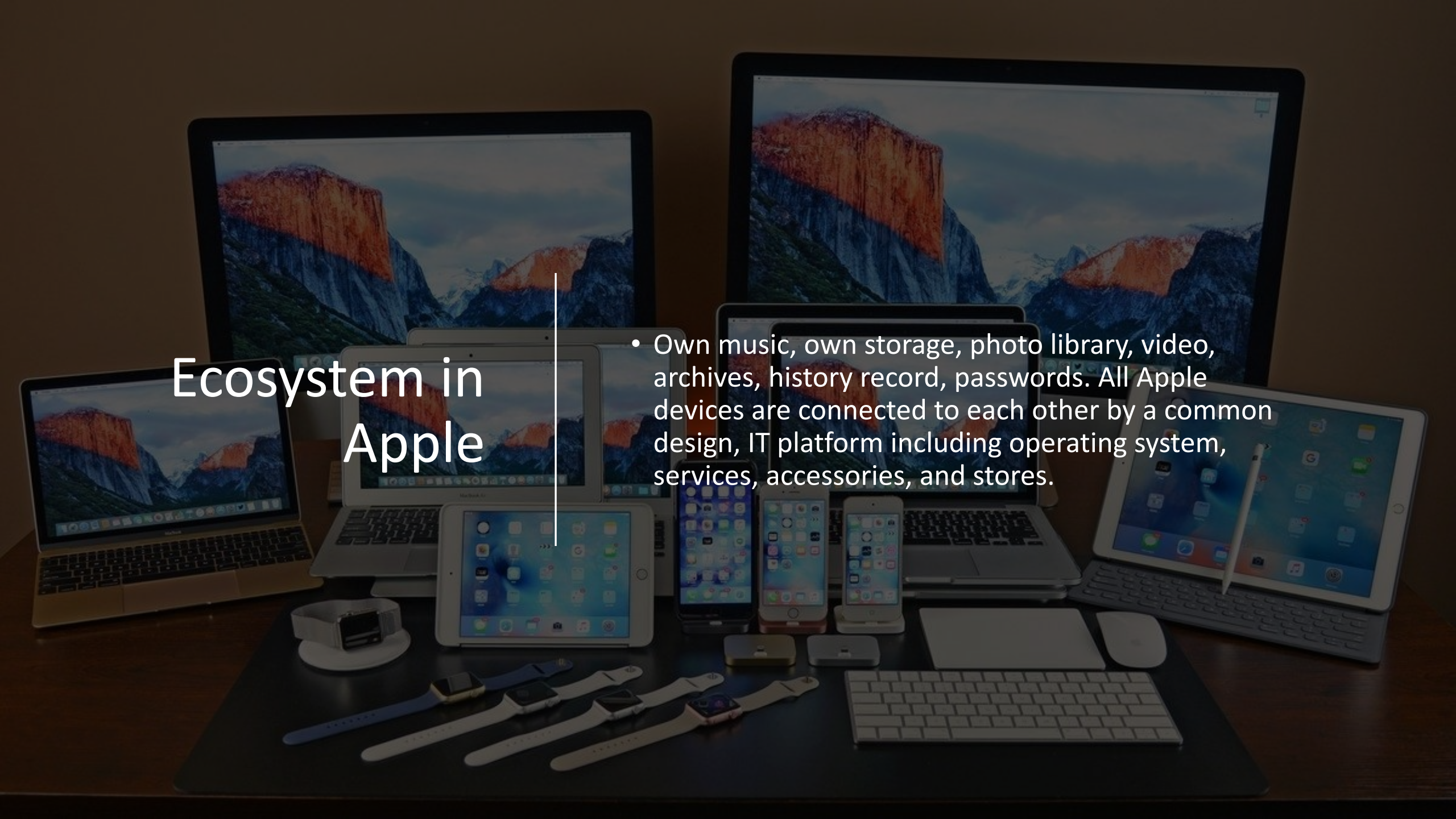
2) The IoT application receives and brings to the proper form device data, sends control commands to a specific sensor, sends data from devices to the cloud, routes information between devices.

3) The analytical cloud consolidates information and builds analytics.

Value and future of Ecosystems

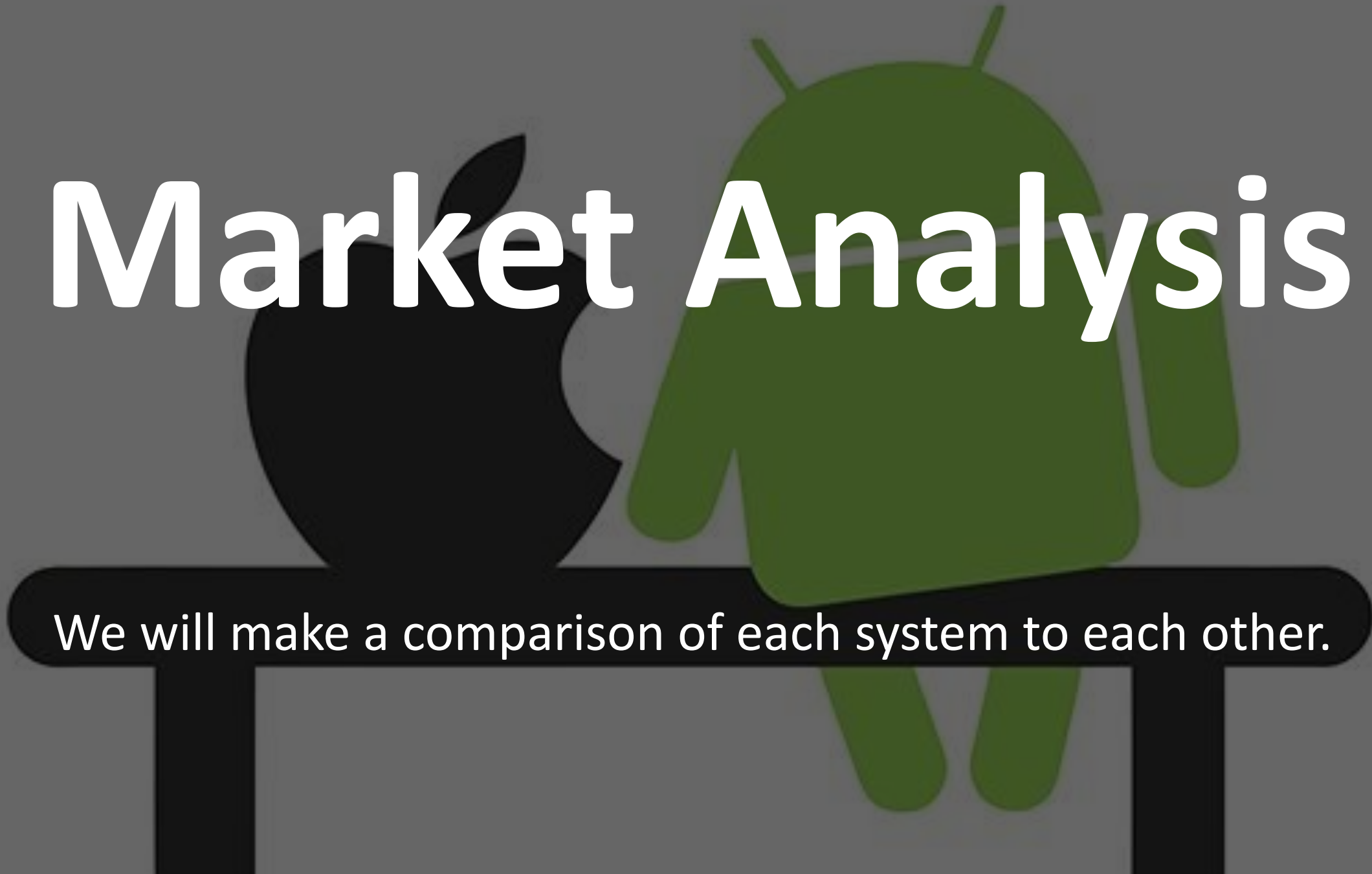
One of the most important factors for any product before and after buying is its accessibilty to user.

Ecosystem in Apple



- Own music, own storage, photo library, video, archives, history record, passwords. All Apple devices are connected to each other by a common design, IT platform including operating system, services, accessories, and stores.

Market Analysis



We will make a comparison of each system to each other.

Plasma Mobile

- is based on Linux, and the creators are part of the team that works on the KDE graphical shell.
- is the mobile version of Plasma for desktops.
- is a free and open source OS.
- is based on the Kubuntu OS with a graphical driver from Android, kwin/Wayland.
- allows you to run desktop apps on your mobile phone.

postmarketOS

- is an Alpine Linux optimized for touch screens.
- is its unpretentiousness to hardware, which makes it possible to install and use it comfortably on very weak devices.
- support the device for 10 years

- the operating system is completely based on the blockchain technology and is the most secure on the market.
- released a blockchain smartphone called "Finney" that runs on SIRIN OS.
- own store for decentralized applications, called dCenter.

SIRIN LABS

KaiOS

- is one step away from becoming one of the largest mobile operating systems in the world.
- is designed for ultra-low-budget devices that usually come with low-cost hardware.
- is basically a web-based operating system that uses applications developed on the HTML 5 web platform.

- Platform designed for a variety of devices. Currently, it is aimed at devices that work in IoT environment, such as smart home devices.
- Relevant version, released in december 2020, HarmonyOS 2.0 aims to deliver a "Super Device" experience for an IoT, in partnership with device vendors and application developers.

- An open operating system based on the Linux kernel, designed for a variety of devices.
- Applications for Tizen are developed using JavaScript, HTML5, and CSS.
- By reports, Tizen Association does a great job supporting junior app developers.

At the end…

Plasma Mobile	PostmarketOS	SIRIN OS	KaiOS	Harmony OS	Tizen OS
Licensing	Open-source	Closed	Distributed	Distributed	Open-source
User-Interface	Simple and low demanding	Average for market	Simple and low demanding	Average for market	Has intuitive gestures, user-friendly
Ecosystem Potential	Yes, potentialy has a huge base of clients and space to grow	No, platform is made for enthusiasts	No, has similar distribution model as Android	Yes, big IT company support	Yes, big IT company support
Leading Market Potential	Yes, for same amount of devices will have a longer support time	No, this OS will be able for a few number of devices	Yes, highly demanded and vastly distributed OS	Yes, big IT company support	Yes, big IT company support
IoT-friendly	yes	no	no	yes	yes

THANKS FOR YOUR ATTENTION

AND PLEASE

DON´T ASK TOO MUCH