

One smart device



Figure 1: smartphone, tablet, pc, vr, camera, one expensive computing^{2/17}

The present (state of the art)

Samsuung FE 21 smartphones are sold for 150,- on the second hand market. They have up to 1TB of micro sd. They have HDMI output (4k) and they have Samsung Dex mode.

The benefits for users

People love the sun.

But no screen works with sun light (Apple high brightness come close) except e-ink displays which are bad at colors.

Sometimes you need HD sometimes 4K. But not everyone requires everything all the time.

Managing your data across multiple devices has hidden synchronization costs. The data is never where you need it - its best to have everything in one place and one backup and be done.

Yes you can even run Windows on Android phones (Chinese did some drivers there are videos ..)

Buld a new device which can be anything: smartphone, tablet, laptop, outdoor, VR

By allowing to replace the screen you get everything starting from mobile phone, laptop, tablet, PC, TV, VR ... in one device.

The advantage

Because only one device only one way to do things only one way to do backups only .. one time to learn something.

The challenge

Fairphones have 300 people runway of max 3 months .. and no idea how many lawsuits they would get if they got huge amounts of market share .. Making smartphones is hard but possible

However people are stuck in technology they know: Android for mobile phones. Windows for PCs.

So to make progress need to get into new markets.

The hidden costs

Copy pasting with Android is slower

Multi tasking with Android is only possible sometimes (dev work not possible despite the hardware being strong enough)

The benefits for the user

You have one device, one backup and you have everything with you.
You pay once only.

The target audience

In some poor countries eg Africa people hardly can afford a laptop. So this way you can serve all needs with one device. And if they need huge screen they can rent it.

The real challenge

A lot of people have tried and failed with smartphones. Either you're South-Korea or Google or China or you have a rough time. So only chance to order devices at such company cause eventually you don't want to have them as enemy either ..

many open questions

Is open harmony good enough ? Same os for biggest and smallest devices managing data depending on hardware capabilities already ?

why now ?

In the past the GPU (printer) was the strongest chip of the PC. Then you had the split technology CPU & GPU (Nvidia). Today you have integrated chips and shared memory (eg Apple silicon) and size shrunk eg today's iOS smartphones are very powerful. Apple wants you to buy 3 devices so if you need touch get a tablet. But it doesn't have to be that way, does it ? So today smartphones are as strong as PCs and technology is small enough to fit into a smartphone. PCs turned faster. And even OSX click amnesia slows you down. Clicking 20 buttons by eye is faster than using the touch pad ! Yes I tried. A lot of software has

bad usability such as popups happening anywhere not where mouse is.
Didn't matter with HD but now we have 4K screens etc.

the borders blur.

Even cameras have AI inference built in in industry. So if we built a strong computing unit who knows who is going to use it for what. Like ESP32 or ..

So if you stack many GPUs you get a GPU cluster out of the same hardware. Like AI cluster or whatever you want.

open questions ?

Same chip for everything ? delivery drones, rc cars, cameras, mobile phone .. They all tend to need AI, processing power, speed So can you reuse aged smartphone chips for drones or put them into a hosting center? ..