**Mobile App Research**

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1. **How could mobile technology be improved.**

I think the most important improvement in mobile, here are several areas where mobile technology could be improved in battery life, processing power and enhanced security. Lithium-ion battery (LIBS) have been widely used in portable electronics such as mobile phone. In China, there is a manufacture named “Contemporary Amperex Technology Co., Limited (CATL)” which launched the first-generation sodium-ion battery with the world's highest energy density of 160Wh/kg, which attracted great attention from the battery industry (1). For the most common complaints about mobile devices is their battery life. Therefore, the advantages of sodium ion battery, such as more efficient batteries and alternative power sources, could lead to longer-lasting batteries. And more safety for the mobile used in the future. Mobile device could be made faster and more powerful. It is because we need the device can handle more complex tasks, applications and e-transactions without any delay. By the technology, mobile processor will make it smaller than before, and it can be plug in more processors in a core. The top processor in this year, it includes 24 cores for the first time (2). Such as Apple announced that the Resident Evil 4 remake and other PlayStation games all would be coming to the iPhone 15 Pro later this year and in early 2024. It means the mobile processor can enable faster and more efficient multitasking, improved gaming experiences, and enhanced overall performance. Last one is about the privacy and security are becoming increasingly important due to the growing use of personal information in e-transactions and other operations with companies by using the mobile device. The unauthorized access to personal information can lead to identity theft, financial fraud, or privacy breaches. Therefore, the protecting sensitive data on mobile is also important. The improvements of virus protection and VPN usage, Mobile devices could have virus scanning algorithms and databases that can identify and eliminate a wider range of malware, including viruses, ransomware, and other malicious software. Then, VPN would allow users to easily establish secure connections to protect their online activities and data when using public Wi-Fi networks or accessing sensitive information. Those are enhancing their overall mobile security experience.

1. **What mobile technology might look like in 5 and 10 years.**

There are two main features we can obviously predict in 5 and ten years easily. First, 5G technology will be more mature in the future. It will provide faster and more reliable connections, which will enable new applications like augmented reality and virtual reality. Additionally, 6G will start working on developing networks, it will offer even faster data speed and less delay. Second is artificial Intelligence (AI) has been used in computer program before, but now it is applied in mobile application development. The mobile AI will be more mature in the future. We can expect using mobile AI simple connect to the vehicle to help the driver to use self-driving. And the main purpose is using AI in mobile apps to solve user daily problems and make life simple. AI can gather important information from mobile phones, like location, contacts, and daily activities. This data is used to improve user interaction and solve complicated issues (3).

**What mobile technology related jobs will become either more relevant or obsolete.**

The more relevant jobs would be a mobile app developer, it is because the increasing demand for mobile applications, it needs a lot of well developers to create user-friendly and innovative apps in mobile app market. And then the UX/UI designers are important for mobile app design because they focus on making apps easy to use. They will continue to be needed as people want apps that are simple and look good. The third is cybersecurity specialist, As mobile technology becomes more important in our lives, there will be a greater need for experts who can keep mobile devices and networks safe from hackers and other cyber threats. These specialists will play a crucial role in protecting our mobile devices and ensuring our privacy and security.

The obsolete jobs would be Manual mobile app tester because there are a lot of automated testing tools and frameworks, the demand for manual app testers may not need anymore as companies adopt more efficient and testing practices. Second one is mobile hardware technician. As mobile devices become simpler and harder to open and fix, the need for specialized hardware repair technicians may decrease. It is often cheaper to replace a broken device with a new one rather than paying for repairs.

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