

Touch and unlock. Fingerprint sensing continues to be one of the most preferred means of authentication.

Starting from Year 2018, we see many Smartphones with fingerprint sensors that are embedded under-display. Although it was an innovation to move from **capacitive** to **under-display sensors**, the current thumb-size is often the cause of inconvenience and many limitations.

Today, we need your brilliant ideas to bring a new technology to life. Pick one or more from the four areas (Security, Entertainment, IoT and Empathic UX) and elaborate on how Smartphone with **full-screen fingerprint scanner** can be used to enhance user experience.

capacitive



under-display sensors



full-screen fingerprint scanner



For more insights, please join [Virtual Explanatory Session](#) (Sep. 17th) or contact us at contact.3mchallenge@gmail.com

Introductory Material

Security

Security refers to activities involved in protecting sensitive information stored on and transmitted by Smartphones.

Below is one example of how security can be enhanced through Smartphone with full-screen fingerprint scanner.



Combining passcode with fingerprint enables higher security, compared to conventional numeric-passcode or thumb-size fingerprint sensor.

Entertainment

Entertainment includes gaming, music, social networking, streaming services, etc. associated with Smartphones

IoT

IoT (Internet of Things) refers to a system of interrelated computing devices. The focus here is on how Smartphone interacts with Tablet, Laptop/Notebook, PC, TV, smartwatch, automotive and etc.

Empathic UX

Empathic UX refers to functions that contribute to creating a more intuitive experience for Smartphone users