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Study on 5GS supporting for Mobile User Service (FS_5GMUS)

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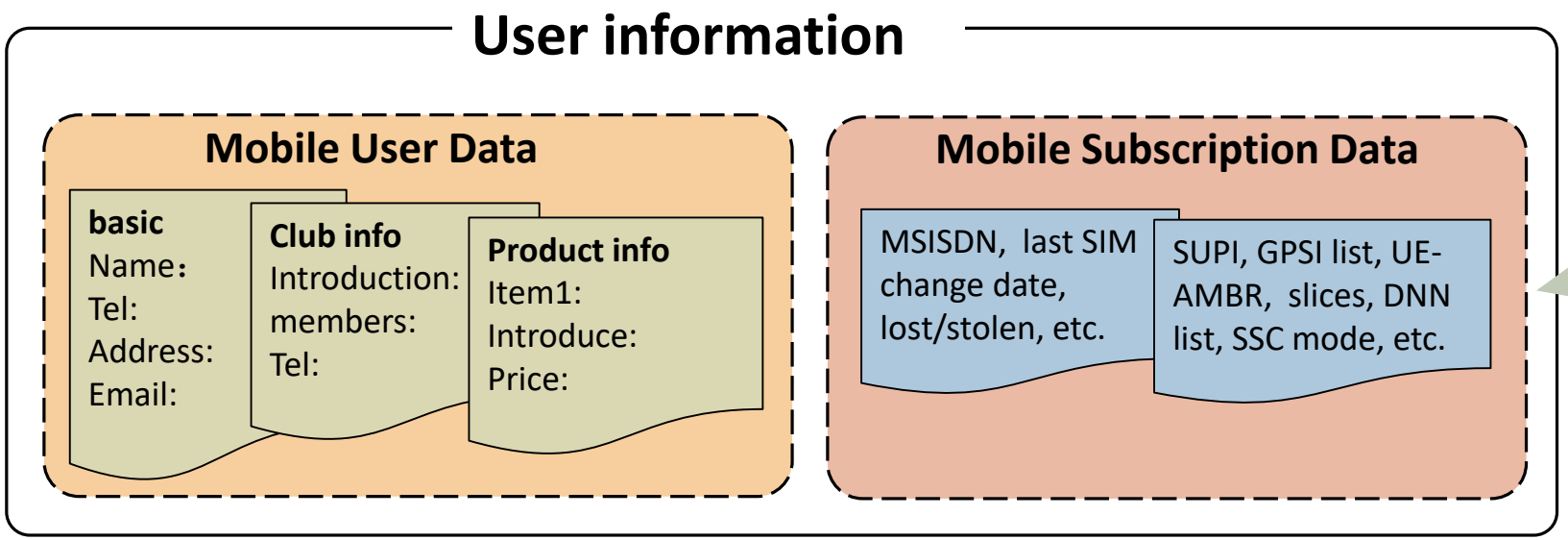
What is Mobile User Service?

Mobile User Service is defined to enable the 5G system to explore and enhance the Users' information owned by MNOs by **considering subscriber authorization/regulations/MNO policy,** in order to enable more secure and convenient services by such as:

- Phone number Searching.
- Advertisement delivery to the interested subscriber(s).
- Authentication & Authorization for 3rd party based on the user information



- Can be a **mobile phone user** that subscribes to mobile service with USIM
- Can be a **3rd party** (e.g., company, organization**)** that subscribes to the Mobile Subscriber Service

- **Mobile User Data**: is related to user private information provided by user.
- **Mobile subscription Data**: is provided by MNOs, e.g., stored in UDM/UDR, or other OAM system.

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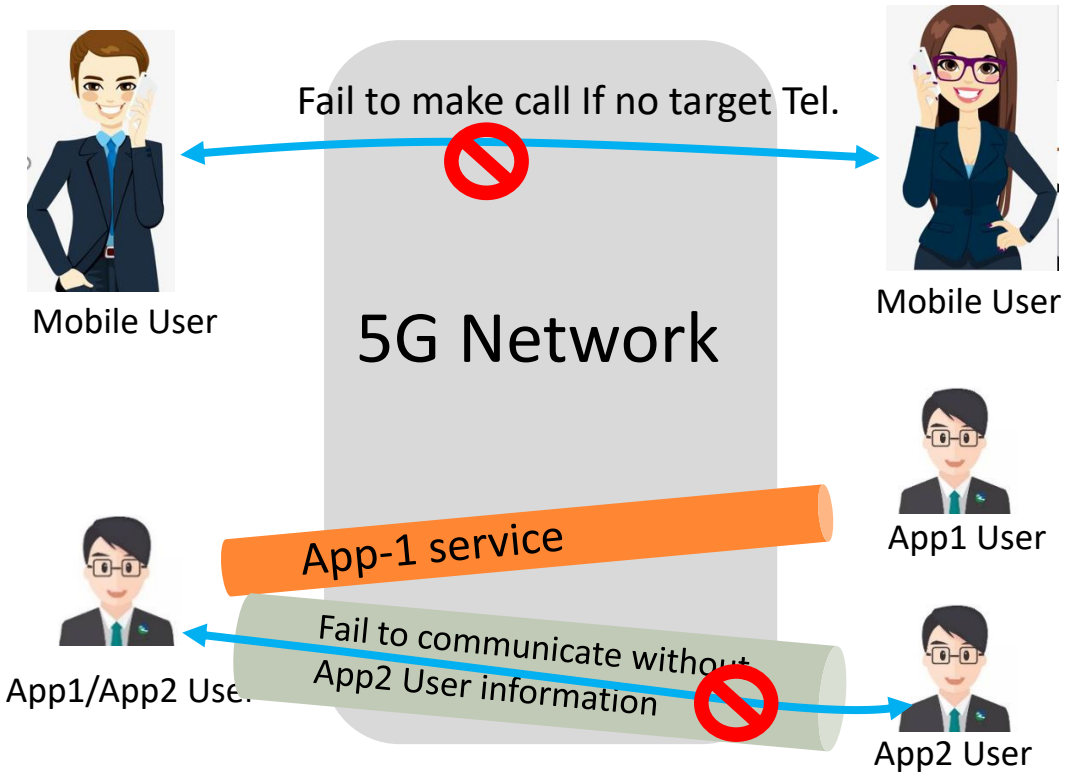
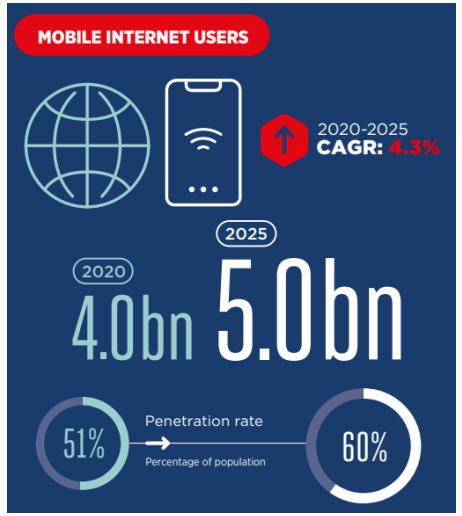
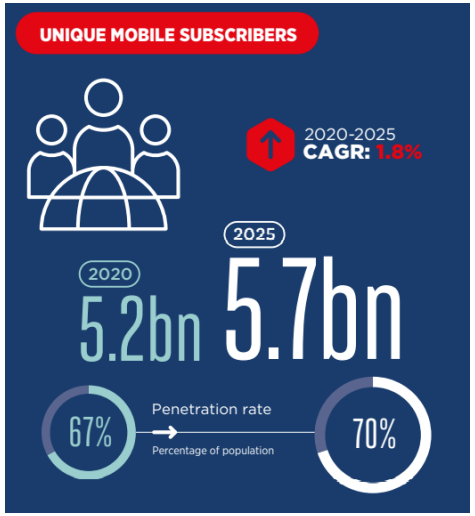
What are the motivation?



Up to end of 2020, 5.2 billion people subscribed to mobile services, representing 67% of the global population; 4.0 billion mobile internet users.





- Mobile/App User fails to communicate with other mobile user without target user information.
- App user is dependent on multiple APPs that eating lots of HW/SW resources in the device

- There is no appropriate/standardized way to explore the mobile users owned by MNOs to enable more services which bring legitimate interest for MNOs.

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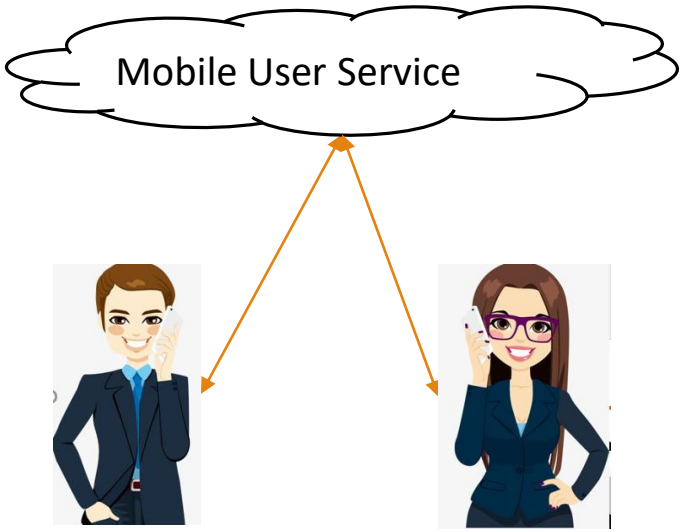
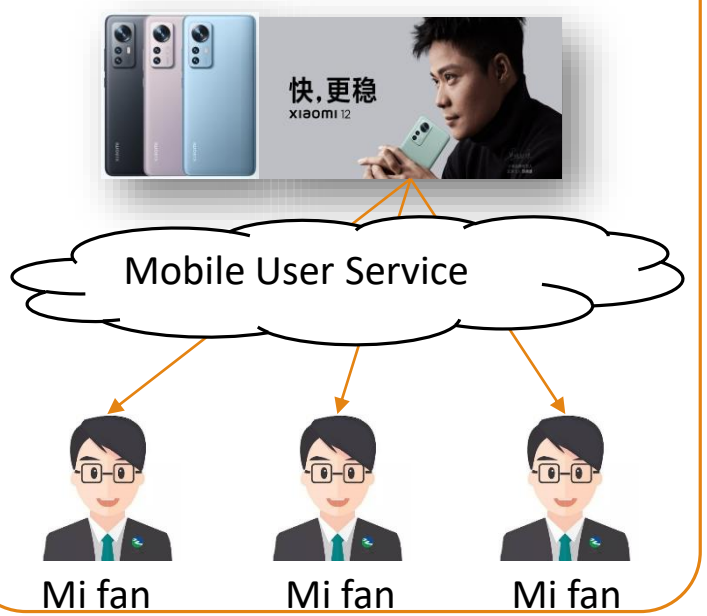
What are the potential Use cases?

Phone number Searching



- The User agrees to share the personal info, e.g., phone number
- Users obtains the target phone number easily from Mobile Subscriber Service in the PLMN

Advertisement delivering



- The users subscribes to the product information.
- Delivering the Product information precisely to the interested users

Auth & Auth service

- Authentication and authorization for 3rd party APPs based on the User information owned by MNOs

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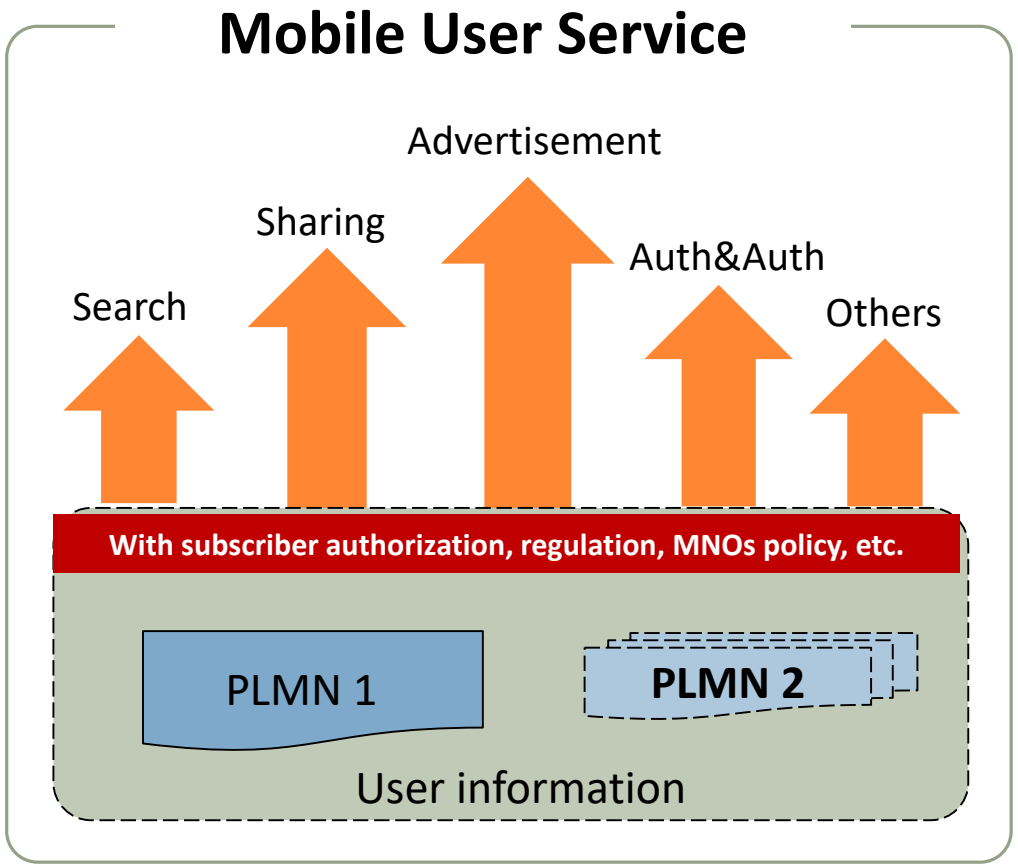
What are the benefits

- **For better user experience**
  - Enable user to search the target info, e.g., phone number
  - Sharing User information for the expected users
- **For high values return for MNOs:**
  - enable the companies to Deliver the advertisement precisely to the target User(s).
  - Provide Users information Search/Sharing to enable more communications
  - Provide Auth&Auth service for 3rd party
  - Increase the subscribers and profit
- **For Company**
  - Expose the product information for more potential users to search
  - Deliver advertisements precisely to the interested users



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Thank You!

Annex: What are the potential impacts

The objective of this SID is to study 5G system supporting Mobile User Service that includes subscribers' information service, authentication and authorization service for 3rd party as following:

1. To identify the potential use cases and requirements for Mobile User Service, including:
   a) management and extension of the User information, e.g., creation/modification/updating/removal, etc.
   b) Operations of Mobile User Service, e.g., activation /deactivation/ subscription/un-subscription, etc.
   c) subscribers' information interworking between MNOs.
   d) Exposure User' information to UE and 3rd party with permission from Users and regulations.
   e) authentication and authorization for 3rd party based on the User' information.
   f) Investigation on potential regulation(s) in the different countries or areas if needed
2. To identify the potential requirements for privacy and security of Mobile User Service by considering, e.g., User' permission, MNOs policy, national regulation, etc. including:
   a) management of the User' information,
   b) exposure of the Mobile User Service to UE and 3rd party with proper permission.
   c) interworking between different PLMNs
3. charging or other aspect if identified
4. To identify the gap between the new potential requirements and existing requirements.

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