9.7 Questionnaire

9.7.1 Screening Survey. 1. Which of the following shared-house services/environments have you experienced? (you can choose more than one answer)
(1) Homestay (Airbnb, VRBO)
(2) Hotel/Hostel
(3) Long term rental apartments/houses
(4) Smart home with visitors/guests
(5) Others: _____
(6) None
2. (If "no", no more questions to be asked) Have you ever used/operated IoT smart devices with mobile apps (or web pages)?
(1) Yes
(2) No
3. Which of the following smart home devices have you ever used in your own shared house/apartment or your previous shared-house experience? (you can choose more than one answer)
(1) Smart lock
(2) Router
(3) Smart hub
(4) Smart lighting
(5) Smart plug
(6) Smart thermostat
(7) Smart motion sensor
(8) Smart smoke detector
(9) Smart leak detector
(10) Smart speaker
(11) Smart camera (indoor)
(12) Smart camera (outdoor)
(13) Smart TV
(14) Others: _____
4. Were you a shared-house host or guest (including tenant, cleaner, babysitter, etc.)? (you can choose more than one answer)
(1) Host
(2) Guest
(3) None
5.(If "None" is selected in Question 4 and "No" is selected in Question 5, no more questions to be asked) If you haven't used a shared-house service, will you use it in the near future (e.g., within one year)?
(1) Yes
(2) No
(3) Not Applicable
6. How old are you?
(1) 18-25 years old
(2) 26-35 years old
(3) 36-45 years old
(4) 46-55 years old
(5) 56+ years old
(6) Prefer not to answer
7. What is your gender?
(1) Female
(2) Male
(3) Not listed above
(4) Prefer not to answer
8. What is your educational background?
(1) Below Bachelor degree
(2) Bachelor degree
(3) Master degree or above
(4) Prefer not to answer
9. Do you work in, major in or hold a degree in any of the fields including computer science, computer engineering, cyber security (or other related fields)?
(1) Yes
(2) No
(3) Prefer not to answer

9.7.2 Questions in the Host Survey. **Please imagine you are a host/owner of a shared house and answer the following questions.**
1. If you own all of the following devices, which ones would you place in your shared house/apartment based on the guest needs? (you can choose more than one answer)
(1) Smart lock
(2) Router
(3) Smart hub
(4) Smart lighting
(5) Smart plug
(6) Smart thermostat
(7) Smart motion sensor
(8) Smart smoke detector
(9) Smart leak detector
(10) Smart speaker
(11) Smart camera (indoor)
(12) Smart camera (outdoor)
(13) Smart TV
(14) Others: _____
2. Which of the following smart devices do you NOT want to share with guests to enable them to access/control the devices through digital user consoles like a mobile app (i.e., only expect guests to physically operate them)? (you can choose more than one answer)
(1) Smart lock
(2) Router
(3) Smart hub
(4) Smart lighting
(5) Smart plug
(6) Smart thermostat
(7) Smart motion sensor
(8) Smart smoke detector
(9) Smart leak detector
(10) Smart speaker
(11) Smart camera (indoor)
(12) Smart camera (outdoor)
(13) Smart TV
(14) Others: _____
(15) None
3. If you have lots of smart home devices from different vendors (e.g., Philips lights, Ring doorbell, and August lock), how will you share your devices with guests? (you can choose more than one answer)
(1) Share passwords or accounts or set up an iPad for center control
(2) Share through smart hubs
(3) Share through smart speakers (Apple HomePod, Google home mini, and Amazon echo dot are typical smart speakers that connect

to and can control multiple end-devices like smart lock, smart lights, and smart plugs)

(4) Use a third-party smart home platform supporting various vendors (e.g., create a home in the Apple HomeKit platform to connect and control all the devices from different vendors and share the devices with the guest by adding them to the home in the Apple HomeKit)

(5) Share each device separately in their vendors' own apps (e.g., August app)

(6) Guests should initialize/reset the smart devices on their own (e.g., guests reset the devices when checking in)

(7) Others: _____

4. As shown in Figure 10, which of the following shared-house types do you have? (you can choose more than one answer)
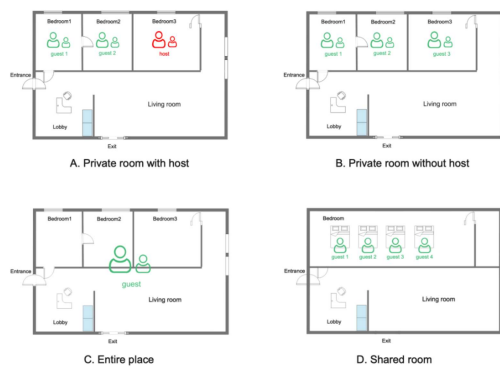

Figure 10: Shared room types.

(1) Private room with host
(2) Private room without host
(3) Entire place
(4) Shared room

Some devices can be controlled through multiple apps (e.g., Apple Home app and the device vendor's app). Please imagine that you set up several of these devices in your shared home and answer the following two questions.

5. Do you normally configure all the supported apps? (you can choose more than one answer)

(1) Yes, because: _____
(2) No, because I didn't know this feature (device being able to control through multiple apps)
(3) No, because the tutorial in app didn't advise me to do that
(4) No, because I didn't want to take extra time to set up more than one app
(5) No, I always forget to do that for each device
(6) No, because: _____

6. (If "No" selected in Q-1.1) Do you expect all other supported apps to be disabled automatically when you configure one of the supported apps.

(1) Yes
(2) No

7. (If "No" selected in Q-1.1) Were you aware that an attacker could leverage the app that you didn't configure to gain unauthorized access to your devices without notifying you?

(1) Yes
(2) No

8. There is a configuration in some devices (e.g., a smart lock) that, if checked, can enable guests to see other people (such as the host and the cleaner) using the device. Do you normally look for and check this when sharing your device? (you can choose more than one answer)

(1) Yes, because: _____
(2) No, because I didn't know this option was available
(3) No, because I believe the default setting should work fine
(4) No, because I didn't want to take extra time to do that
(5) No, because I always forget to do that
(6) No, because: _____

9. (If "No" selected in the last Q)Were you aware that the guest may feel upset if they don't know who else can control/manage the devices during guest use?

(1) Yes
(2) No

10. Which of the following devices do you expect to continue to control (e.g., turn on/off the bulb) during a guest's stay? (you can choose more than one answer)

(1) Smart lock
(2) Router
(3) Smart hub
(4) Smart lighting
(5) Smart plug
(6) Smart thermostat
(7) Smart motion sensor
(8) Smart smoke detector
(9) Smart leak detector
(10) Smart speaker
(11) Smart camera (indoor)
(12) Smart camera (outdoor)
(13) Smart TV
(14) None

11. Which of the following devices do you expect to continue to be aware of its status (such as turned-on/turned-off/open/locked/closed or alarm information) during a guest's stay? (you can choose more than one answer)

(1) Smart lock
(2) Router
(3) Smart hub
(4) Smart lighting
(5) Smart plug
(6) Smart thermostat
(7) Smart motion sensor
(8) Smart smoke detector
(9) Smart leak detector
(10) Smart speaker
(11) Smart camera (indoor)
(12) Smart camera (outdoor)
(13) Smart TV
(14) None

12. Do you sometimes not turn on the "remote control" feature of the devices (e.g., bulb, plug) and then share them with the guest (and then the guest can control the devices locally also)? Remote control: you can control the device at any time and any place, e.g.,

control your smart home devices from your office
(1) Yes, because: _____
(2) Yes, I'm worried about the security vulnerabilities of the remote control feature
(3) Yes, cloud service can get data from me and my guests about how, when and where the devices are used
(4) Yes, enabling remote control would take some extra time for configuration and I only need to control the devices locally
(5) No, I always enable remote control for convenience
(6) No, because: _____

13. In the scenario of the last question, do you expect the guest to be able to control the devices remotely (without your consent) if you didn't enable the "remote control"?
(1) Yes
(2) No

14. (If "Yes" selected in Q-1.8) Were you aware that the guest could control the devices remotely without your awareness/consent by turning on the remote control feature which you didn't enable before?
"remote control" feature in Philips Hue app: To enable this feature, you need to log in to the Philips cloud and then you will become the administrator of the devices in home.
(1) Yes
(2) No

15. Do you normally set up an iPad that connects to all the devices in the shared home for the guests to access/control the devices?
(1) Yes, because: _____
(2) No, because: _____

16. If you have a hub in your smart home to control other sub-devices (e.g., devices under the hub like smart lights and smart locks). Would you share the end-devices with the guest by sharing the hub with them?
Hub: a smart hub usually connects to multiple end-devices/sub-devices like smoke sensors, smart locks and smart plugs and can control these end-devices/sub-devices.
(1) Yes, because: _____
(2) No, because: _____

17. Suppose you share the smart devices with the guest through an iPad. What capabilities do you expect the guest to get?
(1) Control the devices that bound to the iPad (through an app)
(2) Set some routines/scheduled tasks for one device or between devices (e.g., Open the curtains at 10:00 pm)
(3) Invite other people to the family/room in the smart home app (e.g., Homekit)
(4) Enable the remote control function without your awareness
(5) Others, _____

18. Suppose you share the smart hub with the guest. What capabilities do you expect the guest to get? (you can choose more than one answer)
(1) Control sub-devices under the hub
(2) Add or delete the sub-devices (such as smoke/window sensor) under the hub
(3) Edit the sub-devices (e.g., changing the routines related to the sub-devices)

19. Were you aware that if you share the sub-devices with the guests by sharing the hub with them, the guests may have the ability to add/delete the sub-devices under the hub?

(1) Yes
(2) No

20. Suppose you share the sub-devices with the guest by sharing the hub with him but find that the guest can add/delete the sub-devices. Which of the following operations could mitigate this risk? (you can choose more than one answer)
(1) I don't think it's a risk
(2) Share the hub with the guest but only grants the guest access to use the hub (i.e., the guest can't edit the hub such as delete the hub from the host's home in the app)
(3) Share the sub-devices individually without a hub.
(4) Others: _____

21. Do you normally share the router with the guest in a smart home app (like Homekit and Mi Home)?
(1) Yes, because: _____
(2) No, because: _____

22. Suppose you share the router with the guest in a smart home app. Which capabilities do you expect the guest to get?
(1) Use the Wi-Fi to access to the internet
(2) Manage the Wi-Fi password
(3) Manage the administrator password of the router
(4) Others: _____

23. Some routers use the Wi-Fi password as the administrator password by default when the router is initialized. Do you normally set another administrator password that is different from the Wi-Fi password?
(1) Yes, because: _____
(2) No, because I didn't know this option was available
(3) No, because I believe the default setting should work fine
(4) No, because I didn't want to take extra time to do that
(5) No, because using the same password would be more convenient
(6) No, because: _____

24. (If "No" selected in Q-2.5) Were you aware that the guest could change the Wi-Fi password (as an administrator) without your awareness if you use the same password for the administrator password and the Wi-Fi password?
(1) Yes
(2) No

25. As shown in Figure 11, suppose you now need to remove the guest's account from your family in the smart home app (e.g., Google Assistant and Mi Home) after the guest leaves. Please refer to Fig.6 below and briefly describe what you would normally do.
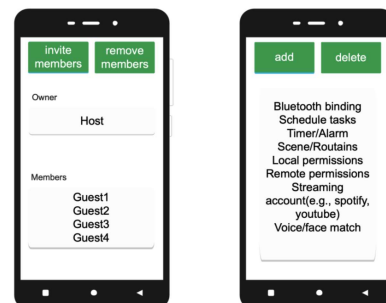

Figure 11: Revocation

Answer: _____

26. Which of the following resources left by the guest do you expect to be automatically deleted after removing the guest's account in the smart home app?
(1) Bluetooth-bound devices (e.g., The mobile phones that has been bound to the Bluetooth bulb)
(2) Streaming account (e.g., Users can guests can login to their streaming service such as Spotify in the smart speaker/TV to play their favorite content)
(3) Schedule tasks (e.g., A routine/scheduled task set by the guest could be: when I say "Good morning", open the bulb for me)
(4) User data (e.g., usage log of the device like TV watch history or personal information)

27. Which of the following events might happen after guests leave?
(1) The guests can still control devices through Bluetooth
(2) The guests can still use their streaming account (e.g., Spotify) to play some content.
(3) Some routines/scheduled tasks set by the guests still work (e.g., Open the curtains at 10:00 pm)
(4) None

28. If you have already removed the guest in the smart home app, but the Bluetooth-bound devices are still retained, do you normally delete them on your own? (you can choose more than one answer)
(1) Yes, because: _____
(2) No, because I didn't know this option was available
(3) No, because the tutorial in the app didn't advise me to do that
(4) No, because I didn't want to take extra time to do that
(5) No, I always forget to do that for each Bluetooth-controlled device
(6) No, I don't mind old guests still being able to control my devices through Bluetooth.
(7) No, because: _____

29. If you have already removed the guest in the smart home app, but the guest's account logged in to the streaming service (such as Spotify) is not removed, do you normally delete it on your own? (you can choose more than one answer)
(1) Yes, because: _____
(2) No, because I didn't know this option was available
(3) No, because the tutorial in the app didn't advise me to do that
(4) No, because I didn't want to take extra time to do that
(5) No, I always forget to do that for each device
(6) No, because: _____

30. If you have already removed the guest in the smart home app, but some routines/scheduled tasks set by the guest may still work (e.g., Open the curtains at 10:00 pm), do you normally delete it on your own?
(1) Yes, because: _____
(2) No, because I didn't know this option was available
(3) No, because the tutorial in the app didn't advise me to do that
(4) No, because I didn't want to take extra time to do that
(5) No, I always forget to do that for each device
(6) No, because: _____

31. If the following guests come to your home and need Wi-Fi, whom would you like to share Wi-Fi with?
(1) Tenants
(2) Cleaners
(3) Babysitters
(4) None

32. Do you normally set up guest Wi-Fi networks for the tenant to use?
"guest Wi-Fi" network: It provides an access point to the internet separate from the one your primary devices (like your personal computer) connect to.
(1) Yes, because: _____
(2) No, because I didn't know this option was available
(3) No, because the tutorial in the app didn't advise me to do that
(4) No, because I didn't want to take extra time to do that
(5) No, because I always forget to do that
(6) No, because: _____

33. Do you normally set up guest Wi-Fi networks for the cleaners/babysitters to use? (you can choose more than one answer)
(1) Yes, because: _____
(2) No, because I didn't know this option was available
(3) No, because the tutorial in the app didn't advise me to do that
(4) No, because I didn't want to take extra time to do that
(5) No, because I always forget to do that
(6) No, because: _____

34. Do you normally change the Wi-Fi password after the guests leave? (you can choose more than one answer)
(1) Yes, because: _____
(2) No, because I didn't know this option was available
(3) No, because the tutorial in the app didn't advise me to do that
(4) No, because I didn't want to take extra time to do that
(5) No, because I always forget to do that
(6) No, because: _____

35. Were you aware that the guest can still control some of your devices after leaving without authorization if you don't change the Wi-Fi password or set up guest Wi-Fi for them?
(1) Yes
(2) No

36. If you have a multifunctional camera (such as a speaker/smart assistant with a remote house-sitting function), will you use the device in the shared house/apartment?
(1) Yes
(2) No

37. If you use the camera in your shared home, do you normally enable motion detection/home monitoring?
Motion detection/home monitoring: If turned on, the camera will record video based on sensitivity to movement of human
(1) Yes, it's convenient for me to take care of my house
(2) Yes, because: _____
(3) No, because: _____

38. There are some smart devices (e.g., smart door locks, speakers, smart TVs) will record the user data (e.g., usage log of the device like TV watch history or personal information), do you normally check if the data (of the guest) exists and delete them after the guest leaves?
(1) Yes, because: _____
(2) No, because I didn't know this option was available
(3) No, because the tutorial in the app didn't advise me to do that
(4) No, because I didn't want to take extra time to do that
(5) No, because I always forget to do that
(6) No, because: _____

39. There are some smart devices (e.g., smart door locks, speakers, smart TVs) will record the user data (e.g., usage log of the device

like TV watch history or personal information), do you normally check if the data exists and delete them before sharing the device with guests?
(1) Yes, because: _____
(2) No, because I didn't know this option was available
(3) No, because the tutorial in the app didn't advise me to do that
(4) No, because I didn't want to take extra time to do that
(5) No, because I always forget to do that
(6) No, because: _____
40. Were you aware that the guests may feel upset if user data (e.g., usage log of the device or personal information) of them may be exposed to you or other guests?
(1) Yes
(2) No
41. Were you aware that the user data (e.g., usage log of the device or personal information) of you or the guest may be exposed to others (like other guests)?
(1) Yes
(2) No
42. Imagine you are an Airbnb host, and you plan to use smart home devices in your home. If these incidents happen, How do you feel about them? (Five-point Likert options from 1-5: Not at all upset, Slightly upset, Somewhat upset, Moderately upset, and Extremely upset)
(1) You don't know who has what permissions on the devices and when
(2) The guests don't know who has what permissions on the devices and when
(3) Smart plugs can be controlled by the guest who has left or people who have no permission
(4) The guest who has left can still play music on the smart speaker remotely
(5) The guest who has left or people who have no permission can use a smart speaker to create a routine to control its sub-devices (e.g., A routine can be: Open the curtains at 10 a.m.)
(6) A smart speaker can leak Voice ID binding preference information (e.g., Voice ID helps recognize you when you speak and provide a personalized experience)
(7) Smart locker can be controlled by a guest who has left or people who have no permission
(8) The guest can control/manage the smart router (e.g., change the Wi-Fi password)
(9) The guest can monitor the network traffic in the home
(10) The guest can add or delete the sub-devices (such as smoke/window sensor) under the smart hub (e.g., Smartthings Hub, Philips bridge, etc.)
(11) Smart bulbs are still controlled by a guest who has left or people who have no permission
43. For the following devices, if your usage log/history of them can be viewed by someone else (e.g., guests or attackers), How do you feel about them? (Five-point Likert options from 1-5: Not at all upset, Slightly upset, Somewhat upset, Moderately upset, and Extremely upset)
(1) Smart lock, your history log of smart lock about when the locker is on/off and who opened it can be viewed by someone else (e.g., guests or attackers)
(2) Smart hub, your history log of a smart hub (e.g., Smartthings

hub, Philips bridge, etc.) can be viewed by someone else
(3) Smart lighting, your history log of a smart bulb can be viewed by someone else
(4) Smart plugs, your log of smart plugs (about when the plug is on/off and electricity usage) can be viewed by someone else other than the current guest
(5) Smart sensors, your log of smart sensors about when the sensor is on/off and the environment data of the home (such as temperature, humidity, light, etc.) can be viewed by someone else
(6) Smart speakers, your history log of a speaker can be viewed or heard by someone else
(7) Smart camera, your history log of a smart camera can be viewed by someone else
(8) Smart TV, your all history log of a smart TV can be viewed by someone else

9.7.3 Questions in the Guest Survey. Please imagine you are a guest of a shared home and answer the following questions.
1. Which smart devices do you expect to use in the shared house/apartment? (you can choose more than one answer)
(1) Smart lock
(2) Router
(3) Smart hub
(4) Smart lighting
(5) Smart plug
(6) Smart thermostat
(7) Smart motion sensor
(8) Smart smoke detector
(9) Smart leak detector
(10) Smart speaker
(11) Smart camera (indoor)
(12) Smart camera (outdoor)
(13) Smart TV
(14) Others: _____
2. Which smart devices do you NOT expect to be placed in the shared house/apartment? (you can choose more than one answer)
(1) Smart lock
(2) Router
(3) Smart hub
(4) Smart lighting
(5) Smart plug
(6) Smart thermostat
(7) Smart motion sensor
(8) Smart smoke detector
(9) Smart leak detector
(10) Smart speaker
(11) Smart camera (indoor)
(12) Smart camera (outdoor)
(13) Smart TV
(14) Others: _____
3. What management/sharing ways of smart devices are more convenient for you? (you can choose more than one answer)
(1) Share passwords or accounts or set up an iPad for center control
(2) Share through smart hubs
(3) Share through smart speakers (Apple HomePod, Google home mini, and Amazon echo dot are typical smart speakers that connect to and can control multiple end-devices like smart lock, smart lights,

and smart plugs)

(4) Use a third-party smart home platform supporting various vendors (e.g., create a home in the Apple HomeKit platform to connect and control all the devices from different vendors and share the devices with the guest by adding them to the home in the Apple HomeKit)

(5) Share each device separately in their vendors' own apps (e.g., August app)

(6) You should set up smart home devices on your own (e.g., reset the devices when checking in)

(7) Others: _____

4. As shown in Figure 10 of Appendix 9.7.2, which of the following shared house types have you experienced? (you can choose more than one answer)

(1) Private room with host
(2) Private room without host
(3) Entire place
(4) Shared room

5. Which devices do you expect to know who else can control/manage them while you are using them?

(1) Smart lock
(2) Router
(3) Smart hub
(4) Smart lighting
(5) Smart plug
(6) Smart thermostat
(7) Smart motion sensor
(8) Smart smoke detector
(9) Smart leak detector
(10) Smart speaker
(11) Smart camera (indoor)
(12) Smart camera (outdoor)
(13) Smart TV
(14) None

6. Which devices do you expect the host to continue to control (e.g., turn on/off the bulb) during your stay?

(1) Smart lock
(2) Router
(3) Smart hub
(4) Smart lighting
(5) Smart plug
(6) Smart thermostat
(7) Smart motion sensor
(8) Smart smoke detector
(9) Smart leak detector
(10) Smart speaker
(11) Smart camera (indoor)
(12) Smart camera (outdoor)
(13) Smart TV
(14) None

7. Which devices do you expect the host to continue to be aware of its status (device status such as turned-on/turned-off/open/locked/closed or alarm information) during your stay?

(1) Smart lock
(2) Router
(3) Smart hub
(4) Smart lighting

(5) Smart plug
(6) Smart thermostat
(7) Smart motion sensor
(8) Smart smoke detector
(9) Smart leak detector
(10) Smart speaker
(11) Smart camera (indoor)
(12) Smart camera (outdoor)
(13) Smart TV
(14) None

8. There are many multifunctional smart devices (such as a speaker/smart assistant with a remote house-sitting function). Do you normally check if the device has a camera and close the camera permission?

(1) Yes, because: _____
(2) No, because I didn't know this option was available
(3) No, because the tutorial in the app didn't advise me to do that
(4) No, because I didn't want to take extra time to do that
(5) No, because I always forget to do that
(6) No, because: _____

9. Were you aware that the host may monitor your activity through the camera (in the speaker or other multifunctional devices) even without your consent?

(1) Yes
(2) No

10. Some smart devices (e.g., smart scale and smart TV) offer "guest mode" feature, do you normally turn on the "guest mode"?

Guest mode: if turned on, personal information will not be collected, but some functionalities will not be able to be accessed (e.g., play my favorite programs on TV)

(1) Yes, because: _____
(2) No, because I didn't know this option was available
(3) No, because I believe the default setting should work fine
(4) No, because the tutorial in the app didn't advise me to do that
(5) No, because I didn't want to take extra time to do that
(6) No, because I always forget to do that
(7) No, because: _____

11. Were you aware that your personal information (such as Weight data) may be exposed to the host/other guests?

(1) Yes
(2) No

12. There are some smart devices (e.g., smart door locks, speakers, smart TVs) will record the user data (e.g., usage log of the device like TV watch history or personal information), do you normally check if the data exists and delete them before leaving?

(1) Yes, because: _____
(2) No, because I didn't know this option was available
(3) No, because the tutorial in the app didn't advise me to do that
(4) No, because I didn't want to take extra time to do that
(5) No, because I always forget to do that
(6) No, because: _____

13. Do you expect the smart scale to record your personal information/usage log by default?

(1) Yes
(2) No

14. (If "No" selected in Q-5.1) Were you aware that your user data (such as TV watch history) may be seenexposed to by the host/other

guests?

(1) Yes

(2) No

15. Imagine you are an Airbnb guest, and there are some smart home devices in the house shared with you. If these incidents happen, How do you feel about them? (Five-point Likert options from 1-5: Not at all upset, Slightly upset, Somewhat upset, Moderately upset, and Extremely upset)

(1) You don't know who has what permissions on the devices and when

(2) Host or other guests can control smart plugs (on/off) at any time

(3) Host or other guests can control the smart speaker (on/off or play music) at any time

(4) A smart speaker can leak Voice ID binding preference information to the host or other guests (e.g., Voice ID helps recognize you when you speak and provide a personalized experience)

(5) Host or other guests can control the smart locker (lock/unlock) at any time

(6) Host or other guests can manage smart router (e.g., change password, set up a guest network, etc.) at any time

(7) Host or other guests can control the smart hub (e.g., Smartthings hub, Philips bridge, etc.) at any time

(8) Host or other guests can control the smart bulb (on/off) at any time

(9) Host or other guests can use a smart camera to monitor at any time, anywhere

(10) Host or other guests can control the smart TV (on/off, play videos, etc.) at any time

16. For the following devices, if your usage log/history of them can be viewed by someone else (e.g., the host, other guests, or some attackers), How do you feel about them? (Five-point Likert options from 1-5: Not at all upset, Slightly upset, Somewhat upset, Moderately upset, and Extremely upset)

(1) Smart lock, your history log of smart lock about when the locker is on/off and who opens it can be viewed by someone else

(2) Smart hub, your history log of a smart hub (e.g., Smartthings hub, Philips bridge, etc.) can be viewed by someone else

(3) Smart lighting, your history log of a smart bulb can be viewed by someone else

(4) Smart plugs, your log of smart plugs (about when the plug is on/off and electricity usage) can be viewed by someone else other than the current guest

(5) Smart sensors, your log of smart sensors about when the sensor is on/off, and the environment data of the home (such as temperature, humidity, light, etc.) can be viewed by someone else

(6) Smart speakers, your history log, conversation history log, music playback records and sleep monitoring reports of a speaker can be viewed or heard by someone else

(7) Smart camera, your history log of a smart camera can be viewed by someone else

(8) Smart TV, your all history log of a smart TV can be viewed by someone else