

WEB APPENDIX W1: CAR GPS SCENARIOS

1. You are a loyal customer who has been driving leased cars from *Premier Inc.* for the last 5 years. As you start up your car on a Saturday morning to head out for some shopping, the following message from *Premier Inc.* comes up on your phone.

“Good Morning! This is to notify you that based on a new technology agreement Premier Inc. will start sharing your driving location and movement data from the car GPS with a firm **that has been your Personal Driving Insurance provider for the last 5 years.**

As experts on storage and processing of driving behavior databases, your **Personal driving insurance provider** will share analytics and updates with you, the driver, to help improve driving quality.

They will utilize your **internal travel location history database** containing your personal driving metrics such as speeds, turning radius and braking distances to help inform and improve the risk profile of your driving behavior.

Data transmission will take place once every 5 minutes.

2. You are a loyal customer who has been driving leased cars from *Premier Inc.* for the last 5 years. As you start up your car on a Saturday morning to head out for some shopping, the following message from *Premier Inc.* comes up on your phone.

“Good Morning! This is to notify you that based on a new technology agreement Premier Inc. will start sharing your driving location and movement data from the car GPS with a firm **that has been your Personal Driving Insurance provider for the last 5 years.**

As experts on storage and processing of driving behavior databases, your **Personal driving insurance provider** will share analytics and updates with you, the driver, to help improve driving quality.

They will **connect** your travel location history **with an external database** containing vehicle related crowding, accident and crime statistics **at your travel locations**, to help inform and improve the risk profile of your driving behavior.”

Data transmission will take place once every 5 minutes.

3. You are a loyal customer who has been driving leased cars from *Premier Inc.* for the last 5 years. As you start up your car on a Saturday morning to head out for some shopping, the following message from *Premier Inc.* comes up on your phone.

“Good Morning! This is to notify you that based on a new technology agreement Premier Inc. will start sharing your driving location and movement data from the car GPS with an **Unknown Third Party Insurance provider.**

As experts on storage and processing of driving behavior databases, the **Unknown Third Party Insurance provider** will share analytics and updates with you, the driver, to help improve driving quality.

They will utilize your **internal travel location history database** containing your personal driving metrics such as speeds, turning radius and braking distances to help inform and improve the risk profile of your driving behavior.

Data transmission will take place once every 5 minutes.

4. You are a loyal customer who has been driving leased cars from *Premier Inc.* for the last 5 years. As you start up your car on a Saturday morning to head out for some shopping, the following message from *Premier Inc.* comes up on your phone.

“Good Morning! This is to notify you that based on a new technology agreement Premier Inc. will start sharing your driving location and movement data from the car GPS with the **Unknown Third Party Insurance provider**.

As experts on storage and processing of driving behavior databases, **Unknown Third Party Insurance provider** will share analytics and updates with you, the driver, to help improve driving quality.

They will **connect** your travel location history **with an external database** containing vehicle related crowding, accident and crime statistics **at your travel locations**, to help inform and improve the risk profile of your driving behavior.”

Data transmission will take place once every 5 minutes.

WEB APPENDIX W2: WEARABLE DEVICE SCENARIOS

1. You are a loyal user of a wearable device for the last 5 years, which is manufactured by *Premier Technologies* and works connected through their mobile application. As you are about to head out on a Saturday morning for some shopping, the following message from *Premiere technologies* comes up on your phone.

“Good Morning! This is to notify you that based on a new technology agreement *Premier Technologies* will start sharing your location and movement data from the wearable device with a **firm that has been your Personal Health Insurance provider for the last 5 years.**

As experts on storage and processing of physical movement databases, your **Personal Health insurance provider** will share analytics and updates with you to help improve the health quality of your lifestyle.

Since movement is key to various lifestyle related diseases, they will utilize your **internal travel location history database** which reveals your movement speeds, duration and dwell times to help inform and improve the health risk profile of your lifestyle.

Data transmission will take place once every 5 minutes.

2. You are a loyal user of a wearable device for the last 5 years, which is manufactured by *Premier Technologies* and works connected through their mobile application. As you are about to head out on a Saturday morning for some shopping, the following message from *Premiere technologies* comes up on your phone.

“Good Morning! This is to notify you that based on a new technology agreement *Premier Technologies* will start sharing your location and movement data from the wearable device with a **firm that has been your Personal Health Insurance provider for the last 5 years.**

As experts on storage and processing of physical movement databases, your **Personal Health insurance provider** will share analytics and updates with you to help improve the health quality of your lifestyle.

Since movement is key to various lifestyle related diseases, they will connect your travel location history to an **external database of your travel locations** which reveals whether you visited fast food restaurants, gyms, parks or bars to help inform and improve the health risk profile of your lifestyle.

Data transmission will take place once every 5 minutes.

3. You are a loyal user of a wearable device for the last 5 years, which is manufactured by *Premier Technologies* and works connected through their mobile application. As you are about to head out on a Saturday morning for some shopping, the following message from *Premiere technologies* comes up on your phone.

“Good Morning! This is to notify you that based on a new technology agreement *Premier Technologies* will start sharing your location and movement data from the wearable device with an **Unknown Third Party Insurance provider**.

As experts on storage and processing of physical movement databases, the **Unknown Third Party Insurance provider** will share analytics and updates with you to help improve the health quality of your lifestyle.

Since movement is key to various lifestyle related diseases, they will utilize your **internal travel location history database** which reveals your movement speeds, duration and dwell times to help inform and improve the health risk profile of your lifestyle.

Data transmission will take place once every 5 minutes.

4. You are a loyal user of a wearable device for the last 5 years, which is manufactured by *Premier Technologies* and works connected through their mobile application. As you are about to head out on a Saturday morning for some shopping, the following message from *Premiere technologies* comes up on your phone.

“Good Morning! This is to notify you that based on a new technology agreement *Premier Technologies* will start sharing your location and movement data from the wearable device with an **Unknown Third Party Insurance provider**.

As experts on storage and processing of physical movement databases, the **Unknown Third Party Insurance provider** will share analytics and updates with you to help improve the health quality of your lifestyle.

Since movement is key to various lifestyle related diseases, they will connect your travel location history to an **external database of your travel locations** which reveals whether you visited fast food restaurants, gyms, parks or bars to help inform and improve the health risk profile of your lifestyle.

Data transmission will take place once every 5 minutes.

WEB APPENDIX W3: SCALE MEASURES

All items are measured on a scale of 1 to 5 (1 = Strongly Disagree, 5 = Strongly Agree). Reliabilities are provided next to construct names in order of study (GPS, Wearable Device).

Location privacy concerns (Cronbach's $\alpha = .881, .884$)

Physical safety

- Such surveillance makes me worried about being targeted
- I feel unsafe knowing that others can find out where I live
- I feel that sharing my movement data with unknown others increases my risk of becoming a victim of crime
- I believe others knowing where I am going to be compromises my personal safety

Harassment

- Such practices cause me worry about being harassed by advertisers
- I feel this will enable companies to irritate me with unwanted offers

Fairness

- I fear such information can be unfairly used by government and law enforcement agencies
- I believe that Entities knowing my location information can prevent me from accessing better opportunities
- I think sharing whereabouts with banks and insurers can adversely affect my financial freedoms

Perceived Value of Disclosure (Cronbach's $\alpha = .912, .915$)

- I think the benefits gained from the customization in the above scenario offset the risks of information disclosure
- The value I gain from the outcome of the above data sharing practices will be worth the information I give away
- I think the benefits gained from using the above services are greater than the risks of information disclosure

Personalization Receptivity of communications (Cronbach's $\alpha = .936, .908$)

- I will be receptive to their personalization efforts if they personalize all communication with me through a mobile application
- I will be receptive to their personalization efforts if they acquire my personal preferences to personalize all promotions and offers
- I will be receptive to their personalization efforts if they automatically collect my information (such as IP Address, location, page views) to personalize updates
- I will be receptive to their personalization efforts if they personalize new service packages based on my behavioral data

Personalization Receptivity of Insurance Underwritten with disclosed data

An insurance co. has procured the above location data and designed a new "intelligent" premium that dynamically computes a personalized risk profile based on your movement data, with rewards for low and penalties for high risk behaviors.

How willing are you to switch to the "intelligent" premium package which more accurately accounts for your personal behaviors and risks? (1 = Do not prefer, to 5 = Prefer a great deal).