

Supplementary Material: Study Questionnaire

Part 1: General Information

1. Please state your gender (*male/female*)
2. Please select your age group:
 - 18-24 years old
 - 25-34 years old
 - 35-44 years old
 - 45-54 years old
 - 55-64 years old
3. Please indicate your current profession:
 - Student
 - Researcher
 - Academic Staff
 - Industry
 - Other
4. Do you have experience with data visualization plots? (*yes/no*)

Part 2: Visualization-Related Questions (for each visualization)

1. How effective is the provided visualization in portraying power consumption information? (*1 not effective at all – 5 very effective*)
2. How easy to understand is the provided visualization in portraying power consumption information? (*1 not easy at all – 5 very easy*)
3. How visually pleasing is the provided visualization? (*1 not visually pleasing at all – 5 very visually pleasing*)
4. In terms of quantity, how do you describe the amount of data presented? (*options: a. sparse (not enough), b. adequate (enough), c. excessive (very complex)*)

Part 3: Visualization-Specific Questions (displayed after Part 2 questions for each visualization)

Conventional

Stacked Area Chart

1. When was the total power consumption the lowest
2. When was the total power consumption the highest?
3. Which brand had the most power consumption fluctuations? (Note: these numbers do not reflect real energy consumption for each brand)

Bar Chart

1. Did you know that you can scroll to see the rest of the figure before arriving to this question?
2. Which month had the highest energy consumption?
3. Which month had the lowest energy consumption?

Line Chart

1. How much was the energy consumption in July (an approximation)?
2. What was the general trend in energy consumption from January until July?
3. What was the general trend in energy consumption from July until December?

Enhanced

Heatmap

1. What does the color scaling represent?
2. At the period 1:30 – 1:40 am, how much did Room 2 contribute to the total energy consumption?
3. At the period 00:10 – 00:20 am, which room had the lowest energy consumption?

Spiral

1. From the plot above, can you know what is the starting and ending date of summer?
2. What was the energy consumption on March the 5th?
3. To which season January the 6th belongs?

Stacked Bar Chart

1. Are vacuum cleaners available on the appliances list?
2. How many brands does kettles (boilers) have?
3. At 1 pm, what television brand was turned on (Note: these numbers do not reflect real energy consumption for each brand)

Optional: Application Design & Participants' Observation (displayed in Thank You Screen from the application)

1. Was it easy to use this app? *(1 not easy to use at all – 5 very easy to use)*
2. How smooth was using this app, according to your experience? *(1 slow and laggy – 5 very smooth)*
3. Would you be recommend this app to your friends/colleagues? *(yes/no)*
4. Please rate the time you spent on completing the questionnaire? *(1 very long – 3 adequate – 5 to the point)*
5. Did you face any technical difficulties using the app? How could we improve your experience (e.g. Found bugs? General feedback?)? *(open question)*