With the increasing trend of the aging of the society, more and more attention has been paid to the electric-appliances usage of the elderly, and balancing convenience and safety issues becomes a big concern. Among them, old people's using habits and preferences for electrical appliances are years of development, which can reflect strong personal characteristics. Combining their physical conditions with the usage of electrical appliances, can we infer their usage patterns, and can social organizations provide more targeted services for them? Secondly, by tracking the use of electrical appliances, can the potential dangers of electricity use among elderly people be captured the first time? Theoretically, it is achievable. We will regard the partial real data of Blackwood Home and Care and another disabled elders dataset as examples to introduce a narrative diary to show daily life in nursing home, and as nursing home’s administrative staff, how to use data to improve the services in nursing home, involving finding elders’ habits and patterns of electrical appliances usage, making purchase decision according to usage frequency, making appliances maintain plans in advance according to usage period and detecting abnormality. Our audiences mainly are families of the occupants and people who are interested in the life in Blackwood. Our creation aims to make families get brief knowledge and promote staff to provide better services so as to improve life standard and attract potential occupants.

We have got 15 occupants’ electricity files in the nursing home, and seven people’s brief identity information including gender and health condition. In those files, each csv file records one electrical appliance's 2 columns of timestamp and instantaneous power value. Duplicate lines are found in the process of data cleaning. In identity documents, the same id occupant appeared twice, and we choose to keep the line with more comprehensive information. After data cleaning, there are still some errors in the data. Some plug-in sensors in electric-appliances exist missing data due to poor contact or other issues. This situation may lead data analysis to show that an appliance has been used for too long or usage missed. Otherwise, we are not given more detailed information of each appliance to offer better service towards repair and replacement. In addition, the amount of 15 is not enough to do statistical analysis, and not all occupants have the same electric-appliances, which may lack underrepresentation. And we are lacking detailed personal information about occupants, the given information consists of one female and others are all male, and their health conditions are quite different. So, we cannot combine their characteristics with their appliances usage pattern definitely to offer targeted service and help, and do some statistical analysis.

How to use given data to acquire new data we need in our advertising video?