1. From this article I have learnt that most users of the Nest thermostat will enjoy using it. However on the whole the nest didn’t lead to energy savings despite the countless features aimed towards saving energy. This could be to do with the limitations of the nest itself. The article found these limitations to mainly stem from the machine learning. This is brought up when the paper talks about the avenues for future development. The exception flagging was a big one. This is to do with the fundamental gap between what a computing system can sense and the user’s actual intentions. During the time with the nests the users were actually able to find ways to work with the intelligence such as correcting the schedule for the nest and monitoring the patterns it had made. This lead to users getting an overall better experience even if they had to do some work to it first.

Another thing I learnt from reading the paper was that many of the users struggled to fully understand how the system actually operated. This was discussed in the paper under the section of incidental intelligibility. What this meant was that users struggled to get to grips fully with the nest, but also the researchers observed that the users desire to understand the system more was very infrequent. So this suggests that if the users put time into the nest they will get a better experience in the end.

1. My real world scenario would be for a house of three early twenty graduates all working in tech up in London. A nest would work for this group of people as they are likely to have other smart home products such as an amazon Alexa or similar, meaning that they can control their nest by talking to their Alexa. Another reason this product would work is they are already technology literate meaning they shouldn’t struggle to get to grips with the nest, compared to someone in their late 60s for example.

One problem that might arise with the nest is that often times the tech industry requires staff to work overtime, as such the nest might struggle to get an accurate schedule for every day, but this can be solved by the person using the app to delay the heating.

Another great benefit for this household would be that they can easily track how much they are using the heating allowing them to be more energy saving conscious to try and lower the price of living a little bit.

One more problem that could arouse with three different people using the nest all at once is deciding who is actually in charge of the heating. For example, if one person is back home earlier but one of the other two turns the heating off then this is a problem. This also works the opposite way round, if no one ends up turning the heating off if they’re not going to be home till later then they are wasting money and almost defeating the purpose of the nest.

As discussed above, the nest can also take some fiddling to get it exactly right, if these three graduates don’t have the time to spend to do this fiddling then they might end up spending more money than they save using the nest, once again defeating the purpose.

Along with the points above, if no one in the house talk to each other, which can be a problem in shared housing, then often no one wants to take responsibility for things such as heating, and as such the nest won’t be used to its full efficiency.

1. There are a few options when it comes to multiple users. My first thought would be to have a history tab, showing all the users who changed what, at what time and what setting. This way there is an easy chain of events so people understand what everyone else is doing.

A second option could also be to have an instant messaging section where you could talk between the different users in the house to discuss what needs to be changed within the nest device. This is a simple solution, yet the user uptake could be lacking. This is because there is already countless instant messaging apps which the members of the household already use. Along with the number of other instant messaging apps, the main barrier is the house dynamic, if none one speaks to each other face to face, they probably won’t end up using another messaging app to discuss the plans of the heating.