P3 Exit Interview

**Researcher 1** 00:08

So we're just to start with, how did you find kind of taking part in the project in general?

**Researcher 2** 00:16

In general, it was very useful in a way that I mean, earlier, I am using my smart devices, but I did not have any idea of any idea that what's happening back at the back end. And what sort of information is basically travelling from me towards some organisations or companies. So yes, in a way, this, this, this study helped me to understand that thing that, okay, the sort of that data, a smart device can record, and some organisation or some individual may have access to this sort of data. So in a way, it has enhanced my awareness and understanding of all these processes.

**Researcher 1** 00:57

So in terms of how that's enhanced your understanding, so could you maybe give us an example of, I don't know, of something you saw that maybe you haven't appreciated before or that now you feel like you have a better understanding of?

**P3** 01:12

I mean, the biggest thing when I started this start, I started my participation in this study, it was like more I was more on light sensors, noise sensor and sort of Wi Fi connection sort of thing. So the thing which I was, initially, I did not understand, I was overlooking it: the motion. So basically, I was thinking that what's the purpose of this motion thing, because I was not able to understand. And I was not able to even what I can say, analyse the data. So that in last meeting, what I did, I just got the data and put it in an Excel sheet and try to just made something simple graph. But it was all together very, you know, surprising for me that it was I mean, it was our most important information, as compared to the things because it was something which was directly linked with me. I mean in terms of like, in terms of, I mean, you can say sound, okay, things out there, but those are not directly linked with me.

**Researcher 2** 02:18

You mean that you produce them?

**P3** 02:20

Yeah, I don't produce, okay, they are something which is happening in my room ... motion is something which is directly attributed to me. So someone can see my motion. And if someone's, you know, just consistently, I mean, looking at the state on my one year, he could have easily understand that what sort of my routine in terms of movement where I choose to move and how much I move? And how about what sort of length of my movement? So that's something which was really surprising and feel that that was very important, I should have, you know, understood that earlier rather than the last time but still, like, I'm happy that I was able to understand that thing. That was a very important yeah, emotion. I mean, earlier, I expect it's only location. I mean, if you have a location that it is very, you know, important or critical information. But this motion information is also very critical for me.

**Researcher 2** 03:17

That's interesting.

**Researcher 1** 03:21

Yeah, and how did you were sticking with the motion for a bit because I think I thought we were going through the sort of transcripts from the, from from the group calls. Um, and there was, yeah, people have interpreted the motion in different ways, I think so what did you understand that motion to be representing?

**P3** 03:44

I mean, in terms of frequency, I mean, if it is a frequency, movement frequency, maybe I'm not much concerned about that how how fast our how slow I just moved. But the interesting thing was like when I moved and when I didn't move, so there's something even it's like a very slight movement, but still, someone can see that what sort of movement pattern when what at what time I used to move and at what time I don't use to move I'm still so there's something which is important, definitely, if we can go further into detail like frequent frequency, like maybe someone can actually move some motion to my bike, someone can say okay, this is a motion when he was working. So yes, frequency is also very important in terms of understanding different mode of motion, but I did not bother about that much about these things. But I bothered about that what I can say, time intervals the time interval when I was moving and the time interval was not moving. Now it's very important for someone to understand.

**Researcher 1** 04:54

Did you, did you learn anything about yourself from that data?

**P3** 04:58

Ah, yes, I I learned something for me. Basically because I am a family person, so I have a family. Earlier, I did not have any idea that how much time I'm spending on my study and how much I'm doing my time on my errands, and, you know, other stuff. So through this study, I just realised that it was quite a time, which I was, I mean, I am giving to my family and those matters, which are related to my domestic life. So this was something which I had not realised, or I had not tried to record that thing. So those through the study, I realised that how much time, I'm just spending to my domestic things, and how my time I'm spending to my study. So it will help me definitely, it will help me to be more, you know, a bit more strict in my planning. And with more, you know, good, good, just sort of planning and good sort of a time management thing, it will help me...

**Researcher 2** 05:58

Where are you in the, in the... How many? How long? How many years? Have you been doing your PhD?

**P3** 06:07

It's my first year? How you can say it's like, eight months?

**Researcher 2** 06:12

I'm just kind of get a sense of that, for me, thinking back on it there were periods of time is really, really crucially aware of how much time there was another time that was a bit more gentle. And then yeah, yeah.

**P3** 06:24

I think that's also one factor that because the initial state of my PhD, so maybe I was not realising very much that how much time I need to put my own time and my PhD on my day, but definitely family matters are very important, I just need some sort of more restriction, instead of just, you know,

**Researcher 1** 06:43

I'm sorry, it was was, was that sort of realising that you've put more time into the PhD than you thought or less time and

**P3** 06:50

Less time I think, less time yeah. Because once I use this probe in my kitchen, so because of kids, I used to cook fresh at home, so that they are just, you know, indicator that that fresh food will take a lot of time. So that was something which I need to work on that how, I can, you know, tackle that time in a good way. So that that can I can save my time from the [inaudible] time to my PhD.

**Researcher 1** 07:27

Since you're talking about well family life and other people in your home, you didn't mention that your your wife had looked at it at one point and obviously, this sounds like you've got kids in your home as well. How did other people respond to the probe? Did you, Did you sort of discuss it with anybody or show it to anybody?

**P3** 07:53

I did not show it outside my own home. So basically, definitely I discussed with my spouse. So yes, being a third person, she was quite afraid of this. She said okay, you have this probe but I don't have any idea that what what are the sensor inside it. You are saying that they are only recording sound of noise and other stuff, but who knows what is inside it? So there there were some, you know, fears inside her. So but then I just told that no, it's not like that. I'm part of university and this project is also part of university and now you have all you know, I read those terms and conditions and everything there. So there is nothing hidden, everything is like so then she got relaxed. And then definitely she had no issue with it. And in terms of data interpretation, I just showed her some something some some graphs, especially that my kitchen routine, and with the lighting sensors. So straightaway, she was she was able to understand that what is happening in terms of lighting. So yeah, she was unable to understand that noise thing. Even I am unable to understand that noise thing because noise it's sort of not my home thing. There are something which is also something is coming into, you know, contributing to it. But in terms of light that was something which was really on that single room. So that that was very clear from that light sensor that was the routine of our cooking or or our eating and stuff.

**Researcher 2** 09:21

Do you think we could have done anything else to... so your wife commented that she didn't know what was was in it? Like do you think we could have done anything else in the way that we showed it to you or the way there is or is there any other way that it could be even clearer or? Because there is obviously yeah, sorry.

**P3** 09:47

I mean, in terms of convincing someone, I mean, it's sort of a very relevant thing because it's all about someone's awareness about something. So we because I have some background related to this issue, even if I don't have a background I have an interest in these things, technology and all these devices, so I can understand I can see that okay, these are the things I can get sort of 40 to 50% idea that what is on the motherboard and what's what is happening there, what's... but if somebody is really don't understand about someone who don't have any understanding of you know, sensors and anything, then if, if that person has no understanding, then what can you do even if you can show the sensor, primary sensor without any, you know, like [inaudible] sensor, that person will not be able to understand it. So the only thing is, you can only convince that person with your own terms and conditions, there is no only way where you can make him believe that there is nothing hidden, because we are part of university and we need to stay here we have we are doing sort of projects from like, like last 15 or 10 years, whatever you are doing, and you will you will do it in future as well. So you are only doing this thing to sort of facilitate the community or the people, so they have a better understanding, and you could have a better understanding how to secure their lives and all those stuff. So these are the things I think which if you can, if you can, you have already done that. But still these are not only things which you can convey to a common man to understand this process.

**Researcher 1** 11:27

So So effectively, the trust in the university as an institution, and, you know, its ethics processes and things like that, more than than anything about the device itself?

**P3** 11:38

100% true, if this study would not have been from Newcastle University, and there was some private organisation, maybe I would have not participated in this investigation. I would not have participated in this study. So the best thing about this study was like I had full trust that this study is conducted by on the platform of Newcastle University. So that was the biggest trust for me, they don't care the people they are they are applied to the certain you know terms and condition because of ethical ethics and rules. So that was, that was the trust that which which enabled me to you know, participate in this study. And definitely, that email also come from the like, university platform. So that was also something which I just forgot. And I said, Okay, I need to participate in it.

**Researcher 1** 12:24

Do you, when you're say buying a piece of electronics, like buying a phone, or whatever, do you make similar decisions about, like, the organisation and how much you trust, you know, same one company rather than another company, or, you know, Google versus Amazon, or Apple and those kinds of questions of trust, that we've talked about for the university, do those playing to your purchasing decisions as well?

**P3** 12:51

Not in that way. I mean, in terms of data, data collection, and data sharing, I didn't ever have any, given any though to citing when I was purchasing, but in terms of price, in terms of customer services, that that's something which I really understand that, okay, which company to pay first, or focus in terms of buying and buying something, because if I'm buying something from Amazon, that would have some different [inaudible] or terms and conditions, and the same thing I would buy from eBay, it would have different... so I don't, I don't have much trust on eBay is compared to the Amazon. Similarly, last time I was going to buy a phone cell phone for my spouse. So, there were a lot of options, but at the end, I just bought it from the contractor you know online directly from online website of this Galaxy Samsung Galaxy. So, yes, I was very I had a trust that because this is a genuine website of of the Samsung and there was their representative. So I was feeling that okay whatever he would say me it will be 100% I mean, right. Because it's their product and they are answerable to that product. If I was buying the same product from some other company or some from some third party, definitely I would not have that much high trust as compared to the direct you know, buying from directly buying from Samsung. So I had never given any thought regarding this data thing or Internet of Things type things, but in terms of reliability of product and sort of customer care, I give [inaudible] when when I purchase something.

**Researcher 1** 14:54

Right. As you you talked about that you only sort of talked to talk about the probe with people in your home. And I think you've mentioned on the calls that you when you were travelling or when you're out in public, you kept it in your bag. Was there anything in particular that made you want to keep it in your bag rather than and sort of keep that concealed?

**P3** 15:17

Up to some, some up to some extent, yes, there was something that maybe someone may become uneasy to see that probe. That was one thing, but that was not entirely the 100%. A second thing was, it was bit difficult to keep it in my hand. So I feel awkward to just keeping it my hand or something. So most of the time, I just, I used to have my laptop bag. So it was more convenient for me to just turn it on and put it in my bag. Yeah, so that was something ... so I mean, okay, you can say 70% was sort of, you know, my convenience, and 30% sort of thoughts that what else, what will people who think about it? So it's not entirely that it's someone who would be found very, you know, surprised or sort of...

**Researcher 1** 16:05

Yeah, I sort of what... Suppose, consider that someone might be uncomfortable about it, or because it's electronics?

**P3** 16:14

Yeah. I mean, it's also because I am international student, or I am quite new to UK. So I am just here first time for my studies. So if this the same thing would have been in my country, like, I'm from Pakistan, same thing would have been in my country, I would have no issue to bring it out and move around. Because I know people around me and I know about the local culture and everything I know about because I am based in that country. In terms of UK, because I am quite new, and just understanding UK culture, peoples are you thinking people's preferences. So that was something which I feel that was sort of barrier that I just tried to make it less, you know, exposed. So that people don't, you know, become sort of cautious about it. And secondly, if someone from the local, local, like, from Britain, British people person would have this thing in his hand, I feel they're the people would have some different thinking, as compared to an international having this in their hand. It's something which is not, I would not say any biasness. But it's a natural process. Because if someone you know, looks similar to you looks from your own people, then you know, you have at least some sort of trust. But if someone outside from your community having something different than definitely you have some other ideas, it's not only with UK, it can be in any country or city or somewhere. So there's something.

**Researcher 1** 17:46

Yeah, that makes total sense. Yeah. Do you think if if you weren't participating in the study, and you saw somebody else with that? Do you think it would make you feel uncomfortable? Or do you think you'd have concerns about it?

**P3** 17:59

I think it's, it's again, linked with the overall awareness of that person, it is about me because I have sort of understanding of how these things, not deeply, but at least, I mean, on the surface level, so I would not have been become any me and you know, discomfortable with if someone would have been with him in front of me sitting in front of me. Now, that's obvious that I would ask him a few questions about the purpose of this thing and why he's having this thing and what's inside it, but I would definitely trust him, whatever he would say, I would trust Him that okay, he's saying rightly. But again, I would definitely ask him that, for whom you are doing the study, if you would say I'm doing for the Newcastle University, or even, for example, university, I mean, Northumbria University or some other university, I would be more, you know, comfortable. But if someone would say, XYZ private company, then I would become a little bit, you know, suspicious about that thing.

**Researcher 2** 18:58

If you were to be challenged with it, do you know, what you would maybe point to or, or say to? Like, would you... obviously you could tell them about the study and would you point to anything else or would there be... How would you kind of go about not proving it as such, but...

**P3** 19:28

I mean, I what I understand from your question is like, I have this probe with me and someone challenging, you have this thing with you. So basically, the first off I try to keep that those paperwork with me, which you had here, the tutorial and all their stuff about that probe. I try to keep that thing at least within my drive, if not, if not always with me, at least with my [inaudible]. So that if someone could ask

**Researcher 2** 19:56

And this is something you thought about that it's a deliberate choice you've made to keep both that paperwork with...?

**P3** 20:02

Yes, because definitely I had in my mind that maybe I can, you know, get some some sort of scenario where someone could ask that, okay, it is only you are saying we don't have any proof that what you are saying it is right or wrong. So basically, the first thing would be definitely able to show the paperwork to them that okay, this is a thing. And Secondly, you had, I had, you know, communication or I had an address on both of you. So I could have given them your addresses that, okay, these are the person these are their email address, you can just email them and you can verify their thing. The third thing, definitely what I have been told in my professional life that don't, you know, make a conflict with anyone to event somebody is just, you know, becoming very aggressive. So what I would say I would only say, Okay, I'm going to turn it off. And I would say I told him that okay, this is I would do, I would ask him to do by yourself. So once it is turned off, I would say okay, this is turned off. Now, I am going to keep it with me with me turning off so I will not be part of any conflict. I will try to convince someone but not beyond a certain limit.

**Researcher 2** 21:10

Yeah, that's fascinating. Thank you.

**Researcher 1** 21:15

So, I suppose a big a big thing for you and taking part in this was that you developed your own visualisations, you did a lot of work directly with the data. What, what led you to do that, I suppose and over say, using the visualisations that were built into the probe and from the, from the pop up kind of webpage, and kind of what was it that led you to favour your own version rather than than that version?

**P3** 21:49

I don't think that there is any problem with that interface that was a very nice interface basically, because I had sort of data analysis background. So, I have some certain preferences to visualise data, because it is easy for me to understand that preference instead of you know, some sort of given by default preference. So, that was the first thing which I just did, because and basically the second thing, first thing was preference. Second, well, I was little bit enthusiastic to play with the data, instead ... that thing. So, basically, the one thing which I would which I would say definitely like, on probe, like, it was very small screen. So you cannot like present 24 hour in that detail as compared to in Excel or somewhere else. So that was something that because of a dimension problem. So you can have not have that much lengthy extent where you can, you know, accurately define your routine or something, especially in terms of what I can say, this light thing, and also noise thing as well. So those are much better visualised in in my data analysis as compared to these visualisation, because those are sort of what I can say... Vertical thing, 24 hour vertical thing, but instead of so many bars, so what I did, I just made one graph, 24 hours in one line. And then for the second day, I just put it down. So it was like, One day One day one day

**Researcher 2** 23:33

So yours could compare the cycles of each day to the next one. So that let us do the when you were describing to us when you were cooking, let you do very direct comparisons on that day I was cooking at four o'clock, on that day it was five o'clock

**P3** 23:49

Yeah, that is that is bit difficult to do with that probe. I have to go along, I mean, no vertical thing. So it would be great if in future instead of like, okay, what you have done, you have done everything on just a one page, the more appropriate way be like you can do it separately, maybe two or three pages, where you have, you know, detail, at least about x xx, at least you'd have 24 hours, you know, extent. So then you can, you can, you know, see sort of very nice patterns in that thing.

**Researcher 1** 24:27

I suppose it's, well, given that it's the end of the study, I suppose, sort of safe to say now that to some extent, that visualisation that we built was meant to be intentionally kind of a little bit ambiguous It was sort of meant to be a little bit sort of difficult to understand and I suppose did you did you find it I suppose difficult to understand and was was that ... what the question is here... did you find that it left room for interpretation, or did you just find it I suppose, a bit frustrating?

**P3** 25:03

Little bit element of frustration as well. Because those bars it was quite difficult for me to understand those bar and the sound. Yes. Yeah. And then interpret those bars. Yeah, so that was, yeah, a little bit I'm not entirely there were two factors one was likely to be difficult. And the second that my, you know, I was willing to do sort of data playing with on my own laptop. So that was also another thing.

**Researcher 1** 25:30

Okay. Yes. I suppose. Yes, a few final questions and having taken part in the study, do you... Do you feel any differently about any of the technology that you use? You talked about, you know, that you have a little better understanding of maybe what some of the data is? Did that change the way that you feel about any of the products that you own or services that you use?

**P3** 25:59

Yes, definitely, definitely. Because earlier all those things were hidden. So I did not have any idea that what's happening behind their processes. So it is something this probe brought all those processes in front of me. So I now I can understand what sort of data is captured by the technology and what sort of data the other people can see and how much how what sort of information they can get out of that data. So definitely that changed my mind. I mean, one of the thing was like earlier, whenever I used to open up a website, straight away I used to say accept cookies. But now I just don't go for the accept all cookies, I just go there and try to at least if there are some essentials I can say okay, but I don't allow any website to use all by default cookies, I would definitely go for rejection because it's my laptop, I'm doing something why someone else should monitor my routine that what sort of websites I'm looking at what sort of activities I'm doing on that web site. So there's one thing which I am I have understood and secondarily I am more concerned about social media like Facebook Twitter and now I'm look I used to Google all the options security options, which are inside those application that where are I can switch those off so that nobody at least you know, see my routine Yeah, it has definitely helped me helped me to think in a different way

**Researcher 1** 27:34

Did you have anything else anything you wanted to ask [Researcher 2]?

**Researcher 2** 27:40

Not really, um, No not really, I I think one of the surprises for me was... how the I was kind of we were kind of thinking about the openness of it all all the way along. But for me there was a bit of a blind spot when it came to the data itself when it was the actual data file that you I think you put it into Excel like immediately and then there was lots of questions from you and from [P1] and about the different parameters in there and the kind of names that chosen for them and and I was that was a really nice kind of for me that was a really nice reminder that I'm not sure there's gonna be a question at the bottom of this...

**P3** 28:31

[inaudible] we can see the comment or something but still it is great if it's something you could have like let let participant know that what the unit of their thing. Because you know it's very important like light is fine if there is no unit you can say okay, it's very high it's low light some sort of but still you know, there are some certain frequencies if you are in on a sunshine then it would have some different frequencies if you are in in a room it would have some different frequency. Maybe there will there will be some time when you have same frequency but otherwise you would have some different frequency so that would help someone to understand that at that time whether he was at outside or...

**Researcher 2** 29:13

So you're talking about the kind of the quality and colour of the light, whether it's like white light or like incandescent light from a light bulb

**P3** 29:21

like even though there are a few you know few you know light light bulbs or something which comes like six thousand, 6500Ks but in most of the time people using three or 3000 or three 3500Ks so there's definitely not the daylight. So the frequency you know, you can say that okay, this frequency belongs to this site and this frequency belongs to this site and then definitely we'll have people that at that time it was outside this light is outside light and this room side.

**Researcher 1** 29:52

I think you probably see quite a big difference between offices and the home as well. You know, more fluorescent sort of whiter light in the office and yellow light at home, I imagine.

**P3** 30:04

Similarly noise, if you can give sort of noise unit, then definitely it can help to understand that there was some big bang or I will someone can, okay, say that this is the frequency of conversation, when we were kind of making conversation, while this is the frequency of rain, also the train, but this is the frequency of some, like, aeroplane or something which is passed by and so yeah, in that way, people can more make it more you know, and interesting things there.

**Researcher 2** 30:37

My motivation to start with was to record it in, in that file in such a way that it was just as short as possible, I didn't want, like, I didn't want to make a huge data file, so the, so the priority was having a representation that was really short. Then what that meant was, when you came to look at it it didn't make any sense.

**P3** 31:00

actually, you know, when its all about diversity in, you know, participants who would have like, if 10 participants, maybe seven participants would be very layman in the, you know... So they would be fine with whatever you are hoping that they would be fine. But there would be three persons who would say, oh, we need one with more...

**Researcher 2** 31:18

And that's part of the agenda of this project is to talk about, you know, opening things, examining them. And you did that. And then, and then we have this, and we have this, this. Yeah, we can created the situation. So that's a really, really interesting,

**P3** 31:41

I think one more thing, which I think I have a comment for that like location, you can, if there is possibility in future you can like, put sort of sensor which you can turn off and turn on even though it's already there. So you can you can have position data inside it. If someone user don't want to give their location, they can just keep that sensor off. If someone want to, you know, get location. So that sensor should work, like in my case, it was not working outside. So if you can a little bit enhance the sensor or sensor quality in terms of location collection. Basically, the these these answers are the sort of study would have been more interesting for me if I had location with

**Researcher 2** 32:28

Yeah we talked about that in week three or something. Yeah. That was really interesting, because I think you were saying that it comes from well, I mean, it's clearly true. Because, clearly, but also you were coming from it, you had a personal angle on that as well, which I think was your geospatial kind of background. Yeah.

**P3** 32:50

But you know right now, location is everywhere. And if even someone don't know about the geospatial thing, but still, he used to will open Google Maps and see his, you know, routine, where he met, like, you know, Google Maps is collecting all their trips. So, you know, in my case, if I turn that one every month or every week, I get an email from the Google that these cities are your trips of the last week. And then I can see okay, I went there. I went there. I went there,

**Researcher 2** 33:19

In lock down it was like your cities are Jesmond and you've been on a trip to, I don't know where I'd been, likemaybe Gosforth. Okay.

**Researcher 1** 33:31

It it a, yeah, it is a shame that that didn't, didn't work. It did when we were testing it didn't it?

**Researcher 2** 33:37

Yeah I was frustrated with that myself.

**Researcher 1** 33:42

Yeah, it pretty comprehensively didn't work for anyone. But that's...

**Researcher 2** 33:46

[P1] got it to work once.

**Researcher 1** 33:47

Yes, I would have I would have loved to see your work you sort of Yeah, geographic visualisations you might have done with that given your background would've been would have been interesting.

**P3** 33:59

Basically, I think in terms of routines, or any any, I mean, location is very important, not about my background. But location is very important because basically, that give something very unique. Currently, I mean, most of the things are related to you know, people are more interested to know the location of the person. If someone would like to, you know, Spy someone, he would be more interested to find his location and you know, routine. So there's something which everybody should understand that that's more important to make someone understand about the location. It's just my thought, Maybe I'm wrong, but I think

**Researcher 1** 34:40

Was there anything you wanted to ask us or any kind of final comments or remarks before we wrap up?

**P3** 34:49

I think we have a very comprehensive questions. Nothing left like no, I think that it will be nice. I mean to participate in this that even though it is bit difficult to, you know, spare time for such thing, but because study study was

**Researcher 2** 35:07

You've given us a lot of your time.

**P3** 35:09

I mean, because the study was of my interest. And definitely we should spare some time. If nobody would spare time, then how you can come up with new things and new ideas are definitely I should be part of that thing. So yeah, it was very interesting. I hope my, what I can say, comments and discussions will definitely have provided some insight to you as well. But I have got a lot of things from these studies, especially coming to know about hidden things in the technology there or something.