

## Case B

**Participant: Designer 3 (P)**

**Facilitator: Xiao Zhang (R)**

**Date: 20120303**

**R: #00:00:33-8#** Can we start out interview? What's the title of your job in [the name of the company]? Senior researcher?

**P: #00:00:46-1#** Yeah, that's my current job, senior researcher.

**R: #00:00:48-8#** what's the routine of your job?

**P: #00:00:55-6#** Sure, so my role is that I represent India and I'm in Shenzhen now. And Shenzhen lab does some product, so I bring all the knowledge from India, and use that input to lead a team working in Shenzhen. I am evaluating the products that are all ready done. So in China, I do some studies, you know, do some products evaluation, the new concept and the team sort of developed it. It's my job to go there industry and make sure that if the evaluate properly, so we can... the investment, something like that. In the conception area, what my knowledge from India, I do propose some concepts related to both India and China. But primarily be, you know, from India. Yeah, so that's my main job in Shenzhen.

**R: #00:03:37-3#** What do you think about interaction design practice? The reason why I propose this question, because there is some differences between what we have learned in school about design approach or design philosophy of interaction design and what actually happened in industry. So my question is about what are your feelings about interaction design practice.

**P: #00:04:23-3#** It's an interesting questions. I remember when I was doing my Masters six years ago, you know, I was...When I was first in my internship, I realized that there are a lot of differences between how, you know, we learn in academic world, what goes into practice, of course, depends from company to company, I was lucky, starting in Motorola research, and then, I never really, you can say, your product develop environment. All of my career have been in research, and doing this kind of stuffs. So from my point of view, I think interaction design it's sort of sentence and balance between the user needs, so we do focus on user needs, but then there are some strategies...from the company side, the company wants to...the future and see, you know, what kind of new product...focuses will be coming, so somehow so a job to sort of to create a balance or sensitize these requirements and then create or propose use experience, you know, make sure that meet...the user and at the same time it does match the existing thing and the all company's focus, you know all the future,...so I was involved in new products development, future propositions, and things like that. It's quite hard from that pint of view to do interaction design, because... the situation, we want to make sure that we want to design for real people and real users, but we want to future, so obviously...you know, that's evaluation of these products, evaluate it today, in present, so how do you might ...interaction practice of today, do the users have the existing requirements, and make sure they would working future as ... So it's quite broad in that sense, quite great...also in certain parts, very hard to, you know, come up... the really tangible or all really concrete experiences that you can be visual that would work.

**R: #00:07:06-7#** Interesting. So what is the role of interaction designers in [the name of the

company] Research Center?

**P: #00:07:21-2#** Ok, so as [the name of the company] Research Center focus a lot on the future, and not just... So the basic role of interaction designer would be to think practices in interaction design today, for example, you know, what would be the interface that are really... today, you know, we have such ... so there are some interactive technologies..., then the job of interaction designers will be you leverage that and propose or create experiences that would also be valuable in the future. So there is a difference between how a product design team and our teamwork is in the sense that they are very limited to what is the current and what are technologies available today, but we are trying to push the develop and see ok fine, we have certain kinds of technologies, so what's next, so not only...but also in the next... what are the interaction possibilities and let's concentrate on them and try to, you know, create the experience...

**R: #00:08:56-5#** Because you are in a research center, do you or your design team have a common design process for your projects?

**P: #00:09:17-2#** Yeah, there is a loose process...If you ask this question to a product team, interaction designer is quite ... because you know... In [the name of the company], the process is loose, but there is a process, because we need a lot of iteration, so the way goes. There are two kinds of projects, some kinds of projects are basically technology-center, and the other ones are user-center, you can say, so let's say you know the company has all the teams produce amazing technologies, but they will be used in real life, then we need to work with them to define you know, scenarios, research scenarios and mockups for that, so we take technologies for... ... and depending on the experiences, evaluated the experiences, you might need to two technologies, ok, the original X, but X is not very well, so let's ... X, you know, Xc, Xa, Xb, some things like that, and then go back, and through the technology, from..... evaluate it again, and then go back, you know the technology is more defined enough .... through the users, so that's one kind of projects.... Another kind of projects, that completely user-centered, where you know, we get user study first, we intend to find out the user needs, and we find of the certain...user needs, and we ... concentrate on one of these needs or needs categories, based on that we propose, you know, one possible solutions, solutions will be technologies involvement, and ...certain solutions might take more time..... there is .... needs to be done, once.....

**R: #00:12:35-4#** So do you think designers' personal life experiences are one kind of potential factors that can help or influence you in your design practice?

**P: #00:12:59-0#** Definitely, yes.

**R: #00:13:04-2#** Can you give some examples? Examples about what the project is, what you personal experiences are, and how you use such experiences in the project?

**P: #00:13:24-8#** Sure, ok. That is one of my favorite projects.

(Connection is bad. Reconnect)

**P: #00:23:30-0#** So, this project is called [the name of the company] [the name of the product], so you can Google it, find some information about the background, so in brief, this project was to track this kind of malaria, in mobile phones, and we included and applied system in 22 villages In India and what we did was we designer a system that would help health workers in

rural areas to report the cases of malaria, And then we gave the tool to the doctors, which will visualize the numeric data into a very easy to understand, you know, let's say geospatial visualization, so we had a map and it would tell you know how the diseases thing, and then we had another visualization of a meter, made up of meter would compare last year's malaria vs. this year's malaria reporting, so it will tell better, you know, it's an epic or it's not an epic, is it in danger zone or things like that, so that was the brief concept, what I was saying was, I moved to the village for 4 months to ensure that the system actually matches the requirement of users. And It will be limited for me to be in the [the name of the company] office in that 4 warrant cubic and actually designing something meaningful, unless I am on the field, and unless I experience what they experience in their day to day lives, because one of the biggest challenges for interaction designers, especially interaction design from a utilitarian point of view, so in my mind, there are many types of solutions, one solution could be very expensive, like Facebook and networking, it's very fun, one is very utilitarian, which means that something like a reporting system, ... but the main purpose is its utility, and if you compromise on utility, and you may out break experiences, it really doesn't solve the purpose, so when you are using utilitarian solutions, it's very important for the designer to experience not just understand, but experience the needs of the user from their point of view, and that was one of the reasons I was based on the village for 4 months to actually experience what is happening and how the system is responding to their needs. So I was also involved in deployment of the system, I partially went to each of these 22 villages to deploy and train the health workers in how to use the system, so it was a very rich learning experience for me, so their feedback reports a real system which means that, you know I had real feedback in almost real time, so I gave these to my technology guys, ok, this thing doesn't work, let's change it, so the product sort of involved 3 clues, sort of, you don't wait under my watch, and I must say it was great learning experience both personally and professionally.

**R: #00:27:11-7#** So this is the project. I am wondering what life experience you used in this project?

**P: #00:28:01-6#** Ok, so I guess you missed the whole previous story to this project, so, I was telling you maybe it was due to bad connection, you could not hear it, so, when I was a child, my father used to work for a bank, his job was like every three years, we would go to a new town, so we got transferred every 3 years, so I have living in many many kind of places, for every years, you leave all of your friends, move to a new place, you know, new friends, so that was my life when I was in childhood, and in one of these years, maybe when I was seven, something like that, I got fever, it was not something you will die for, so my mother used to report my temperature in certain time period to the clinics, and we have a doctor, sort of like a family doctor, it's quite dominant in India in small towns, so there is a doctor who treats everyone from my grandfather to like me, my mother, my sister, everyone, and he knows about families. He was a very good guy, and he would basically look at my temperature at the end of the day, and then he would call back to my mother, ok now, it seems to be improving, so let's do this, if it seems to be not improving, so let's do that, things like that, but more importantly for me, this whole fever thing, and my mom doing so much, and the doctor actually doing so much, it actually broke down you know certain aspects of relationship, ok, which means that somehow, all these happening, it brings out at least to me, it was like, wow, people are, you know, they care so much about me, let's say reporting of my temperature, I cannot say that my mother is technology exhausted, but I have never seen her so much interacting with the telephone, but she learnt that, you know, how to sort of put and hold, and how to do this, and how to do that, and that really sort of brings the relationship in focus, that let people like me do want to put in the efforts, and actually bring the best on the situation, and the same sort of experience helped me in this project, because I was actually doing something that would help people connect the

dots, If my reporting happens smoothly, you know, it would actually bring on more press in the system, it will bring more trust from the doctors and the patients, for example, the patients will be more I would say, they would trust the doctors more, like yes, they are doing job properly, and in time, the doctors will be happy that there is a huge community that is expecting us, because the situation in rural parts of the India is many people do not want to go this government doctors, because they think they don't pay much of attention, and they are not doing their job properly, so how could I bring the aspect of trust in this whole system. So I bought from the user experience and the utility, that was a strong fact of trust that was needed, it will be created in using the system, and I use my life experience of my childhood to support this whole aspect of trust, and if the system could this job properly, then what is the buy product, what is it that we need to create at the end of the day. Disease is yes one thing, but what is the more human thing, how can we make the system more accessible to a large community in the end, and let people trust this, is to create a system you know which will help them stop this kind of disease, and made the results visible to all the people, and hence create this trust and believe in the system that yes, this will help us in our daily lives.

**R: #00:33:39-7#** So what are the users of this system? Both doctors and the patients?

**P: #00:33:48-9#** No, not the patients, the health workers.

**R: #00:33:51-6#** So what's health workers?

**R: #00:33:55-3#** Typically, what happens in India health system is a doctor cannot go to all the villages, because villages being many old places, so one doctor is placed in a big village, from that center, there are let's say, 5 health workers going five directions, so each health worker is assigned to 3-4 villages that he is responsible for, so the health worker would go there, and find out what are the health needs and what are the interventions that's required, if it's serious, he would suggest the patient to come to the doctor, if it's not serious, he can do some basic medication, he is certified to do that, he cannot do some major, but he can do minor medication and administration. So health worker's job is to report cases of malaria into the system, and the doctor's job is to monitor what health workers had reported, so by doing so, in all the villages, what happens is, one doctor in one village can also know what's happening in another village, which means, let's say 10 malaria cases in the neighboring village, he can alert them that ok, my neighboring village has that case, maybe the malaria or the disease will move to my villages also which he is responsible for, then he can tell the health worker to bring some medications to the people in those 3-4 villages to make sure that the care is good for them.

**R: #00:36:03-6#** Ok, it makes sense, so your personal life experience contribute to the features and functions of the system?

**P: #00:36:17-0#** um, um.

**R: #00:36:19-5#** So how many people, how many designer involved in this project? I mean designers, developers and other stakeholders involved in this project, because I'd like to know the scale of this project?

**P: #00:36:57-4#** We have 3 user researchers including me, I was the lead designer. Developers, we had a small team I would say, there are 4 developers, for them, but we also hired a partner team, who are from the medical school, because this requires domain knowledge in medicine, we cannot design something only from our point of view, we need inputs from medical people. So there are 4 doctors involved in the team, and of course, in terms of the users, we had 22

health centers, which means we had about 66 health workers, 22 doctors, 1 district malaria officer, and they support major values, so it was a huge project in that sense, and it takes 9 months, implementation of application of the system for the users was 9 months, so I would say it was a very big project.

**R: #00:38:29-5#** So what's the design process of this project?

**P: #00:38:38-9#** Well, in the starting, we did have a process defined, but when I actually moved to the village, the process become very agile in a sense, I could, when I went to for the deployment, you know to the new health center, there will be new issues and there will be new things that will come up, and I would basically communicate those, I would make decision whether we really need to, you know, change certain aspects of the system, and if this is must to change, then I would immediately call my technology guys to change it, so to update the system as soon as possible, so it gets very agile after that, so there are many tractions, I would say may be 100,000, in terms of 40 (traction)s to the whole system, sometimes, some basic fundamental things, and sometimes very hard to ease, it been good to the process of like making all the changes at the same time, then test the whole system again, it become more compartmentalized in a sense that based on the specific needs of a certain health center, I compared their possible needs of other health centers, and then make decisions to create it or not.

**R: #00:40:21-5#** So what did you do when you went to the fields?

**P: #00:41:42-9#** Yes, so let me explain, the 4 months study, I don't call it user study because at that time, the system was already taking shape, and I want to see whether the system works or not, and also the work in the field, it means a lot of tweaking, a lot of understanding of user needs, and at the same time, implementing those changes in the system, so the design happens on the field, so it's not of your user study, I am going to answer question and then understand so many needs, and then come back to design the system, and here is the system that satisfy all the needs. It wasn't like that. It was more a iteratate process to make sure that the product changes based on the user needs.

**P: #00:42:47-1#** In terms of my personal experience, let me give you another example, it sort of taught me a lot of, it did focus a lot on .... In human terms, more humbleness, so for example, in the villages, of course there are hotels and restaurants, so I am a pure vegetarian, I do not eat meat or things like that, so it's really hard for me to find food in the villages, so the in the time of system deployment was make a clear line in certain way that would coincide with the Malaria season, which means the Malaria season starts of the month too, because water starts contaminant, and there is a very high risk of a lot of mosquito bites, but that was my job, I wanted to be there starting that season, so that I can capture the status of Malaria, so we used to travel with the doctors to upload the status, and we use to eat water what is available in like very small shacks, very small places, and the disadvantage was of course, the hygiene that is a certain level of thinking about hygiene, or perceptual hygiene in the mind of a city level, we want to sanitize as we want to drink mineral water, and when you are in the villages, you see all these people drinking water from the well, eating in places which normally we would think, you know, should I have food there? But seeing them living so violence, seeing them that.... yes, there is a certain trust that we need to put on the nature, and you know the Mother Nature that it was they care, even if you don't drink bottled water, it's fine. So like the doctor say, I better eat very spicy food, what ensures that the, so India people uses a lot of spices, and It's a good thing because according to the doctor, you know there are certain bacteria that they taking care of if you use some spices like salt and pepper and things like that, so if you eat spicy food, it's safe

for you, and other thing is, I do eat very hot food, so anything that is boiling, it's hot food, so these two kinds of food, if I sit down and try to understand the experience, it changes me in certain ways, I think I have start in trust more on the sort of Mother Nature aspect of things and how the design of the world works, and it connects to my system that I was designing, at certain point, I think as designers, you must learn to give up, give up in the sense that we as designer, we can be really you know controlling of all the experiences, all the features, with the technology developers(that are available) to make sure that each of every detail is working, and we proposing it on certain period of time. But (that argumently) unfortunately understood the acceptance of the system, we must learn to let it go, and let the system show why on its own, and that is the true test of a system, it is actually acceptable by people and really actually make a mark. So after that point, this new point, you know, fighting for control, because you know, it's not in our hands, so we cannot force the user, or force the Malaria to, you know, act in a certain way, so we let it go after certain period of time, and expect that it will work, we did our best.

**R: #00:47:28-9#** So when you did the deployment of the system in the field, was that user testing of the system?

**P: #00:48:18-5#** I wouldn't call it user study because the user's main need was already there when we design the system; it was more about making sure that the system is aligned properly, so it's more like pilot system evaluation.

**R: #00:48:57-8#** So how much did you influence the design result of the system?

**P: #00:49:45-9#** Ok, so, I am not quite confident on this question, so in terms of my initial proposal from the understanding that had during the initial user study, I propose the system, and of course, that system was based on the introductions with the doctors more, like experts of the university, who have given me input for their sort of medical point of view, so the system did so in utility purpose, however, the initial design was modified a lot in the whole process of evaluation because of the sole reason that I was is on the feet, and I learnt so much in terms of the things, like, you know in certain villages, there is no cell phone connection, so they walk a certain distance to report the disease cases. Things like that, definitely modified the whole medical aspect of the system, so yes there are a lot of modifications made from the initial design, the initial design was just to solve or rather just to make sure that medical need that they can take care of, but the human needs of the system where taking care of doing this evaluation thing.

**R: #00:51:22-9#** So what's your role in this project? User researcher or designer?

**P: #00:51:48-1#** User researcher and designer, so one of the important things that I think is, a designer needs to be a user researcher, because let's say, when I was in research centers, we had user research analysts, and we had the design team, and the user researcher would go and do user studies and then share them with us, and designers would make a design proposal, the problem there is, the design that is proposed only solves a part of the problem, but a lot of let's say user research, a lot of things comes not from the documented experiences, although the undocumented experiences that the designer must experience first time, and it is very important for the designer to meet the user researcher at some point, so experience the needs first time and then use that subconscious experience. All these small things affect the design process, and it's an important thing for designer to experience that and move on from this cubic in the office to the users actually in moment, and see what takes to be like a user.

**R: #00:53:34-0#** So I want to clarify that you first design the system and then went to the field to evaluate the system?

**P:** #00:53:45-3# No, no, let me start from the starting, so we want to develop a system that would help the track of Malaria, so we contacted a medical school, a university, I talked to the doctors to find out the initial need of the system, so that was my user study, but that was the experts, not the real users, those who use the system, so once that (document) design is finalized, then I went to the users that are health workers and doctors to evaluate the (so in the end the) needs that were given by the university doctors, that ok, they said they require system to be like that, and I need to go to the villages to find out will the health worker be able to use the system or not, based on that, my design was finalized, and the prototype is created, and after that, the whole evaluation and deployment started. So initially, there was a user study, we started with the experts, then evaluate the design with users, and the prototype was created, and then we did the deployment, and then the evaluation of the system.

**R:** #00:55:06-6# Ok. It's clear. So how do you think your personal experiences contribute to the system design and your creativity?

#00:59:16-7#

#01:02:07-0#

#01:02:42-8# undocumented experience