

**Design Thinking A Primer**  
**Professor Dr. Bala Ramadurai**  
**Design Thinking Empathize**

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Hello and welcome back to design thinking. Today, I am very excited to present to you the first module of design thinking. This is a very, very important module. This pretty much is the central piece of design thinking. You get this right, rest will flow or so we believe is what the heart of design thinking is called empathize, empathy or empathize is the key idea here. So, in empathy it is about putting yourself in someone else's shoes figuratively. You get into somebody else's psyche and think about what is it that they are going through.

So, one way of empathy could be you yourself going through that experience and figuring out, oh! Yeah! This is what they are going through and write down and note down as if you are that external. So, you will have to do two roles. It is best done with another person also as a team so that that person does the observation you go through the experience or the other way round. So, it is easier to sort of do these two roles. If you do not have another person you can do it yourself but it will be double work for you.

So, empathy is about going through somebody else's experience as if it were your own. So, for example, I will give you two examples from this company called ideo.com. Ido is the design thinking firm. They said one of the cases I remember having read in a website or in one of their videos is they were trying to figure out, 'How can we help emergency room patients?'. So,

emergency room is the trauma care, you know the ambulance comes in and the patient is wheeled in on a stretcher and they need immediate attention.

So, how can we help these guys these people who are going through this experience. So, the first step as you can imagine is to see, 'Can we go through this experience ourselves?' of course without having to go through the trauma part of it but at least what is it that they are experiencing feeling as much as possible. Easiest way is to go and interview them and see if you can find out, unearth some truths about what is their experience like and you can note that down. That is of course there, that is one way.

But ideo's team said, "no, we will do it more touchy feely". So, what one of the person from the ideo team did was strap on a video camera a camera right next to their temple here and recorded the whole thing as if this person is going through. So, what this person told the rest of the hospital team is to pretend that he is one of the patients and just pretend the whole thing you know fake the whole thing as if he were one of the patient.

So, he was wheeled in from an ambulance and the whole thing was being recorded as I told you earlier. So, he was wheeled in from the ambulance into the emergency room and he was transferred from the stretcher, the bed on to their main bed where the doctors and the attendants would come and take care of the patient. So, they pretended the whole time about I think I do not know how long it took but how long it took he recorded the whole thing.

And interestingly he said 'Okay. Now that I have gone through this experience, I want to see what the camera saw' and they saw the whole video, they played the whole video and found that most of the time the video had recorded the roof of the emergency room, okay? So, this is what a patient does and what they hear is that somebody operating on them or doing their operation, they are performing whatever the medication, what injections all that is being performed.

But all the patient sees during the entire process most of the time is the roof. Probably a very, very traumatic experience but what do they see to get it down is the roof. So, this was a key insight for them through this whole experience. It is to see how can we make it better when all they are seeing is the roof. That could be a problem statement. You can come up with interesting solutions for making this person's life better, to reduce the whole trauma experience.

So, but to me it is key to figure out that this is what we need to be working on. So, empathy formed a key bit in that. The second story that Ideo shared also on either their blog or their

video is a case of again a health care case. They wanted to help senior citizen, a senior citizen meaning more than I guess 60 years of age. An elderly person to see if they can see, 'How can I help their life in their day to day life?' not an emergency case but a day to day life sort of case.

So, they called up a lady in her 60's, mid 60's maybe and they said, 'Ma'am, can we do something to help you? We are from this design team, we are trying to make people like your lives better. So, is there something that you are facing that we can probably help you with?' So, the first thing that the lady said was, 'Oh! My life is perfectly fine. I am doing well. I do not really have anything that you can probably help me with'.

So, these guys, yes, heard the answer but they are not convinced that was really the case. So, this person asked mam can we come and visit you, maybe observe you in your environment. You go through life as if there is nobody around, we are just bugs on the wall. We will just observe as you go on with your life. So, they went and the lady said yes of course, come on anytime I have some free time you can walk in and observe me. I will be more than happy to help you. So, the entire team went with their paraphernalia, you know notes, camera and all that.

So, they went to this lady's home and said the same thing they said over phone saying that we are from this team and we would like to help you. Just get on with life as if we are not there. So, she goes on with her life whatever she did during the day and at a point came when she had to take her medication. So, this lady as described in their report, was, not did not have, let us say straight fingers like I do here, what I guess an arthritic patient, so her fingers were crooked and she could not hold on to objects very well. Such was her health condition.

So, she took the bottle of medicine and this bottle of medicine is child proof. In some countries, they have it as child proof which means that just a normal rotating and opening will not work. You have to press on it from the top and then rotate it. Okay? So, it takes a bit of skill. The assumption is the children are not able to figure this out. The kids do not figure this out, I doubt that but anyway the assumption is that and they are able to open by only adults who figure this out is pressing on top and opening it.

So, obviously with her condition she could not do that, either "okay pressing" it on, opening and holding it on like that. So she actually took a hacksaw, mild small hacksaw like this and cut the neck of the bottle to open the medicine bottle to get her medicines out. So, the team

observed that if this is not a problem worth solving then what else is? So, they took that upon themselves to solve it and to help the lady.

So, the point being that it is through observation that they figured out that this lady helps even she could not articulate that she needed help here. Maybe, she did not, but, it is an area for us design thinkers to think about saying how we might help with opening her medicine bottle but keeping in mind that it should still be child proof. So, it should be easy enough to open it, even people with such a condition should be able to open it but still kids should not figure this out and open it and get into trouble. Okay?

So, this was the case that also was published on ideo and this demonstrates empathy through observation. One was to go through yourself, the second was through observation.

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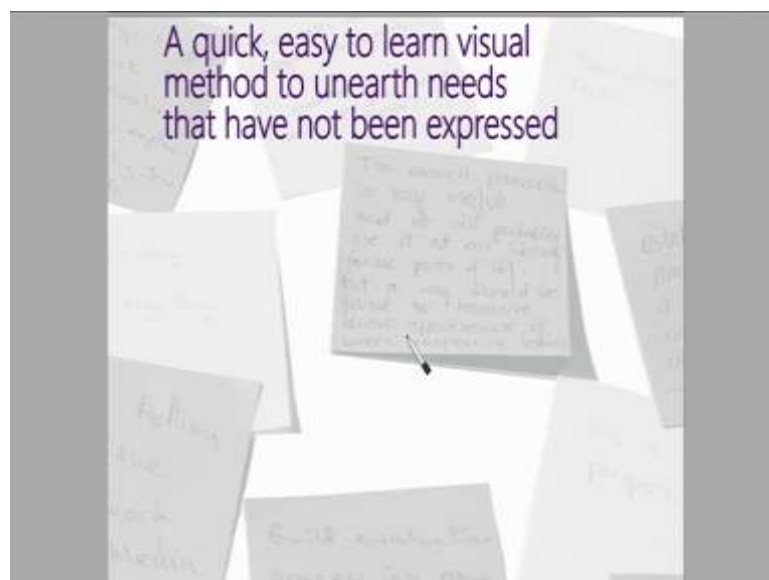
So, to start off with what is it this whole empathy involves is to really find out, understand what is it that people are really going through and this requires empathy. So, this really is the first step and the most important step in our journey here.

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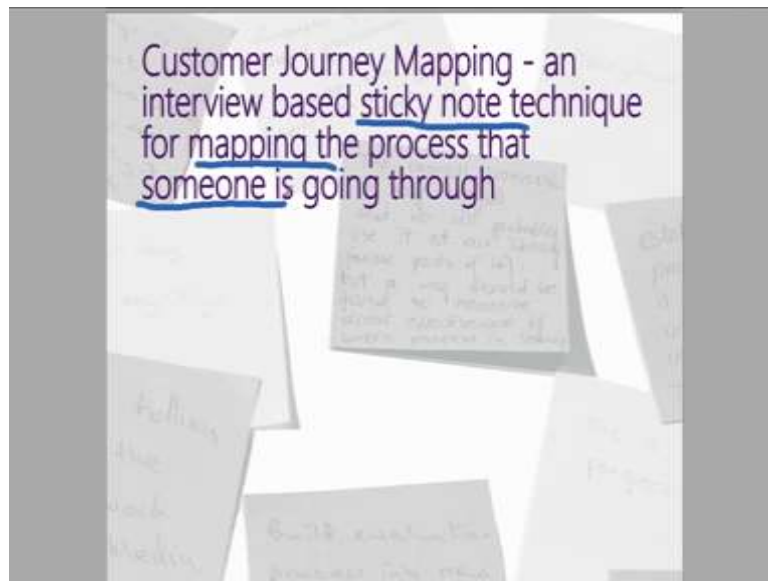
So, asking like ideou team did with the lady is, what they want really does not enlighten us to that extent because, sometimes people are able to articulate it well and good for you. You can note that down, but most times we find that customers or people who really need help are not able to express it in those terms. So, this is something that is a gap that we will observe.

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So, really quick and easy to learn visual method to unearth needs that have not been expressed is really the need of the hour we want something that you and I can quickly pickup. And it should be visual, so that it does not require a lot of language to express what it is, is something that is the need of the hour.

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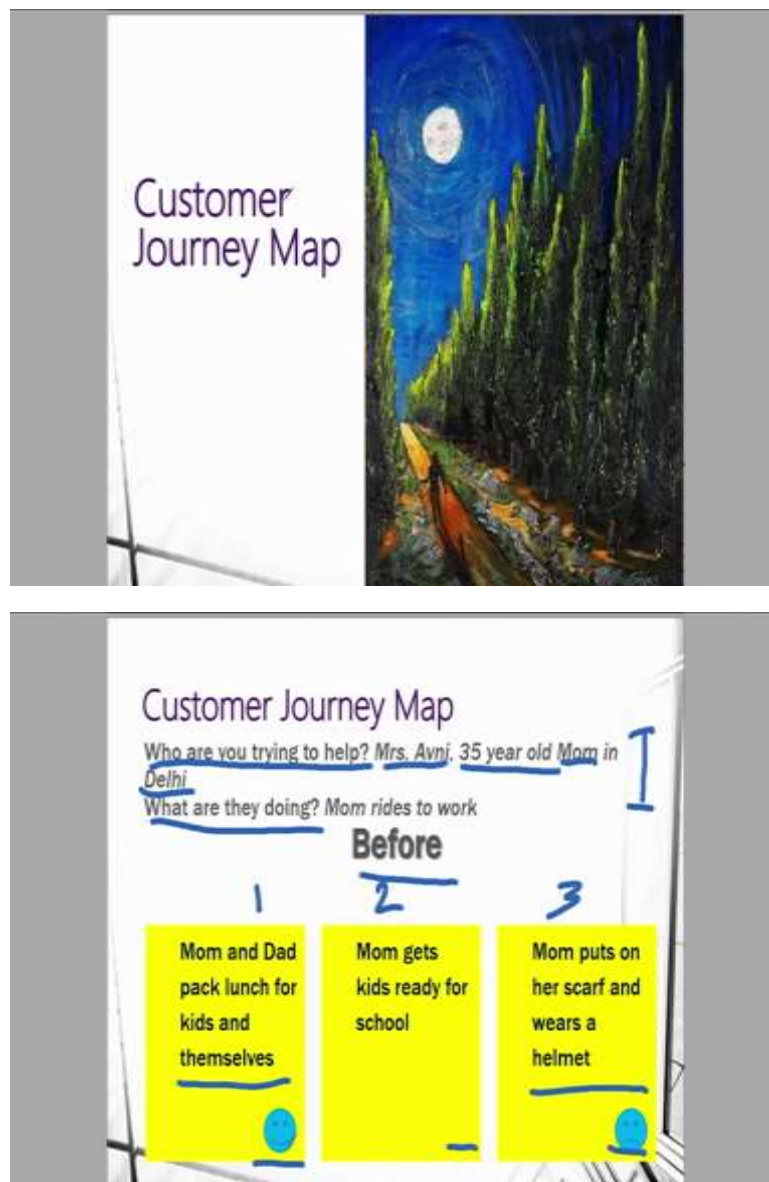
And is something called customer journey mapping. It is a very simple technique, and interview based sticky note technique that you can use to map the entire journey that any of your customer is going through. So, it is sticky note based, meaning those notes that stick temporarily and you can remove, move it around so that as in when new information your team figures out, you can actually add a sticky note, move things around as your understanding becomes better.

So this way you are actually tracking somebody who needs help. Since it is a sticky note you can also draw little visuals even a stick figure would do fine. You do not have to be an accomplished artist to get this going. So, I will give you a simple example of case study that I worked on myself is that in the city that I live in a lots of people who ride 2 wheelers powered. 2 wheelers, particularly, they go through a lot of steps trying to cover their head from dust, from heat, from pollution, from inhaling smoke, but they do not wear a head protection device- a helmet.

So, to me that was bugging that you take all these steps to prevent your exposure to sunlight, to pollution, to dust and what not but you do not take the basic 5 seconds it takes to wear a helmet. So, this was something that was really irking me, whoever I could approach I could tell them you know guys wear a helmet and go on. This it is not safe, you are assuming that everybody else rides safely, so you should wear a helmet is what I used to tell people.

I mean that was just external empathy, yes I did ride a 2 wheeler. I use to wear a helmet, but what is it that people are going through I wanted to look at it from this perspective and I use this customer journey mapping to map that journey that somebody is going through.

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So, here is an example of a customer journey map of fictional personality called Mrs Avni, okay. Here, if you see the first question to answer is, who are you trying to help really in this case? Give them a fictional name. I have not met any Mrs Avni. I do not know them this was a fictional name, I wrote down what kind of personality she could be based on the interactions that I had in my interviews probably shows up as a 35 year old mom, her role and particular geography. This is important for you to visualize what kind of journey is this person going through.

And what is the activity that they are going through, is a simple mom riding to work. So, this is the simple activity that they are going through. So, I am going to examine three phases of mom riding to work one is before, during and after. So, we will see. The first step to see is

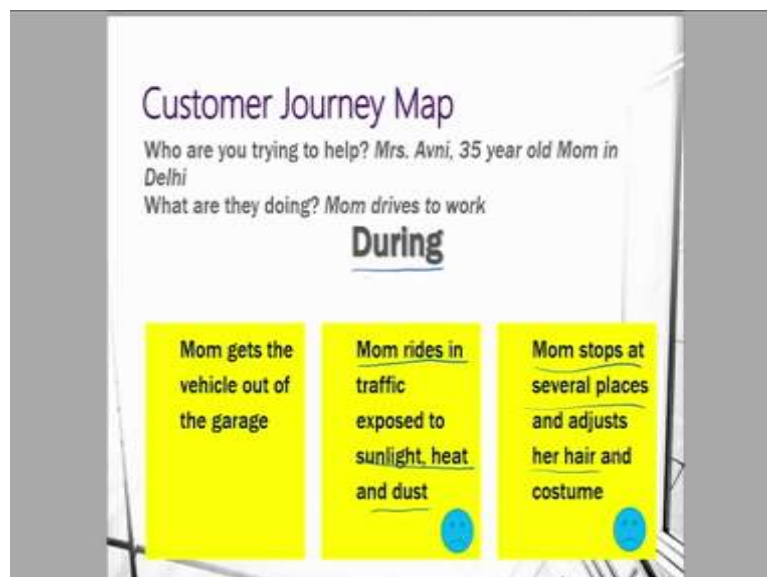
before their journey. So here, mom and dad actually pack lunch for kids and themselves. So, this is the first step that they do. This is what came up in my observation.

The second step that, she did was to get her kids ready for school as well. So, once they pack lunch, they have to get them ready to for school and then send them across. Then, comes the stage for us. The crucial stage here is to put on a scarf, something that protects them from sunlight and pollution and then wear a helmet. I am assuming a case where they do wear a helmet. If you notice we have looked at a few elements now, so this is the first one which is setting a base for who is this person and what are they doing?

Here is this time status before the activity. You can have 1, 2 and 3 to begin with but you can have many more than that. This is the bare minimum that one could start with. Another element to notice is their emotional status. People have done the same method with multiple emotional states. I would, say, start with, are they happy? Are they sad? Or they do not feel anything, like in this case mom getting ready for school she does not probably feel anything as she is happy or not.

Here she is very happy. On the left hand side is packing lunch for her kids and for herself which is good, okay.

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So, the next stage is during this activity so this is the second stage of what the mom does is first she gets the vehicle out of the garage, no emotions associated with that. The second step during the phase is she rides in traffic exposed to sunlight, heat and dust. Okay. So, I did not fully empathize with this mom earlier on before I interviewed them and observed them on the field,



I knew about the sunlight. I knew about the dust, but the heat of wearing the helmet for a long time during traffic actually leads to a lot of sweating. Apparently, also, there is a perception that if you wear a helmet it leads to hair loss. One of my students did do the ground work on figuring this out that there is a personal perception associated with the fact that if you sweat and that leads to hair loss.

I had no clue about this part till my student did interview based perception analysis and she found out that yes, this is true. A lot of people who have this myth going around whereas, a myth or not is not part of my study but the perception is true. Okay. So, here again mom stops at several places because now she is concerned whether she is probably her hair does not fit in correctly as she wants it to be. Maybe her costume has moved around in the traffic, she has to stop at several places to make sure she is okay because she is riding to work. She wants to look her best. Okay. So, in this case this is what our analysis of the situation was.

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Then we go onto the third step which is now Mrs Avni looks like she has to park the bike in the parking spot. This is not well received by our intended audience as well, because the bike is usually a bit heavy or the scooter is a bit heavy. If you are going to use the main stand again this is something that is not aware of till I observed them on the field. Again, the next step is now she has to take off her helmet and scarf and probably pack it inside the trunk of the vehicle.

Then the last phase is she walks to work, now she is all done with her ride. The vehicle is out of the way and now she is happy to go to work. And so, you can see that in my map as well. So, this is what we traced as a journey that my intended audience. Mrs Avni, 35 year old mom

in Delhi works during the day and in the part where I am interested in to solve a problem to help her out in mom driving to work.

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So, now we have unearthed few things during her journey. We can pull out all the sad faces that we put on steps. First of all, she finds it hard to wear a scarf and a strap a helmet on top of it. This is something that we observed you can write that down. The sunlight tans her skin in this particular geography in India. This is a social stigma, heat causes perspiration. Again, I was remarking about this as perception of hair loss and dust. Possibly dust can also cause illness, bronchial diseases or some sort of defects. Parking a heavy bike with the helmet on is also a tricky affair again noted down.

So, I noted all these problems down, pulled out these sticker from our customer journey map and now you can use this as insights that you want to work on. Here, my tip is that, one is, you should be skilful enough to take that problem up and see if you can solve that. Is it broad enough that you can get many solutions? Is it narrow enough that you are not overwhelmed by the magnitude of the problem? Okay.

So, these are some tips that can help you in figuring out which of these problems should I work on. Should I work on all 3, should I work on only 1, should I work on 2 some things that to help o. Is it something that you are skilled at you can make something? You can help them with your skill? Is it narrow enough for you to make an impact for your intended user? Is it broad enough that you can generate a lot of solutions, so these are some things that you can ask yourself and see if it fits this particular problem set and you can pick a problem. Okay?

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So, I have done this in a field in a class in Italy. On the right hand side is me working hard, while my team was having a good time in Italy. You can see the customer journey map. That is the reason why I had put up this. So, you can see a lot of sticky notes with all our observation from the customers. There are still a few more that we were thinking on putting it there. I was digitizing the whole thing. I mean, they were also working of course. But, you can see that this is where our observations were going in. We were sort of grouping some of the common observations and you can be very detailed with this as you can see here.

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Here we went ahead and actually categorized a lot of users, as you can see here. Lots of users we detailed out. We were working on a particular company's product of an app and seeing where they use this app all our customers insights we had digitized and mapped it based on this. You can do such a detailing exercise but I would still insist on having the basic journey map like we saw in Mrs Avni's case, okay?.

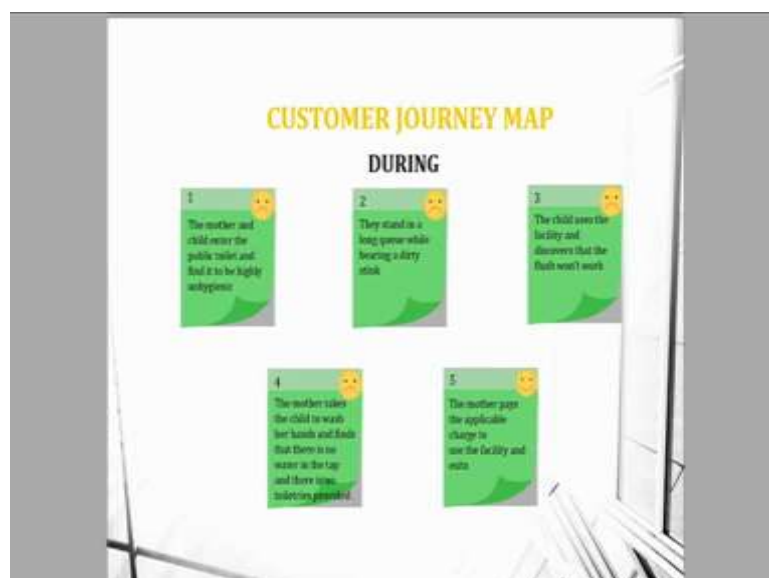
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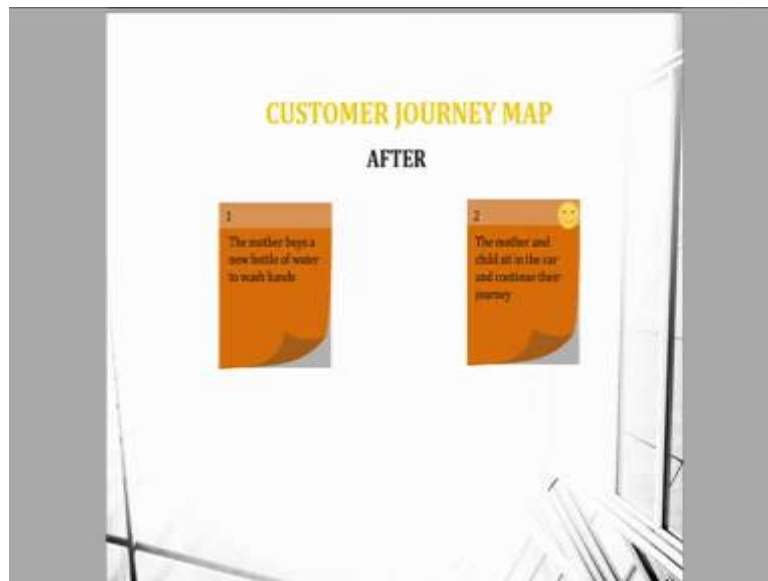




So, I am going to illustrate another example of persona that one of my students had covered of somebody with a child actually looking for a toilet or a bathroom in a city. So, this is her persona of a middle age mother with her 5 year child and the geography is given and all the detailing is done. So, you can do this as detailed as this or as generic as this you can see it here. She did detailing of what all does the customer go through six steps. You can see it clearly what people are going through again. You can read the text, you can pause the video right here and see what details are in this, okay.

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Now this is during the journey that the mother is going through with a child, so this we are open to seeing what all can probably go on your customer's journey and this is after what is the emotional state. So, this is another example of customer journey map that one of my students had detailed out.

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So, there are a few generic steps that you can follow in constructing a customer journey map . The first and foremost important one is to have an age. Having a large age group actually does not focus your efforts on finding out what the experience that your customer your typical customer is going through. So, going with a very specific age really helps in figuring out. A geography very specific geography can also help you with tracking down or shadowing your

typical customer, these two are something that I found to be very useful in constructing a customer journey map.

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These are the six steps of detailing out a customer journey map. At first glance it may sound very complicated. It may look very complicated but it is actually not. It is very simple. The first, is use your own experience, your own vision of what your customer is going through and ask your team mates, also, to come up with their own insights and stack them all together chronologically in time saying they did this first then they did this first, next and then next and you can put detail all this out.

So, this is what I mean by steps of the as-is customer experience. As they are, as you imagine them to be and one tip here is to use one sticky note per step so that you are not crowding out a lot of steps and you can move things around as you can have your discussion with your team and you can move things around and see if it makes logical sense. If this what your team is going your customer is going through. Okay, so, that is the third step you are arranging them in chronological order, this then next this, then next this so this is what you are doing in the first phase.

Then you go out into the field and interview real customers. So, that will be step 4. Like how I arrived at Mrs Avni,, you can arrive at your own persona by interviewing more and more people and seeing if they sort of fit into our age category and the geography category. Now, go back to your customer journey map and see if you have unearth something new some new insight that you think, “wow I did not think about this, I had assumed a certain persona of a customer.

This is how I thought they should be but they are actually turning out to be this way. So, you can actually make some corrections.”

And importantly, see where they are emotionally high. Meaning, they are very happy. Emotionally low meaning they are very sad or they are feeling a bit low. So, you can mark them out to begin with just a simple smiley and a sad face. Just make them in your sticky note and you should be fine. You will have a complete customer journey map. Okay, Thank you.