

Convey UX 2016

Thanks for being here. Thanks for coming in. I'm going to start with a little story. When I graduated with my computer science degree in 1987 I wanted to move somewhere where I didn't know the street names. I thought that would be a fun adventure. I got all these job offers up and down the coast of California and then I got one from Colorado. I thought oh my God, I'll get to experience what it's like to have snow in the winter – that would be cool. Growing up in California we didn't have seasons and everybody's all like "seasons are great, seasons are great." I'm like okay, I'm going to move to Colorado, take that job, do some skiing with my pals – an actual photo from 1988, can you believe it! I also did a lot of mountain biking while I was there and camping. And every time I went out there I noticed that the trailheads and the campgrounds were completely trashed with litter everywhere. Seriously. It was really disheartening every time I'd go out there. I grew up near Palo Alto and we had recycling. It was something that you did at home and then you brought it into the recycling center and every couple of weeks my Mom would let us go down there with the bags and the bottles and the cans. They had these giant dumpsters. I remember really clearly the three dumpsters with the three different colors of glass – clear, brown and green. As kids we used to get to stand up on the platform and throw the brown bottle in the brown dumpster and the green bottle in the green dumpster. We got to look at all the brown glass in there, or the green glass. It was so cool. Well, it was cool to somebody who was going to end up being an information architect. Maybe not so much to everybody.

Anyway, back in Colorado, what I decided to do was at the trailheads I would pick up trash every time I went out. When I would go camping I would pick up trash. I would devote a whole morning to it. Once I devoted an entire Easter Sunday to it and I picked up everything, including all the cigarette butts of this one campground. All the time I'm thinking, oh my God, these people, how can they do this. It's like full of malice. You're throwing it out here to annoy all these other people and it just looks lousy. It was probably a year before I realized that they're not doing it out of malice. They're doing it out of convention. They're doing it because everyone else around them is doing it and they just don't think about it otherwise, right? Can you see that? Times have changed. This was a while ago. Now everybody's all like "what do you mean you don't recycle? You throw your bottle out there." But you can understand their way of thinking. It's just like everybody is doing it and so we're going to do it this way too.

Convention is what I'm going to talk to you guys about today because I have seen a lot of convention; blind following what everybody else is doing without really thinking about it deeply. In our industry, in the clients that I work with – and indeed, I am a researcher. Joe didn't

mention that, but that's mostly what I do. As a researcher I work with a lot of clients who already have some sort of a product out there – big clients, little clients, start-ups. One of the things that I always ask them is if we're going to do some research who are we going to investigate? Who are we going to explore? Who's the audience for this? It's a pretty simple question. Unfortunately, most people will answer things like, "oh, you know we're doing a data storage app and so it's all data storage experts." Or, "we're doing something for people who have to take meds." "We're doing something for all the coders using our API." "We're doing something for all the employees using the ERP." And they're not thinking too deeply about it and so we have this excruciating session – this is the white board after one that lasted a couple of hours where I'm trying to find out the different styles of thinking. Like a data storage expert, surely they don't all act exactly the same and they don't all make their decisions according to the same philosophies. So what are those? Usually people can't tell me. So that's what I do the research for is so that we can discover who those people are and we can look into focusing on one area or another, or supporting one area or another.

I mentioned something, styles of thinking – I want to give you an example. Raise your hand if in the past week you've driven a car. Okay. Keep your hand up if in the past week you have encountered a pedestrian standing at the curb as you were driving. Okay. Now everybody can put your hand down for this next part. Did you stop? You don't have to admit it if you didn't. But when you actually do the research and you ask people did you stop? Why did you not stop? Why? And this is actually the not stop part – you get different styles of thinking. Over there on the left you've got the more "oh my God, I'm so sorry. I wasn't paying attention. I was looking at this other commotion." Or, "I wasn't familiar with the area." Stuff like "I didn't even see the ped(estrian), the sun was totally in my eyes." Over on the right is the more sort of defensive stuff. Like we're "commuting, everybody is trying to get to work and the most efficient thing is to let the cars go past first and wait for the ped later and I didn't want to slow down the cars behind me." Or the "no, no, no, I don't have to stop for the ped unless he's actually in the crosswalk." So different styles of thinking. See what I mean?

Now that we've got this, let me go back to that word convention. The whole convention of throwing your bottles at the trailhead. I'm going to talk to you guys about 2 kinds of conventions that I see in my clients. Conventions of vocabulary, the way that people use a specific word. And conventions of "business culture" – I have air quotes around this because I'm not quite sure what word to use for that. Again, a vocabulary thing, but for now I'm going to call it business culture. It also creeps out into pop culture and I'm going to talk about this. I have 10 points that I want to talk about in terms of these two things. The reason why I want to bring up conventions is that I am worried about where we're going in the future. I'm worried that if

we just do what everybody else is doing without thinking too deeply about it we're not going to achieve the place that I want us to achieve.

This is a chart of maybe the last 30 years. In the very beginning, technology – oh my God we've got the technology and can actually do that. So let's teach the users how to do it; how to use that technology. Then oh, well let's make the technology usable so we don't have to write so many manuals. And oh, what about the experience? Let's try to make this a more engaging experience. And going forward I think what's going to happen is that the success of a person is going to become much more important than the success of the technology and that we're going to be able to branch out to support those various styles of thinking. There's no reason that a piece of software can't have a bunch of different front ends that support different styles of thinking. So this is my worry is that we aren't going to get that little part where there's a little fringe at the end.

The fix is to try to be aware of these conventions. Let's get started with the conventions of vocabulary. It's going to be an easy one – User. How many times do you say the word user? How many times do my clients say the word user? And you don't really mean it. A user is someone who has a relationship, or a potential relationship to your organization. To the thing that you're trying to help people do. You might be a non-profit. You might be a library. You might be the government agency. You might be a for-profit business, but you're trying to do something in support of people. And a user is someone who is interacting with you or your service or your offering. You might call them a customer. You might call them a member. You might call them all sorts of different words. I don't care if you're saying a different word instead of the word user, it's still someone who has a relationship to your organization. Member of the gym – yeah, it's still a person.

So let's back off a little bit in terms of explaining this and think about this cycle that we all follow. Think-make-check is what I have up here. There's lots of other different kinds of words that people use for this. What we're doing is we're trying to figure out how to tweak something, how to make it better, how to come out with brand new ideas in the first place so that we can help that person. We do our user research in our think part and in our check part so that we can kind of make sure that we're doing the right thing for people. But the thing to pay attention to here is that all of this is cycling around the solution. The idea that you have, the thing that you want to make, to provide.

There is another cycle out there. That other cycle is cycling just around what a person is trying to achieve. What is their intent? What is their purpose? How are they getting that done?

What's all the thinking that's going through their brain for getting that bigger purpose done? And *this* is where you actually develop empathy. The kind of research that I do is over in this other circle. It's not user research. It's research to develop empathy so that I can understand what we're cycling around here, which is the problem. What is it that people are facing that they're trying to make happen? The solution is the think-make-check. The problem is understanding people; people who may or may not have a relationship to your organization. The way these guys spark together is through the creative inspiration that comes from being able to walk in someone's shoes—to your thinking that you're doing in the think-make-check, just so that you can see the whole thing.

Another vocabulary word – wants and needs. Or needs analysis. I hear this from clients all the time. I don't think they're saying it with a lot of clarity. Really what it is, is goods and services that someone is hoping to use to achieve their intent or purpose. I have goods and services highlighted because that's the solution. That's the thing the organization is involved in. So wants and needs is user research. It's all over there in that solutions cycle. And we're not doing enough research in the problem cycle.

The other one that I mentioned is empathy. How many people were in my workshop yesterday? It's [empathy is] really hard to define. When I start the workshop I ask people, "What is empathy?" We get all sorts of definitions and they're all correct. I notice that, in business, in the stuff that the clients are reading, empathy is defined in a hard to really pin down way. So here's Harvard Business Review and in this one they're deciding that empathy is emotional intelligence. Another Harvard Business Review article and it's all about being truly responsive to the needs of your employees or your customers. Forbes is talking about empathy is the ability to connect with and relate to others. Another Harvard Business Review (this goes on and on and on) – good intentions and better selves. Isn't that nice! It's lots of stuff that seems unusable. It sounds great. It sounds noble, but when you are actually working, how the heck are you going to apply this sensitivity and better selves sort of stuff?

So when I was writing my book, Practical Empathy, I researched, not only in our field, but also in psychology, to understand where they're coming from with the definition of this word and there are lots of definitions in their field as well. So they've got mirrored empathy and self-empathy and they've got personal distress and effected empathy and cognitive empathy. I'm like whoa, okay, it's not just our problem. Everybody who's talking about empathy is kind of talking about it in a different way.

I want to talk about two of the definitions. One is affective empathy. The other is cognitive empathy. Affective means emotional, so we can call it emotional empathy. I mentioned to somebody yesterday, they were talking to me about Practical Empathy – I actually wrote that book without using the word emotion in it at all, because the word emotion is a little bit scary to business people and seriousness. So I used the word reactions instead. I don't use the word feelings either. That's even scarier. Anyway, so emotional empathy. How many people saw Inside Out? It's all about joy, sadness, anger – all these little emotions are inside your brain – of a little kid who is just growing up. She was a little, little kid and she had imaginary friends and stuff, but now she's starting to approach teenage-hood and there's a lot of stuff that's changing inside of her brain. This whole movie is about those inner voices. One of the scenes really demonstrates emotional empathy very well and that scene is with the emotion Sadness. There's also the emotion Joy, off-screen here in this little screen pic. And that elephant-y sort of thing is the imaginary friend that the girl used to play with. The imaginary friend just lost something precious to him in the middle of a quest, and they have to hurry up and go do something else, and this imaginary friend sits down. He's like shocked and he starts to cry. He doesn't know how to deal with it. And Joy comes up and is like, "Come on, come on, we've got to go. (Tickle, tickle, tickle.)" I'm just going to change your mood so that you're happy now. Let's go. It's having absolutely no effect on him. Instead, Sadness sits down next to him and says, "That [precious thing] meant a lot to you, didn't it? You had a lot of memories with it." And she talked a little bit about the pain that he's in, reflected the pain, showed that she understood that pain. And he got up then after that and said, "Okay, I'm ready to go on with the quest." And Joy turns to Sadness and goes, "How did you do that?" This is emotional empathy. This is saying your emotion, your pain, is real and I'm not going to try to make you get rid of it. I'm going to acknowledge it.

Emotional empathy is also used a lot by authors and by actors to try to help you understand what the character is feeling. It's a little bit like a strike of lightning when you are watching a movie or reading a book or something. You kind of feel that, oh yeah, okay. You can feel this stuff coming in. Like a strike of lightning, it's extremely powerful and extremely illuminating, but not completely controllable as to when and where it's going to happen. So you can use emotional empathy in your business, in your decisions, in your design work, but it is like a flash of lightning. So in your work you're using emotional empathy to support another person through an emotional process real time. This is usually with that person. You're sitting down next to them.

Contrast this with cognitive empathy. Cognitive empathy is all about understanding what is going through another person's mind and heart, sort of that little inner voice, as (now we have

to add the “as” for our purposes) –as you’re trying to achieve an intent or a purpose. If we didn’t have that little clause there then it would be much less usable in our work. But the interesting thing about cognitive empathy, and that intent and purpose, is that it is all about the problem someone is trying to solve, not about the solution you’re trying to make. And if you want to talk to somebody about the problem they’re trying to solve you’re going to ask them questions that are far, far different than you would in user research. You’ll ask them questions that are very similar to the questions you could have asked your great-grandmother or great-grandfather. It’s about the human thinking. It’s the stuff that we’ve been doing for millennia. People come up to me and they’re like, “Well, you know, before I go and work with a participant in research I need to really, really understand their vocabulary and how things work. If they’re a rocket scientist I need to study a little of rocket science.” And I’m like, “No, no, no, no, no, because we’re not interested in the rocket science. We’re interested in the very human thinking, the inner thought process.” And that inner thought process is very understandable. It doesn’t require rocket science. So think in terms of these more human qualities. The definition then for cognitive empathy in your work is being able to support another person as they achieve their intent or purpose over time. You don’t have to be directly in front of that person because you take it back to your team and you use it in your decision making. And maybe you only have time to go and gather a little bit of data this time; you can go and gather data a year later and add it to the data that you gathered. And another six months after that and another five years after that and ten years after that. This stuff does not go stale. The way that we think our way through toward achieving a purpose or an intent has nothing to do with the technology that’s changing. It’s a human thing so it doesn’t go stale. You can keep adding to it.

Another thing about empathy – walking in someone’s shoes. Feeling what they’re feeling, being them. Not, “If I were in their shoes I would think.” It’s like, “He is thinking this in his shoes.” That is applying empathy, and if you’re going to have any truth at all in your walking in shoes you need to develop empathy first. So here’s another little sort of convention is that, yeah, walking in shoes is - I see a lot of clients make up stuff, or do it based on what they know, or their friends and family. Or maybe just the people, the team at the standup meeting or something. You’re making it up. You’re not actually developing the empathy. You’re not taking the time to go out and listen to people. (By the way, my favorite color is green, so all the important parts I’ve highlighted in green.) Listening is something we don’t have a lot of skill with. Julian Treasure, who’s given a couple of TED talks, points this out really well in one of his talks – we teach people reading and writing, but we don’t teach people speaking and listening in grade school. I think that’s really, really important thing because – now I will go back to this slide – there are no telepathy servers yet. We can’t just plug into somebody’s brain and hear what their thought process is. We have to listen. They have to speak. We have to negotiate that

whole building of the rapport. We have to figure out how to get them to be trusting enough to open up to us. So there's no observation here. You can't just stand there and assume that you know what that person is thinking.

Another vocabulary word – product. It's like our solution that satisfies these customer needs. I want to change this up very subtly to various offerings. Remember my diagram with a little fringe at the end? I want lots of different offerings that support different styles of thinking with different approaches. So that data storage engineer who has one particular philosophy – there are differences in the way somebody runs a storage farm. There are differences in the decisions that they make as to how fast they keep up with demand and how important responsiveness is.

Here's another diagram that we all should be familiar with, the long tail, which is really only used when we're talking about having more things on offer, more solutions out there. I want this to mean more solutions that we're developing software wise as well. It applies to solving and supporting different mindsets – that fringe diagram.

The next section is conventions in business – business culture. Again, if you guys have good ideas for better words for this I am all ears. I develop this stuff as we're thinking about it. It's a conversation that we're all having together. Here's the first myth. We make decisions based on demographic correlation with behavior. I see my clients do this all the time without realizing it. What is demographic correlation? Let's take a phrase from back in 2000 when we had the whole Butterfly Ballot issue in the U.S. You've surely heard about that. This is a phrase describing the realization – “oh, Pat Buchanan had all these votes, but he's a religious fundamentalist and all of these retired Jewish grannies who live in Florida certainly wouldn't have voted for him.” That little word “Jewish grannies” – it's a cute word – brings to mind certain aspects, but it isn't a behavior. If you instead put in there “people who had benefited from the New Deal and have been loyal to the Democratic party over their entire lifetime” that would mean the same thing. Of course it's a much bigger mouthful and it's not much fun to say. It's much more fun to say “Jewish grannies.” It's a cute phrase and that's fine for the most part, but when we're doing serious work about design we're dangerously close to making a decision that's going to hit an actual person instead of a concept of a person. Remember when Netflix decided to branch out their DVDs and then end up charging twice as much? They did that because they wanted to stay ahead of the curve. They didn't want to be one of those firms that actually rented videos and then just sort of died. They wanted to go on with streaming and yet they didn't realize that 800,000 of their customers were really into the having of the DVD in the mailbox experience. They weren't necessarily cutting edge, early adopters who wanted

streaming right away. That's making a demographic assumption and having it hit actual people and having those people believe.

This also happens a lot in marketing with product design. Good, good, you're awake enough to see that. I bought this just because it was a chance to buy something that was not pink. I was checking out once and this woman ahead of me – I like to chat with people in line – she's all like "oh my God, everything in my car is pink." I'm like oh yeah, okay, so you're female, it needs to be pink. I don't know what it is. Anyway, this idea of taking a demographic and assuming a certain behavior. How many men are all builders? Right? Anyway, it's a convention that I'm hoping is going to die out soon because I'm really tired of pink. The key here is that correlation is not causation. We all learned this in university, in whatever class that was that we learned it in. We tend to forget this and we see something that goes together and we're like, "ah, this is the reason for it."

Have you guys seen this site, Spurious Correlations? It's awesome. It's so much fun. I thought this was a really sweet one because the divorce rates are going down because people are eating less margarine. Butter makes you a more loving couple!! Despite this, we still reach out for surveys because they are fast, they're easy, they're cheap and we can get data from them. This data is not deep data. It's just someone trying to figure out how to respond to some answers you put there. Trying to figure out which answer maybe matches kind of what they're talking about, or thinking. It's never going to match exactly, never. I have a huge set of thoughts about surveys. How many people have done a survey lately? Ouch. Think twice the next time you do a survey. Surveys are great when you're recruiting people, when you're trying to make sure you've got a balance of a certain demographic for a particular piece of research. But they are lousy when you're trying to figure out how a person is thinking. They're great for preferences and opinions, but that's not how you develop empathy. Empathy goes deeper than preferences and opinions. Empathy is about how someone is thinking? How they're making decisions? What are their guiding principles? How did they learn this? Why did those opinions form? You can't get that through a survey.

Erika Hall also wrote a really great article on Medium saying this as well. It feels so certain, it feels so objective that we're just going to go and do it and feel great about presenting our numbers. Which leads me to the next slide – numbers. Numbers are scientific. You're going to believe the data. We did this rigorously and now we have confidence to make a decision to do the thing that we wanted to do. There is a lot wrapped up in this statement. I'm going to take it apart. The first thing is confidence. What is confidence? Confidence that this is the right place to put our money; the right decision to spend time trying to develop this. Maybe trying to find the next direction for what we're doing as an organization. Maybe trying to attract market

attention or trying to attract funding to ourselves. These are the kinds of decisions you need confidence about and the confidence is coming in the form of numbers. Especially with most of the clients that I work with who are in start-up land. The big ones too though, they have reams of data.

Someone was just talking about the idea that this data has been around forever. This guy is Sean Davis. I want to take a side route here that we're data driven. He hates that word. He works up here at Microsoft. He's the Senior Director of their analytics department for their website. He hates the word data driven – hate, I know, bad word. It's useful because what does that word mean? Is the data making the decisions for you? By convention actually it is. He's saying how about data information; let's at least change that phrase. (Side note: maybe this should have gone in the vocabulary section.) The idea is that we are just blindly doing things with our data. We are using this idea of scientific rigor and we're worshiping it as a culture. I know in Christina's workshop yesterday she was "yes, rigor. I like rigor. Science." Yes, science and rigor are good, but let's not let them blind us to what we're actually trying to do. We're using this word and this technique and these approaches to make us feel confident. And there are other ways to add to that confidence that will actually make it work out better.

Scientific rigor – there's this whole background about the idea of what it means. It's the truth about the way things are which is a positivism way of thinking about the world. There's post-positivism also which means things have one answer, but we may not know all those answers yet. Humans aren't that way. Humans aren't all thinking the same way. Humans have different approaches. Humans change their approaches as they learn new approaches or make mistakes or feel embarrassed. Science doesn't apply to humans. Positivism doesn't apply to humans. And yet we see it all the time – more marketing, right? This is some sort of a gym I guess where you go to have Sports Health Science done to you. It's marketing. The bleeding out into our pop culture. And then this one – The Science of Lumo. These examples are everywhere. I want you guys to be aware of when you see the word science. You will see it, probably today – you will see it by the end of the week and I want you to think twice about what it means? Why is it being used? Is it being used to make us feel confident? Okay, well how else can we feel confident?

We run around saying things like a quantifiable fact, or this is evidence based, or we've proven that this is the decision we need to make. The interesting thing about these phrases, as Dr. Carl Fast points out is that they all apply to natural science. Natural science is the study of the physical universe. It's the things that exist if humans disappeared. Apparently they call it artificial science when you're studying things that humans have made, like bridges or libraries

or information science. Artificial? Whatever. I guess we're artificial. Anyway, these phrases work for natural science, but they don't work for what we are doing which is building human things and supporting humans. So why are we using them? Because of convention. Because it makes us feel confident. I want you to think twice the next time you say something like that. I want you to notice every time you read something like that – evidence based, we proved this.

Experience is about a human achieving their intent or their purpose. It's not about the thing that you're making. And even if we were talking about the thing that you're making that's not natural science. That wouldn't exist if humans went poof. It would go poof too.

Another myth, and this is really tied into that last one, a deductive approach is better than inductive. Quantitative more credible than qualitative. Positivism invalidates relativism or constructivism. There are some vocabulary words up here that I can get into if we end up having lots more time. I didn't put them in the slides because I didn't want to bore you because there's all sorts of rabbit holes we could fall down. In this particular sentence – that deductive vs. inductive part. I want to ask how many people are watching the new Sherlock Holmes series? Not too many. Sherlock Holmes has become a very popular character and has been since the late 1800s because of this whole- "I take a scientific approach. I am deductive. I take all of the facts and then what's left has to be the truth." (I didn't quote him right on that. I need to memorize that one better.) Anyway, deductive is starting with a hypothesis and proving or disproving that hypothesis. Inductive is taking a bunch of data and seeing what hypothesis comes out of it. The work that I do, the research that I do, is inductive. It is not deductive. If I used that word with my clients they would go running for the hills because it's not a very reassuring word. Deductive is much reassuring. It's more scientific. It's our culture.

I have to put this slide up here because Jacob is going to be up here later. Look at the date on this – we've been talking about this for a long time. We've been aware of these conventions for a long time. This is why I'm worried about not reaching that fringe, that difference where we're going to be going in the future, in the next generation. This is why I'm worried because we've been aware of it, but we haven't done anything about it yet. So humans, and we all know this, describe their reasoning with words and those reasoning, those thoughts, those reactions that people have cannot be expressed in numbers. Duh, right, we know this, but we don't really act it as strongly as I think we need to try to do in our business culture. The business culture – I'm not saying we're wrong, but the business culture that we're embedded in is still stuck on numbers. They're still stuck on the idea of making recommendations based on certain numbers. They're still stuck on the idea of maybe setting advertising based on certain data points. Do you remember that story about Target sending the ad for baby stuff to the teenage girl and her

father found out about it that way? Big splash. They did that based on data points. What are our response rates and we're going to make some decisions based on those. These are all trailing numbers. These are numbers based on actions that have already happened. So there are also predictive algorithms that are trying to take data and predict what's going to happen – training vs. predictive. Like predict a match, or at Macy's they're actually predicting demand. So putting different things on the website based on their predictions. At American Express they're predicting when an account may close so that they can send in some customer service rep or something to save that account, to try to retain that customer. That's what predictive is. This is how they're using the numbers. In this room we understand, okay these are numbers, but you also need to understand why that person may be closing the account and get the word. But are businesses going ahead and making the decisions just purely based on the numbers?

There's a story (I'll have the reference up here later) about a group of people who were looking at the data in their sales funnel, in terms of sales, and they saw that in week 3, if the person used the demo copy, then they were much more likely to buy the product. There was a big turnover in week three just from use. It turns out it was a spurious correlation. So all of the work that they did trying to encourage people to use the thing in week three didn't change the numbers at all.

I also want to do another shortcut here and mention Mike Kuniavsky who's working at Xerox PARC. He gave a great presentation at UX Week last August. What he's talking about is machine learning in terms of that predictive stuff going one step farther. What they're trying to do is get models in there, which models can be derived from words. Symbolic reasoning can be derived from an understanding of how people are thinking, derived from those words. We're trying to marry it all together.

We all know that hybrid research is necessary. We know that you have to balance those two things – the words with the numbers. Our businesses still don't get it so it's time to up it. It's time to show people to do that. To show the value. To take our lunch hours and just do it anyway, or take a weekend and just do something anyway. Take a bunch of weekends. Actually, you can't do it in one lunch hour. I worked with some folks down at a library (zero budget, right). They wanted to understand their patrons much better. They wanted to understand the different styles of thinking. They took their lunch hours, I think for the course of 6 months – every lunch hour they could they would go and listen to patrons and collect all the data and then pulled it together. So I think we can do that.

Another little myth – customer values and success is super important right now. It's the feature and we measure it by their purchases and how satisfied they are. This is what businesses believe. This is an article that was done really recently about marrying customer success to design and what he's talking about is hey look, most of the companies are staying in that failed funnel. Most of the companies are staying over in the solution spinning wheel. We're still trying to use those numbers to effect purchase, or to effect satisfaction. Success is not satisfaction. What is satisfaction? It's usually a survey and it's usually like an opinion based survey – you know what I think about surveys, right? You have no idea what that person really thinks. You have no idea why that person reached for your offering and how it fits in their life in terms of their intents and their purposes. You can't do that with a customer satisfaction survey. And in those cases the thing that you made is just satisficing them – standing in until something better comes along. It will do for now. We're in the infancy of all of this. Great, great, great grandkids, they're going to be looking back at us going my God, they were the most patient generation ever, to put up with all this awful technology.

Customer success does not equal the customer journey either. Why? Because the customer journey is a user oriented thing, it is a solution oriented thing. It's all about how that person engages with your organization over time, hopefully over a long, long, long time. That's what the customer journey is about. And if we're measuring customer success by their relationship to us, that's not success. We're looking again at that solution as opposed to the problem that people are trying to solve. And what the customer success is, is achieving their intent or purpose. It's just achieving that intent.

Second to last one – we can measure our org's empathy. How many people have seen this, or heard their organization want to measure empathy? There was a recent article out by the Lady Geeks in London and they posted this thing – “we measured the empathy of all of these companies and here's the list.” Look who's in first place. Look who's in second, third, fourth, fifth. How do they measure these things? They were looking at financial data feeds and at social media. Social media is a little step up from just the numbers, but you're just getting opinions necessarily. You're just getting how happy I am with this thing; how much I hate it. How frustrated I am? Which is a little bit like customer satisfaction. In fact, I would say it is the same thing as what they define customer satisfaction as right now. So empathy is a personal mindset. It is not something that an organization does. It is also not measurable, even in a person. Can you measure kindness? If you're a spiritual believer can you measure the quantity or magnitude of your spiritual belief? No. So empathy sits in that kind of an area. Empathy is not measurable.

Last one – let’s just go with the product concept test; we don’t have time for doing all of this kind of research right now. Check this out. This is from emails that I have received in the past six months because people come to me and say, “we really want to understand deeply and develop empathy for our people so that we can support them better.” And then when they try to get budget for it they’ll come back to me with these things. It’s like ah, you know the business just wants to go on with the convention – business as usual. “Let’s just do it the way we’ve been doing it.” I think it’s because words are scary and nobody wants to put budget toward them, because they think they’re open to interpretation. But when you’re developing empathy, you’re getting underneath that level of opinion and preference and statement of fact and explanation. You’re getting down to how somebody is actually thinking and making decisions. You’re getting their guiding principles. That stuff is not open to interpretation. You’ve spent some time with that person. You get it. You understand what they’re talking about.

My hope is that more people will have time to do these in little small bites – little studies over time, because you can accumulate them and they’re all still valid years later. Also, it’s very easy to do these things by phone. There is absolutely no reason that you have to talk to somebody in person because you’re not talking to them about their use of a thing. You’re not talking to them about your solution. You’re talking to them purely about their mind space and how they’re thinking their way through toward their purpose or their intent, which is something you could ask your great grandmother about.

Conclusion – we need to take the time. Time is not being taken. Business culture, convention, vocabulary convention, everything that our environment is full of is not allowing us to take the time and I think we need to fight for it. I actually think if you’re one of these big investors at a venture capital firm, you ought to require this, because look at the top reason for a failure of a start-up. And if you understood the problem a lot better and you understood what subset of thinking you wanted to support, you could support that so much better and avoid failure.

Also there was this article, HBR again – this was more like physical products – they’re so focused on design. They’re not taking the time to do the hard work. This is prevalent, we’re starting to talk about it, let’s talk louder.

Here’s an example of some of the data from a listening session and how you go through that data and pull it together. I love spreadsheets by the way – you can do it however you want. It’s just lists. Pull that data together into patterns. The patterns are what give you confidence in how somebody is thinking. If there’s no pattern, if lots of people aren’t thinking this, then

maybe you don't pay attention to it. Then you can come up with these behavioral audience segments.

This actually happens to be for a bunch of research I haven't published yet about near miss accidents and how people feel about near miss accidents. Here's a real example. This is Becky Reed, she works at Healthwise in Boise, Idaho. They've been doing evidence based, medical content since the 70s. This is what's on WebMD, or your insurance provider when you want to look something up. Around 2006/2007 they started thinking we still need the evidence based, but we need to balance that with the human element. What is the human facing? One of the studies that they have done, and they have done many, many studies, was about losing weight. They found that there are three styles of thinking if you are trying to lose weight. We've got the research off to the left and on the right we have the actual solution that they came up with. One is the Resigned – this is the person who is like “I'm not having success. I'm just going to end up being this weight forever. I'm kind of giving up.” Notice, on this next behavioral audience segment, how different the solution is. This is the Sidetracked. This is somebody who was like “I was doing fine, but oh my God the holidays.” Or, “my Mom's in the hospital and I'm eating the food from the cafeteria. I have no control over this.” “I'm traveling too much.” Sidetracked - something else came up. How do I get back on track despite the fact that I'm in this weird scenario? And the third one was the Inconsistent. These are the people who join the gym in January and then disappear by February maybe. These are styles of thinking when you are trying to lose weight and these are three different ways of supporting those people.

So in conclusion I'm going to reference Mark Hurst's Medium post that was recent. It was really a great cry for let's get louder. He posted the amount that he hears his client's spending on advertising - \$25 million. The amount on the customer experience – well he had this really awful example. I'm sure they're spending maybe \$200,000. Maybe \$1.2 million. Nothing compared to the marketing budget. So why can't we take that? Let's get louder.

That's everything for now. I will be signing books later. Now I want to open it up for questions.

You said you can do this by phone? But how about when you want to get empathy with how people work with your product?

That's on the left. That's solution based. That's user research. I'm not talking about user research.

Somehow you have to do something with the product or service which you first tried to get empathy with interviews or by telephone. But then you have something so you want to know if there's a solution.

Yes. That's all in the solution. You do develop empathy in your user research as well. You can use all of this, but what I'm trying to solve for is the understanding of the problem space better. Let's take Facebook. We're taking this technology; we're putting it up there. People have a great experience with it and we're not paying any attention to the thing that it's solving. What is the intent that a person using Facebook might have had? Well, then another company like Instagram comes along. It's like maybe the intent – the thinking style of another person is not in words, but pictures. Why couldn't Facebook have done Instagram? They just weren't thinking about it. Maybe they were, but I don't think they were.

There's another thing I want to say about Facebook which is their whole move fast and break thing, but still remain stable. He's talking about code. When we're talking about humans you can't move fast and you generally don't want to break things or you'll become Netflix. Hence, we have to take the time. We have to really get more boisterous about the time that we need to develop this understanding of the problem space better.

This is kind of like a follow-up to what she just asked. If what you're talking about isn't specifically like usability testing, and I'm trying to think like how can I apply this to my job, obviously? Would you suggest I have an in-house with my customer service team and I could totally go in and work that role for a little bit? Or is that not even part of it? That's when somebody already has a problem or are you talking about just discussing with them before an issue occurs?

The latter. When you're going into customer service and sitting down, which is a great thing to do, you are working with your solution. You're working with people who are having problems with your solution. That definition of the word problem – remember I used the word great grandmother – it's not a problem with the tool. It's a thing they're trying to address in their life. Like instead of I am buying a ticket and making a reservation on a flight, the thing that I'm trying to solve for is have a little R&R. Or I want to solve for repairing a client relationship which seems a little broken and I want to see them in person, face to face. What you are not asking, but probably mean to ask is when should you use this? We've all got this convention going. We've got some user testing going (hopefully not using that word) – all this research going on. We're maybe just trying to force that to happen and it's not going so well yet. It's not up and running. So you're in this environment where suggesting doing something like this is going to

make absolutely no sense. You will get nowhere. There are reasons to use it. The reasons are when you're offering, or one of your offerings is not doing as well as you thought it should. You're getting bad customer satisfaction. Your usability reports are – no matter how much you fix things it's always pff. That means you're not solving the right problem and this means it's time to go understand the problem better. Another one is maybe things are going great, but you want to go in a new direction. You need to capture a new market or make sure that what you're doing doesn't sort of die off. It's another reason to study a problem space.

Another really strong one is when you're starting off and you think everyone is your user, or every data storage expert is your user. That's a total red flag. If anyone has that going on at their organization you can say, "this is a red flag. We need to understand the different styles of thinking." Do it because then you can clarify who you are supporting. Instead of having a one size fits all sort of experience, you can have an experience that works super great for this particular philosophy and the "your philosophy is coming soon" advertisement.

Great talk. I really enjoyed it. I work in an organization that is very engineer heavy and is very focused on solutions. One of the things that I find challenging is framing the problem in a way that is understandable to my colleagues. I actually am having (you may be dismayed by this) some success using surveys because surveys are very solution oriented. But I'm able to expose the problem and frame it with numbers in a way that seems to be graspable for my colleagues.

You're doing a slight of hand to get them to eat the broccoli, right?

Yes

That's fine, so long as you know you're doing the sleight of hand.

I'm totally doing this on purpose. In the way that I was phrasing the questions people didn't understand that anyway. Anyhow, I wonder if you have any other suggestion how to frame the problem in an organization that is very, very solution and engineering heavy?

I've seen that a lot and this is not a nut you're going to crack, even necessarily by the end of your career. But if we don't start fighting the next generation is going to be in the same boat we are. So we're trying to prepare the boat for them. I know it sounds a little pessimistic. Christine is all very optimistic – sorry! But we have to do it. So suggestions – sleight of hand is great, what you're doing. I think that the framing that I'm talking about with the problem vs. the solution – and somebody yesterday, he's all like I wish those two spinning cycles were switched because

the problem is what you should study first. I'm like they're this way because this is how it exists right now. Everybody has a solution. I've got an idea! But I think just clarifying that all the things we do are about the solution, and we don't do anything about the problem, is going to get us into trouble. I know engineering minds are kind of like I want to solve for everything, I want to be a purist. I want to understand all of the boundary conditions and make sure that what I create can solve for all the boundary conditions. But sometimes the problem gets too big and there are too many boundary conditions and too many constraints – time and budget also.

Another thing is that you are re-defining the problem into a smaller thing with less boundary conditions because you are doing it for one way of thinking. So you don't have to do all the boundary conditions. Like there could be – you're trying to solve for data storage experts – maybe I shouldn't use that example. How about travel? You're trying to have an app that will solve for everybody who's in the airport trying to get to their gate, including the person who is running to the gate and it got changed or something. He's late and doesn't know where their gate is. Including the person who has the sick toddler and they're in the bathroom trying to take care of the toddler. Including the person who is having trouble getting around. Maybe they broke their leg. Maybe they're getting up there in years. To solve for all of those boundary conditions you end up with a solution that isn't fantastic. But if you solve for one subset of thinking – and of course this is an example off the top of my head so it may not make a lot of sense. But if you solve for one subset of thinking, like the people who are under a lot of stress and worried about missing the flight. I actually did some research with the airlines and there is a group of people who are “just get me there.” So they are always cutting things to the wire. If you create an application for the “just get me there” you can get them to the gate on time. As opposed to the unphased people who are relaxed. They've given the entire day over to travel. You may have different things in that app like let's explore where the best chocolate chip cookie is in this airport. Totally different. So boundary conditions, engineering, they understand that. That might help.

Any other questions?

You spoke about the use of science driven language. I was just thinking that one of the return on investment arguments for UX that's used is reducing risk. Then you posted some of the quotes that you had from clients where they were kind of resistant and struggled to get funding. And you also posted the graph where you had lack of market need was the highest reason for product failure. How do you have that return on investment conversation with clients without using scientific language?

For me it's pretty easy because that's the language that I speak and that's the language they expect to hear from me. I'm going to answer as if it wasn't me, as if it was somebody who they don't expect to hear this sort of thing from. When you are trying to get somebody to be more cognizant and clear about risk, that means defining all the little bits and pieces of risk. And you have some defined already. What's been happening is that there are some other risks over here that we have not defined. So let's go through all the risks we have defined and maybe some past decisions that we've made based on these and maybe the success or failure of those past decisions and we can talk about those. Maybe bring in some examples from other companies or other HBR articles or something that have talked about these kinds of things. And then talk about the other things that affect issues, like losing 800,000 clients because of a decision you made. And that decision was because you didn't think about the way people were approaching this, the problem they were trying to solve.