Webinar Series

Live Webinar July 31, 2015

Mood Meter: A Real-Time Satisfaction Meter

Ania: Key Lime Interactive has been around for a little bit over six years. Most of my team is very experienced, coming from different backgrounds, anything from ethnography, like Rick here, and Johnathan, who really comes from a design background and has crossed over to research. They come in with really just great knowledge to really bring to the table.

<The Presenters Ania Rodriguez CEO & Founder Jonathan Knopf Senior Researcher Rick Damasco Research Specialist>

A little bit more about who's here with us today, Jonathan Knopf, he's one of my senior researchers. He's been a part of my team for over three years, and like I said earlier, he's coming from a design background. Because of that, it's been really phenomenal for clients to get actual recommendations. He's really known for his – he's a strategic thinker, a forward thinker, and I love that about him.

One of the things that he's really great at is taking any type of study and making it – really design a perspective that really gets to the bottom of what the client is needing, from that perspective.

He works in a number of different industries and he's now working on a medical device company, a longer-term engagement, doing a lot of really great research. He's done work with some of our ecommerce clients, he's

done work in financial clients, a number of different of streams, scheming and the like.

Rick is with me a little over a year. He's been a phenomenal add to my team. He's really a phenomenal qualitative researcher, one of the best moderators I know out there. He really knows how to engage people during the studies, and so we're really proud to have him a part of the team.

Both of these guys are baseball players on the side, [INAUDIBLE 0:02:25.4]. We do a lot of stuff in sports and types of athletic things, so they've been a great add in that perspective as well. With that, a little bit about me, just before we get started.

<A Quick Story…>

I founded this about six years ago, and part of one of the missions we had as a company is to really create new methods that really make sense, so that our clients are able to really get to what they need. Because of that, I'm going to start with a little quick story.

How did this come to fruition? A little over a year ago, we were discussing that some of our research, especially when we were doing an out of the box experience, needed a way to really capture what was happening. From there, we thought, "Well, in the typical think aloud protocol, it's very cut and dry."

People are thinking about what they're doing, but they're not giving you really where they're frustrated. Because we do a lot of journey mapping work and because we do a lot of work that's around understanding where the moments of truth are, we start thinking, "Okay, how do we really get at that emotional journey?" Because of that, we started formulating what we're going to present today to you. Anything you want to add, Jonathan?

Jonathan: When we're doing qualitative research and we're in that think aloud protocol, a lot of times it becomes repetitive. You're asking people to rate their experience on a scale of one to seven, and we'll do some exercises to demonstrate where those challenges come up, but what we wanted was something more real time, even within the task level, not just post-task, and something that would make it a little more interactive and something a little more fun.

Between the three of us, we were brainstorming all different types of methods that we can use to show those triggers, whether it was audio or visual triggers, things that can make it a bit more exciting for the participant.

Ania: I would also say, for the people who are observing, let's talk a little bit about that.

Rick: Yes, absolutely. I think this is really indicative of just the Key Lime way, the culture that we have here. Our senior staff and especially Anya, as a CEO, really creates this culture of how can we present actionable feedback? How can we allow our clients to be able to feel that they're in the room and understand exactly what the participants are talking about?

From our experience, we get a lot more engagement from our stakeholders in the back room. They really get to feel like they're participating and they understand exactly where those moments of truth are, that perhaps is inaudible or sometimes not as clear to be able to pick up, if you were just doing a regular think out loud protocol.

The best way to communicate these ideas is a fun way to do a little bit of experiment here. <Time for a little experiment!> I would be remiss if I didn't mention Doc Brown, my favorite scientist of all time. He's real, he's a real scientist for anyone who's out there. Let's go ahead and take a quick moment to understand exactly what we're going to be doing here, and we'd like to get your interaction, so we'll actually be using the audience to take part in this part of the experiment.

<We are going to show you some images After each image, rate your experience on a scale of 1-7>

First things first, as researchers, we're going to set the scale for you. I'd like for you to imagine a scale of one to seven, where one is going to be very unsatisfied, four is going to be neutral, and seven is going to be very satisfied.

For the next couple of minutes here, what we're going to be doing is we're going to be showing you a series of images, and what we'd like for you to do, as the audience, is interact and give us your rating of your experience, based on the scale you see in front of you. We'll give you about 15

seconds to enter your responses, and we'll give you about five seconds to actually view the image. Ready to go? Let's get started.

<Ready?>

This is part of my new diet regimen that I'm actually eating. It's high in protein and low in fat, so let me know how you feel about that. We'll give you about 15 seconds from this point, to go ahead and give a response. Que the music. I'm not really a singer. I'm more of a researcher, but that's me.

Okay folks, here's the next image. We'll give you about two or three seconds to take a look at that. Then, like we said, same as before, we'll give you 15 seconds to queue in your response. If you notice, we have the same scale, from a one to seven basis.

Ania: You should be able to click on the screen and click submit at the number, versus putting it in the Q&A. I see some of them coming through the Q&A. Just click on the regular button. If you're having issues, let us know via the Q&A, but you should be able to click. If you're neutral, you click a four, et cetera.

Rick: These polls are interactive, so we'll actually be seeing the responses in real time, and please feel free to let us know if you have any questions. Here's our next photo. Let us know what you think.

Like we said, 15 seconds before, you can go ahead and queue your response directly into the poll on the screen, and go ahead and click the submit button when you're done. We've seen some good responses. Okay, who put this one? I didn't see this one. This one's cute. What are we thinking, folks? 15 seconds, don't be shy.

Jonathan: The next one's a great one.

Ania: Don't bias it.

Rick: There we go, good feedback.

Jonathan: Let's see what the emotional response is. Sorry, my contribution.

Rick: Like we said, fifteen seconds, folks. Just a couple more. Make sure to click submit when you're done. That's my kind of picture. I like that one. Alright,

folks, fifteen seconds. We're getting some good responses in. How about that one?

Jonathan: They're athletes.

Rick: Absolutely, I know that feeling. The last one, folks. Like we said, fifteen seconds. I'll give you folks a little bit of time to submit that one. <On a scale of 1-7, How would you rate the experience?> At this point, what I'd like for you to do is let's have the entire experience of all the photos that you've seen, and I'd like for you to give that experience itself a rating of one to seven.

We're going to go ahead and give you the poll again. At this point, we'll give you another ten seconds just to go ahead and queue the response, and then we'll debrief what actually happened here.

<8 Primary Emotions Surprised Anxious Trusting Angry Sadness Afraid Disgusted Joy>

At this point, folks, what we've tried to simulate in this scenario is, using the mood meter, what we're actually able to do is ascertain those specific pain points and the actual changes in mood from one second to the other.

Ania: I think part of the reason why you'd want to do that is we all know that, if you have someone thinking out loud and you typically wait until the end to ask, "How easy was that? How easy was it to do X, Y, and Z? Was it efficient? Are you satisfied?" What you get is that additive experience, that final what does it mean.

But what you miss, which is the traditional way of doing thinking out loud protocol and then waiting until the end to ask those quantitative, qualitative questions, you're missing out along the journey, what is the point? If there's something about the experience that, at a certain point, is really dropping because it was something that was like that blue screen, then you miss that blue screen. You got the additive version of the experience.

Rick: Going back to our initial idea, which was talking about the out of box experience, if there's one particular pain point that we're missing throughout that experience, and at the end of the day, we get a positive overall rating, what was that moment of truth? What was that one point

that we missed? That's really the actionable feedback that we're hoping to give back to our clients.

Jonathan: To add one more thing to that, when you're doing that type of qualitative research and you're hoping to get things from participants, you don't want to be asking them to think aloud or pushing them to speak up, because you're potentially biasing whether or not they're even giving you an emotional response or giving you some kind of feedback.

We developed a way that we can allow them to, in an introvert fashion, give us feedback.

Rick: From a moderator's perspective, it's a phenomenal tool to be able to know exactly when it's appropriate. You're seeing that minute change in rating, going from positive to negative. That's a great cue, from a moderator's perspective to understanding. When we can go in and actually ask a couple more questions?

At this point, what we'd like to do is go ahead and show you some of those emotions again. We're actually going to give you some real time feedback, to how you responded. We remember seeing this picture? How did our audience feel about that photo? We're seeing a couple of negatives, overall.

Ania: Most of the people gave it threes, it looks like.

Rick: Maybe there's some grasshopper eaters in the audience.

Ania: It looks like we got at least a couple. Eight percent of it is a grasshopper eater there, 6s and 7s, anyways.

Rick: Shocking. Let's move on to the next. This has got to be heartwarming. There we go. That's more indicative of what we were expecting, but interesting feedback to see how participants attributed that one negative response. Is that a feeling of happy-sad? My girlfriend is happy-sad. Is that a real thing, like when you cry in a movie or something? Maybe that's what that is.

Jonathan: That's another good point. It's difficult to know, if you look at it after.

Rick: Sure. At that point in time, if I saw a negative response, I, as a moderator, would want to know exactly what's going on there.

Jonathan: That's the cue to probe in.

Rick: Absolutely.

Ania: This one's all over the map. We have some thrill seekers and we have some people who are just in the middle, some people who are like, "Yes, that's awesome," or, "No way." There's a lot of shark bitings going on.

Rick: I know, especially in South Florida right now. This one's got to be across the board. No, we had some sad faces.

Jonathan: It's a lonely puppy.

Rick: Right. Are they attributing the sadness to the puppy or more to what's going on here? Like we said before, it's eye opening in general. One would assume that you would get a typical response, but to actually see the different responses, it's eye opening. This is all you, Jonathan.

Jonathan: Yes, I can't imagine someone liking that picture.

Ania: Looks like we got one.

Jonathan: There's one person.

Rick: One someone.

Jonathan: It may be they're in QA and they're getting paid to find crashes. That's one way.

Rick: Job security.

Jonathan: I was in that for a while, QA.

Rick: Here are some other thrill seekers. Let's see who enjoyed that one. Alright, a couple cliffhangers, nice.

Jonathan: That would be a one for me.

Rick: I'm just tired looking at that photo. That one's pretty all over the map. Interesting. The last one?

Jonathan:	That's really a challenge that we see with a lot of our clients, too, is how they quantify that certain type of emotional response. That's why the cue itself is great, to dig in a little bit and find out the details of why they felt that way.
Rick:	Absolutely, and the idea that these images are coming in a continuum, you have that range of emotions. How long did it take a participant to have a negative experience, and take that back up to a positive experience? Which image was that infliction point going from up to down and how do you attribute that response is really interesting, from a data perspective.
Jonathan:	Good point.
Rick:	We got one more slide. I snuck that one in. That was one of my favorites. At this point in time, we wanted to be able to compare and what we wanted to be able to display, in this type of scenario is there's an ability to capture those moments of truth, and being able to get that minute changes in positive experience, as opposed to asking one generalized question that are summative at the end of an experience, that won't really capture those innate changes. This is what we feel has been one of the best methods to be able to capture that type of data. <On a scale of 1-7, How would you rate the experience?>
Jonathan:	Let's see what they rated for the overall experience.
Ania:	Most of the time, they had a positive experience.
Jonathan:	Very interesting.
Ania:	A couple neutrals and then everybody was ticking up to the positive.
Jonathan:	Amazing. You look at this, and you would imagine that there were no negative experiences, almost, if you're just looking at the summative.
Ania:	That's a challenge that we have. I know the client walks away and thinks, "Wow, everything is good and dandy." Everybody's either neutral or positive about the experience, the overall experience. That's not really right. That's how you don't tell where your opportunity is. What we're trying to look for, from a user experience, whether you're doing a journey mapping or you're doing just qualitative research to

understand the different journeys, is you're trying to find those moments where there is a drop and why it's happening, because that's your greatest opportunity to really fix it, and then change that experience and really impact these scores and, in that case, really get a bigger percentage of folks who are in the 6s and 7s, versus having a lot of 4s and 5s, in this case.

One thing, before we move forward, I wanted to say a couple of things. On the left hand side, there's a Q&A panel, and that's going to be used for any questions you have throughout the time. Right now, we had somebody ask is there any reason why we're going for a seven point scale?

You can use any scale you want for this. We find that, for qualitative research, a seven point scale is our best overall, for getting not too narrow and then also not getting too spread out, where we might have an eleven point scale or a nine point scale, and then people have a hard time telling the difference between what is a 6, a 7, or an 8.

In our case, depending on the research, and also depending on what the needs are, we find the seven works best overall. But in this case, we've done things where we've done it for a ten point scale. We start people at a ten. They don't know that they're at a ten sometimes, and then they go up and down the scale.

We'll talk a little bit about what that is throughout our time. Back to that, the Q&A is on the left-hand side, and then there's also a Twitter on the right. One of the things we're going to do to make this even more interactive is we want you to tweet. You can actually enter any tweets in there.

We're going to do a random pick of the folks that actually tweet during the session, and at the end, we're going to direct message on person and give them a $20 gift certificate of their choice, if you like Amazon, Starbucks, if you like ice cream, you pick it out, $20. Okay, let's go ahead and move forward.

<Changes in emotion occur throughout a task. How do we measure those changes?>

Jonathan: What we're going to be talking about in the next few slides is these changes and how they occur throughout a task. As we saw, the examples that we posed actually worked out really well, to demonstrate the problem that we see a lot of times. We really want to capture what's happening throughout the task, not just at the end of the task.

How do we measure those changes that happen during a task, without leading, without pushing for them to respond, and in this think aloud protocol that has people that are introverted really not giving you very much feedback?

I'll show you some examples of what, as UX researchers, we would love to hear from these participants during think aloud protocol, things like, "Oh, I would really like it if they offer this," or, "I'm really hoping to find something like that," or, "I hate it when they do things like this."

<What we hope for…>

<What we get…>

But the reality is, what they end up doing is keeping all those thoughts in mind, and only just giving out those little pieces. Oftentimes, they're doing a task so they're focusing on the task at hand and not really focusing on giving you that type of verbal feedback that you're looking for.

Ania: Even when you have a wonderful moderator, like someone like Rick or Jonathan, it still becomes an issue. It's not really about – granted, versus other people, they might not have as good an experience. But the reality is, you're going to get some participants who are just not going to articulate what they're thinking or doing, even what they're feeling.

Really what we're trying to get at is I don't really – I'm not worried if they're not talking as much, as long as they're giving me some sort of cue. Yes, we could all say that we're trying to read cues of the body, et cetera. The reality is, you know your participants for two or three minutes, so you don't know what their baseline is.

You're assuming that you're going to be able to read them, and yes, you can look at some traditional reads of different people, the way that they position themselves. But it's still a difficult task, even for your most experienced moderators.

Jonathan: How do you quantify that?

Ania: Is that good or bad, if they smirk or roll their eyes? The whole point, when people say things like, "Yes, this is different," is it different good or different bad? What does that mean?

Rick: To add to that, some of the cultural implications that goes in with testing internationally. You really have some sort of cultural biases and filters that participants are innately just attuned to being able to be more respectful or they tend to be a little more reclusive when it comes to giving criticism. This quantification of feelings allows us to be able to get into a little bit more of the details, if the respondents are perhaps a little reluctant to give.

Ania: Yes, especially in Asia, where we find that people are very – even when sometimes [INAUDIBLE 0:20:08.2], they wear the face masks and things like that. It becomes a little bit harder to read what they're thinking, doing, and this helps.

Rick: Absolutely.

            <Positives and Negatives>

            <Concurrent Think Aloud Protocol (CTAP) *Thoughts are fresh in memory *Ties emotions to an action *Can be intrusive *Requires user articulation *Difficult to quantify>

            <Retrospective Think Aloud Protocol (RTAP) *Uninterrupted *Better task time accuracy *Memory decay *Fabrication *Misses in-task emotional changes>

Jonathan: As you all know, if you've done qualitative research before, the Think Aloud protocol is widely used as a way to encourage participants to speak about what they're doing, what they're looking for, what they're thinking while they're doing a task. There's two different types of Think Aloud Protocol, and we'll discuss some of the benefits and disadvantages of each type.

            With Concurrent Think Aloud Protocol, that's when you're asking them to do that think aloud during the task. The thoughts are really fresh in their memory and it ties that emotion into that action.

Some of the negatives are it can be a little bit intrusive. You're pushing them or taking the time out of their actual task time to give feedback, and it requires them to really articulate emotions and really give that verbal description of how they're feeling or what they're looking for, and it's pretty difficult to quantify that in real time.

Rick:　　　Thinking about a Retrospective Think Aloud Protocol, it's got some positives in the sense that it's uninterrupted and you have a better task time accuracy, which could be very helpful in some scenarios.

But unfortunately, the reality is you have some sort of memory decay, and there is an opportunity for participants to over-embellish their own success and have an opportunity to say, "Well, although I struggled mightily within the first couple steps, ultimately I was able to succeed."

But we're missing the fact that there was actually moments in time where they could have an abandoned task, or potentially returned an item, if you're considering an out of box experience. Also, it misses those subtle emotional changes that we've been talking about earlier.

Jonathan:　Definitely.

<The Challenge *Simple *Minimally intrusive, captures non-verbal *Quick quantification for large N *Not repetitive *Easily shareable *Affordable>

Ania:　　　So, the challenge. In our head, we had a challenge. We wanted something simple. Yes, you can really measure emotional responses using biometrics, eye tracking. In fact, we have Andrew, who's our wiz at that, right?

Jonathan:　Or something not that intrusive.

Ania:　　　We wanted something that was not as intrusive, we wanted something that was-

Rick:　　　It's not repetitive. At the end of the day, if you have 14 tasks and you're sitting with participants for an hour, the standard question of "How do you feel about this task?" It gets repetitive and you start to see emotional response of participants who are just fatigued, and at the end of the day, they don't have any more feedback to give.

Jonathan: Yes, and I'm all about the analytics, too. I wanted something that I could quantify and I could give my clients the type of actionable responses, based on numbers, not just something that we're giving them quotes. It's really difficult to give them drivers with that.

Ania: What I love most is when I'm sitting in the back room, that my clients are able to see that uptick and downtick and the emotional experience, so it's shareable. You'll see, in a moment, of how this looks. But the reality is, in the back room, what you as a customer is seeing is someone said that their response was positive, because of something that happened within the task flow. Wonderful.

But if something drops, they see that number drop, say, on a ten point scale it drops from maybe a ten all the way down to four – there's something major happening there. Maybe they didn't say it, because maybe it's something that happened because they ended up where they didn't know where to go next and maybe something that's less obvious.

But we're talking about something that's subtle for someone to say, but there's something that is really just frustrating for them. You'll at least get that. What I'd love to is, as a moderator, you're able to see that.

Maybe you don't probe right there, because you don't want to interrupt something, especially when they're using retrospective. But now you know, "I have to come back, I have to check on this, because something happened right here that really killed their experience."

Rick: Cost implementation is near zero. There's an opportunity for this to be customizable to any particular type of research, and really, the costs are minorly prohibitive. They don't exist, at this point. You can develop your own tool. We've actually developed and customized our own tool, based off a type of experiment that we're doing. But for any scenario, this is totally an affordable solution.

Ania: What I love best, we presented this advanced topic at the UXPA Boston, and we were there, surrounded with a lot of thought leaders in our own field. Everybody just paused and said, "Wow, this is really brilliant." It's so simple that we're surprised nobody has ever thought about it before. But it's actually so actionable and so easy.

I think for us, because we're doing so much work and customer journey mapping, it was a natural fallout, as that work started really upticking, because we're like, "How do we get this? How do we get to this emotional response?" A lot of times, I see journey maps from other folks, and they just try to map that experience, but there's no real task-based data that really helps them quantify it, and this is one way to do that.

Jonathan: As a researcher, Key Lime is really good at just taking the problem or the challenge at hand and finding the best possible solution. That's really what we do best.

Ania: It's our values. It's how I hire my people.

Rick: Add to affordability, just because this task is simple doesn't mean we're not getting actionable feedback. Jonathan will actually go into some great detail about the type of feedback and the type of results that you get from implementing a simply solution like the mood meter.

Jonathan: I'll try not to bore you too much with the mathematics.

<Tactical Requirements *Positive or Negative input *Tallies the overall Mood in real-time *Audible and visual cue for auto-tagging *Software solution *Easy to view 'Mood Swings'>

Jonathan: Some of the tactical requirements that we had to consider with the mood meter, we wanted to find out the positive or negative inputs, whether it was a great experience, whether it was a poor experience, something that made them maybe feel unsatisfied or more satisfied with a potential product, and something that's telling the response, as we go, but also allowing us to visually see – maybe not the participants seeing, but at least allowing us to see and have some kind of recording of that type of mood change.

Ania: What I love best is when Jonathan came up with something brilliant, which he called the mood swings. Our report has these mood swings. Why don't you talk a little bit about that, Rick?

Rick: Sure. The mood swings is an ability to quantify those changes in emotions. What we're looking for are those subtle inflection points of a positive uptick to a negative downturn, and what was that point? We can

start to develop, pretty early on in the research and trends, that you can start to point out.

Typically we have our stakeholders who are in the back room, and we wanted their debrief session where we get very interactive and we like to understand what are we really taking away from the session today?

Ania: One of the things that I thought was also brilliant that this team came up with is we were integrating with [INAUDIBLE 0:26:56.4]. What we did is we used the audio uptick of the actual our version – and we'll show you what we used. It's basically a solution out the door, from another vendor. You'll see it.

It was a reuse of that, but long story short, we were able to tie in that little check that would happen when someone would change it from a positive to a negative, and then tag that to basically the actual –

Rick: Right, when you're recording, it allows you to tag, based off of an auditory response. With the mood meter sitting right in the room with the participants, you're actually able to tell exactly when an uptick happened and when a downtick happened. That auditory response is attributed back to [INAUDIBLE 0:27:42.6], and we're able to tag those in real time.

<Mood Meter Method (Patent Pending) *Allows for a Positive or Negative input *Tallies the Mood in real-time *Gives a rewarding audio and visual cue *Software solution *Easy to review results *Affordable>

Ania: Here it is, guys. You want to say it, Jonathan?

Jonathan: We mentioned that we came up with a software solution to do this, and really, it could be done in so many different ways. But we just wanted to – we had so many ideas. We thought about that buzzer, from –

Rick: From Taboo, that game we used to play.

Jonathan: Any kind of buzzer, but that's not giving us the type of positive and negative. We found a simple counter. We didn't want something that only counts upwards, we wanted something that gives the variance in the positive and the negative. This also allowed us to tally the mood while we got the positive and negative, and the little click that we mentioned also gives that type of interactive feedback. It's rewarding, in a sense. It's almost like gamifying the experience.

Ania: One of the things we should say here is that the actual method is really what we're talking through, which is a way to capture that uptick, that negative and positive uptick, from an emotional response perspective, during your research. Yes, you could use this. For all intents and purposes, you could use a buzzer. You could use whatever you want.

In fact, we even used paper and pencil to have somebody crossing up and down and make a tick when they want to move it down and move it up, things like that. But the reality is, there's some basic counters that are out there.

The first one we used had numbers. Later on, we realized we didn't even have to show the numbers in the front row. That's how we started creating our own solution of that, because out of the box, you might have a little bit of biasing that happens with using a counter that shows numbers, so we took that out from the participant view, and in the back room, we still showed the client how that's changing.

We start everybody at a ten, which is their high, and then you'll see things go down to negative numbers, even from a ten, and you'll see things go up, but it'll give us that as our starting point perspective.

Rick: At this point, we're actually showing the mood meter on a mobile device, but we've actually extrapolated it out to a web-based version. We actually have solutions for different types of platforms that we're encountering with our clients.

Ania: When you're running a remote study, that's a great thing. You don't really know. Yes, you can see what they're thinking, but you can actually have them just have a simple plus and minus on the top of the screen, which is what our solution is, and then press up with their mouse and negative, and that just gives us a cue. Then we're already knowing and [INAUDIBLE 0:30:11.2] that and we're tying it into our data. It's just great.

<Case Study – Smartphones *Find clues why someone would return the device within the first 14 days of purchase. *Examine the following: - Packaging – Marketing – Instructions – Hardware – Software>

Jonathan: Yes, and we're all about custom research, too. Any method or any type of scenario where you want to do that type of real time tracking, we can adjust it and come up with a solution that works best.

Rick: Absolutely.

Jonathan: I'll talk a little bit about a case study where we did this for smart phones. We did a specific study to look at the packaging, unpackaging, and the first time use experience of a smart phone. We're looking at the marketing, the instructions, the manuals, hardware, software, how it feels, how you use it, and really just trying to find out the little ups and downs that happens, and what could potentially make someone want to return this device, after just that first time experience.

Rick: With all these potential variables, it's just helpful to be able to hone in on very specific moments of truth.

               <Research Strategy *In lab: Out of Box Experience (OOBE) *At home: 30 Day Mobile Ethnography>

Ania: Like Jonathan just said, it was an in lab study. We had two components. The first was we had folks come in and they were presented this new package. We were going to do an OOBE test, an Out of the Box Experience test. Then we also did a mobile diary study that was 30 days.

               Really, we were trying to understand if there was any remorse during that purchase experience. Along it, there's something that came right out of the box, some opportunities there, and there were things that we found later that we were going to show.

               <OOBE *In Depth Interviews (IDIs) *Mood Meter *User Performance Metrics (UPMs) *A/B Comparisons *System Usability Scale (SUS)>

Jonathan: For that out of the box experience, we had multiple components to that research. We don't use strictly Mood Meter as a standalone. It's typically something that we add in. We definitely want to get that qualitative, rich, why someone experienced, why someone changed the value of their satisfaction at the moment.

               We ran in depth interviews, to really get that qualitative portion of it. We tied it in with the Mood Meter and we had other things.

Rick: Yes, your typical parts of the research that you see involved – user performance metrics and really being able to understand an A/B comparison, to understand what the flow in emotion was between –

Ania:	Their product versus a competitive product. From this perspective, they would understand that, so we obviously recruited people who had one version of a phone and the other version of the phone, and that comparison of that experience also came into play, to see if they could be a version of user types, et cetera.
Jonathan:	Yes, something that we use in almost every type of system test is the system usability scale. We have a lot of experience working with that, and it's provided a lot of insight into whether your UI or your application is really easy to use, from an intuitive, first time basis, or whether it's something that can be learned. There are different points within that scale that can really give a bit more detail as to where the problems are in your system.
Ania:	One thing I should say is that one of the things we do internally is we have a benchmark, because we're testing so many different systems across so many different industries. We find their data is better than what we're gathering – what scores we can give you, what is in your industry.

In fact, some of our clients didn't have that type of data before, and so they were asking us what is a SUS, one product versus the other. Because we did different spectrums, it's given us a chance to collect that as an aggregate. What is the current state SUS out there for all the experiences, as well as what is specific to industry? |
| Jonathan: | Yes, we have a department that's dedicated strictly to competitive benchmarking, if you want that type of research. You can definitely send us an email or reach out to us on Twitter, and we'll provide you any additional info for that.

<Mood Meter Method (Patent Pending) *Click + if something validates your purchase *Click – if something makes you more inclined to return it> |
| Rick: | Let's talk about the actual mood meter itself. The mood meter in this scenario lived right next to the participants. Our goal was to have something that was minimally intrusive and an interface where the user felt totally confident. We had this actually placed on an iPhone, and as Anya said, it was something that was totally an out of the box solution.

We were able to download it to the phone and have it placed right next to the participants. Whenever they would encounter a positive or a negative |

experience, or a positive or negative point in the experience, they would simply just click up or click down.

It's something as simple as that, and not as intrusive, that allowed us to really get some of that qualitative feedback. As a moderator, I'm looking to say what's really going on in this scenario? Are we seeing a particular trend relating to the opening experience or relating to the onboarding experience?

Ania: Yes, and I think here, the big thing is that, from the back room stage, you're able to see that. Where are these points coming down?

Jonathan: Yes, and for the type of emotional response in setting the stage for this type of out of box experience, we had to assume that the participants had just bought the phone and they literally just got the package. But we wanted to start at a base of ten for this experience, because some people getting a new phone, they could be at a twenty or at a hundred or go really insane when you're getting a new device or something like that.

<Mood Meter – Assumptions Participants will assume: *Recently purchased the device *Receiving the package at home *Can press +/- more than once>

We're putting a starting point at a ten, not something like this. I don't know if you've seen this video that's been going around, or if we can even play it here. It can't be played, but this is where this kid flips out about his Nintendo 64.

We're assuming that they recently purchased the device, that they're receiving the package in their home environment, so they can press plus or minus as many times as they want. We're not restricting any experience to a minimal number of ticks or a maximum number of ticks.

Ania: One of the things here, too, is that you don't necessarily need to start at ten. You can actually ask – we've done work as well, where we tell participants, "What is your current perception of this product, from one to a hundred?" Then we start them at that number.

Whatever that is, if they have a really positive perception of this brand, and because they have that halo effect, they might start really high and then the experience just bombs out, because it's bad. Or the other side,

they don't know who this brand is, so they're all the way in the bottom, but they like maybe the technology so maybe they're in the middle, and they go all the way up on finding out what this is.

Rick: From a moderator perspective, we're typically taking notes in real time, trying to make sure that we attribute one particular task to the next. Being able to see that change, where did the participants start? Where did they end? That's perhaps task one, and then how long does it take to recover, to get back to that point of being happy or being satisfied?

Ania: Yes, and because it's ticking and putting a [INAUDIBLE 0:36:58.6], you now can just add a comment there. Tick, what happened? Tick, what happened? Obviously, if someone articulates a point there, or a comment there.

<Mood Meter Observations *Mood Swing *Mood Swing Severity *Recovery Time *Mood Swing Impact>

Jonathan: Some of the analytics – I love this part. We came up with the name, the coin phrase of the mood swing, which I'm sure everybody knows. But as a way to determine the difference in the mood that was – the before and after.

The mood swing is, if you started at a ten, it drops to an eight and you have that difference of two. The severity, is it a high positive? Is it a high negative? That really gets into the type of impact, and as Rick was mentioning, that recovery time, how long it takes to get you back to that. Then, the mood swing impact overall, and the total experience, was a summation of all those different changes in mood.

<Identifying Mood Swings In-Task>

Jonathan: I can lead this one. You can see we had that baseline, that's the dotted line with the ten. That's really where they started. You're getting this new device, you're opening it up. You can see most people had that really positive first experience, and there were different actions that they took throughout each task.

Within a task, there are multiple actions that they were doing: opening the box, reading the manual, getting all the way to the point of the first use, and that entire thing was one task, but there were many actions involved

in that. We were trying to find those little points, which action really dropped them below that baseline or really created that big mood swing that we're looking for.

Rick: We're actually seeing a couple of questions coming in from the audience, and I think one of them is pretty timely. We're talking about some of the pain points to implementing the mood meter, in the actual lab.

I think one that comes to mind is actually pretty relevant. We'll actually have some participants who either failed to interact with the mood meter, or they might have interacted with the mood meter, "I forgot to put something," so they start putting three or four.

As a moderator, it's also something to be a little bit more vigilant about, and be on top of what's going on with the participants and being able to remind them, in a non-intrusive way, to be able to interact with the meter as opposed to waiting towards the end of a task and having them try to recall, and you're defeating the purpose at that point.

Jonathan: Yes, and someone also asked if there's an app for it. Really, we just came up with an app solution that was already existent. But there's so many different ways of doing it. But really it's the –

Ania: The invention is really the method.

Jonathan: The method, and the way that we presented the analytics and presented the quantification of it.

Ania: For our intents and purposes, we have something we'd come up with. There's plenty of things out there that are alternatives to it, but really what we're grabbing here is it's a way to capture that journey, the emotional journey within a task, a journey itself, in a live setting.

<Identifying Negative Mood Swings>

Jonathan: Here, we're identifying the negative mood swings. What was really good about the mood meter is that we can really look at the differences of certain types of user segments, and when you put these things in parallel, the way that these types of segments responded on certain types of actions, and you can start to see where the gaps may be, between some of your users – a specific persona, for example – then it really gives you a

lot of power to make the changes that would impact your users the most, and in the most positive way.

You can see the differences that personas 1, 2, and 3 have, where their mood swings dropped below something critical. It varies between the three of them, but you can see the low severities between a minus two or a zero, but a high severity is when that swing is further below than a minus two, so they're ticking even more than two times. We call that a high severity.

Ania: We just got a question, and I'm going to try to read it. It says why are you tracking time as one of the variables? Why don't you measure feedback using the time variable? We have time as a variable, and then why aren't we using time as a feedback?

Jonathan: that's a good question. I can answer that. Regarding time, everybody takes different times to do tasks. That's something that we didn't think about, and it would be great, ideally, to have a matching total number of time and start to see where those inflection points are.

                 But unfortunately, once someone does their task a little bit longer, it's not necessarily going to match up all the graphs. Somebody could take a little bit longer with this part of the action.

Ania: They take another path. Just think if it's on a website, they might take path number one versus path number three. But let's just talk about that for a second. You could very well take, for all path one – you could say, "Let's look at those users on path one, and let's look at their journey."

                 It's okay that the time changes. You just have to be able to [INAUDIBLE 0:42:30.1] key points. Every time they do a specific point within the task, you can line up those specific journeys, if you're aggregating at that level.

Jonathan: But unfortunately what happens is the perception that has to happen, the cognition of what they're looking at, the actions that they take – unless you start to really restrict the user to a specific time frame for each task – and mind you, these are actions. They're not the task itself.

                 We're looking at interactions within a task, not the total task time. That's really where the matchup of the graphs really didn't work as well as we had hoped. But if you're using strict adherence to time, it can be done. It

can be done where you're overlaying all of the graphs and really seeing where the differences are that way.

Ania: In that case, you have to have the same actions.

Jonathan: Yes, and everything is timed and the task has to be stopped at a certain point. That's not always preferred. We want to get the qualitative feedback and really find out where those issues where. It was more of a dialogue, so it permitted a way of looking at where those changes happen, but also permitting a dialogue, so we can find out why that happened.

Ania: Good.

           <Mood Swing Impact>

Jonathan: Here, we're looking at the overall impact score. This is what we delivered to our clients. They were able to look at this side by side, and really see what the biggest – the high severity impact actions were that had to happen within the overall task. We're looking at this and saying, "Persona 3 really struggled with Action 4. Look at the impact it made."

           Rick was talking about the overall length of that impact. How long does it take them to recover from that?

Rick: You talk about having a product manager, and is this a software issue? Is this a hardware issue? The different tasks are attributed to different parts of the actual product. You're actually able to ascertain specifically which part of the process is the pain point. I think we just had another question come in.

Ania: Yes, you can normalize. That's true, from one [INAUDIBLE 0:44:39.5] or another. You can normalize the points. We just had that person who asked before ask if you can normalize the points, and that's true. That's exactly right.

Rick: The great thing about the mood meter is it's a living, breathing tool that we use, and we're constantly evolving it, we're constantly changing. We change it to meet our particular client needs. At the end of the day, this is not something that's set in stone. It's more of an ideology of how to approach a scenario and really deliver that type of feedback to the client.

Jonathan: Yes, it's quantifying the response, but really we're looking for the why, not just for quantifying it. But this is really a trigger for somebody who's moderating, to really say, "Why the two drops there? What was happening there? Let's talk about that a little bit more." Rick is the expert at really digging into that type of qualitative feedback.

Rick: He's the man, he's being modest.

<Challenges & Alternatives *Still requires the user to change focus away from the task *Requires a smartphone *Alternative methods used to minimize interruption: - Eyetracking – Brainwave – Facial Recognition>

Jonathan: These are all really great questions. I appreciate the feedback, and these things can be customized per use. It really depends on what you're trying to understand about your users, what you're trying to understand about how to make improvement to your software or your hardware.

There's still some challenges and alternatives that can be done. We can do things with eyetracking that could be interesting, that can mark those points. We can use brainwave and facial recognition. All those things really add a strong feature, but they're a little bit more intrusive.

Ania: Not necessarily, but they do have a higher cost. You have someone like Andrew, on our team, to do that. In our solution, we're basing it on a smartphone solution. But the reality is, going back to the point, it's a method. If you want to go back to the buzzer and just use a buzzer, then you can do that.

The way that we've done it is so that we can tie it to [INAUDIBLE 0:46:25.8] and to the time and to mapping things, and really using it. It's easier for us to do it that way, because now we have a digitized version of this. I think, from that, it's going to save you a lot more time and it's going to be a lot more actionable, and we all want, as consultants, to save back end time of analysis. But it can be just a buzzard or it can be paper and pencil, for all you want.

Jonathan: Hopefully you're not looking like this. I know you'd just come from lunch, so chances are you are like that. Hopefully you have a coffee next to you. If you haven't had Cuban coffee, I recommend it, especially for this time of day.

Jonathan: We just wanted to get any questions. I think that was it.

Ania: What are some of the main points you've encountered with the mood meter, from a researcher's perspective? I don't know what that question means. We have a couple questions coming in, so let's just see.

Jonathan: [INAUDIBLE 0:47:27.7] the way you can present the data.

Ania: Elaborate more, on the way to present the data from one report to another. Jonathan, why don't you do that, since you're the mood swing master?

Jonathan: That was my favorite part of it, really giving those side by side and showing those segmentation differences. I mean, so much of what we do now is regarding personas and developing those personas and really providing personalization and really trying to get that empathy for the user and understand their needs.

         When you start to look at them side by side, there may be changes that are for one type of persona that are not going to work for others. It really gives that good side by side comparison.

Rick: Anya mentioned a tool like Moray. Moray is incredibly helpful to be able to understand, at the end of the day, if we want to highlight just some negative interactions that we had or some negative emotions. The auditory response tied together with Moray allows for that work to be done on the front end, as opposed to analyzing all the data on the back end.

Jonathan: That's huge.

Rick: From a resourcing standpoint, it really enables us to spend more time with the client debriefing and have that real time data available, when we need it, as opposed to having to work with the data for another day or two on the back end.

Jonathan: Yes, that's a 60 minute video that you have to go and scrub through or rewatch and find that little clip. Moray does that. Because we have that tag, it puts that right on there, so we know where those negative drops happen, and we know whether or not it's a minus or a plus. It's not just the

audio tick. We see a negative, negative, so we have a tag that stays there, and we can immediately grab a clip as to what happened.

Rick: Right. It's a little more work on the front end, but it's totally time saving and it's really valuable for our clients, to be able to have that type of feedback, at the end of the day.

Ania: Rick, this is for you. How do clients and stakeholders feel about the data? Is it meaningful or something that they haven't seen before?

Rick: Absolutely. One of the scenarios that we encountered, we actually had some of our stakeholders in the lab, and they were actually able to participate. But unfortunately, the entire product team wasn't able to travel with them. We actually had the ability to show the mood meter within our web sharing conferencing tool.

We actually had a team that was overseas, able to follow along in real time. We had questions coming in and feedback, saying, "We keep seeing pain points coming on in task two, and we understand that this is a potential software issue. Let's come at the situation and probe a little deeper, from the moderator's perspective, as to what is actually going on."

The stakeholders actually get really involved and they're able to give that feedback, right in real time.

Jonathan: Yes, and in particular, the side by side one was something that became a highlight of our report. They felt like it was really informing their broader team as to where the issues are with certain types of users.

Ania: For situations such as data evaluation, where the evaluator's not in the picture during the evaluation, can the mood meter be extended to allow the user to enter optional comments on what is behind their clicks? Yes? [INAUDIBLE 0:50:34.3] but that's a good one.

What they're saying, if we have – this solution was in beta testing, a game. We used this as something that can be remotely used. As you add and plus, can you add a comment?

Jonathan: Yes, that's what we did with the ethnography. For the longitudinal study, we used a method of capturing the mood after certain parts of their –

Ania: For that one, we used [INAUDIBLE 0:51:06.6]. There's something called Experience Fellow, which is also letting you do a little bit of this, where along the journey, it does plus and minus.

Rick: And it's open directly to mobile.

Ania: It's built directly into mobile, so there's that out there that I think is really great, because then you can do the plus and minus as you put in a point within your beta test. There are things a little bit out there that are out there. We've had to hack the way that we do this, quite frankly, and because of that, we've come up with our own little hack, if you will. But it's working well because what it does for us, it allows us to then analyze quickly.

           This is pretty straightforward. It's a simple concept. It's really a beautiful concept, if you think about it, because really, there's nothing that allows you to get that end feedback. But there's nothing really out there that does it perfectly. We've had to come up with a way to pull it together really quickly, and what's nice is what I love best, when we first did this, to the point of that mood swing and impact of scores, that was so very valuable to this client.

           That was the moment that we thought, "Wow, we just came up with it. We just discovered gold." It was just amazing. I think it was one of the most amazing – and I've been doing research for over fifteen years. I'm telling you, this was brilliant, at that point.

Rick: At the end of the day, it's a differentiator for us, and it's something that is not elegant and it's cost effective to be able to implement, but it allows us to think, for lack of a better term, outside the box in this scenario. It allows us to look at a potential solution and a type of research project that, for all intents and purposes, could be potentially stale. We get to add our Key Lime labor to it, and this is really what Key Lime is about.

Jonathan: Yes, and we did this for someone that everybody would know, and when they looked at all the different types of feedback that we gave, we gave ethnography, videos, we gave qualitative feedback, we gave out of the box experience.

Rick: Quantifiable metrics.

Jonathan: Everything. This was the one that they really mentioned, "Wow, that's really powerful, to have these things side by side and showing the different segments in how they responded." That became the highlight of this report, and it was quite a large report that we did for them.

Ania: That basically covers all the questions we have out there. I want to take a moment to thank everyone that's here today. We had over 127 attendees for this webcast, and we're going to be broadcasting this, if you want to see an after-play, if you weren't able to make it today.

But thank you so much for taking the time out of your busy days and schedules to be with us today, and we wish you a great weekend, and hopefully we can chat and talk about implementing one of these solutions or one of these methodologies into your research.

Jonathan: Yes, reach out to us on LinkedIn. We love discussing these things. Lal of our research is customized to fit a client or fit a problem, to answer questions that you have. We're happy to have this discussion.

Ania: Actually, if you have a question related to any of this today, and you want to reach out to us, you can email us at info@KeyLimeInteractive.com, and then we'll target those to the right researcher, at that point. Thank you so much. Have a great day, bye.