Talk by Amit Somani at MobileSparks 2014

About 75% of, and I am sure the stat probably came up earlier today, 75% of the apps that are downloaded are not even opened once, right? And you know, the cohort, after about a month, is less than 20%, right, even though of the ones that are opened, there is an exponential decay in terms of people continuing to use the app. So we, as a human race, now our attention span is less than that of goldfishes. You know, lovely, orange-coloured fishes that you see, right, in the movies, like Finding Nemo. I have a young child, so I see that a lot. So therefore, your ability to engage a user who is very very distracted and is being bombarded with thousands of messages every day, or not to mention notifications, emails, other things, is very very difficult. So how do you kind of operate in this environment?

I've looked at three different models and you know, I'll cover one of them in more detail. So the first one, which I am going to look into a little bit more in detail is '*Hooked'* by Nir Eyal. This is a book that he wrote recently, earlier this year in 2014. Another one is called '*Made to Stick'* by Chip and Dan Heath. This is about how to make ideas stick, right? I won't have time to cover this one, you know, in a 15 minute talk and the last one, which is one of the most classic texts around influence, is a book by Robert Cialdini, called '*Influence: The Psychology of Persuasion'*, right?

So each of them have a nice model, in which you can try to, you know, model your app or your solution and the framework and try to look into that. So I'll dive right into the '*Hooked'* model, this is the one slide summary from that whole book, in the sense, by Nir Eyal. Like I said, the fundamental thing it starts with is to say, "What is that underlying trigger? What is that underlying emotional need? What is that human need?" I mean, if you think of the Maslow's '*Hierarchy of Needs'*, you know, human beings have lot of needs, right; you know, physical, sociological, and goes all the way up to, you know, self-actualization.

So what is that need? What is that trigger? All of you are sitting here, in a mobile conference. This is probably the last but one session of the day; you are probably bored, right?   What mobile app comes to mind? This is the question for the audience. What mobile app comes to mind when you are bored? Just shout out. '*Quora'*, wow! I need to talk to you later. Okay, what else? Facebook, okay. What was that? Whatsapp, okay.

Yeah, so the user's mindset and where that trigger is, depending on what app you have, is very important. If you are a booking app, if you

are, may be you need to get a ride home, so you know, like the Ola Cab app; maybe you want to pick up your *Ola* app, and book your taxi ride home or whatever, so the trigger is really important. And there is a lot of different things that the mobile phone enables for the first time, that you didn't have before.

Even if you have a trigger, do you make it very very easily actionable? So I am a big fan of Google now. We'll talk a little bit about that later, even though it's, you know, the work-in-progress, but nonetheless, if I just realize, like, "Oh! It's 4.30 or 4.45 now and I probably need to get a ride home," and if at that time suddenly it said, "Oh! You know, this is where you live and this is where you need to go and here is the active notification to go, book a cab. Would you like to do it?" And "This one's available and that one is not!" You know, "Taxi for sure is available or Ola is not" or whatever it is, that makes it much easier for a user to take action, right?

I think somebody earlier, one of the earlier speakers talked about, you know, designing of invisible app; I think that the designer from FreeCharge. So the more you make it less about, "Oh, it's my app, it's screen time, actual time inside the app" It's more of, "Am I helping the user accomplish some action, right?" That is really important. And Nir talks a lot about this model of variable rewards, which is used a lot in gaming. I'm not a gamer, but nonetheless, this notion of, you know, these sudden "Aha!' moments, these delightful moments where you're not expecting some kind of a return, but you get something, right?

It's a little unique, a little different, so therefore, human beings, the way they behave is, if you have a consistent action with a consistent reward, works very well for utilitarian things. Most of us are not doing necessarily utilitarian things. Therefore you need, in some engagement through basically varying the reward, right? So therefore you put in a little more effort and lastly you get to, you know, God-like status if you can get a user to invest into an app, right?

So the classic example from a US company, not mobile, is Netflix, which is a movie screening site, widely cited, so I cite it here, which is, if a user goes... So Netflix is a movie recommendation, it started as a movie recommendation site, now of course it does streaming and other...doing a little, their own content and what not. If a user went to Netflix and added 7 movies, the lifetime retention of that user was 99%. If it just went and rated 7 movies, then you are highly unlikely to ever go to any other movie recommendation service.

Of course they have figured this out from a lot of empirical evidence, and of course, having a fantastic recommendation engine with 7 things. So imagine if you are a, if you are trying to build a recommendation

engine or your **Zomato** or some discovery service. I know there are quite a few that is presented here today, [inaudible] and others, if you can get the user to invest some amount of time, after the basic, you know, trigger, action, motivation, variable results, then you can own that user for right. Remember the cohort, the one-month cohort and the six-month cohorts, declining exponentially, right? Six-months cohort was less than 20%; may be even 10% of the user that did open the app, so it's actually 20% or 25% people that are left after six months, for any app, by and large.

These are some of the factors that affect engagement, so mobile phone, I think we talked about Tinder; you know, you look at so many other examples of people that are doing mobile first solutions, where they are exploiting location, immediacy, engagement etc, so you...absolutely in a biometric sensors, there is a lot of interesting ideas, that are on Aadhaar. So you've actually got to use the context of the user, time of day, so the maximum number of searches, for example, on Google and this is a little dated now. I used to work...many years ago, used to happen at 6.30 in the morning or around 10 'o' clock in the evening, between 8 pm and 10 pm.

It was really weird; of course, there was a peak around lunch time as well, because people were away from their office computers, this is again, I am talking about Google India; not necessarily globally, although the behaviour is probably similar. So, you know, could your app be responsive and have a different behaviour at 6.30 in the morning, right? Most of us know where we are at that time! But you know, you have to think about the user's context. Emotions, we talked a little bit about already. Why should the user act? I don't think it's good enough and I hate a lot of apps. and I won't name them here, especially in the news area, including in India, where you are just bombarded by notifications, right? May be I can mention *Times of India* because I am pretty sure they are not here today.

You know, I like from *Times of India*, the newspaper; like you know, subscribe to it, I read that, I use that app, but you get, you know, 16000 notifications a day, right? You know, in the middle of a cricket match, it is like every over they are sending you a score as a notification. That doesn't really...make me very motivated to do anything except uninstall the app, right? So my personal use case per maximum uninstallations is, you know, irrelevant notifications where there is no need for me to do an action.

And then finally the loyalty and the stickiness comes from, you know, repeatedly winning the user's trust. There is a news app called '**Umano**'; again, a US app, where there is an audio news component. I love that, because they don't...they may not even do notifications once

in two or three days. Sometimes they may do an email notification, because it is only relevant to saying, "Hey! Last three days, we noticed you didn't use the *Umano* app. These are 3 beautiful articles you missed, based on the 240 that you already listened to." And it's a guaranteed click-through, guaranteed action, guaranteed re-engagement for me.

So here are some techniques, as you think about your own mobile app, in terms of how to kind of break it down a little bit more. The very first thing is the time into the first delightful moment, which is just the start-up. And this is a disaster, I would say, by and large. I have about 386 apps on my phone, couple of phones and 2 battery chargers, to carry, that from the time of installing an app, to getting some ROI, in my opinion, should be single-digit seconds of time. I mean, post the install and all that, right, the download and what not.   So the on-boarding flow is really really important. Talk about what are the really popular app from Travel that does really well.

Notifications, CRM, engagement through the triggers, in the Nir's model, that is pretty important too and then each of these had metrics to go with it, right? So you can have the time to first action for your on-boarding flow, or you know the mobile CRM. Deep Linking and Chat, I think that was, I've seen back there, the gentleman from *WeChat*. *WeChat* has a beautiful API. Unfortunately, you know, Whatsapp, and some of these others don't, but Chat as a distribution platform can be very interesting, you know. Some of you said, you know, when you are bored, what do you do? Go up to Whatsapp, open it up. Now what if I could get a Whatsapp notification to book a cab for the ride home, again to stick with the, you know, of the cab example?

Distribution is very very hard in mobile. Everybody knows how hard it is to get to under 100,000 downloads or half a million downloads or whatever. 'Aha' moments, right? So this is very important. Mobile is unlike anything else, right? Mobile is a very very personal device, right? It's an extension of yourself, so you need to have fun with it, right? It has to be little exciting; it has to be a little, you know, delightful in the moments, like going to a movie, if it was just monotonously, you know, of one pitch, even if it was a very good compelling story, you'll be bored out of your mind, right?

So how do you get users to have some 'Aha' moments? Again, a fantastic…on the web side, something like *Zynga*, if you are playing some of their games, you know, their metric is number of 'Aha' moments and they actually have a numerator and a denominator. Total number of moments served, total number of 'Aha' moments, some notion of click-through in the sense of a broader audience, right? So hospitality industry does the same. So there is a hotel called '*West In*'

where they've designed for an 'Aha' moment when you go sit in your bed finally, after checking in, getting your room key, etc; so designing for that.

And lastly of course this whole notion of sharing social spreading and virality. So let us look at the ...few quick examples. So on-boarding, I am not even sure if you can see this properly at the back. So Air B&B is this company from Travel, which has a phenomenal on-boarding experience and I mean, just to find out and again, it's not rocket-science, but just saying, "I'll make it, break that simple for you to go and see the first property that is just near to you." You use Google Connect, use Facebook, use the [Sign-In] if you want to, but you just go right in. The example from your left hand side of your Google Inbox app, when it was launched, they have a ton of things like [WatchMarks] and Workflows, to just get you going and it wasn't more than 30 seconds to on-board a user.

If it just looked at the Inbox by itself, if you remember, the early days of Facebook and when they redid the Newsfeed and then they did 'Like' and so forth, most people were psyched out of their minds, right, because they were like, "What is this? What am I supposed to do with this?" But in a mobile, you have the luxury of being able to do a very quick tour or a very quick set of snapshots or a very quick on-boarding flow. So you should have on-boarding metrics, like I said earlier.

Notifications. This is Quora – I think there was somebody here who said 'Quora' and they are bored, which is possible. I am actually a big 'Quora' fan, but I don't go to 'Quora' when I am bored. I go to other things. So 'Quora' is phenomenal at engagements, one of the highest engagement apps. as well as websites; again, for this kind of demographic that we have here.

So they do notifications, they do questions, people have asked you, they do questions that people have...voted, so they use all these social signals, right, to be able to figure out what is it that is relevant to what you have done or people are asking you to do or what have you...? So everyone has notifications. You get 50000 notifications; you are not going to do anything. But if somebody says, "Oh, you know, such and such upvoted an answer that you had" or "Such and such followed you." Now it's very personal to me, right? So now I am like, "Okay, who is this person or why did they upvote that answer?" or "Let me go write another answer because may be somebody else will go, do that."

LinkedIn of course, I think does phenomenal job in engagement; almost converting from social graph for hiring into a content network, right? So they are using content as a strategy for engagement.

Deep Linking, again, you know, this is a US example, but very relevant. How many of you have your own mobile app? How many people are awake? How many enable Deep Linking on Google Search? It is one of the best opportunities for engagement, right and it's pretty open and pretty widely accessible, and also, with Google Now, which I mentioned earlier, we'll look at the screenshots. So you can basically take, in this example, I think it's hotels or rooms for rent in New York. It could be hotels in Goa, it could be cabs in Belandur; it doesn't really matter.

So you can basically index in-app content on Google through the natural organic search and what do you see, what there is, you know, in that, the second result is from Air B&B. It'll actually open a Deep Link into your app, right? So Google is now open to, I think, a couple of months ago, for everyone. I think Chat is a great example where you can do this. I think *WeChat* has already opened in India, but I think *Hike* is also open or semi-open or whatever. I mean, so you have to get blessed by their developer programmes. But finding other triggers in the context of the user's interaction to be able to get them into the Deep Link story is really really important, because there is no way you want to get just regular downloads, installed, open, engagement, right?

So you have to find all these other ways, whether it is Social Sharing, whether it's content, whether it's Deep Linking, whether it's Chat, to be able to invoke the user back into your app.

"Aha" moments! I think Walnut presented here today; I was just thinking through some Indian apps where I've actually had an 'Aha' moment, and I really liked this thing that they had done, which, so Walnut is the personal expense app, for finance app, that these guys presented earlier. So these are my expenses and I had that, you know, dinner or something at BonSouth, in Koramangala, a few weeks ago and basically it just visualized all of that, on a map, right? So where all you spent your money, where you get these transactions from, from those establishments, right? This is the one on the left. And for me it was an 'Aha' moment! Interesting, you know, like I never visualized my expenses in a geographical basis, on a geo-location basis.

The other one of course is the cricket test match. For those of you all who are cricket fans, this is a score from yesterday's match, so they had to send the slides in early. But India was, I think, for 23 runs shot and 9 wickets in hand and today, Australia, of course went all out. So Google Now is phenomenal because it is not trying to get you to open an app. There is no ***'Google Now'*** app per se, right? It is basically a personalized set of recommendations where they are using machine learning to be able to modify the behaviour, so it's an 'Aha' moment,

when you are not even thinking about it, and of course, they have access to a lot more data, so it is easy to say. But you know I have a Google Calendar entry for the MobileSparks event and suddenly it says, "Oh, time to drive there," right? Because it is going to take you an hour at this time of day to go over there or cricket match, you know, I didn't even know there was a match on and suddenly it says, "India is 311 for 4." And so forth.

So designing for a few 'Aha' moments consciously, right? Again, depending on what your app is, you know. Again, if your app is recharge, like the gentleman from freecharge said, may be you don't care, right? You just want to come, recharge, get out, like done! But in many other cases, you need to think about some of these 'Aha' moments.

Content sharing and virality. so this is a real time location feature out of *WeChat*, where because I think from Shanghai, when I was travelling there earlier this year, and I had to meet someone and of course I don't speak any Chinese or Mandarin and I was using public transportation to get around, so it was a very nice feature where you are basically...who you are trying to meet, you get on a real-time location chat with them. There is not really any chat happening, except the sharing of location, and you start basically navigating towards the same thing. The virality of this was enormous because every single feature that I...every single person I met in China, I would basically just...you know, everyone is on *WeChat* of course in China, unlike here perhaps. So I would just turn this on and that has a natural viral spread.

The other one of course is '*Secret*', right? How many people on '*Secret*'? Come on, you can admit it! **'*Secret*'** has this ultimate voyeuristic, you know, kind of feel to it, right, so because it's anonymous network. Of course, there is a lot of crap that happens there as well, but nonetheless, there is a lot of interesting things saying, you know, for the one at the bottom, you know, "1700 people that have liked this"; you know, "x number of people have shared it"; "x number of people have, you know, whatever…" So there is this inherent human emotion that they are appealing to, from an engagement perspective. Of course there is a certain class of content, certain class of users, so obviously in a 15 minutes talk, it's hard to cover all the examples, but again, you can think of examples where you can appeal to some fundamental kind of human emotion, right, so to look at the Maslow's "**Hierarchy of Needs**."

So next, focus on the user, so literally, like I said in the beginning of my talk, start well before you get to your app, or your design or your

engagement metrics or your cohort analysis, right? Start with, you know, what is the context of the user? Where are they at? What time of day is it? You know, what have they done? What is that state, okay? Work through what would their trigger be, what would their…, you know, emotional state be? Why would they be motivated to take an action? Ask yourself that question, saying, "Why would I…?" Let us say, you know, fashion app So there is quite a few fashion companies that is presented here today, saying, "Do I just get up in the morning and say I would look at new clothes," you know; may be you do, may be you don't, right?

And so when is the time when you are most interested to say, "Now a little bored," or you know, like, "Oh, I've to go to a party for Christmas or New Year's eve, so I want to start looking." So you've to figure that out. And of course you obviously measure everything. Be very clear on, especially the utilitarian thing, meaning is it a need or a want, right? So there is a classic pain-killer versus a vitamin; especially for mobiles, think of the physical world reaction, right? What would they do equivalently in the physical world and then can they do it '10x' better in the virtual world? Can they do it '10x' better on the mobile device? So I think that that is something that you can do.

Finally, you can engineer triggers, whether they are, you know, implicit or explicit, whether it's a notification or an email, you know; something else, somebody bringing them a chat, little, you know, blurp getting shared somewhere and eventually, you know, you have to basically say, "Hey, does it solve the user's problem?" If it doesn't solve the user problem, you'll get away, you'll get the early spurt, but then your engagement data will decline quite exponentially.

So that is pretty much what I had, since this is the other dark side of engagement. This of course I think is from, if I am not mistaken, from Australia. Of course, right now, there is a couple of features that has happened. Don't make your product so engaging. I know all of us would die to be in that place, where people are actually tripping and falling and picking their legs, because the product is so engaging, so that is what I have.