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# DesignIntelligence 2016-2017 STRATEGIC FORESIGHT REPORT

# Entrepreneurship and "the Architecture of Involvement"

## An Interview with Michael Kohn

ichael Kohn is a U.K.-based architect who left practice in order to address what he felt was a fundamental problem: building owners, users, designers and other stakeholders lacked the tools to connect with one another in order to create better performing buildings, spaces, and communities.

Kohn's vision for a solution became Stickyworld, the company and product he launched in 2012. Stickyworld is a web- and mobile-based communication tool in which designers post multimedia document of projects and viewers can offer comments or pose questions via virtual sticky notes that go directly on the images.

*DesignIntelligence* publisher Bob Fisher spoke recently to Kohn about how design can change when more voices are integrated into the process and how it feels to move from practicing architect to technology entrepreneur.

### **BOB FISHER**

What business lessons have you learned since 2010, and what surprised you?

### MICHAEL KOHN

Well, it's hard work as a startup. It's frighteningly difficult in fact. You hear and read about an entrepreneur's journey creating a startup, but the focus is often on the big stories and the overnight successes. In reality, for most start up businesses, it's really hard work to bring a new product or innovation to the market.

When we started in 2010, we were focused more on making the product. We weren't really focused on the problem of the customer. The real lesson for me has been to get out and talk to as many prospective customers as possible, listen to what they're trying to tell you about their problems, and then build an offering that solves their problem.

Then there are so many other things with start up business that you also have to learn—and that I really didn't know as a mainstream practicing architect. From building the right team to appreciating the need for marketing and sales — I've simply had to learn about this the hard way, adapt and overcome the obstacles.

### **BOB FISHER**

What role do you feel that better and broader communication plays in creating great architecture?

### MICHAEL KOHN

In the 21st century, the idea of ideology driving architectural design—as it seemed to me as an architecture student—that's all changing. We now live in a connected world. More and more professionals are educated in multiple domains. We've got the rise of smart cities, where multi-disciplinary teams are looking at how to design urban living experiences, using new technologies to deliver better products and services. Where's the role for designers in that? There's surely a role for urbanists and architects but it's a brand new playing field.

I think that communication tools like Stickyworld offer the opportunity to help multidisciplinary teams capture qualitative data, points of view from the end user in a way that maybe wasn't possible or practical, and just wasn't happening in the regular world of design. It turns the process of what a designer does on its head. You're not telling people what they are going to have. You are actually listening and looking for real insights, so that you can make expert proposals on the basis of that information.

### **BOB FISHER**

How will including more voices affect the process of design?

### **MICHAEL KOHN**

I think it opens up opportunities for delivering design within a more interesting, inclusive process. More co-design in certain areas. The designers who have ideas present them and create frameworks whereby there is room for more participation and involvement to improve the design. There's not a single design professional at work in the world today who knows everything. That is going to get more and more difficult as industry knowledge and expertise becomes more fragmented.

We've gone through a couple of decades where people have been talking about collaboration. Collaboration today has become more about experts sharing files and putting data into shared data models. That isn't the same as explaining data, asking questions of each other, and understanding each other's discipline a little bit deeper. I think we have moved from the age of collaboration to one of participation and involvement, where the results that come out become better by design, because of the process that you've gone through, and the deeper knowledge and understanding of how the whole thing works.

### **BOB FISHER**

Do you think that there is any potential downside to design that is much less centralized?

### MICHAEL KOHN

Well, we get lots of people, particularly in the traditional professions, feeling challenged by this idea, because of their business models. They are paid for their knowledge and for their answers. It's intuitive for them to protect this expertise.

But if involving technology and more voices in the design process can feel like ceding expertise and control, perhaps there is another way to think about it. The computer is not going to tell you what the answer is, even if you're working with Big Data, smart cities technology and planning solutions informed by data. You still need to interpret results. Everyone does. You need to know what the questions are to ask, in the first place.

That's a challenge for anyone who is trying to do research. What is the question? What information are you presenting? What type of responses are you seeking, and how are you going to use those responses?

We didn't invent the Internet. We didn't invent social media. All we — and other companies like us — are looking at is how you can use Internet communications to involve more people, more groups, more parties that might be able to help shape outcomes for the better.

What's interesting in the U.K. right now is a new process coming into force in April 2016 called Government Soft Landings. This is the government's requirement of their contractors and design teams to follow a more "peoplefocused" process and deliver useful information and data about the building as a result. This is going to affect over a hundred billion pounds worth of centrally funded capital projects each year, which must go through a process that involves clients and end users in the detailed briefing, design review, handover and feedback of all capital projects.

Design and architecture firms, engineers and infrastructure companies all over the country

are thinking, "How are we going to do this? How are we actually going to meet the requirement?" Getting closer to the customer and end users makes so much business sense in other industries, but doing that in an affordable practical way for construction is the real challenge.

The whole point is about proving that you are able to listen, design, build and hand over buildings that the owners, end users and maintenance professionals can understand. This means they can then operate more easily and save energy as a result. I think the ability to deliver this kind of process, is absolutely about evolving professional expertise, not handing over responsibility.

### **BOB FISHER**

I didn't realize that pre-design was a part of Soft Landings. I thought the program was more about construction, commissioning and post-occupancy evaluation.

### **MICHAEL KOHN**

The purpose of the original Soft Landings process, as authored by BSRIA in U.K., was all about involving the right people at the right time and double checking to make sure the design still meets everyone's requirements. This actually starts with user requirements and briefing, but indeed moves through the stages, including regular design review of the detail, all the way through to handing over the building to a more involved and educated client and end user. This at least increases the chances of reducing operational and energy costs. The Government Soft Landings requirements is a specific application of this process for all government buildings which has a heavy requirement on the integration with BIM standards and data exchange protocols.

We're currently working with BSRIA and Costain — a large U.K. infrastructure company who are building out part of London's Crossrail — on a research project to test that we can support Soft Landings process with online communications in Stickyworld.

The traditional approach has been to have face-to-face meetings to engage with clients, and that will still happen of course. But if you're trying to do get the input of large groups of different people, or explain buildings to hundreds (if not thousands), many of whom are new to the project, then that's a difficult process.

I experienced the difficulty myself as an architect, when I was handing over a building to around 12 different groups of professors and researchers at Cambridge, which required repeat visits. It was a university building and my contractor had prepared the classic large and illegible operation and maintenance manuals that have all the facts if you can find them. We were talking to the occupants and trying to explain how the heating and ventilation system works and what individuals could do to adjust their offices. It was an expensive and frustrating process of repetitive meetings, which better use of online communications and use of digital media could greatly improve. Establishing the relationship with end users early on in the process would also help — and that's exactly what a Soft Landings process facilitates.

### **BOB FISHER**

Could products like Stickyworld integrate with virtual reality someday?

### **MICHAEL KOHN**

Yes, we've got a couple of in-the-works collaborations with companies offering virtual reality and augmented reality technologies. How it could work is that a user will import their BIM models to create a virtual environment, but integrate with Stickyworld to enable communications, ask questions, comment or get the answers you need from other experts who see what you see. As you walk around the model using your headset, if you want to ask a question you click on the control and speak into it to ask your question. The system takes a snapshot of whatever you're looking at, which is sent back to Stickyworld. Whoever is subscribed to the VR environment via Stickyworld then gets an email that shows what that VR user is seeing through their headset, and is able to reply. So you can see the answer, either in the headset, or more practically, you see the answer in your email, as it may be an asynchronous experience.

For us at Stickyworld, we are interested primarily in the "architecture of involvement." Media experiences and conversations about media are simply a necessary feature of involving people.

Virtual reality is once again a sexy technology, and it's fantastic to imagine the possibilities for architecture and design projects. But the VR headset is simply one of many interface types that could support the conversation between people. Whether you're on your mobile phone, your laptop, tablet, your VR headsets ... wherever you are, you know, if you've got things to contribute and improve design, it shouldn't matter the what the interface is that's what we are trying to enable.

### **BOB FISHER**

What new skill sets are designers and architects going to need in this new environment where they are engaging with broader groups of people in new ways?

### MICHAEL KOHN

I think the fundamental one, and I speak here from personal experience having needed to evolve my own skill sets of practicing architect to technology product entrepreneur — there needs to be more focus on communication skills as part of professional expertise from the outset. Any kind of designer or technical expert needs to develop more empathy for the person they are designing and building for. We need to learn to do a lot more listening, so it's like a research approach to design, rather than a professing or telling approach. Culturally we all need to value more feedback, rather than seek to avoid it. If you think about other design industries, feedback is so valuable, and it's built into the culture of practice. In the build environment it's of course more difficult. The projects take a very long time, they are often one-off and it's culturally difficult to be told that your great vision — and this building design — is not up to par. I know, as a design student we were not trained in the art of conversation and listening and thinking about a different point of view.

I actually taught professional studies at a U.K. architecture school for four years and the problem clearly starts there. I guess this skill and mindset of valuing feedback is something that I think needs to be more promoted in education. The idea and the role of the client and end user needs to find its way into education somehow. So that you are actually being trained more as an enabler, and a listener, and you're really smart at how you do this. You're still very much an expert because of your ability to do this, rather than just jump to the first idea and force it through with design personality.

All of the students coming out right now are coming into a world where everyone's talking about data. Everyone's talking about more evidence for decisions. Clients are going to be looking to architects to prove stuff, rather than just say stuff.

Tomorrow's architects will not be working in an ideology driven world anymore where the professionals know best by default. In the future, more clients will be looking for more evidencebased decisions and more data to back up ideas. This makes sense because whilst there's a lot of money being put behind the capital projects, there's a bigger amount of money to be gained or lost in terms of whether or not the building or asset works. Big repeat clients become more interested in this as they see the return on investment, and they'll make choices about their designers accordingly.

### **BOB FISHER**

What kind of economic opportunities are opened up for firms by a more inclusive design process?

### **MICHAEL KOHN**

There are three obvious ways of making money. Firstly, and specifically in architecture and design in U.K. the formal design stages described by RIBA includes a stage 7 which covers the in-use period for extended performance review and feedback. This is rarely priced and paid for by the client, as it is perceived as an expensive unnecessary process, but there are fees to be won if you can educate your client and make a clear value proposition about a more inclusive process. This approach in turn can then leads to reinforcing a client-focused brand for your design practice, which in turn drives more business. A third area is the use of data, and new business models around expert consultancy but that's more complex and the industry needs to get better at collecting data first.

### **BOB FISHER**

How do you see this unfolding over the coming three, five, or more years?

### MICHAEL KOHN

I think that businesses that are already becoming more and more customer focused are the ones that will naturally get this, and they're not challenged by the idea of ceding expertise to clients or end users? I think that there is an opportunity for small, proportionately small, nimble side firms to have better, deeper relationships with their clients. But I think the larger push will inevitably come from the very large projects and new experts and champions in this process will emerge in the industry to champion the process.

### **BOB FISHER**

Can you tell me any stories of real projects that have used this kind of inclusive approach and communications technology?

### MICHAEL KOHN

Sure. In Greenwich, in London, our customer is Royal Borough of Greenwich and their architects East used Stickyworld to involve local citizens and retailers in an online conversation about opportunities to change the design of the high street in Eltham. East architects opened up a Stickyroom where they presented plans of the existing area, photos of various buildings and green spaces, the pavements and bus stop locations. They posed open questions and invited citizens to discuss the pros and cons of change. That went on as an open forum on Stickyworld for about four weeks. The online interaction was supported in parallel with a face-to-face exhibition. Conversations from the exhibition are ultimately lost as

72

hearsay, but conversations in Stickyworld are preserved online for all to see. East could analyze the responses, export a report as formal evidence and carry on with their design.

They ran a second Stickyroom where presented their latest proposals, still listening for comments, and ran a formal survey which aligned with the second exhibition.

It's a nice, classic use of Stickyworld. First they used a discussion room to better understand the citizen perspective and get the evidence to help shape their ideas, and then the architects presented back with a survey to capture more structured responses to validate support for their designs.

Another public example is the Design Museum. There they built a 360 virtual tour of the building which will open in 2016, and the museum advised online visitors to ask questions and leave ideas. The objective, really, was to raise awareness of the museum's ongoing project and gauge the response from the museum's active online audience. It's helped highlight potential risks in some decisions about colors or materials and all of the data has been passed back to the design team, as they've developed their detail designs. That exercise put the museum in a position where, when they're ready to launch their actual building opening, they now have an online audience engaged so that they can go back to and start the whole process again. We're hoping they are going to do that with a follow-up project, with the

actual photographs of the real thing. We'll see. It is still a building site at the moment.

### **BOB FISHER**

What was the ultimate effect on the design? What was different due to this approach?

### MICHAEL KOHN

Designers said that having an online system could get them access to more data and conversations, but the visual component avoided the miscommunications that you get in normal online forums, in email channels, or in other form of written communications.

### **BOB FISHER**

Based on your experience, what is the single most important piece of advice you could offer a potential entrepreneur?

### MICHAEL KOHN

You need a vision, a great team, lots of energy and perseverance.

You also need to know what you don't know and seek others who can help. Many entrepreneurs seek a mentor — I don't have one, but instead I have many who span different backgrounds and expertise and that help me make my own decisions. Most importantly you need to really believe in what you are doing and get others to believe it too. That's why having a worthwhile mission can help you keep going through the tough times.