



The Innovators

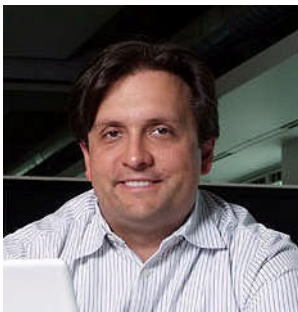
Conversations

on the *Cutting Edge*

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September 2009

Interview with Jeremy Alexis Assistant Dean, IIT Institute of Design



Jeremy Alexis is an Assistant Professor and Assistant Dean at IIT Institute of Design. Jeremy has spent the majority of his professional career leading interdisciplinary teams tasked with defining next-generation products, services, and business models. He has worked with clients such as Unilever, Motorola, Citibank, Pfizer, American Express, Target Corporation, and Zebra Technologies. He currently teaches the Research and Demonstration class (year-long capstone), as well as classes on economics and design, concept evaluation, design decision-making, and problem framing. He holds both a Bachelor of Architecture from the Illinois Institute of Technology, and Master of Design from IIT Institute of Design. Jeremy can be reached at alexis@id.iit.edu.

Interview conducted by Doug Berger, INNOVATE doug@innovate1st.com

Doug: Please start us off with a few background statements in order to better familiarize us with the Institute of Design.

Jeremy: The Institute of Design is an academic unit college at the Illinois Institute of Technology based in Chicago. Founded in 1937, we are the largest graduate design school in the U.S. Our graduate community is primarily interested in two areas; 1) a focus on what to make instead of how to make something; 2) trying to take the black box that was once design and make it more understandable, repeatable, and scalable. We want the discipline of design understood by and engaged in by people outside of the field.

Doug: Let's highlight areas of design that are well understood but not as well practiced, starting with the area of problem framing and reframing.

Jeremy: In the last 10 years, the design profession has been seen as perhaps an answer to issues related to new product development and innovation. It shouldn't be considered as a replacement for the Stage-Gate Process or the Agile Development Process. However, what often happens and the reason why problem framing is so important for a designer to understand, is that we're often asked to do things that our tools and methods don't necessarily allow us to do most effectively and efficiently. A sign of a maturing profession is having the knowledge of what you can and cannot do. The focus of problem framing is to make sure that the challenges we're given as designers are the ones that are best aligned with our tools and methods.

For example, large business organizations trying to create a 5-10% increase in revenue for the foreseeable future often start with a traditional approach. They start

by understanding various user segments, then understanding a broad common set of customer needs, and ultimately launching a product that will fit that broad and common set of customer needs. The aim is to address a big market right away, and then through further marketing and development carve off little niches that will help it to grow over time.

The design process, on the other hand, is better suited for taking a much more niche approach, focused on a very specific group of users. What we focus on in problem framing is making sure that designers are solving design problems. For example, in the world of travel you're not interested in designing something for the broad population of families traveling in North America. You are more interested in looking at families with kids under five who are traveling intercontinental distances on single aisle airplanes, as my students did last semester. That's a nice tight problem frame, because it allows us to go in and do some really deep observation about that particular user group; understand their needs in a way that you can't if you're administering surveys.

There's an old adage . . . you can ask a thousand people one question, or one person a thousand questions. The design approach is to ask that thousand questions of those particular people often while they're traveling, then take those individual instances and extrapolate them to a larger set of customers. That yields some really interesting and potentially disruptive ideas for the airplane manufacturers or for the airlines.

Doug: Do you have an example of a company that took this approach and created a larger business?

Jeremy: In terms of a business example, we were working for a large GPS manufacturer. As we were venturing into this new product development space, the initial group that we looked at was called Urban Adventures. These were people between the ages of 20 and 27 who lived in a large city like Chicago, New York, and San Francisco. The activities and the need set was: "What are they doing after work? How are they using their mobile phones and their other technology to find places to go, get to those places, and then coordinate their friends around them?"

After studying those needs for a while, we found some really fascinating potential applications and solutions that could live on a device specifically designed for them. However, we knew that you can't just launch a device specifically for that group; it would not have the scope and scale that the company needed. We were able to take the specific elements and transfer them to a larger audience. The methods, the applications and the tools that we had designed for this narrow group actually fit a much larger segment, which they called the Crossover Segment. These were people who were using their GPS systems for everything from biking to cars to boats. We had seen a lot of these transitions with the Urban Adventurer group. We designed specific solutions that were immediately applicable to a much larger audience.

Doug: What Honda did with the Honda Element comes to mind. That has now become a class of automobile, which started out with a unique focus on a particular California age group and life style.

Jeremy: Exactly. That's a fantastic example. The point is that focusing on a very specific group and extrapolating those learnings to a larger group is a design way to do product development.

I think a great example of reframing is something that was done, oddly enough, for the city of Chicago. They had asked us to look into the problem of troubled buildings

in Chicago. We have over 10,000 vacant and abandoned buildings. It's a big issue for the neighborhoods. The issue for the city was: "How do we actually tear down these buildings faster?" They wanted us to look at the process of going from putting out bids to increasing the efficiency of contractors tearing the buildings down. It was an interesting problem, but not necessarily a design problem. What we suggested was, "Let's reframe this in such a way that it's more focused on how we prevent buildings from ever becoming troubled in the first place." This was more of an open-ended solution than just about improving pieces of a process.

Ultimately, what resulted was a whole system of solutions. We spent a lot of time in the communities understanding the individual residents' relationships to the buildings, how they felt about them, and how we might activate them to help reduce the problem. We spent time on specific policy changes that would reduce the issues leading to buildings becoming troubled in the first place; everything from resolving issues around the unknown future of a building when someone dies, all the way through to the relationships of landlords and tenants.

This is an example of how we took an initial frame and said "This isn't necessarily a design problem, but if we frame it this way it will be something better for us as a design group."

Doug: Let's move on to new practice areas around knowing your customer.

Jeremy: Most companies will tell you that they know their customers well and that they always want to know their customer better. In terms of practice, a lot of the work that goes on is focused on methods and tools, and it's too often handed off to a consulting firm or a group of researchers.

What I've been doing is shifting this thinking from something focused on tools, methods and experts, to engaging the larger organization to spend time understanding the customers in a deeper way. The goal is to go from having insights to having empathy. Companies have been searching for that distinctive, proprietary customer insight. When you can find it, that's really powerful. It's just that every company has many consulting firms, often the same firms, working to find that proprietary insight. Mining for those insights is getting less and less fruitful. We've found that it's now less important to find that single insight that's going to shift everything, and more important to build empathy for the customer throughout the whole organization. In this way the vast yet little design decisions and engineering decisions that people make will be grounded in a true, deep understanding of who the customer is and what they want. Decisions won't necessarily be grounded in people's own thoughts and feelings. Once you shift to that type of approach, you have a distinctive advantage. It's no longer one single thing about the product; it's how the whole company system works together. It really feels to the customer that they know who you are.

Doug: Can you give us an example?

Jeremy: It's better for us to understand this in terms of traditional, more service-based businesses. Southwest Airlines is an example that's used often, and it's really a good one. The front line employees have more empathy for the traveler than most frontline employees do. They truly understand the needs of the customer and are making their decisions at every little point related to what's best for the customer.

Doug: Much attention has been paid to how can we productize services. You are going in the opposite direction, which is how do we build empathy and a service-level connection with the customer at every possible touch point.

Jeremy: Absolutely. I mean, for people who travel frequently, stay at Marriott and fly American Airlines, it's actually a good exercise to run through how you're treated in both of those phases of your travel experience. American Airlines has more of a technical focus. They've productized all their services down to a very detailed level, but it's not necessarily a good experience because the employees don't necessarily have empathy for you. Marriott, on the other hand, does a good job of making sure that the employees are engaged and have a sense of what the customer may or may not need.

Another example is Starbucks. They give their store managers Spaghetti Diagrams to map out customer and employee flows within their space to truly understand what's happening in their particular store. Those are exactly the tools that the most high-end ethnographic consulting firms are using, and Starbucks is giving those tools to their employees to make sure that they have a deep understanding.

Doug: Let's talk about getting early proof of concept.

Jeremy: The new approach is focused on prototypes, pilots and experiments. We are *not* trying to get the product right. We are not trying to create a looks like, feels like prototype and then test it. We *are* actually focused on understanding the key assumptions of this new concept. What do we assume has to be true in order for it to be successful, and then actually test those assumptions?

Students were doing a project last semester for the Mayo Clinic. They had this idea of creating a Mayo-certified health coach. The Mayo Clinic would offer certification for a specific class of health advisor. We weren't sure if the target population, young adults, would actually go to this health coach. What would be the nature of the conversation? How much would they would be willing to pay? We were really testing those business assumptions of the concept. So we built a prototype. We took a room at school, created a mock café-like office had a physician stand in as a health coach. This took about a week, and cost under \$1,000. We were able to glean a number of key insights about what would and wouldn't work in terms of moving it forward. When we presented to the staff at Mayo they said, "Do you have any sense of whether or not this would work?" Instead of giving them a spreadsheet showing the business case, we talked in very specific details about the strengths and flaws of the concept, and how we might go about solving for those.

You're always going to need a business case. It's just a good idea to pilot, experiment and prototype so that the assumptions on which you build the business case are sound.

Doug: What were the kinds of assumptions for which you were testing?

Jeremy: Our main assumption was that young adults would have something about which to talk to a health coach. There are issues and questions in their life that they would like answered. The second assumption was that face-to-face vs. online contact would work better. We tested both. We built online as well as individual face-to-face opportunities for contact, and then analyzed the results, as well as the thoughts and feelings of people who went through both.

It turns out that people preferred face-to-face interaction, and there was enough content for them to discuss. The challenge would have been just assuming those to be true and then jumping into the business case. We were able to throw those assumptions up against the wall and make sure that they were solid.

An important point about concept evaluation goes back to the *endowment effect*. This is the idea that we endow the things that we own or make with more value than do the people to whom we're trying to sell them. This is a big issue in concept evaluation and the reason that there are so many false positives. By the time people have gone through this long process of trying to understand what they can make and what the answer is, we tend to overestimate how much the user group is really going to want and use this. We often discount the challenges that change presents for people. One of the things that we focus on during prototyping is the cost of change, because it's often the cost of change that prevents people from adopting a new service.

The best example of this is Webvan, the famous Internet supermarket that did just about everything right in terms of logistics, marketing, hiring all the right people, and securing adequate financing. In the end, what they failed to realize was the cost to people of changing their behavior from traditional grocery shopping to shopping online. They were never able to understand the scope and the degree of that cost, and that was one of the reasons that they had trouble succeeding.

Doug: Let's touch on "workshop design." Companies spend a lot of time and energy in design sessions, meetings, and training programs. The frame is to make the follow through more effective.

Jeremy: If you hire a design firm, chances are that at one point or another they're going to ask you to engage in a workshop. Part of this workshop will probably include some research and some brainstorming. My experience in working with dozens of design firms is that the actual experience of being at the workshop is great. People have a good time, they relate, they collaborate, they have some good ideas, some crazy ideas. Then, when they leave, there is really not a lot of follow-up. What was once a very positive feeling often turns into a very negative feeling about their time and experience.

I have been giving students who are going to be running these workshops a more complete framework to understand how we make them the most effective, and the most useful. The approach is to not only design the session itself, but design the pre- and post-work with the same level of detail and rigor.

Doug: What things are commonly missing in the workshops leading to disconnects in follow-through?

Jeremy: The main issue that I ask the students to look at is this: What is the presenting condition of the people coming into the meeting? Are they aligned on a single point-of-view and the goal is to use that single point-of-view as a way to expand into a lot of options and concepts? Or, do people have many differing points-of-view, and the goal of the workshop is trying to bring them together.

In terms of follow-up, the issue with workshops in general is making sure that the concepts and the discussions that come out are actionable. Sometimes the point of workshop is to make a decision. In a decision-making workshop, you need the right people. You have to make sure that they have the ability to make that decision without it being overturned. If it's a workshop that's focused on generating ideas, you have to make sure that those ideas are of the scale and scope that are usable. Big

sweeping ideas have no hopes of any follow-up, because no one's able to make that degree of change. If it's primarily research that you're presenting, you want to make sure that the group is aligned with the point-of-view before they leave so that it takes on its own infectious enthusiasm after the session is over.

Doug: Alignment is an area that plagues most organizations. How can design thinking, or the practice of design, inform better ways of reaching alignment?

Jeremy: Design is a collaborative process. When you actually solve a problem using design methods and skills, people work together to arrive at a solution. That activity on its own does a lot for alignment. People may often agree but they're saying different things, thinking different things. They don't necessarily know exactly what people are talking about. Design thinking is about making something tangible rather than theoretical.

Doug: What other topics would you like to touch on?

Jeremy: Governments at the state, local, federal levels have generally not used design at all, other than if they need a Web site, or a new building. I am passionate about how the design process can actually make government more citizen-centered. If you start to look at government as being something citizen-centered, from a design point-of-view, you can really come up with some innovative solutions that will ultimately make peoples' lives better.

