Lessons from product design with Adam Wrigley, Senior Mechanical Engineer of Frogs Design based at NYC studio

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I have heard Susi Varvayanis, director of Cornell’s Broadening Experiences in Scientific Training Program describe the BEST program as a train constantly in motion with training opportunities, which students and post docs are free to jump on or off whenever.

I jumped on this event to listen to Adam Wrigley, the senior Mechanical Engineer based out of the Frogs Design, NYC studio talk about product design. I am not an engineer but I am surely interested in how new products are designed and the old ones re-invented.

As Adam described the process of re-inventing a juke box to sophisticated phone boxes to multipurpose kitchenware, I notice a few things that are a common denominator to the design process.

It required a team to accomplish the task of coming up with each one of these products. It is important to utilise other experts or get a partner in the field. Nobody is expected to know everything but knowing where to find the help is essential. If help is not available then figure it out; but sometimes it is easier to figure out with a team.

Product design is an art, it may take 3 minutes, 3 days, 3 years or 3 decades. However long it may take, observation is key. It requires paying attention to detail, always stepping back and rethinking each process and step. “Always question everything even if it’s not engineering.” Adam says.

There might be a designated researcher dedicated to finding ideas for new products. Listen to what people are saying in everyday conversations; it is a great way to identify the needs of society and ideas for products.

Sometimes when you are starting a job as an engineer you are expected to know everything and if you don’t, you have to learn how to figure it out quickly. This is where teams and establishing a network of experts may come in handy. The BEST program is very good at bringing people together.

Start small and build a portfolio, broaden your experience by working for different people doing different projects. All practices add to experience, diversity and networking so that when the dream opportunity finally comes knocking you are fully prepared.