## Design Thinking: A Methodology that Supported Apple and Samsung (Mr. Sungene Ryang)

Apple's mouse and Muji's wall-hanging CD player... IDEO, an American company founded in 1991, is known for many product designs that have wowed the consumers. The company's list of clients is full of highly recognizable names from around the globe, like Proctor and Gamble (P&G) a major player in the US consumer goods industry, PepsiCo the drink industry giant, and Italy's Prada, a high-end designer brand.

How has IDEO, a company crowned as "The Most Innovative Company in the World," managed to rule the design world for over twenty years? Leaders of IDEO will reveal its secrets. Mr. Sungene Ryang, head of Japanese operations, talks about "the Way of Thinking" that is important to IDEO in this first installment.

## People should always be the center of design.

Our job isn't to simply design the exteriors of hardware like the mouse or the ebook readers. We design all kinds of things from software, services, hospital layouts and shopping centers to organization reforms. We use design change as a starting point in our consultancy to solve problems that companies have.

An example of a success story is Samsung that went through a radical reform supported by IDEO. From about 1990 to 2000, Samsung was just a follower that chased other innovative companies such as TV manufacturers, etc. The company also handled the task of product development with the idea that technology comes first.

Our first thought was that we would have to design the awareness of the management and the organization itself. Specifically, we asked that importance be placed on the customers. The very people that will be benefiting from having products and services provided, when making business decisions during strategic planning. At IDEO, we call this method the human-centered approach. This is our way of thinking that produces IDEO designs.



Photo caption: Mr. Sungene Ryang, the head of US's IDEO Tokyo office. He received an MBA from UC Davis in 2004. After being in charge of businesses aimed at emerging countries at BT Group, a major British communication company, he joined IDEO in 2005. In addition to Japan, he oversees businesses in the entire Eastern Asia region. He also holds the position of special associate professor at Kyoto University's Management Research Center where he currently teaches. He is 42 years old.

Since humans play the leading role, the creative process must be changed also to reflect it. For example, when a company decides to move into a new country or region, the company generally sends their employees to the area to explore the new market and calls them back after two to three years. However, this isn't enough to create product strategies that really understand the people in the area. If we are to base the process on the concept of human-centered approach, the company must be willing to let their employees spend a long time in the new market to really understand the area. Following this approach, Samsung is now able to introduce products that are well suited for the market very quickly, and is also able to detect subtle changes in market



Photo caption: IDEO opened an office in Japan in March 2011. They are widening their client base from businesses to universities and government entities.

conditions to make the next move. You can say that Samsung's recent rapid growth is the result of their insistence on being user driven. Each company has its own way of doing things, but I can't think of any other company that has changed so much in such a short period of time by fearlessly adopting IDEO's methods as Samsung.

Why is IDEO trusted by so many companies? We believe the answer lies in the fact that we employ a methodology that no other consulting company possesses. Normally when deciding on the kind of design that is needed to solve a problem, you begin by grouping the clients by different characteristics such as sex and age.

But IDEO is different. We concentrate on three elements, insight, observation, and empathy, and actually go to the place where consumers are using the products, and we observe carefully. We also believe that in order to innovate, it's necessary to watch people who are not the "main customers" that companies have pursued and investigated for a long time. We believe that the key to design often lies with the customers other than the main customers.

A whole variety of people get involved, too. We form teams composed of three to four members with different backgrounds like architects, designers, and former consultants. Consulting usually takes eight to twelve weeks, but it takes much longer to let design thinking penetrate through to the core of an organization.

## A prototype should be rough.

We came to Japan, because we believed that we can really help companies that have lost their confidence in creativity. They have locked themselves into a kind of creative rut. I believe with design thinking, IDEO can be the medium to help Japanese companies regain confidence. Two years after opening our office immediately after the Tohoku earthquake in March 2011, the number of projects have doubled every year. We have gotten about twenty projects so far from companies such as Toyota Motors, Mizuno, and Sony. We were also involved with the development of

a user interface of the new cell phone that was developed by NTT Docomo. Currently there are eleven staff members working in Japan.

We are often asked why we set up shop in Japan where the economic growth isn't expected to be as high as other parts of Asia. I think part of the reason is that more than any other country, we as designers find the Japanese craftsman temperament very stimulating. Many people from our US Headquarters in Silicon Valley come to visit Japan often during their vacation. No other country in the world has maintained this high level of design and craftsmanship.

I grew up in the States, but I spent some time in Kyoto as an exchange student during college. I was taken by how everything in Japan, from product packaging to the service at convenience stores, is so precise and refined. Japanese business hotels where all the necessities are well-laid-out in a very small space made a huge impression on me.

I often hear people lamenting about all the "restrictions" in Japan such as the limited landmass and the super aging society, but I think that's wrong. For design thinking, in fact, there is nothing more potent than restrictions to create innovation. If restriction or limitations of Japan can be leveraged to an advantage, I believe it's possible to invent something with a global application that cannot be done anywhere else in the world.



Photo caption: Mr. Ryang of IDEO who says, "Restrictions are actually really important as conditions." He says that what is perceived as Japan's restrictions such as aging population and limited landmass are opportunities.

I think the problem with Japanese companies and their difficulties with innovation lies with "design" within the product development process. For example, I think too much time is spent on making a prototype. Japanese tend to make these beautiful and perfect prototypes. Since so much time and money get spent on making this object, it's hard to suggest revisions or criticism. If you can leave the prototype kind of rough and create an atmosphere of open discussion, I think you open the field to great feedback.

## Limit the functionality and hurry to launch.

In Silicon Valley, "lean startup" where you launch products and services as beta versions with a minimum of functionality has become very popular. This method puts the product into the marketplace first, then makes improvements based on consumer input. I think this kind of thinking is what is required of Japanese companies now.

Tohoku earthquake showed us again how much the world respects Japan. There are many things with which the Japanese excel such as safe foods and cutting edge fashion that the world aspires to and yearns for. A lot of things with potentials for overseas growth can be found here and there in Japan.

IDEO recently linked up with Tokyo University, Kyoto University, and Kyushu University, etc. in their curriculums to talk about design thinking. Young people in Japan are passionate about changing the

status quo. I would like these young people who will be in charge of the future to create a new Japan and be their mentors. If Japanese companies, or the entire country, can change with design thinking, the world will see a new ever powerful Japan at the Tokyo Olympics in 2020 which will be Japan's big moment on the world stage.