Before the advent of design thinking, perhaps design was nothing but a tool to make things look nice or easy to use. With design thinking, we now know how to apply designer's way of thinking to address problems such as organizational strategy and social development.” said Jin Ge, design lead of IDEO China.

The word “design” may easily be associated with fashion design, interior design, garden design, etc. However, design actually covers a wide scope of areas. Herbert Simon, a laureate of the 10th Nobel Prize and one of the most influential sociologists in the last century, defined design as a course of action aimed at changing existing situations into preferred ones. Unlike natural science, which aims to find answers to “what it is” and pursues “certainty”, design focuses on “what it might be” and “contingency”. In Herbert’s view, this creative process requires a different way of thinking, which in his words is called “Design Thinking”.

What sits at the core of design thinking is human-centeredness, driven by creating positive social impact. “If you look at the end result, design thinking and social innovation share the same goal.” As Jin Ge explained, “Design thinking is a methodology of problem solving and can be illustrated by three circles: user desirability, business viability and technological feasibility. Innovation, as the end result, comes from where the three circles’ overlap.”
Design thinking focuses on people. “If you look at people, you’ll inevitably look at the social background and try to solve social problems. And naturally business and society cross over with each other. Meanwhile, people who are involved in human-centered design tend to look for social value, rather than simply seeking business interests.”

**Human-centered Design and Innovation**

In 1991, David Kelley founded IDEO, which has now become one of the most influential design consultancies in the world. David has not only successfully commercialized “design thinking”, but also founded d.school at Stanford University in 2004, which marks the beginning of design thinking finding its way into college education.

Design thinking has evolved from traditional design methodology. In order to make it easy to understand, apply and be used by different projects or individuals, d.school at Stanford University summarizes design thinking into five parts.

Generally speaking, the simplest process of product design involves four steps: identify client needs – brainstorm – prototype – test. Design thinking emphasizes on empathy, which adds a premise to and redefines the traditional design process:

- **Observe**: observe and experience what users experience through in-depth user research and empathize with them;
- **Define**: clarify the problem, the action plan to take and the values behind the action plan;
- **Look for solution**: conduct “Go for Quantity” brainstorm sessions to connect resources and encourage open-minded thinking, and distill a tangible and actionable solution out of there;
- **Prototype**: make product archetypes and identify potential new problems or bottlenecks at the same time; Test: test and iterate archetypes in a quick trial-and-error way.

It is these methods that enable design thinking to generate human-centered design and innovation.

Human-centered design starts with users’ fundamental needs and takes into full account user needs, context and constraints throughout the whole process, in order to achieve optimization. “Human-centered design can be traced back to the time before Industrial Revolution, when artisans provided products in the form of local workshops that integrated design, production and sales.

Since most products were sold in nearby communities, producers and consumers shared a similar external environment, and the intimacy of communities made it possible to gain a deep understanding of consumers and provide customized products. However,
because of mass production as a result of Industrial Revolution, designers and producers started to alienate consumers, or even knew nothing about their consumers.

In an effort to appeal to the mass market, producers gradually moved from a human-centered mindset to a technology- and production-driven mindset. The emphasis on consumer needs was played down unknowingly.” said Yangming Che, founder of YES Network, a Hong Kong-based social innovation incubator, as he addressed the topic of a return to human-centered design.

(Excerpts from the whole feature article)