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Analysis catalysis

Designers think they can teach MBAs and philanthropists a thing or two

TIM BROWN, the boss of IDEO, a consultancy that helped shape Apple's first mouse, does not have solutions to daunting global problems such as climate change, epidemics and persistent poverty. But he believes he knows how to find them: with "design thinking".

By design thinking, Mr Brown means the open-minded, no-holds-barred approach that designers bring to their work, rather than the narrow, technical view of innovation traditionally taught at many business and engineering schools. Firms that think like designers, he claims in a new book, "Change by Design", stand to win huge new markets and profits. The concept may sound pat and woolly, encompassing everything from savvier marketing to radical technological leaps. Yet design thinking is winning many converts in both industry and philanthropy.



Herman Miller
The chair that saved the world

Mr Brown argues that a holistic approach to tackling problems produces more breakthroughs than the MBA's traditional urge to make incremental improvements to

existing products or processes. He says the uncompromising focus on predictability and quality-control exemplified by Six Sigma (see article), a form of statistical analysis popular with manufacturers, can lead to "analysis paralysis" by discouraging sweeping changes that may cause disruptions in the short term but yield big benefits in the long run.

In contrast, design is often a "Trojan horse" for momentous ideas, maintains John Kao, a former academic, since it marries rigorous methods with more empathetic and intuitive ones, from lengthy anthropological studies of consumers to the production of experimental prototypes. With funding from Deloitte, a consultancy, he has set up the Institute for Large Scale Innovation, an outfit dedicated to "building the new innovation agenda necessary for tackling wicked global problems".

Roger Martin, head of the Rotman School of Management at the University of Toronto and a pioneer in this field, says that true "design thinking" involves a deep understanding of people's habits and preferences. As evidence, he points to the expensive Aeron chair (pictured), which Herman Miller designed based on lengthy observation, not just answers given in focus groups. The firm mimicked some elements of the lawn chairs that consumers seemed to find particularly comfortable, and the result was a blockbuster. IDEO applied a similar approach in a campaign it devised for Bank of America. Its researchers noted that consumers feel empowered by saving even trivial sums of money, such a collections of pennies in a jar. So they came up with a scheme called "Keep the Change", in which the bank automatically rounds up deposits to the nearest dollar—a huge hit with customers.

Philanthropists are beginning to bring similar methods to bear on big social problems. The Gates Foundation has worked with IDEO to develop a "human-centred design toolkit" to help charities develop new programmes in collaboration with locals. VisionSpring, an American charity that sells inexpensive reading glasses to the poor, used the toolkit to make its vision tests less intimidating to children, and thus reach more of those in need.

Focusing on people need not mean losing sight of the big picture, design thinkers argue. George Kembel, the head of Stanford University's Institute of Design, points to Embrace, a fledgling health firm created by a group of his former students. The problem they set out to fix was the appalling lack of proper medical care for premature babies in poor countries. One reason for this is that sophisticated incubators can cost \$20,000 or more; even if a country receives the machines from donors, the lack of proper training and money for maintenance undermines their effectiveness.

Many attempts had been made to reduce the cost of such incubators, but the Stanford team took a different approach, by talking to locals in rural areas. In the process, it dawned on them that most babies in the developing world are not born in hospitals, and so are unlikely to benefit from incubators even if they are working properly. The team designed a cheap and cheerful proxy: a tiny sleeping bag made of material that, when dipped in boiling water, retains heat for hours. Embrace hopes to start selling this \$25 "incubator" soon.

Even newspapers, in dire straits in much of the rich world, are embracing design thinking. Michael Maness of Gannett, which publishes *USA Today* among other papers, describes how employees working from IDEO's Californian office are using "anthropological and ethnographic tools to get much closer to the consumer". The result is a web-based news service catering to local communities (recently launched in Beta form) that he hopes will help the firm make money online. If design thinking can even help the sinking newspaper industry, then tackling global warming should be a doddle.