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Design Unbridled, see page 24.

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The quarterly publication of the Industrial Designers Society of America (IDSA), *Innovation* provides in-depth coverage of design issues and long-term trends while communicating the value of design to business and society at large.

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Cover photo: Cat in the Hat at Universal Studios Orlando by Tucker Viemeister, FIDSA

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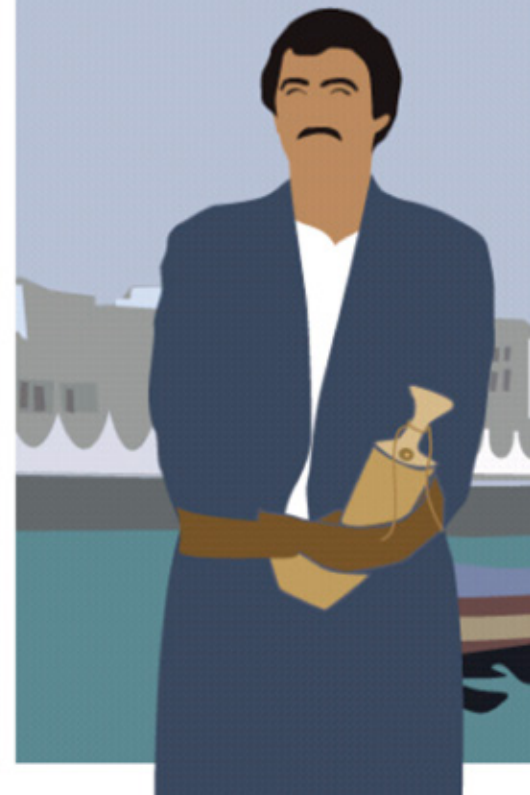


By Clive Grinyer
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Clive Grinyer is director of customer experience for Cisco (IBSG) Innovations, designing innovative new digital experiences for Cisco's clients. He has held senior design-management roles in a number of consultancies and corporate design teams, including IDEO, Tangerine (co-founder), Samsung Europe, Orange France Telecom and TAG McLaren Audio. He was director of design for the Design Council in the UK from 2002 to 2005.

DESIGN UNBRIDLED

It was Bill Moggridge, FIDSA, who said (in an accidently perfect tweet) that “few people think about it or are aware of it, but there is nothing made by human beings that does not involve a design decision somewhere.” For most designers, this observation will be understood to be true for the act of making. Creating any sort of physical reality, especially if it has any type of interface, clearly requires a human-centric design process (rather than the wider, technical aspect of design you would use in laying out a circuit board, for example).



Moggridge's comment says something about the all-pervasiveness of design that has always interested me. For him, design was a verb, an activity that could not be avoided. Design, as a conscious process of working out what something is and how it will be achieved, is a decision-making process that has to happen; it's not an option. In making these decisions, we can be more or less conscious of the impact on the person who will use that something or the process required to bring it to life. How we consider and balance the what and the how is at the core of almost every activity.

As a student, all I wanted to do was design a toaster my mum would like to buy, or a piece of industrial equipment that was comfortable and easy to use or create systems that were easy to understand and operate. Design was neatly fenced in around my discipline of product design and creativity defined within parameters of materials, process and economics. My first job was designing car radios, an interesting challenge involving the cognitive understanding of digital functionality and ensuring long fingernails could press the buttons.

Since then the nature of what I design changed radically. I moved from the physical to the interactive and developed mobile and Web user interfaces, but I was still able to describe myself as a designer. Now, despite using exactly the same techniques and thought processes I was trained in, I am rarely described as a designer, and I operate in completely new worlds creating experiences a million miles from car radios.

In my role at Cisco, I work with companies and public-sector organizations who want to understand how technology can help them do things better, more efficiently and at a larger scale. The development of technology over the last decade has, of course, had a major impact on how people communicate, work, shop and spend their leisure time. So working in this technology world means that the problems I work on are extremely diverse. When I was designing fake domestic irons or floor-cleaning machines at London's Central Saint Martins design school, it never occurred to me that I would be asked to work out how technology might help a fishing cooperative in Yemen or local government workers find new opportunities when they lose their jobs. But those are just two examples of how I have used design skills to help solve problems.

Translating Technology into Meaningful Experiences

One of the interesting features of technology is the enormous trust people have that technology will solve all their problems. So when an international aid foundation wanted to solve a set of problems around youth unemployment, problems that were shared by many countries, it was natural for them to presuppose that a range of Web applications, platforms, call centers and videos would be the solution. It was assumed that this technology would enable the foundation to reach a younger and culturally diverse audience and put them directly in contact with the services and opportunities that could help them and the businesses who might provide sustainable employment. What was not understood at all, however, was just how this technology would actually work. What channels would this audience be able or want to access? How would these services be provided in remote and unconnected areas? How would training or information actually be received?

These questions might seem unimportant, details to be worked out later. But it was clear that the investment was at risk of being ineffective if we didn't start understanding how we were going to provide easy access to this great technology and make the services and information attractive and relevant. **We needed to convert spreadsheets and process flow charts into meaningful experiences that would succeed.**

Suddenly, and unexpectedly, this became a design project. Understanding the people at a street level, their cultural references and their preferred channels was vital. Working out how generational attitudes and traditions would be respected, changed or worked around needed to be understood. Creating a vision of how the project would attract, engage with and succeed would then enable everyone to understand what and how to make the project a success.

What is perhaps surprising is that the same methodologies used in designing the car radio were required here. Understanding the users (replace fingernails with cultural traditions) provided insight into how they would understand, see benefit in and consume the services. Analyzing the different delivery channels, content and style led to a series of design concepts that enabled us to evaluate what would work best. Visualizing the service as stories that would show

DESIGN IN UNEXPECTED PLACES



how each aspect of the experience would work could be done as a rough prototype. In this case, a narrated cartoon brought the stories to life and communicated the vision to the project team and to the potential users for their feedback. This approach enabled us to tell the stories of how local businesses expand their markets; how young people receive effective training in a style that suits them; and how a local trainer could download a training video, travel to a remote location (with a laptop, projector and solar power pack) and teach an illiterate fishing community how to fish and distribute their catch to more lucrative sushi-craving markets.

Conventional design activities ensured that the applications were well-designed and the websites were easy and attractive. But design here had transformed a worthy project into an effective one. And everyone on the team, for what many said was the first time, understood exactly what they were doing and what success would look like.

There is often criticism that stories such as this over-emphasize the contribution of design. Many smart people worked on this project and are making it a success as we speak. Design had a pivotal role in creating a coherent vision

and a shared sense of how all the different parts could work together to deliver benefit.

Unexpected Outputs

I am not called a designer at Cisco. My specialism is described as “customer experience.” What this means is that I only occasionally get involved in designing a thing—a product, user interface or interior. And yet I have never done so much design activity in any previous roles.

I draw more than I ever have, but not to sketch a shape or draft a Web layout. I use drawings to help people visualize their strategic decisions—“Is this what you mean?” I help people communicate their perceptions of a solution through drawing to see if we all agree. It’s much more powerful than words, and I have been asked to teach drawing to senior management because they find it so useful.

The principles of an early prototype are vital in the technology world. So many projects waste money by developing what they think people want before they find out that they thought wrong. People find it difficult to believe that you don’t have to build the technology to try it

out. Designers are great at using all sorts of simple techniques to simulate reality (from a fabricated model that looks exactly like a finished product to a Flash demo of a digital experience) that you can put in front of people to find out what they like and dislike long before you have to develop anything real.

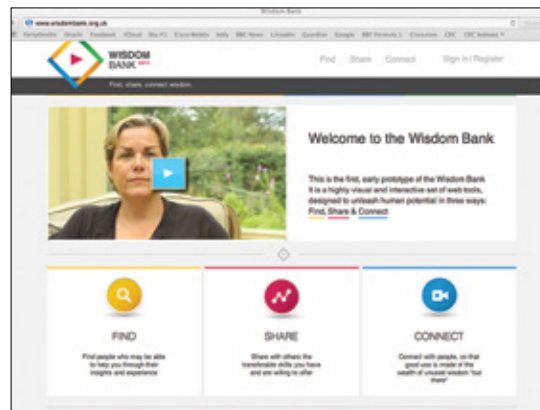
Of course, what every designer wants to do is make the world attractive and beautiful, and the importance of remembering this early in a process means you don't have to put the lipstick on the pig at a later date. You can make sure that everything about the experience is attractive and delightful. So why not design it right the first time, rather than having to do it twice?

For all these reasons, **designers have found their skills applicable to a great many unexpected outputs that don't look like conventional design.** A whole crop of new consultancies has evolved in the UK around service design. Companies like LiveWork, Engine or, in the public sector, Participle, are full of designers designing unconventional things for unconventional clients. Designers design better policing practices, programs to combat obesity and communities in deprived urban locations. Not a split line or radius or font in sight.

For the last few years, I have been working on projects that address our aging population. People are living longer, some affluently, and need to remain independent or receive support for a longer time than previous generations. My first project in this area was in the city of Almere in Holland. This rapidly growing city still retains its original pioneers who first moved onto the reclaimed land (polders) in the '70s. As they live longer, the city wanted to understand how technology might help these people retain their independence and continue to enjoy their city as they grew older.

As a designer, my first reaction was to understand the people better. Interviews and photos made these older residents of Almere real and gave us all insight into their needs, desires and surprisingly open attitude to technology. Making the people real and developing personas changed the attitude of the city planners; they saw their citizens in their own minds and better understood their needs.

In Almere we used video technology to connect two choirs in different parts of the city so they could sing



together, keep fit together and stay connected to their local communities. The results were phenomenal; many physical and mental-health improvements occurred, and the choirs now sing to others around the globe.

In Torfaen, a district in Wales, UK, we aimed our attention at a slightly younger generation

preparing for transitions in their lives as they grow older. Changing jobs, retiring or redundancy are likely transitions in the 55–65 age group. Here our objectives became capturing the knowledge and skills of these people and connecting them with younger people just entering the job market or older people who need care and assistance, or helping them become entrepreneurs and develop new businesses themselves. As a designer, it was my job to create and visualize concepts that might solve these issues. As a result, we created the Wisdom Bank, an online platform where people can upload their wisdom—their accumulation of skills and knowledge, latent and otherwise—and connect with and mentor others.

All the tools of design were needed to create the concepts, visualize them through stories, mock them up and create a prototype that could be tested and improved by user involvement. Showing how understanding your own knowledge and wisdom and helping people collaborate together is probably the most satisfying and surprising design project I have ever been involved in—certainly a long way away from designing mobile phones, toasters or car radios.

We must be careful not to claim too much for design. But every day I experience how design methods and processes that were established in designing artifacts and objects help us make decisions that are better informed about people and their emotions (so important and so ignored in conventional development processes), easier to test and learn from, and easier to adopt, engage with and enjoy. For me, there is no limit to the application of design skills to the smallest or largest issues in the world. These skills can play a huge role in ensuring that the intellectual, economic, strategic, organizational, industrial and technological efforts of mankind will be effective. After all, as the great man said, "There is nothing made by human beings that does not involve a design decision somewhere." n



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