

On Designers, Healthcare, and Sustainability

From battling COVID-19 to fighting to save the planet, designers play a key role

By Robert Grace

edical doctors subscribe to the ethical canon of, "First, do no harm." Industrial designers, on the other hand, have no such singular purpose. But if they did, I suggest it would be to strive to "Improve the human condition." This aspiration is not widely recognized as a stated goal but is implicit in much that designers do.

In addition to seeking to create products, services, and experiences that are accessible to all, including the disabled, the elderly, and the indigent, designers seek to level the playing field and bring comfort, relief, and joy to those who need it.

Nowhere are these lofty principles more needed than in the response of designers to the major issues of sustainability and—especially now, due to the COVID-19 virus pandemic—healthcare.

"I'd like to think," says Chris Livaudais, executive director of the Industrial Designers Society of America (IDSA), "that a lot of us have altruistic missions with our purpose and our talents to affect people's lives in a positive way," and that these actions then also positively impact the planet through a considered use of materials, and the like. The San Francisco-based Livaudais spoke in a March 31 telephone interview from Atlanta, where he and his family had been stranded for a month, unable—due to self-imposed virus-related restrictions—to travel home to northern California.

"I see the occasional calls for designers to push back on

clients, to use different materials, but the reality of that is quite difficult." It's one thing to push a client to use materials that have less impact on the environment or that offer additional qualities, but it often comes down to price. The client has to foot the bill for that, and often they don't want to do it, or simply can't afford to do it. "There's always that duality in play there. That's always the challenge."

And then, Livaudais notes, there also is the question of the consumer's perceptions of given products. What do they want and what are they willing to buy?

Healthcare and the Environment

There's an interesting tension now between the principles of practicing good healthcare and being sustainable. As has been widely documented, a number of U.S. states, other municipalities, and even companies such as Starbucks have postponed or suspended their plans to ban or phase out certain types of single-use plastic products, such as retail carry-out bags—at least temporarily.

It's now being more widely realized—by groceries, restaurants, and politicians alike—that disposable plastics in food-service and food-packaging applications have an important role to play, not only in the battle to minimize food waste, but also in the fight against transmitting the coronavirus. Additionally, hospitals, emergency-response officials, and healthcare facilities currently can't get their hands on enough polymer-

intensive personal protective equipment (PPE) such as gloves, face masks, face shields, medical gowns, and the like to meet demand. Like never before, plastics are showing their chops as a life-saving material.

"It comes down to using the right material for the right purpose in the right setting," Livaudais acknowledged. In a clinical setting, for example, he noted, the properties of plastics are ideal, for lots of reasons.

Keep Sustainability Front and Center

Still, it's important for the plastics industry not to overplay its hand in these critical times. Few doubt the value of plastics in the medical field. But when it comes to the plastics waste generated by packaging and other applications, it remains prudent for industry officials to keep their eye on the larger sustainability question, and to continue to strive toward a more circular economy.

The two executives who gave opening keynote addresses at SPE's virtual ANTEC® 2020 conference on March 30 issued a similar message. Jim Fitterling, the CEO of Dow Inc., and Tom Salmon, CEO of Berry Global Group Inc., stressed how it's a good time, however challenging, to be active in the plastics industry.

Salmon, whose Evansville, Ind.-based company is a

major packaging producer, said: "I think it's a great opportunity for us to tastefully reeducate the world around the power of plastics, and not deal in an opportunistic way, but as a way that's thoughtful that actually reminds people now why plastics has become such an indispensable part of everyone's life." Education, he suggested, is going to play a big role.

Both CEOs have been, and continue to be, outspoken on the topic of plastics sustainability, and both their companies are founding members of the global Alliance End Plastic Waste (www. endplasticwaste.org).

Fitterling noted that the COVID-19 crisis is going to end. "But the air we breathe, our water, and the land we live on is here forever. And we can't afford to lose the momentum that we've started to gain already to safeguard the environment and help us move to a more circular economy, he told attendees listening in on his talk.

U.N. Sustainable Development Goals

While keeping an eye on the environment, consider also the United Nations Sustainable Development Goals (SDGs). Some 193 countries agreed to these goals after three years of negotiations and debate, U.N. Secretary-General Ban Ki-moon announced in September 2015.

These SDGs provide a framework of sorts for the work of designers, engineers, companies, and nations going forward in the effort to generally improve the human condition.

They set an ambitious target date of 2030 for tackling a range of issues, from addressing climate change, protecting the environment, and eradicating poverty and hunger, to generally advancing equality, education, and justice.

The 17 SDGs-part of a wider 2030 Agenda for Sustainable Development-build on the U.N.'s initial Millennium Development Goals. Those eight MDG goals, set by the United Nations in 2000, aimed to eradicate poverty, hunger, illiteracy, and disease, but expired at the end of 2015.

"They set outrageous goals, to see how far they can reach," notes Dr. Lorraine Justice, professor of industrial design and dean emeritus at the Rochester Institute of Technology's School of Design. She has been monitoring the U.N.'s actions on this front closely for some time

As the U.N. describes it, there are "the 17 sustainable development goals to transform our world" (see Figure 1).

SUSTAINABLE GALS DEVELOPMENT GALS

































These 17 United Nations Sustainable Development Goals, adopted in 2015, have become a touchstone for many companies and designers as they develop strategies and new products. Courtesy of United Nations

Justice attended the past two World Economic Forums in Davos, Switzerland, and at the January 2020 event noticed a stronger focus than ever on those topics. "I was surprised by the visibility of the 17 SDGs referenced in many of the talks," she said in a recent interview. "Last year was [all about] bitcoin; this year it was SDGs."

For designers, the Sustainable Development Goals "can be daunting," she acknowledges. "But you can parse it



and do something about specific SDGs. "Designers and students are all aware of it. It's impacting choices that designers make about materials.

Corporations Are Buying In

Many plastics companies are incorporating the U.N.'s goals into their broader strategic objectives.

DuPont Co., for example, states: "We are using the U.N. Sustainable Development Goals as a guiding set of principles to understand what the world needs action on now. Through this commitment, we intend to shift our innovation processes to purposefully drive towards solutions that address the global challenges included in the U.N. SDGs. We are not simply looking to map our portfolio to the themes identified in the SDGs, but to proactively and intentionally use the SDGs as inspiration and to drive decision making and investments in our innovation processes."

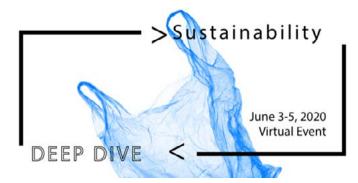
Germany's Covestro AG says: "We have set ourselves the following goal: Our project portfolio is aligned with the United Nations Sustainable Development Goals. By 2025, 80 percent of our research and development project spending will be targeted in areas that specifically contribute to achieving the SDGs, either in partnerships with or endorsed by recognized institutions."

Many other firms also are paying attention to the SDGs and to the related challenges they represent. But it's clear that more work needs to be done, and more assistance also must be offered to designers and other creatives to help drive the desired change.

IDSA's Sustainability Deep Dive

To that end, the IDSA design group is turning a spotlight on the environment with a focused, three-day conference called "Sustainability Deep Dive 2020."

Set for June 3 to 5, each day will be devoted to a singular



Courtesy of IDSA

theme-strategy, process, and product experienceaccording to the event's organizers, Jason Belaire and Stephan Clambaneva.

Belaire, founder of Denver-based Belworld Creative Inc., and IDSA's incoming chair for 2020 to 2024, is focused on the crucial role that industrial designers can play in bringing the vision of circularity to life. On April 1, Belaire was part of a Sustainable Brands panel titled "Embedding Sustainability in the Design Process." And last August he conceived and pitched the concept for this new Deep Dive event to the IDSA board.



Jason Belaire conceived and launched IDSA's first "Sustainability Deep Dive" conference. Courtesy of IDSA

The former executive director and part owner of Denver Design Week, Belaire has worked since then on the program with Clambaneva in New York.

Recently reelected to the IDSA board, serving as director of the group's Special Interest Sections, Clambaneva is principal and founder of iD8trs LLC. He worked for 20 years for tech giant IBM Corp. as its environmental product lifecycle management champion and enterprise leader Dassault Systèmes as design innovation director

for the firm's design studio. He's been deeply involved in environmental issues for more than two decades, dating back to 1999 when he presented a paper at the International Conference on Engineering Design (ICED99) on how best to educate designers and engineers on environmental issues.

When it came to developing the content and recruiting speakers for the Deep Dive event, Belaire and Clambaneva also partnered with Farrell Calabrese, Eastman Chemical Co.'s strategic initiatives manager for global sustainability, and Shujan Bertrand, founder of culinary design company Aplat Inc.

"We need a balanced, holistic approach" to addressing the so-called triple bottom line of people, planet, and profit, Clambaneva stresses. This will involve leveraging all available tools, including biomimicry, designing for circularity, biomaterials, recycling, reusability, compostability, and more.

This first-time Sustainability Deep Dive originally was due to be held in Denver but now. as with so many other events, the physical gathering has been cancelled and instead will take the form of a virtual conference online. Clambaneva will co-

emcee the proceedings with Debera Johnson, who recently returned to her role as professor of industrial design at Pratt Institute in New York, after founding the Brooklyn Fashion + Design Accelerator in 2013 and chairing the ID program at Pratt from 1998 to 2005.

Johnson first started teaching about sustainability 18 years ago. "There was little excitement about sustainability then; it was considered more a pain in the butt," she said in a March phone interview. She founded the Pratt Design Incubator for Sustainable Innovation in 2002, but initially, she recalled, "it was a slow go."

Then, in 2006, former Vice President Al Gore's Oscarwinning environmental documentary about global warming, "An Inconvenient Truth," was released, and two years later Johnson founded and directed the Center for Sustainable Design Studies at Pratt.

SDGs: A Guide for Critical Thinking

The tide has turned, and "people want it now," she says of knowledge about this topic. For designers, the U.N.'s SDGs are "a sort of scoresheet for critical thinking" on a given topic, and they help to promote the previously mentioned and much-needed systems approach.

Leadership in this area is critical, according to Johnson, who notes that it's important to get finance directors and others in the C-suite involved in the sustainability conversation. This, notes Clambaneva, is why it's vital

to demonstrate how "being green" can not only address the growing eco-interests of one's customer base, but also help to drive profitability.

The organizers in early April were still putting the finishing touches on the Deep Dive program, but confirmed speakers include RIT's Lorraine Justice, as well as Noah Murphy-Reinhertz, Nike Inc.'s sustainability design lead; David Dombrowski, director of industrial design and innovation for pharma giant GlaxoSmithKline plc; Jasmin Druffner, an industrial designer and durable packaging developer with the circular shopping platform Loop; and many others.

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—Stephen Clambaneva

While dealing with the coronavirus obviously is the top priority for all now, it's clear that sustainability must remain a vital aspect of nearly every company's agenda going forward. IDSA's planned Deep Dive will help organizations learn more about how to define a companywide initiative related to circular design, sustainability, or zero waste, while also offering guidance on available eco-design toolkits, lifecycle analysis options, emerging materials, and how best to apply the U.N.'s SDGs

to your own business, among other topics.

In doing so, chances are you can take your own modest steps to join designers in striving to improve the human condition.

For more information about the U.N.'s SDGs, go to: www.un.org/sustainabledevelopment/sustainabledevelopment-goals

For more about IDSA's Sustainability Deep Dive conference, go to:

www.idsa.org/events/deep-dive/sustainability-deepdive-2020

ABOUT THE AUTHOR

Robert Grace is a writer, editor and marketing communications professional who has been active in B2B journalism since 1980. He was founding editor of and worked for 25 years at Plastics News, serving as editorial director, associate publisher and conference director. He is now both editor of SPE's Journal of Blow Molding and a regular contributor to various outlets. A long-time member of the Industrial Designers Society of America, he runs his own firm, RC Grace LLC, in Daytona Beach, Fla., and can be contacted at bob@rcgrace.com.

