

I first spoke at the United Nations many years ago as a lawyer and policy maker. As the leader of the NGOs in the development of Article 30 of the CRPD, we spent much of our time advocating for equality, equal access and to be treated the same.

Today, however, I speak to you as an inclusive designer. And my message, ironically is this: If we want to find the best innovations – in terms of advancement, adaptability to change, monetary value, and inclusion, we need to step back from our policies and standards. And rather than focusing on treating people with disabilities the same, we need to embrace their differences.

Take out your phones. This is one of the most ground breaking instruments that we use today. What are the key components? The screen. The keyboard. Voice recognition. Gesture recognition. What are some of its main capabilities that it affords? Email. The ability to call people. Text messaging. It even acts as a remote control.

These advances, which led to vast leaps forward in innovation, resulted from inclusive design. This is NOT universal design which refers to making one thing as accessible to as many people as possible. Often when we do this, we sacrifice the effectiveness of a solution because we are trying to do everything with one thing. Rather, inclusive design's goal is to embrace the differences that an individual with a disability presents, to study them and to use these differences to inform a new solution. Then, to extend this new solution to many – those with and without disabilities. It also recognizes that for an effective solution we often must build a variety of ways to create and access an experience or product.

Why is inclusive design so powerful to smart city design? The demographics of cities will be different tomorrow. Technology will be different tomorrow. We don't know what will exist and we don't know how people will interact with technology in the future. Yet, it often takes us 10 or more years to get a policy passed that outlines the standards we should be designing around such as the European Standards ETSI EN 301 549 and the WCAG. How can a policy that began to be written 10 years ago embrace what is possible in technology and needed in our cities TODAY?

Designing for uncertainty, for a different tomorrow, means we need to build adaptability into our solutions. **Adaptability results from embracing extremes and difference, not from designing around average. Our car seats are adaptable because we can move them forward for smaller people and back for bigger people.** This will enable us to adopt solutions that will accommodate the inevitable way we will change in how we interact with the world due to advances in tech. Such as how headphones make us momentarily deaf to the world around us or how being engrossed in our phones make us momentarily blind to the obstacles in front of us.

Importantly, as Kat Holmes, Microsoft's former Design Director stated, "inclusive design studies human relationships, observes ways to bring things together to complement each other and build collective accomplishments." Just like a city, inclusive design focuses on interdependent systems.

Universal design and the policy standards we create often ignore one of the most significant guiding principles in the disability rights movement – “Nothing about us, without us.” This is because designers think that they know how to design for disability because they have standards to refer to. As a result, they also fail to involve people with disabilities in the process. Yet designing beyond these minimum standards is where real value lies. This is why organizations like Microsoft, IBM and Adobe are investing in employing inclusive design methods to actively insert people with different abilities in their design processes to co-design with them. It does not assume that the designer knows the answer but rather recognize that people with disabilities are experts at understanding their own needs. And that they are some of our most talented problem solvers because they have spent their entire lives solving for the problems that they face daily because their world is not designed for them.

How do we begin?

- Insert inclusive design NOW. This will save you lots of money in the form of retrofitting solutions.
- Encourage educational institutions to teach inclusive design methods in all curriculums. It has origins from Human-Centered Design and is just as valuable.
- Actively target and increase the number of designers with different abilities.
- Include “Exclusion Experts” on your teams. This is NOT a task force or advisory council. These are people who test prototypes or existing conditions in person and in the context in which they exist.
- Open source designs and target disability communities.
- Incentivise contracts which apply inclusive design methods and actively include co-design approaches
- Get leadership buy in in your cities and shift the culture within your organizations and governments.

Policy and standards are important for holding companies and products legally accountable. But immense value lies in looking beyond these standards and outfitting our designers with a methodology that actively inserts people with different abilities into the process and that embraces the richness of difference.

Thank you.