Inclusive Design
Thinking beyond accessibility

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We all have one thing in common

We want to make a positive impact on as many people as possible
Inclusive Design is...

Planning considerations to ensure that a product, service and/or environment is usable by everyone to the greatest extent possible.
Based on Universal Design

Ronald L. Mace  Slewyn Goldsmith  Patricia Moore

Founded and pushed the idea of universal design in the architecture and design of public spaces. Lowering barriers to make those spaces as usable by as many people as possible.
The sloped curb is a result of barrier free/universal design. It helps those with accessibility issues, but also beyond. Parents with strollers, delivery people, even people distracted by a text on their cellphone.
Thinking beyond accessibility

Inclusive Design encompasses accessibility issues, as well as, the wider range of human differences.
10 Principles of Inclusive Design

1. Be Equitable
2. Be Flexible
3. Be Straightforward
4. Be Perceptible
5. Be Informative
6. Be Preventative
7. Be Tolerant
8. Be Effortless
9. Be Accomidating
10. Be Consistent

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bit.ly/IDXPrinciples
Four Pillars of Inclusive Design

I. No user is average
II. Every user deserves equal access
III. Provide understandable content for every user
IV. Every user deserves our trust and respect

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I. No user is average
In 1952 the Air force had a problem, their new jets were not performing well. The issue? The cockpit was designed for the "average" pilot, for someone who did not exist. It was not until they designed to accommodate the actual differences of pilots did performance improve.
The Myth of Average

"If you design for the average, you are literally designing for nobody."

- Todd Rose

bit.ly/IDXAvgMyth
The average user does not exist

Building for the "average user" is the same as building for no user. Every user has a unique difference.
Plan beyond the average user

Planning for unique users (outliers) and their differences, means capturing everyone in between.
Create personas with limitations

- "Has red-green colorblindness"
- "Has a broken wrist due to a skiing accident"
- "Does most work while traveling"
II. Every user deserves equal access
45% of internet browsing is from desktop

Data Source: gs.statcounter.com/platform-market-share/desktop-mobile-tablet

Only a few years ago we were asking clients if they wanted a mobile site. Now we tell them they need a responsive site. The market changed. The same thing is happening for accessibility, we need to tell clients they have to plan this way.
Structure in a way that makes sense

- Use semantic markup, bit.ly/IDXSemBBC
- Use progressive design to deliver experience
- Prioritize what needs to be loaded
Google does not care about how your website looks. They care about the markup and being able to read your content in the correct order. As do people with screen readers. If you plan for them, then you plan for better SEO.
Average global internet speed: 6.3Mbps

Republic of Mali: 0.5 Mbps
South Korea: 26.3 Mbps

Data Source: www.fastmetrics.com/internet-connection-speed-by-country.php#top-10-comparison

If you just build for South Korea, people in Mali are going to have a poor experience. However, if you plan and build for people in Mali then everyone is going to have a positive experience.
Artificially limit yourself

- Use tools to throttle connection
- Disable JavaScript
- Can you navigate without a mouse?
III. Provide understandable content to every user
The *boston.gov* website was redesigned and the content was reorganized with real users in mind.
"The website should act like a helpful human. This is one of the big differences between the old site and the new site... on the old site, it would feel like you were interacting with some sort of lawyer-robot that was speaking to you in government-speak"

Jascha Franklin-Hodge, the city’s chief of information technology

Source: The Boston Globe
Be clear and direct

- Use simple phrasing and avoid jargon
- Pay attention to font, spacing, line length
- Be meaningful, tools to check readability
Hemingway App makes your writing bold and clear.

The app highlights long, complex sentences and common errors; if you see a yellow sentence, shorten or split it. If you see a red highlight, your sentence is so dense and complicated that your readers will get lost trying to follow its meandering, splitting logic — try editing this sentence to remove the red.

You can utilize a shorter word in place of a purple one. Mouse over it for hints.

Adverbs are helpfully shown in blue. Get rid of them and pick verbs with force instead.

Phrases in green have been marked to show passive voice.

You can format your text with the toolbar.

Paste in something you're working on and edit away. Or, click the Write button to compose something new.

Tools like hemingwayapp.com can help you write clear, direct and meaningful content. A readability score of "Grade 6" means the content is engaging enough for advanced users, but clear and inviting enough for new users.
Inform and guide

- Display useful error messaging
- Plan a user's journey
- Provide contextual relations
The boston.gov website feature contextually linked sections such as street cleaning and tow lots.
IV. Provide every user with trust and respect
Inclusive Design: Excluding no gender

"The easiest way to do inclusive design? Stop asking about gender!"

- Sarah Leren

bit.ly/IDXGender
Drupal.org give users multiple options on how to identify their gender, or not select an option at all.
Collect only the information you need

- Ask "Why do we need this data?"
- Ask "What options can we give users?"
- Ask "Why should users give this to us?"
Pintrest not only gives users options, but also explains to the user why they collect gender information.
Be responsible with data

- Explain how the data is used
- Explain how the data is protected
- Give users control of their data
Four Pillars of Inclusive Design

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*If we agree to these four pillars when building our applications, then we have to think differently.*
We make a positive impact on as many people as possible

And if we follow the four pillars, then we will reach a wider audience.
Resources

bit.ly/NJCampIDX  
This presentation

bit.ly/IDXPrinciples  
10 Principles of Inclusive Design

bit.ly/IDXSemBBC  
BBC Semantic guidelines

bit.ly/NJCampIDXSlides  
Presentation Slides

bit.ly/IDXAvgMyth  
The Myth of Average

bit.ly/IDXGender  
Inclusive Design: Excluding No Gender
Thank You!
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