

Designing for Diversity: One Size Fits One



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Inclusive Design

- Design that considers the **full range of human diversity** with respect to ability, language, culture, gender, age and other forms of human difference.
- Design: Purpose or planning that exists behind an action, fact, or object. (Oxford dictionary)
- We are all designers



The Future of Work

Reconsidering **HOW** we work in a digitally connected world

Weighing the benefits and risks

- Remote work
- Online, real time collaboration
- Cryptocurrencies
- Machine learning / AI
- Online forms & applications

What is the impact on

- Hiring processes
- Performance review processes



The Three Dimensions of Inclusive Design

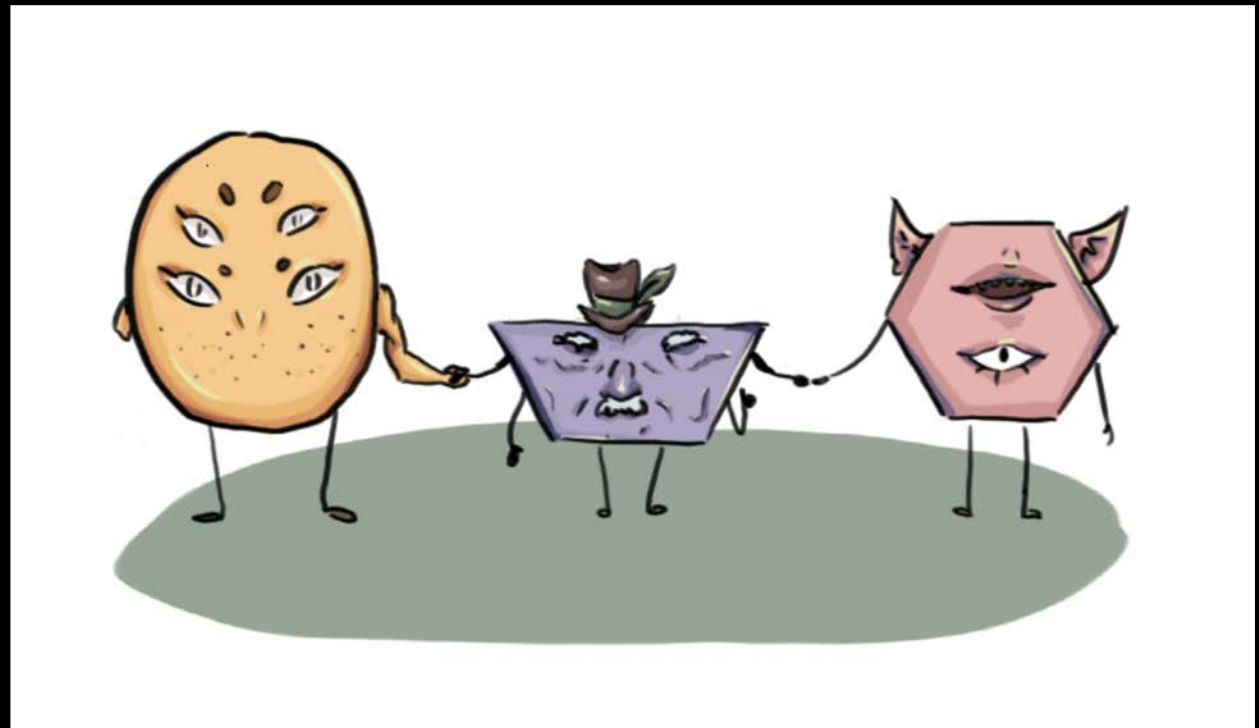
1. Recognize, respect, and design for **human uniqueness and variability**.
2. Use **inclusive, open & transparent processes**, and **co-design** with people who have a diversity of perspectives.
3. Realize that you are designing in a **complex adaptive system**.



Dimension ONE

Recognize, respect and design for human uniqueness and variability.

- The single defining characteristic of disability is difference
- Average is an artificial construct (Todd Rose *The End of Average*)

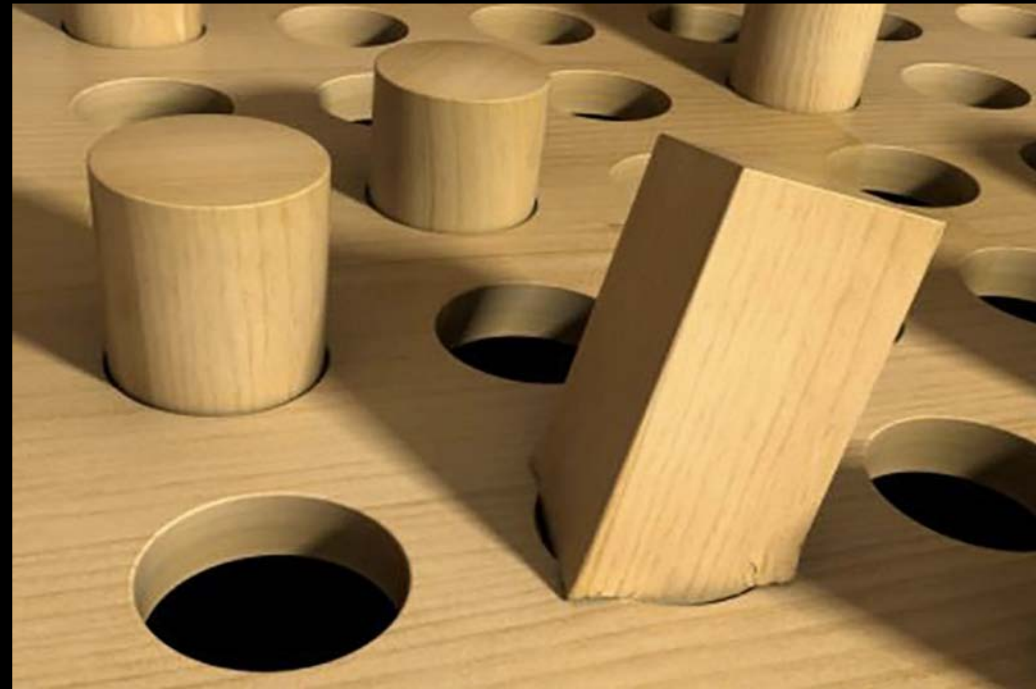


What is typical? Are you typical?

Dimension ONE

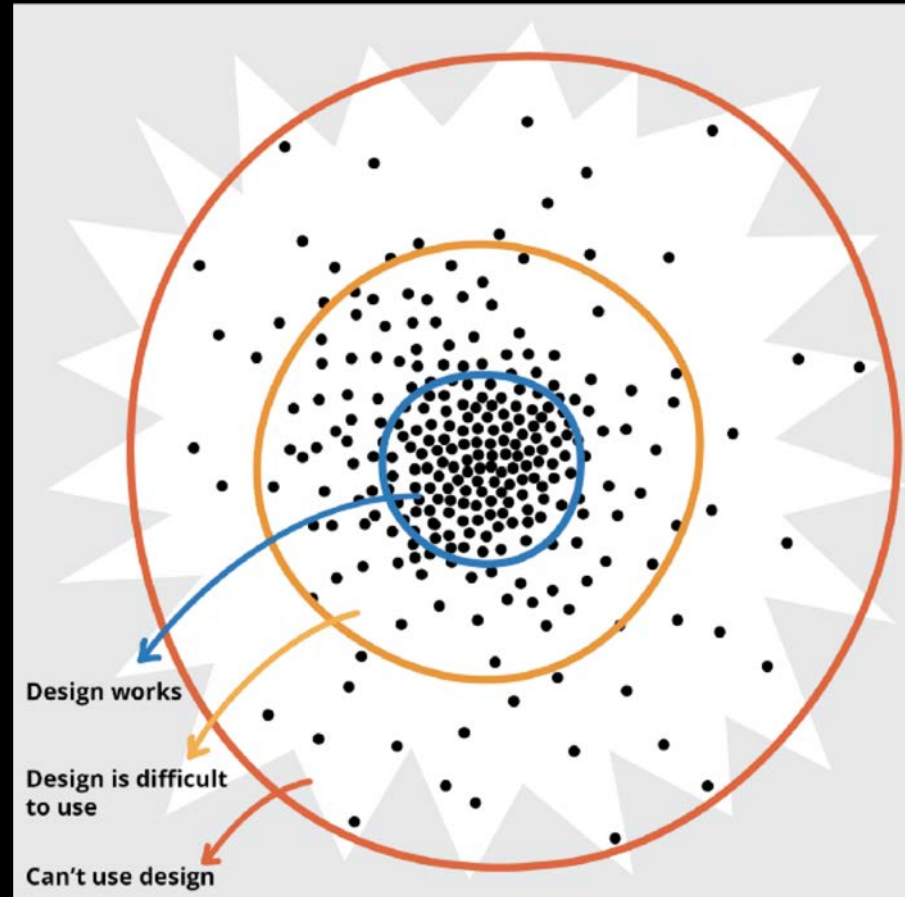
Recognize, respect and design for human uniqueness and variability.

- Consider disability as a **mismatch**
- Consider that many disabilities are invisible, episodic, or situational



Dimension ONE

Recognize, respect and design for human uniqueness and variability.



Dimension One

Recognize, respect and design for human uniqueness and variability.

The “Curb-cut” effect



If we design for the margins, everyone benefits



Nike Flyease



OXO sippy cup

“If we understand what the extremes are, the middle will take care of itself.” Dan Formosa (Smart Design)

Personal Adaptation



Dimension ONE

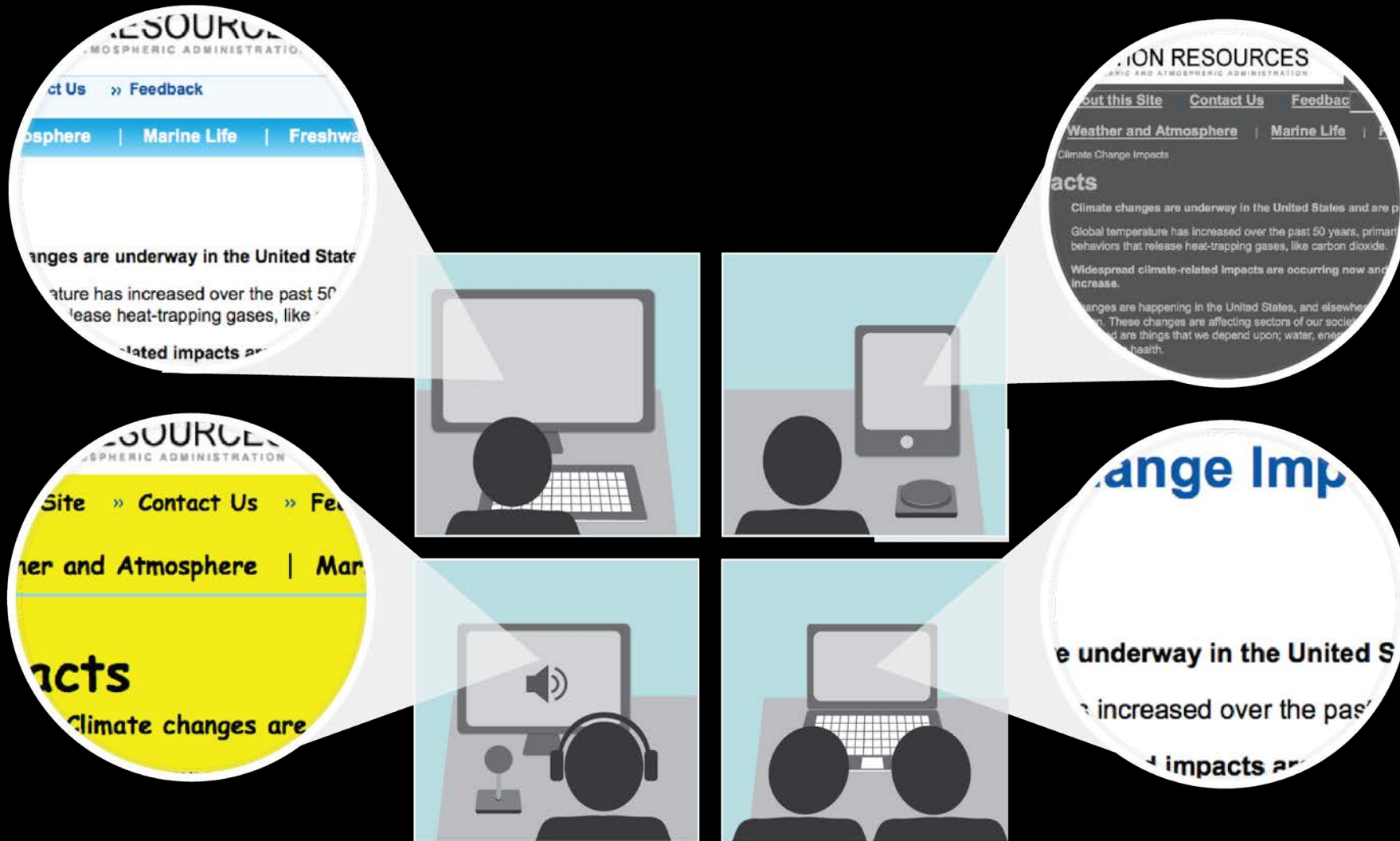
Recognize, respect and design for human uniqueness and variability.

One-Size-Fits-One

Configurations that can be **optimized to each user** and **stretch out to the edges** of our human scatter-plot of needs and characteristics.



One Size Fits One Example: User-Interface Options



Dimension Two

Inclusive, open & transparent processes + Co-design

Transparency is essential to inviting participation...



but it does not ensure access or inclusion.

Dimension Two

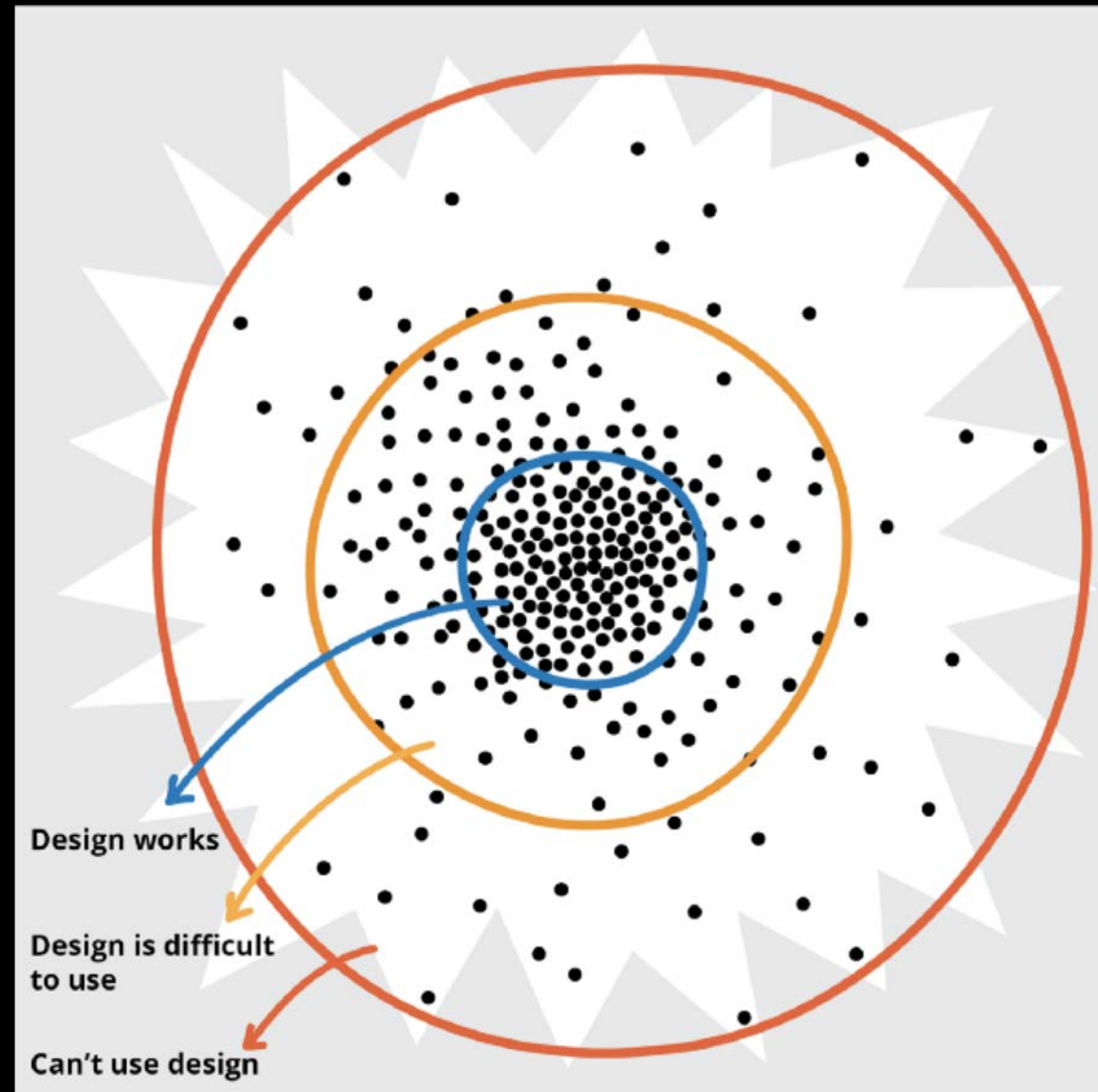
Inclusive, Open and Transparent Processes + Co-design

Co-design = “Nothing about us without us” = good design practice

- Include those who have difficulty using your design (starburst)
- Who is missing from the table?
- How can we make our “table” more inclusive?
- No such thing as “end-users”



Include those who (might) have difficulty using your design

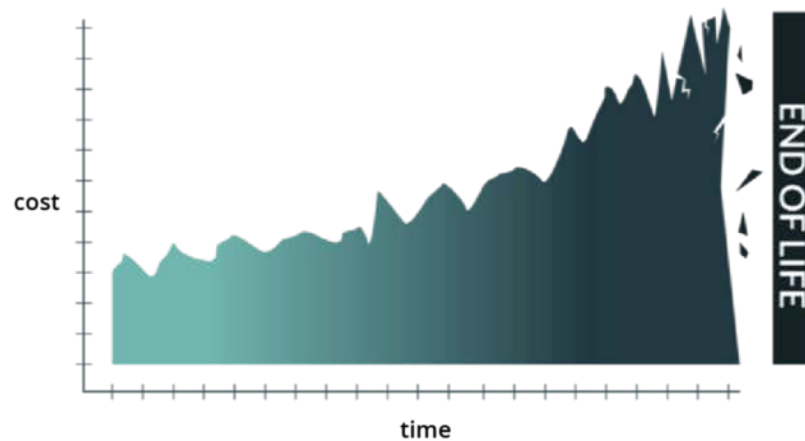


Dimension Two

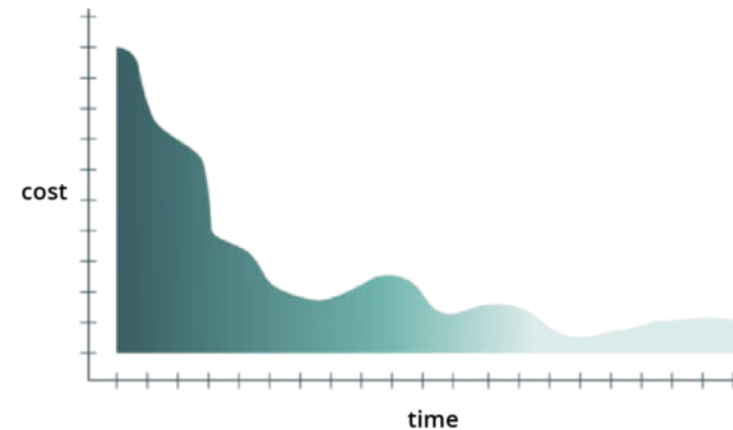
Inclusive, Open and Transparent Processes + Co-design

Unlearning the 80/20 rule

Plan for the Centre

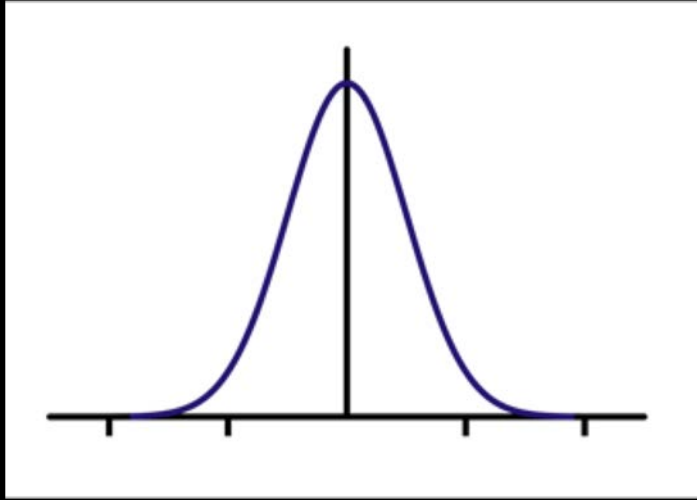


Plan with the Edge



If you want the best design, ask strangers to help – Jutta Treviranus, Medium.com, Feb 13, 2018

Status Quo



- Design for the majority
- Design for the average
- Design for the 80%

“It’s too expensive to design for the margins / the 20%”

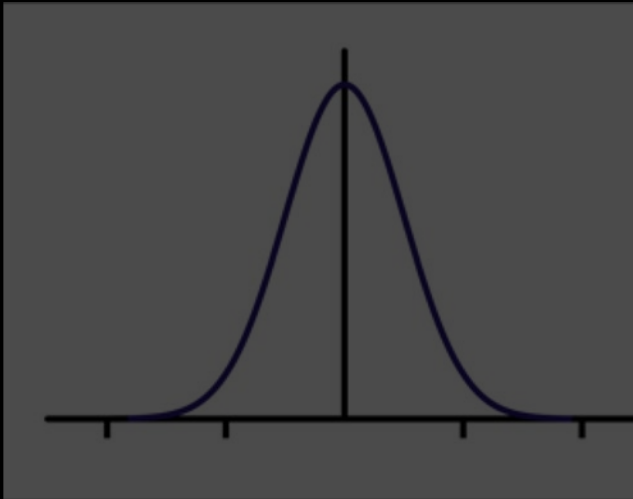
2 Extremes



- Highly specialized, segregated or custom solutions
- Unaffordable for most

“There’s no market for this”

Inclusive Design



Design solutions that are:

- Flexible
- Adaptable
- Personalizable
- Inter-operable



- Design for the majority
- Design for the average
- Design for the 80%

“It’s too expensive NOT to design for the margins / the 20%”

- Highly specialized, segregated or custom solutions
- Unaffordable for most

“There’s a market for this!”

Dimension Three:

Realize that you are designing in a complex adaptive system

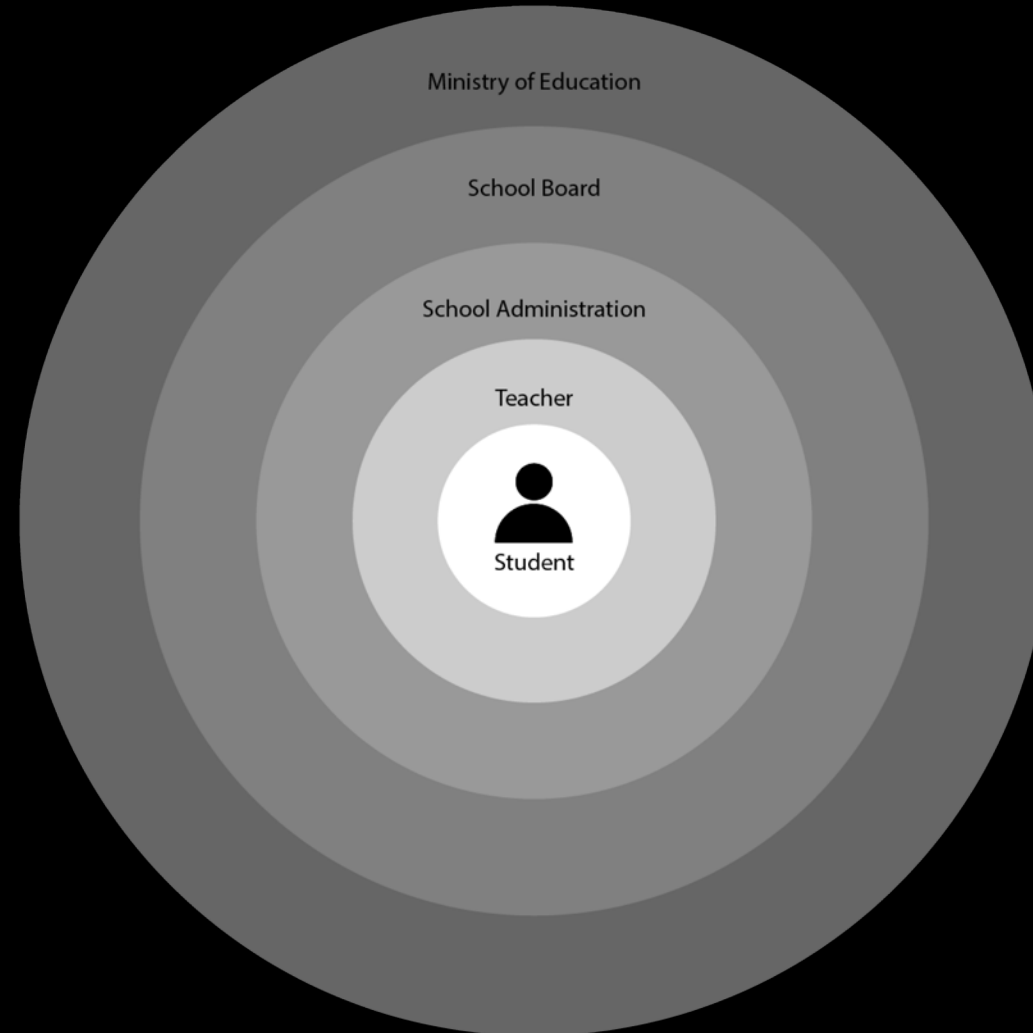
The Inclusive Design Paradox

- Inclusive design must hold and support both diversification and cohesion
- We speak of
 - one-size-fits-one but also of non-segregated solutions
 - maintaining interoperability while adding multiple configurations
- Navigating the paradox is the third dimension of inclusive design

Dimension Three:

Realize that you are designing in a complex adaptive system

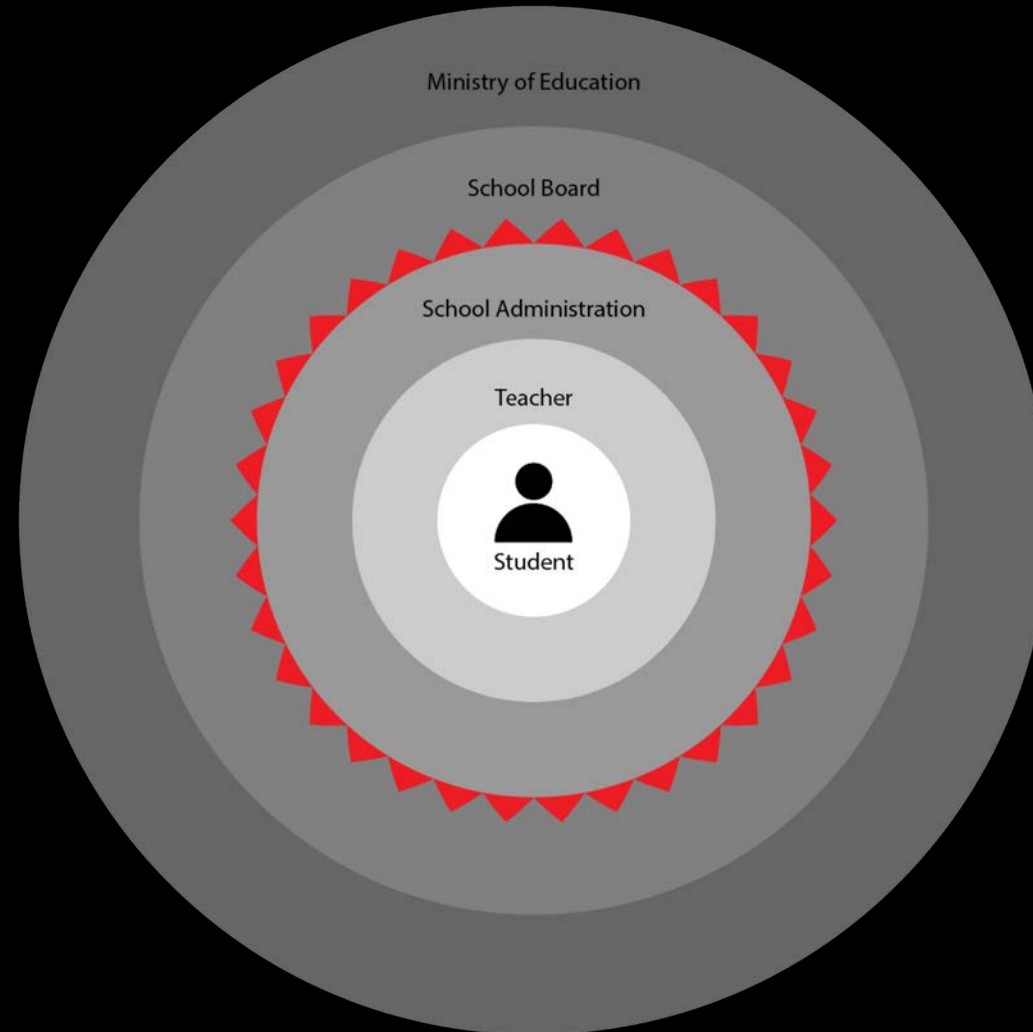
Nested Systems
Example:
Education System



Dimension Three:

Realize that you are designing in a complex adaptive system

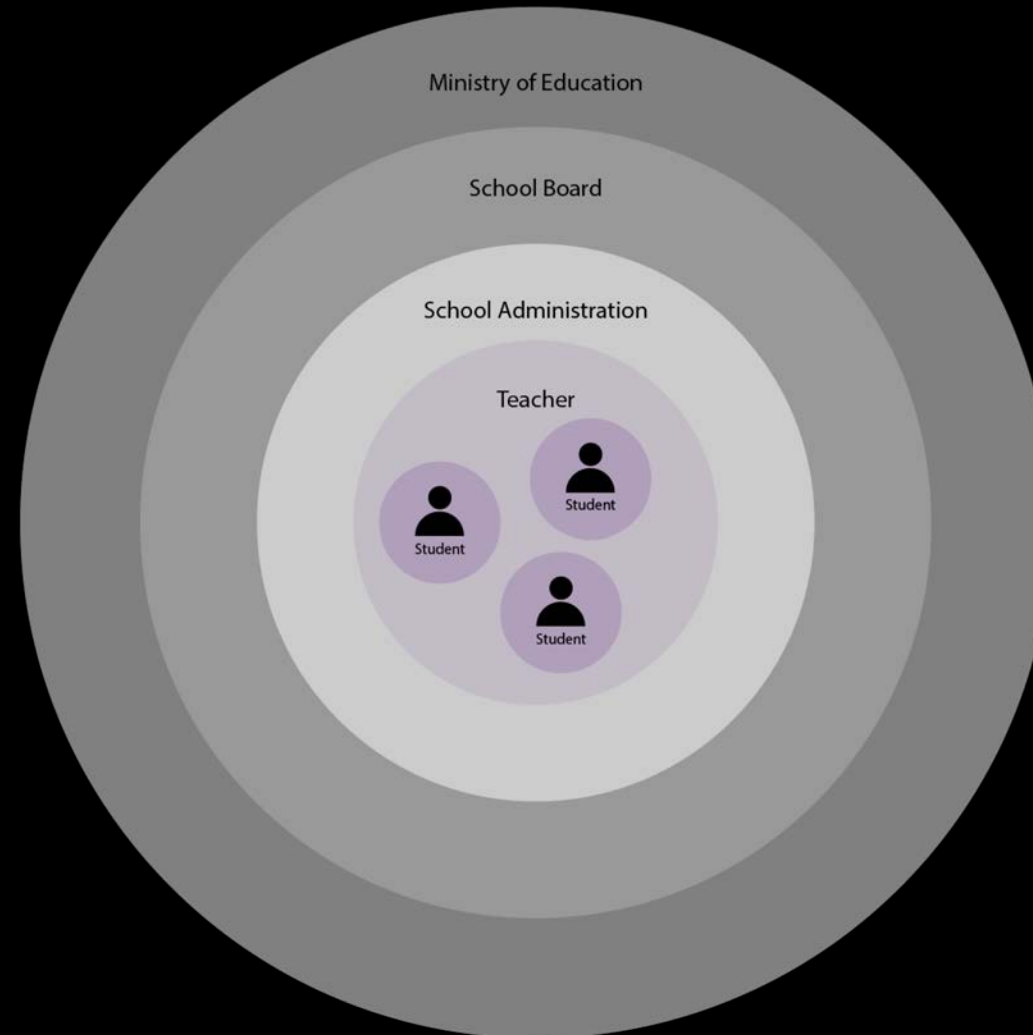
Point of Friction



Dimension Three:

Realize that you are designing in a complex adaptive system

Greater usability for all students

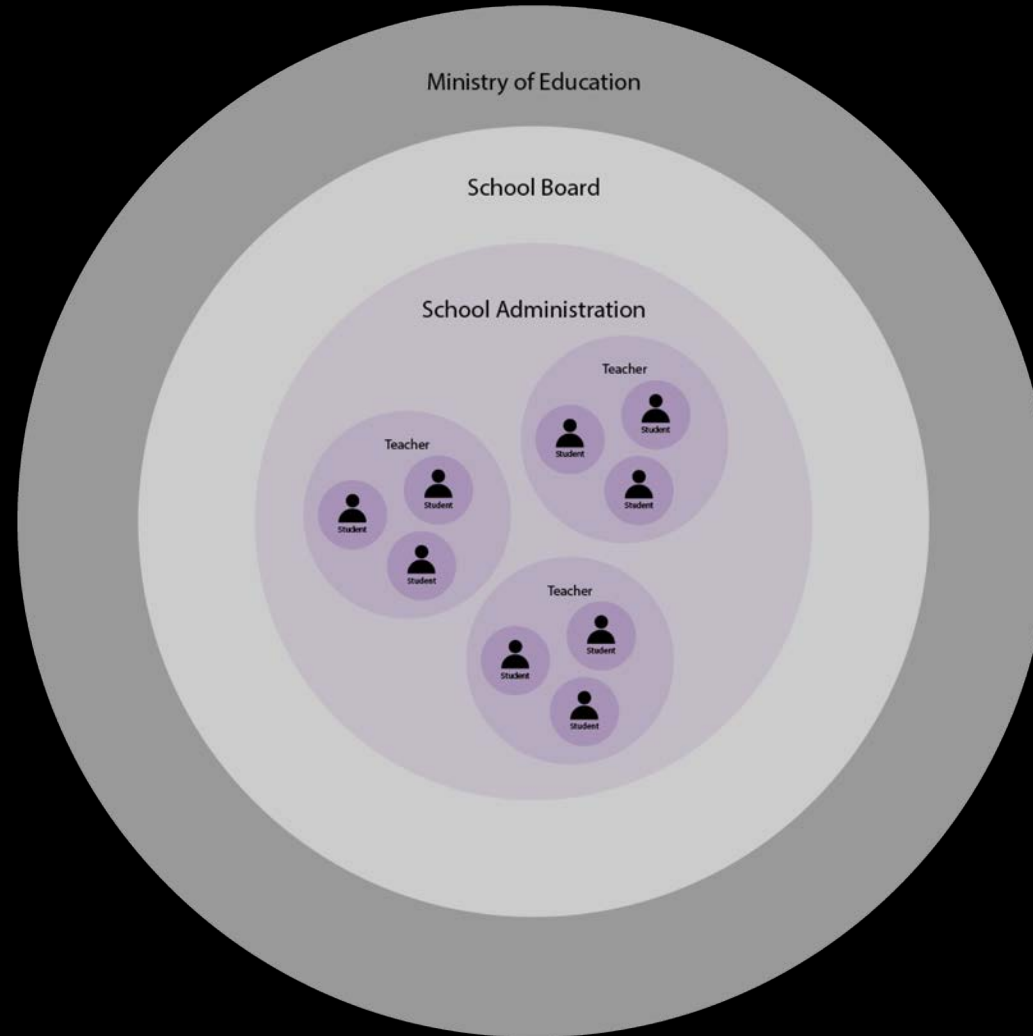


Students can augment and edit resources

Dimension Three:

Realize that you are designing in a complex adaptive system

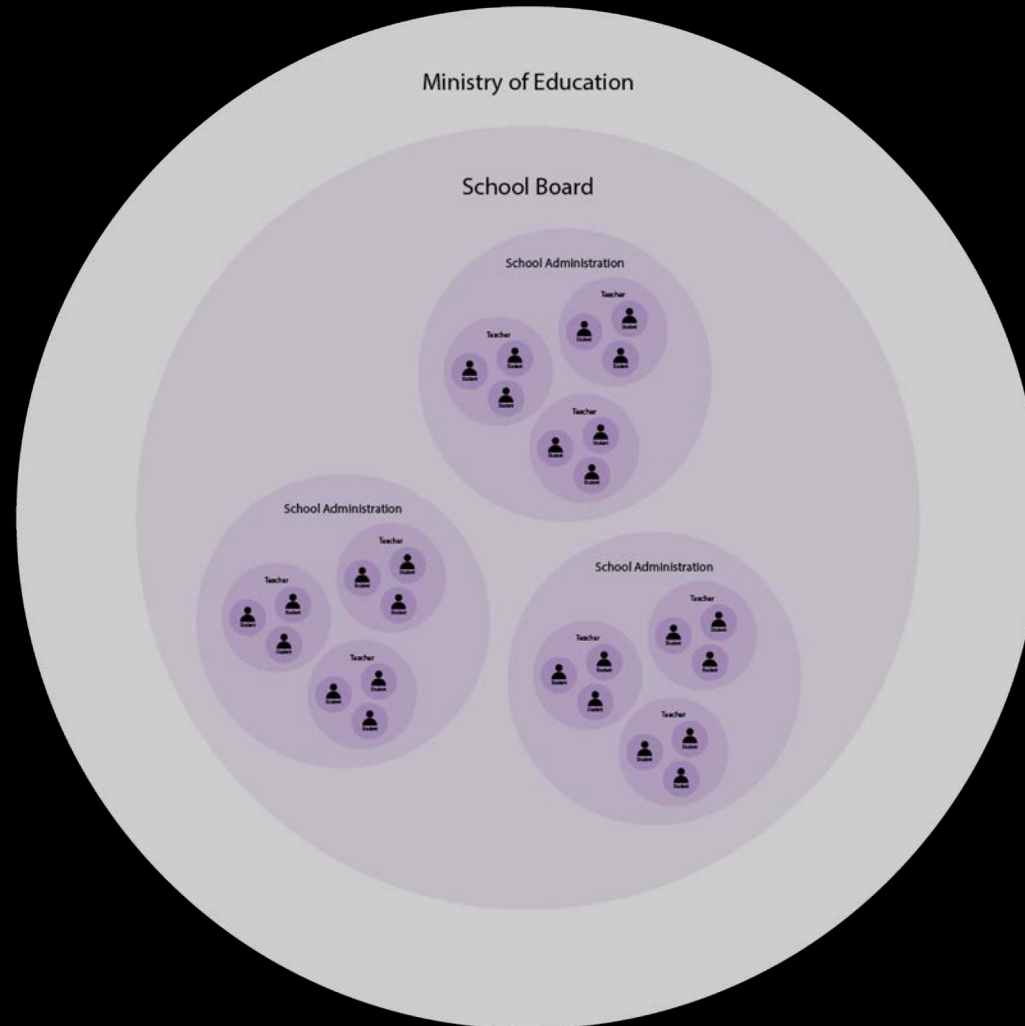
More flexibility for teachers



Teachers can translate, localize, augment and update

Dimension Three:

Realize that you are designing in a complex adaptive system

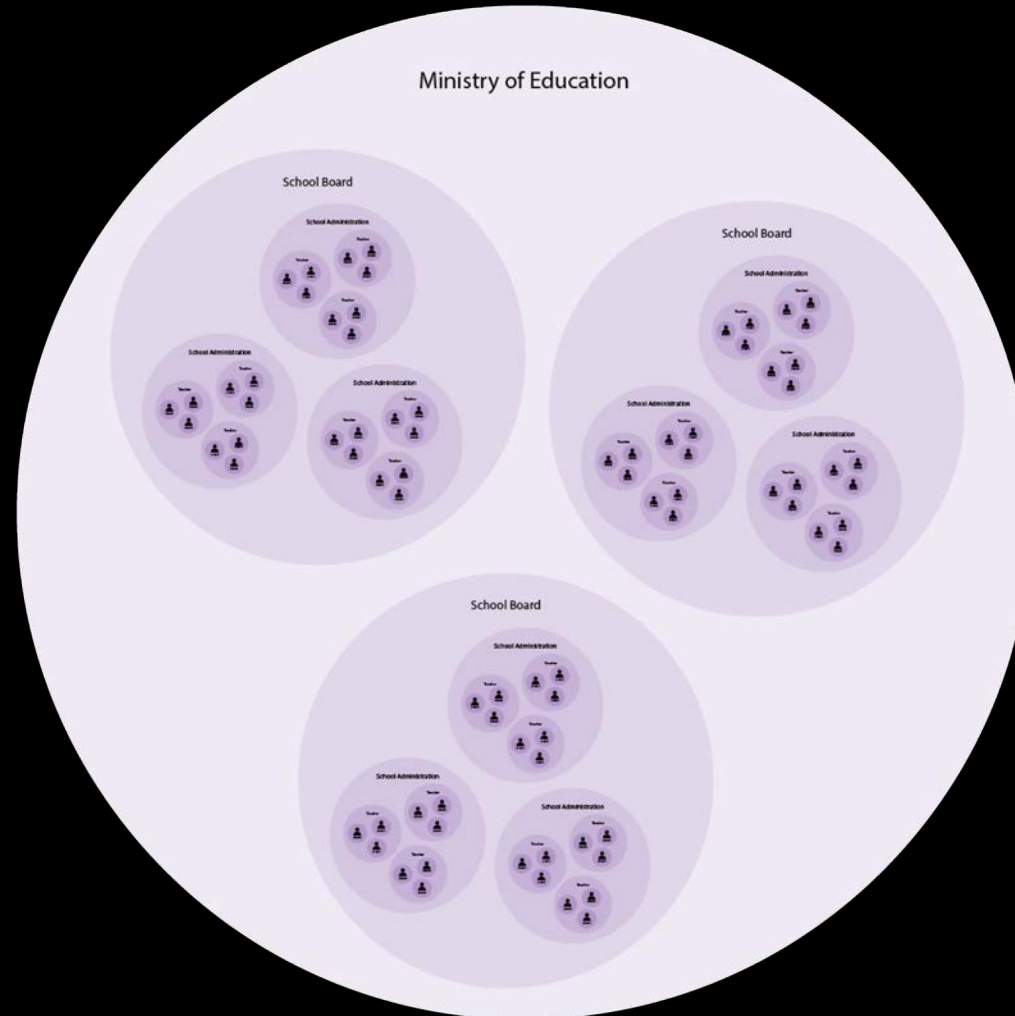


Dimension Three:

Realize that you are designing in a complex adaptive system

Greater usability,
innovation,
sustainability,
resiliency and agility
for the entire
education system.

System is more
prepared for change



Some notes on adaptation and personalization

1. One-size-fits-one = optimal fit for the goal

- It doesn't necessarily mean a comfortable fit.

2. Not Segregated or Separate

- A solution separate from the general market will cost more, be less interoperable, require special training and separate maintenance.
- Interoperability is a critical factor in the entangled, quickly evolving, complex networks that we depend upon, and a separate solution soon becomes orphaned and incompatible.

3. Enabling Smarter People

- If smarts are used to learn and adapt to what each individual requires, we need to make sure that the intelligence we gather should make the person smarter about their unique needs
- Requires transparency regarding choices made and the reasons for the choices.

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Where to Begin?

- What can I do today? Tomorrow? Next month? Next year?
- A utopian vision?
- Small group discussion



Platform Co-operativism

- A growing international movement that builds a fairer future of work.
- Brings together the rich heritage and values of worker-run co-ops (democratic ownership) with emerging Internet technologies
- Making good on the early promise of the Web to decentralize power
- Platform co-ops allow households with low and volatile income to benefit from the shift of labor markets to the Internet.
- IDRC is working on a project to explore the development of a platform co-op to support care-givers and those they work with.

Thank you



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Resources

- Inclusive Design Guide <https://guide.inclusivedesign.ca/>
- Inclusive Learning Design Handbook <https://handbook.floeproject.org/>
- <https://floeproject.org/>

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- Slide 2 - <https://www.heinzmarketing.com/2013/07/how-to-work-with-a-remote-consultant-agency-or-partner/>
- Slide 3 - <https://medium.com/@jutta.trevira/the-three-dimensions-of-inclusive-design-part-one-103cad1ffdc2>
- Slide 4 – Grace Lei, Kathy Luc in collaboration with IDRC, Inclusive Design OER (W.I.P.)
- Slide 5 - <https://internetretailing.net/marketing/the-personalisation-mismatch-shoppers-want-customisation-and-service-but-brands-offering-discounts-17440>
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- Slide 10 – courtesy of Inclusive Design Research Centre
- Slide 12 - <https://medium.com/physiatry/hugh-herr-discusses-bionic-limb-technology-highlights-from-his-reddit-ama-96e00770a585>
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