

Sustainability at Steelcase Toward a Circular Economy

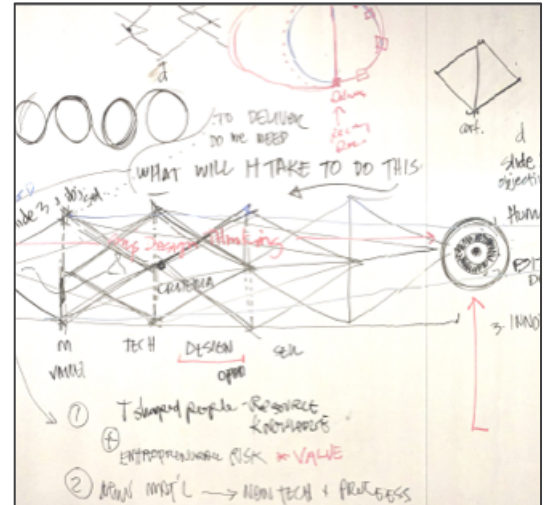
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Director, Global Sustainability

Bruce Smith

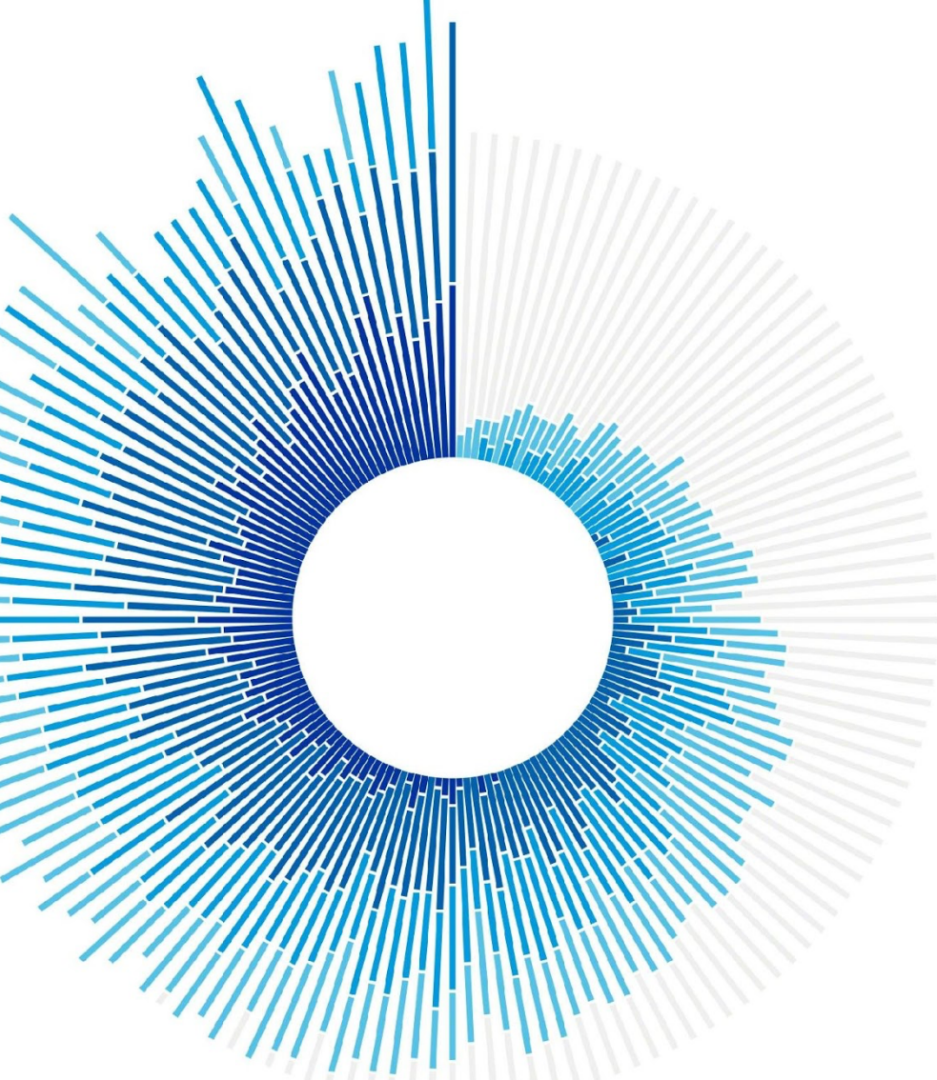
Director, Global Design

Steelcase



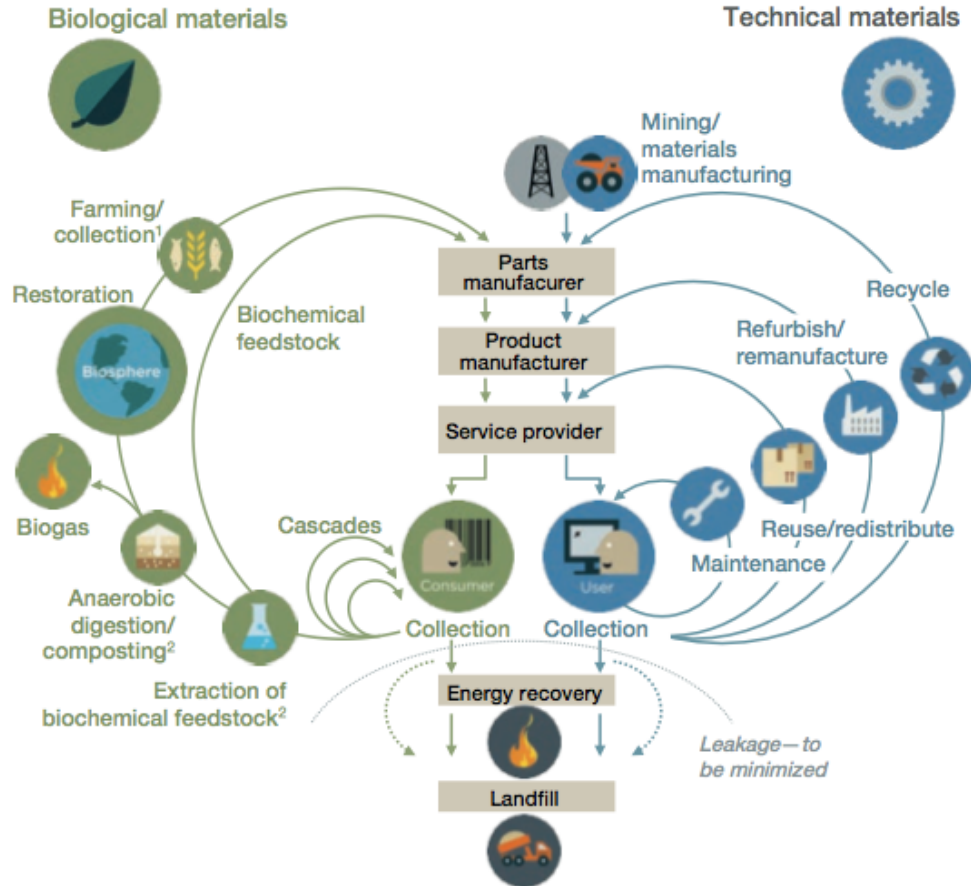
We're in the people business.

Our purpose is to unlock human promise.



...by creating the **social**,
environmental and **economic**
conditions that allow people,
organizations, and communities to
thrive.

The Butterfly Diagram is often used to illustrate the Circular Economy Model



Source: Ellen MacArthur Foundation (Interactive System Diagram)

¹ Hunting and fishing

² Can take both postharvest and postconsumer waste as an input

Source: Ellen MacArthur Foundation circular economy team drawing from Braungart & McDonough and Cradle to Cradle (C2C)

4 questions

there will be an opportunity for you at the end....

Essentially, the difference between the **Linear Economy Model** and the **Circular Economy Model** is centered on **design intent**.

1720 pre-industrial/industrial - linear economy	1920 industrial/market - shorter linear economy	2020 neo industrial - circular, matrixed economy
Users	User	Users
Performance, Aesthetic, Durability	Desire , Performance, Aesthetic, Durability	Experience , Performance, Aesthetic, Durability
one sale many lifetimes, slow loss of value	one sale product lifetime, loses value fast	many sales many lifetime services, intentionally and actively maintain value
waste burns, creates heat, light	reclaim	repurpose, reclaim, regenerate, remake, reuse

tractor 1923



bicycle 2016





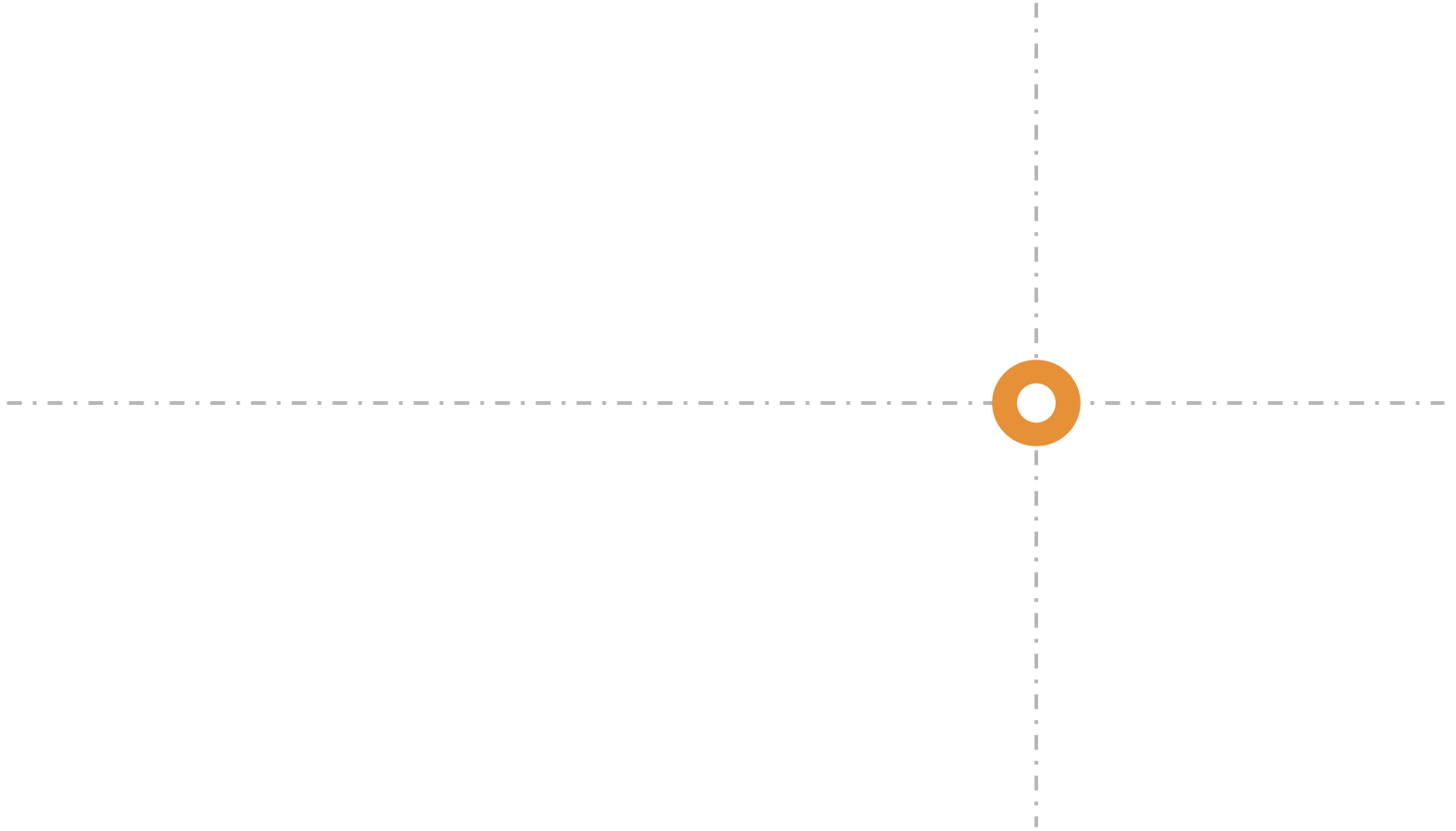
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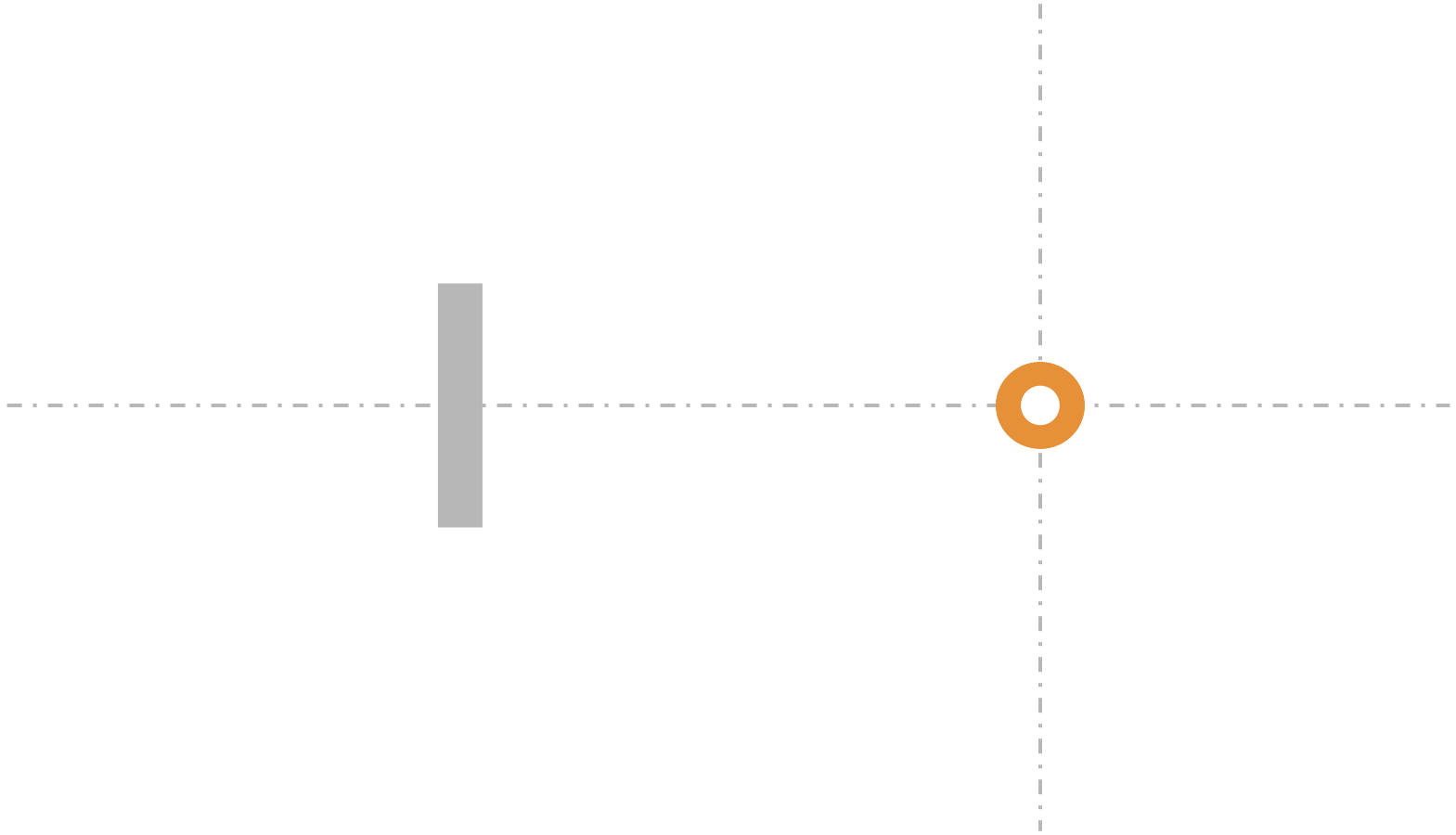
What will help us transition from the linear to the circular model? Social, Economic, Technical, Political, Cultural, Skills, other...?

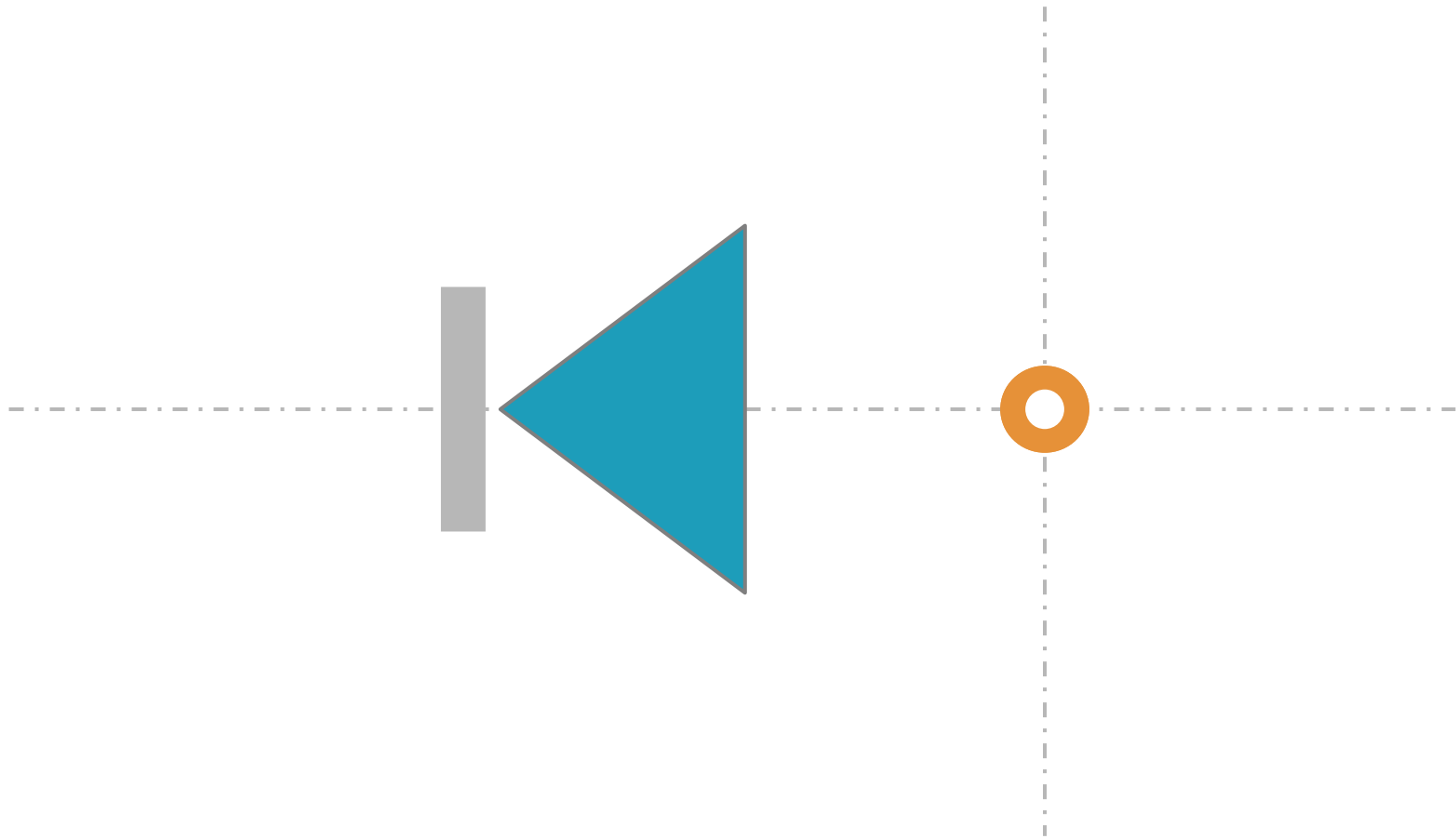
a design is a plan
there is an intent to good design

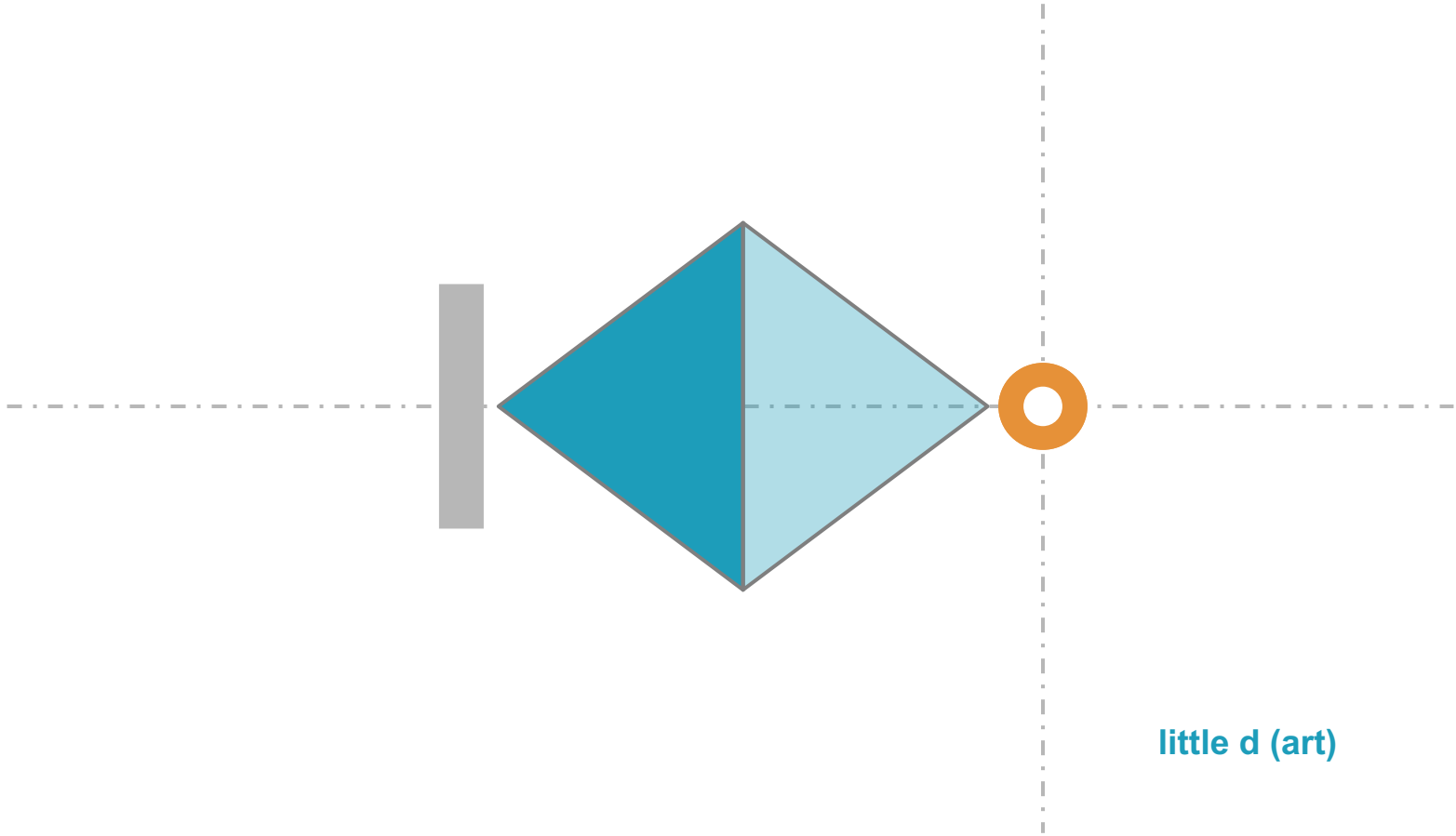
a designer is a planner
we plan businesses, objects,
industrial systems, delivery,
recovery...

we are all designers







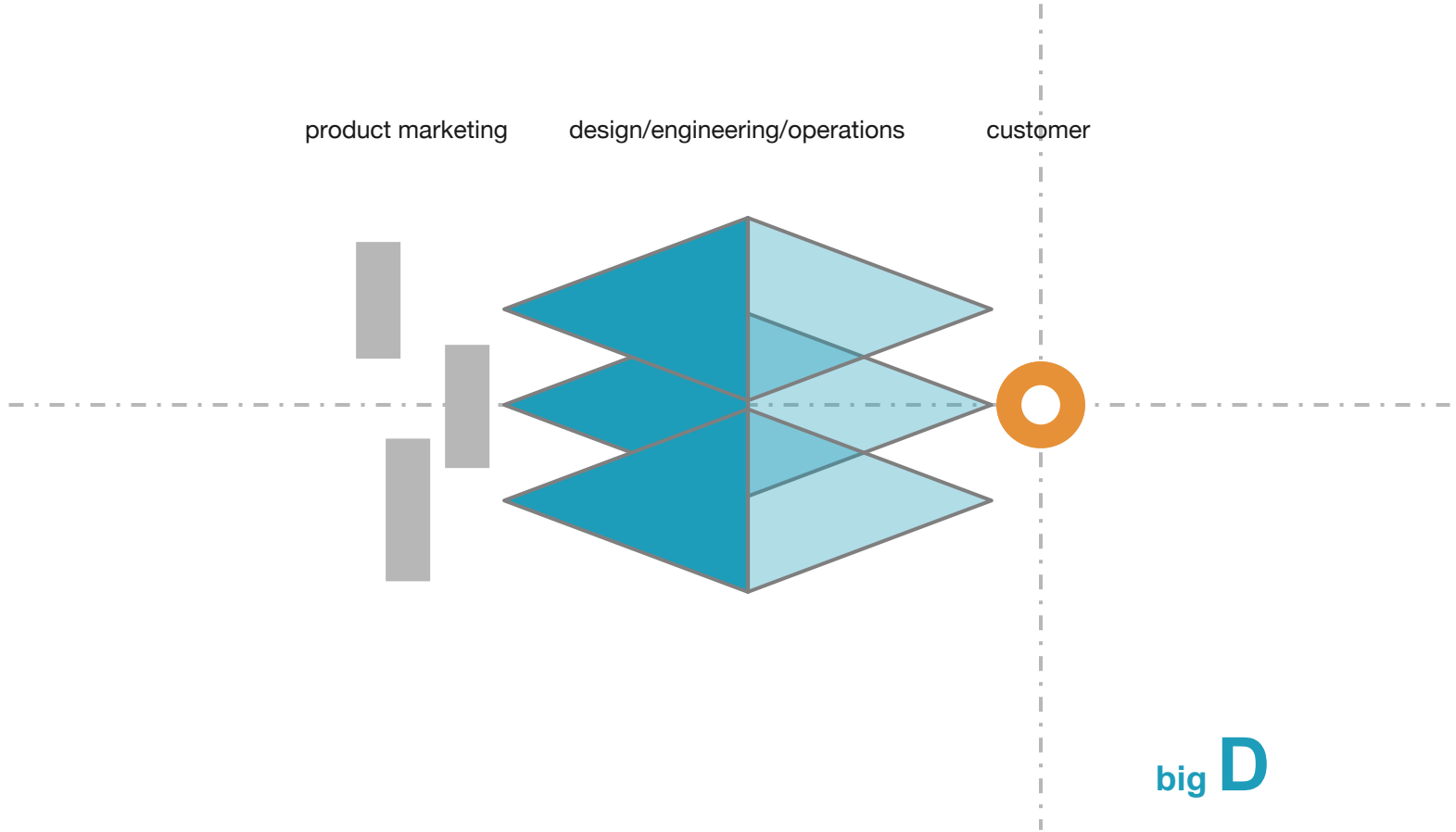


little d (art)

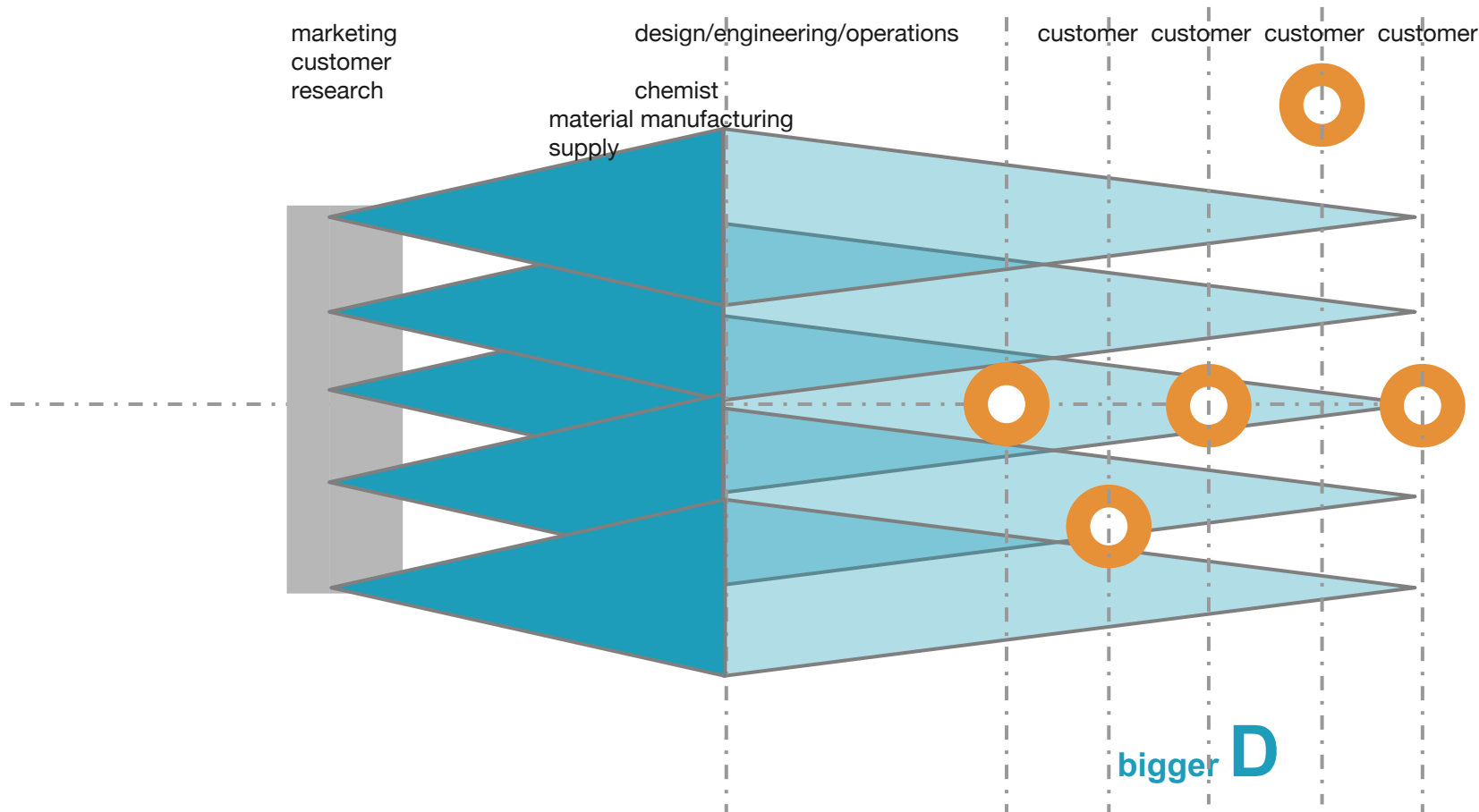
product marketing

design/engineering/operations

customer



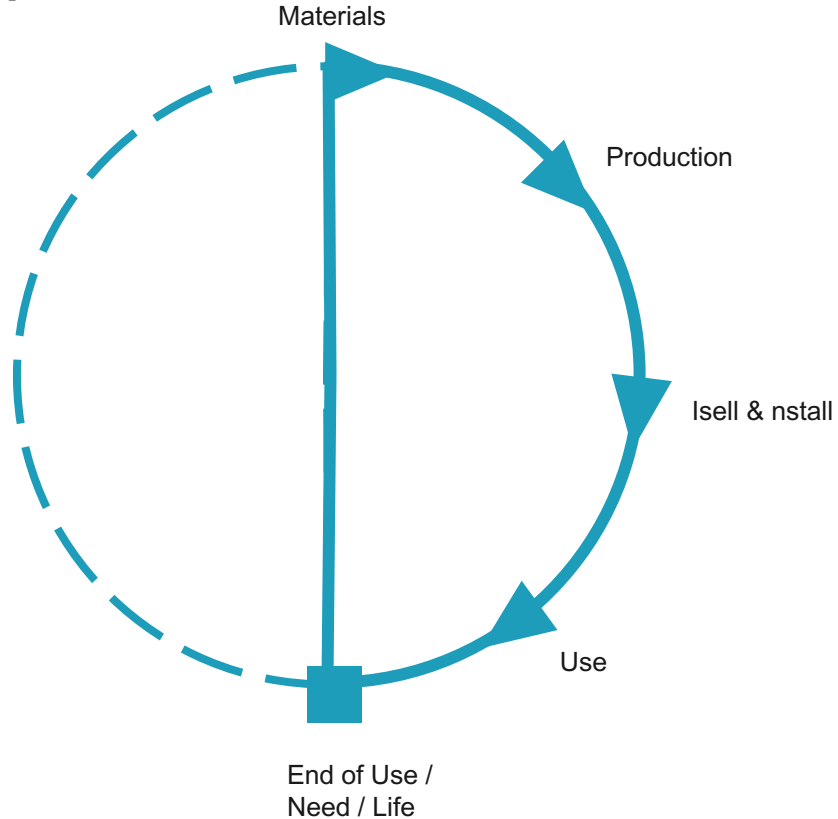
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2

**How does the innovation process change?
How does the nature of partnerships
change in a systems design model? How
might that change what you do, when you
engage and how long you remain engaged?**

Design Thinking in a **Linear Economy Model** produces a limited set of business system design options



Think 2004



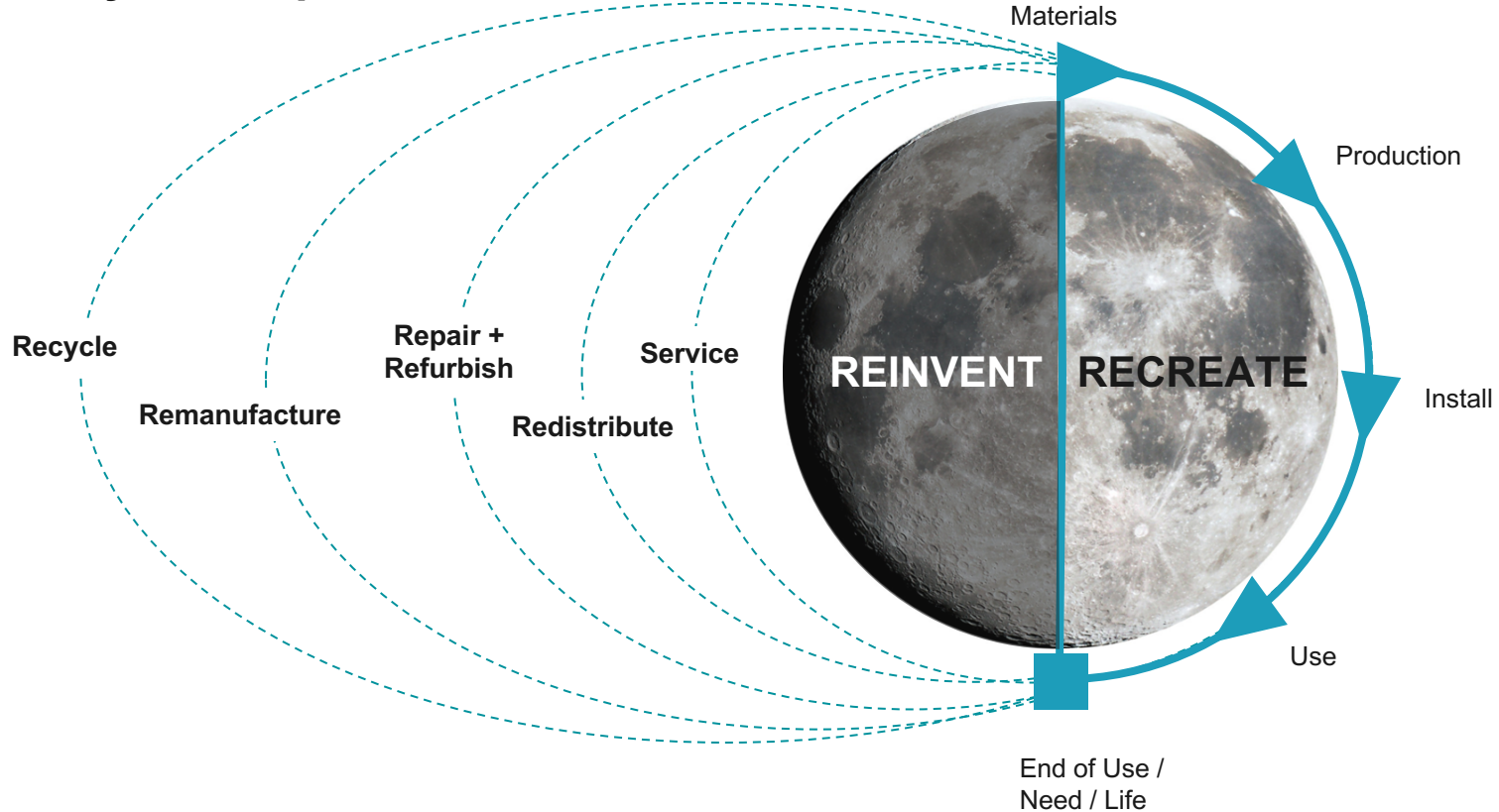
Think 2014



3

What are the new design principles?

Systems Design Thinking in a **Circular Economy Model** produces an exponential set of design options by combining business models, product service systems, products and materials



4

How does the circular economy model advantage or disadvantage the design promise of new material & chemistry models and processes?

The **shared** challenge.

How might we...

create greater **value** for our stakeholders & unfold opportunities to drive **growth** in a circular economy?

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Our purpose is to unlock human promise.



- 1** What will help us transition from the linear to the circular model? Social, Economic, Technical, Political, Cultural, Skills, other...?
- 2** How does the innovation process change? How do the nature of partnerships change in a systems design model? How might that change what you do, when you engage and how long you remain engaged?
- 3** What are the new design principles?
- 4** How does the circular economy model advantage or disadvantage the design promise of new material & chemistry models and processes?

Thank you !!!