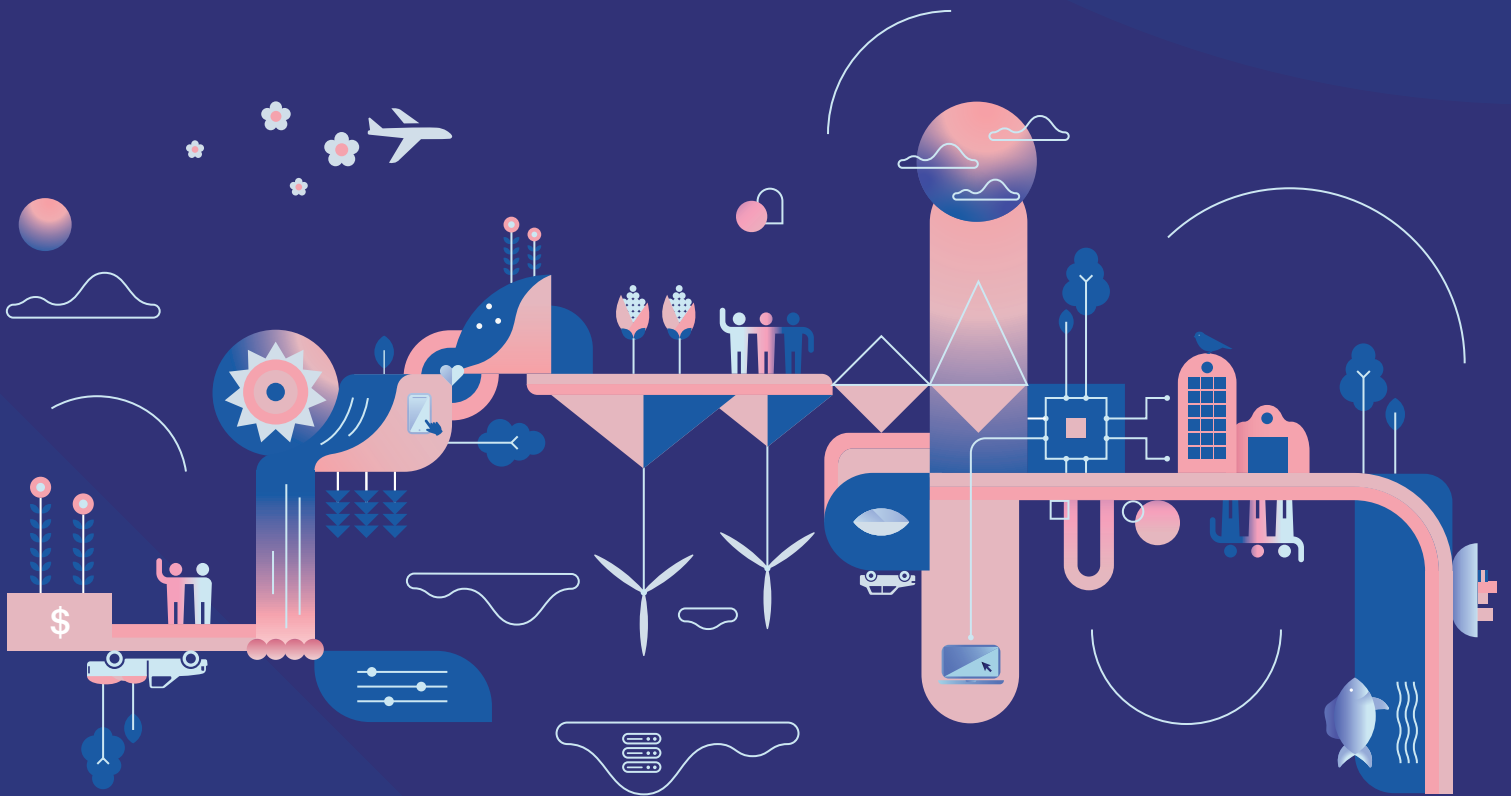zensar

The Future of Design Thinking

From Human-centered to Humanity-centered

▸ Whitepaper

Executive summary

Design thinking is no longer sustainable at the intersection of human desirability, business viability, and technical feasibility. It needs to adapt to the larger picture of humanity and the planet's sustainability. Human-centered design has always focused on the needs of humans, but it's now time to put the planet and humanity first.

The future belongs to products and services designed to be environmentally regenerative, socially conscientious, humanely produced, and supportive of communities and cultures. Also, the shifting preferences toward social and environmental awareness warrant a new approach to design. This is where the concept of humanity-centered design, a more inclusive and comprehensive approach to broadening the horizons of innovation to include new design imperatives that address social and environmental challenges impacting our community and civilization, has relevance.

This paper explores humanity-centered design and its six key tenets in depth. These include:

1. Workarounds that foster sustainable innovation
2. A net positive impact rather than a negative or zero impact
3. Sustainability as part of the organization's goals
4. Systems that align with humanity-centered goals
5. Experience architecture that goes beyond the legacy thought process
6. Influencing behavior through experiences

Humanity-centered design is yet to find a firm footing in the consciousness of businesses. A standard approach is still evolving but will soon be available.
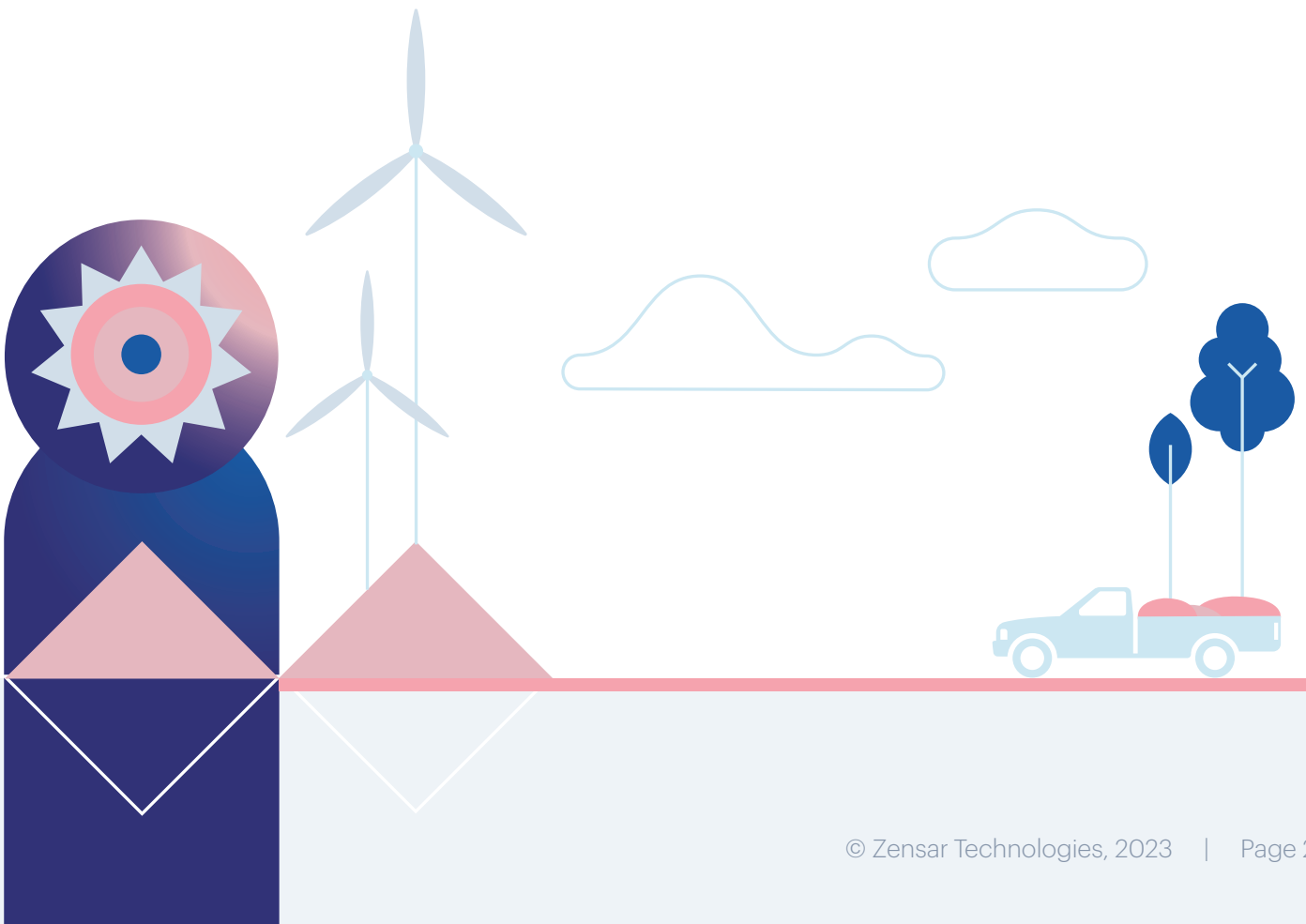
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Introduction

Human-centered design is a critical element that can help address many challenges that business leaders face today — how can organizations keep pace with changing customer preferences? How can they leverage innovation to address customers' needs? What are the critical elements to enhance and enrich customer experience? With a human-centered design approach, product and experience designers immerse themselves in the lives of their customers to understand their needs, motivations, and frame of mind.

Human needs, preferences, and behaviors are continually evolving, influenced by many factors such as increased awareness, availability of new products and services, geo-political changes, evolving technology, and other social factors. Black swan events such as the COVID-19 pandemic further accelerate this change and constantly impact how humans live, work, and consume products and services. Proactive, agile, and future-aware organizations have successfully created evolved customer experiences with their products and services by focusing on design and design thinking to ensure customer delight and loyalty.

We live in an era of constant climate, health, and social crises. Climate change is a big concern that has overarching effects, including social and economic impacts.

Design thinking at the intersection of human desirability, business viability, and technical feasibility is no longer sustainable without looking at the bigger picture of the planet and humanity. The original premise of design thinking was based on the assumption of infinite resources, as it attempted to bring the customer to the center of attention. Yet, it remained silent on the potential expansion of each of the three intersecting domains — the big picture.
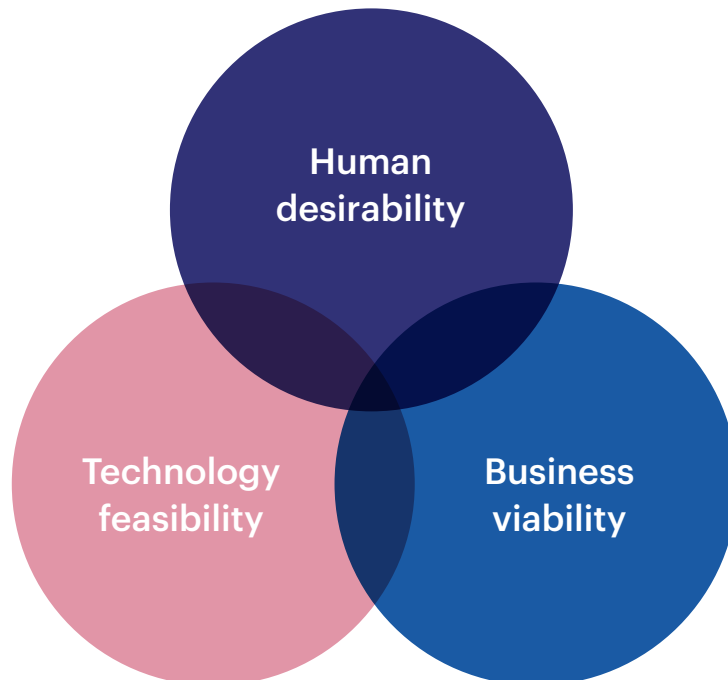

Figure 1: The three intersecting domains of human-centered design
(Source: HXI Studio, Indigo Slate, A Zensar Company)

Key tenets of a human-centered design approach

The goal of human-centered design is to curate and build products and solutions that are not just consumer-focused and acceptable but also sustainable in the long run – from the perspective of the enterprise. Hence, human-centered design involves innovation driven by the ability to solve pain points and unmet needs of users based on a deep understanding of their needs and wants. At its core, the human-centered design approach has deep empathy for those who will benefit from it.

A human-centered design approach leads to products and services that resonate deeply with customers, driving engagement and scalability. Airbnb is a classic success story of a human-centered design approach. The company has not only brought tremendous innovation to the hospitality industry but also created a community by understanding and fulfilling the needs of travelers and homeowners to create a home away from home. Airbnb has created a platform that empowers guests and hosts, facilitating travel to more and more remote places. Similarly, the Swedish home furniture company, IKEA, has democratized access to good design at a base level by making affordable, practical, and aesthetically appealing products designed for their consumers.

The human-centered design approach follows simple but effective guiding tenets:

- Effectively frame the problem by defining the project goal to invite many potential solutions
- Map the customer journey by focusing on the core challenges and needs of the people
- Take a systemic view and design a complete experience. The product or service should align with the customers' environment and activities, providing a holistic experience.
- Integrate customer feedback to align product design, making it an iterative process

When applied strategically, human-centered design can deliver significant returns on investment by creating differentiated products and services and increasing customer adoption. Consider this — Airbnb was able to garner a profit of $55 million in the last quarter of 2021 and gain higher revenues compared to pre-pandemic periods with its continued focus on human and user centricity.

So far, most practices around human-centered design in businesses have been to achieve and deliver desirable products and services to customers that also make business sense. This mainly translates to better ROI. However, human-centered design has also been used in non-business contexts by NGOs and non-profits to tackle problems, arrive at solutions, and measure an approach's cost-effectiveness.

For example, the public health sector focuses on cost-effectiveness over profits because it exists for the greater good of society. While this approach consumes financial resources, it results in a more financially thriving society. An excellent example is the US Government's response to COVID-19, expediting vaccines and providing free testing and vaccination.

There is a lesson to be learned here. When there is an opportunity to have an impact beyond the ecosystem of a business and its customers, relevant design-thinking approaches can be taken for the greater good of society and the planet.

The need for a fresh approach to design: beyond human-centered design

As impactful as human-centered design has been for many organizations over the past several decades, an emerging need to update this approach is becoming increasingly evident. While customer-centricity currently drives the success of many modern businesses, there is a growing focus on society and the needs of humanity as a whole. This focus needs to be included in human-centered design today.

Historically, good design has made products innovative, appealing, delightful, and easy to use. But in the future, products and services must also be designed to be environmentally regenerative, socially conscientious, humanely produced, and supportive of communities and cultures. As we see a culture shift, consumers become more conscious about social and environmental issues, and they gradually bring such consciousness to their choices of the goods and services they consume. However, while there is growing consumer interest in more socially and environmentally responsible goods and services, there is a natural disconnect in demand and daily choices of consumers. This disconnect is due to the limited availability and affordability of such goods and services.

Given this background, it becomes imperative that these challenges be addressed through a more inclusive and comprehensive framework of design thinking. These new challenges will be the drivers of the next evolution of human-centered design: humanity-centered design.
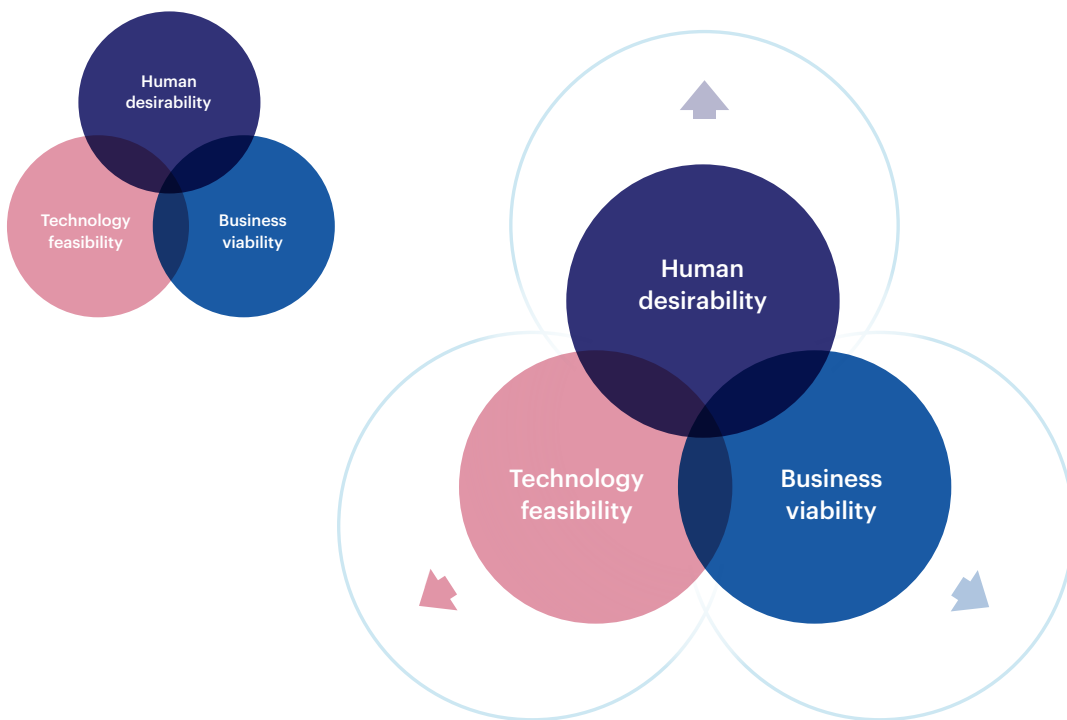
Figure 2: Left: Human-centered design domains of concern; Right: Each of these domains call for an expanded field to become purpose-driven as well (Source: HXI Studio, Indigo Slate, A Zensar Company)

An estimated 80 percent of the environmental impact arises from decisions made in the design phase. There is increasing awareness about the impact of purchase decisions on the environment and the planet. Consumers now demand accountability on environmental impact from companies. Deloitte's Global Powers of Retailing 2022 survey indicates that about 55 percent of the consumers of the world's top 250 global retailers purchased a sustainable product or service.

Design for sustainability is rapidly transitioning from a luxury to a necessity. A sustainable design ensures that the product minimizes the carbon footprint and other environmental harms throughout its lifecycle. However, there are several obstacles to the widespread acceptance of sustainable products.
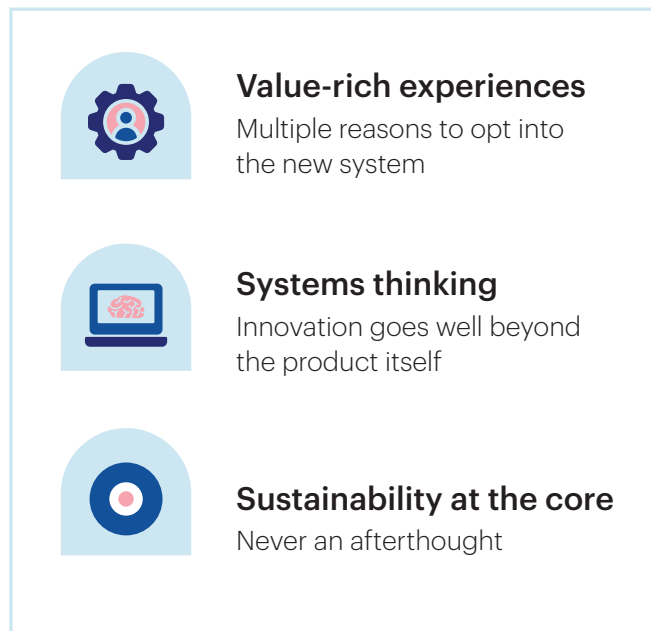
Value-rich experiences
Multiple reasons to opt into the new system

Systems thinking
Innovation goes well beyond the product itself

Sustainability at the core
Never an afterthought

Figure 3: Ingredients for successful humanity-centered design

Obstacles to the adoption of sustainable solutions

Today, sustainable products and solutions face many adoption problems. Depending on the category, there may or may not be sustainable products or services available. Where they are offered, sustainable options are often limited to a much narrower selection, may charge a premium price, and usually deliver diminished performance compared to conventional alternatives. Finding these companies and vetting their credibility as authentically sustainable organizations can still take time and effort. Where no sustainable products or services exist commercially, individuals adopt workaround solutions taking additional time, effort, research, and expense. Examples include efforts to avoid single-use packaging, reuse and repair products, energy conservation, avoid or minimize travel, recycle

electronics, adopt a zero-waste lifestyle, and create products from scratch to avoid packaging or problematic ingredients. Sustainable product challenges can be alleviated in the future as companies adopt a humanity-centered design approach and product development practices to develop solutions.

In the last two decades, taking a sustainability approach inhibited business growth. This approach is slowly changing as businesses find ways to align their financial success with environmental good. As companies work toward developing solutions that improve on the existing options available, they will need an updated approach to product development.

This is the sustainability experience we are offered today

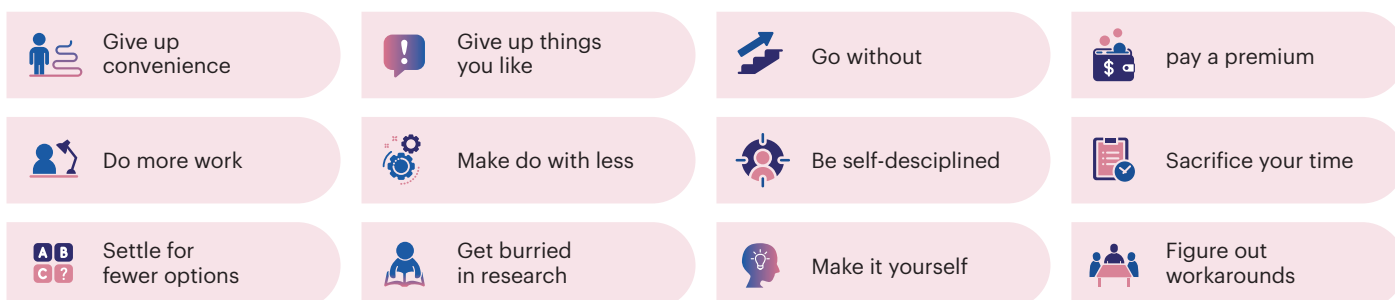| Give up convenience | Give up things you like | Go without | pay a premium |
| Do more work | Make do with less | Be self-disciplined | Sacrifice your time |
| Settle for fewer options | Get buried in research | Make it yourself | Figure out workarounds |

Figure 4: The price to pay for sustainability

Embracing the next frontier of design toward sustainability-driven innovation

Innovation is often used in various contexts to denote the creation and development of a new idea, concept, or product. It is highly essential for an organization's growth and success.

As a solution, sustainable innovation is designing an organization's products, services, and processes to generate long-term social and environmental benefits while simultaneously supporting business objectives. Sustainable innovation addresses social and environmental impact in the long run.

Humanity-centered design is connected with the natural environment. As humans, we are deeply dependent on natural ecosystems. As our growing population places greater demands on the earth's resources, we continually face threats to our wellbeing. Climate change, biodiversity loss, impending water scarcity, the influence of harmful chemicals, and other factors threaten the safety, health, and security of all species on the planet. The most significant and immediate impact is on wildlife and marginalized communities. Humanity-centered design must consider complex systems and dependencies to develop and produce goods and services.

A new design paradigm that considers sustainability as its core mission will inevitably take a humanity-centered approach. In this emerging paradigm, long-term vision and solutions benefiting business, humanity, and the planet are equally important.

A new paradigm: value-driven, environment-conscious, humanity-focused solutions for future generations

The future will belong to those organizations that design and deliver products and experiences that consumers love. Increasingly, people love products made by companies that prioritize social and environmental impact along with customer experience. The mandate for organizations is clear — create easy, enjoyable, affordable, and impactful solutions and experiences that address sustainability at its core.

Amid environmental challenges and climate change concerns, governments worldwide are increasingly becoming more aware of environmental, social, and governance (ESG) issues. Corporations are now held responsible and accountable for conserving the environment. Over 90 percent of S&P 500 companies and around 70 percent of Russell 1000 companies publish ESG reports. While ESG reporting primarily revolves around investments, companies will need to increasingly assess whether their products and services meet the requirements of being climate-aware and environment-friendly.

The new paradigm is value-driven, emphasizes cost-effectiveness over cost-efficiency, and is socially and environmentally conscious and responsible. Any solution that is humanity-centered is at the intersection of these domains and is also at the intersection of human desirability, business viability, and technological feasibility.
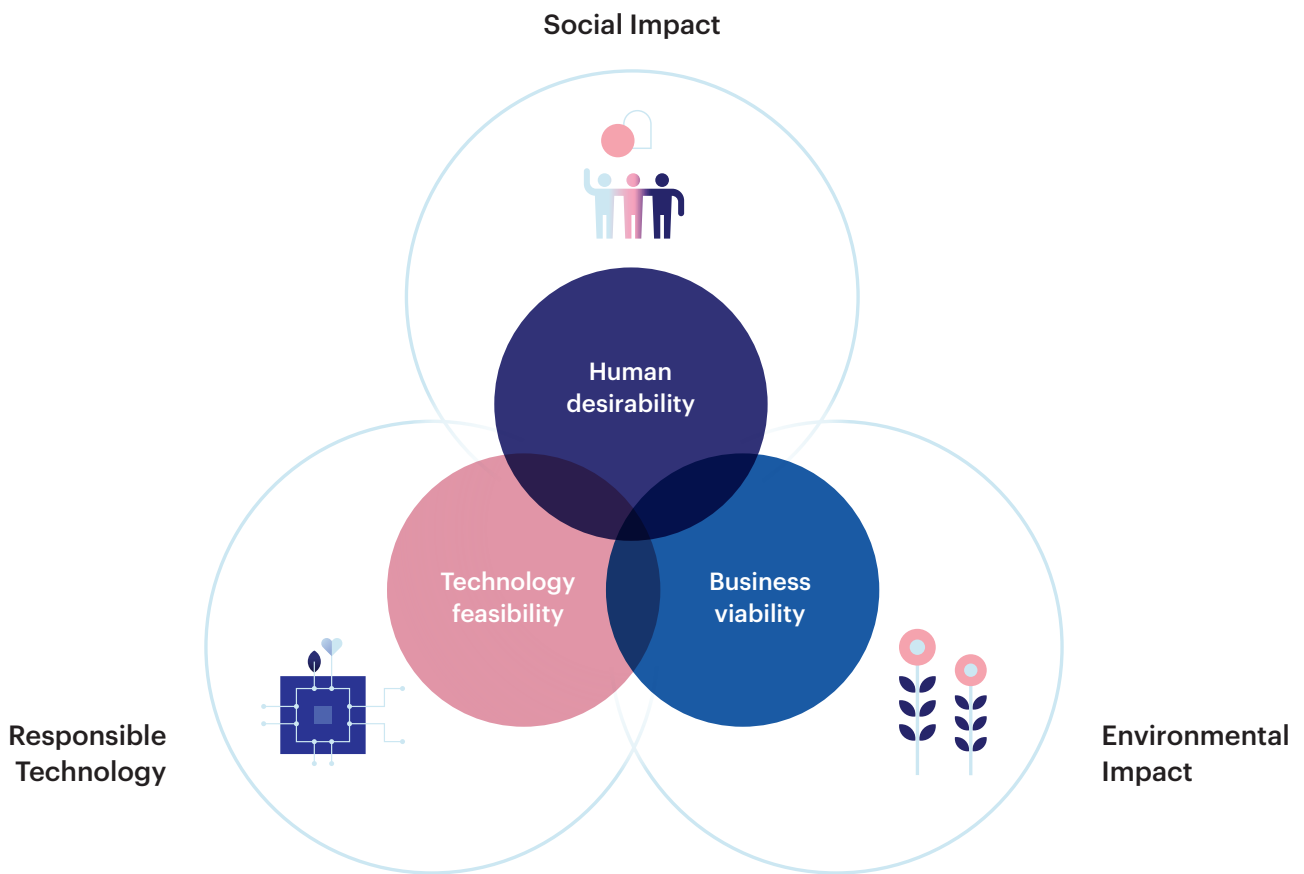
Figure 5: Human-centered design and its expanded field of humanity-centered design
(Source: HXI Studio, Indigo Slate, A Zensar Company)

Toward humanity-centered design thinking

With the new paradigm at the center of design thinking, one may wonder how human-centered design thinking and sustainability are connected.

Sustainability is not limited to environmental challenges alone. It also includes social, economic, and governance issues. The United Nations SDG 17 is the most comprehensive attempt to address sustainability for governments and organizations. A humanity-centered design is also a sustainability-centered design. Therefore it is acceptable to use sustainably as a reference for humanity-centered design thinking.

Several organizations have taken long strides in their journey toward enhancing sustainability and minimizing their products' environmental impact. For example, Blueland offers a range of cleaning products in the form of tablets sold alongside durable, reusable, and refillable containers. The dissolvable tablets are

wrapped in compostable paper packaging and shipped in a recyclable envelope, saving on shipping emissions and waste. The products are made with plant and mineral-based ingredients. With its efforts, the company claims to effectively reduce the use of 100 billion single-use plastic bottles in the US.

Singapore, now considered one of the greenest cities in the world, has prioritized sustainability in its urban planning initiatives since its independence in 1965 and has focused on sustainability in integrated planning, high-density development, and conservation. Curtailing urban development, reducing vehicle usage, using cleaner methods to generate electricity, and developing green zones have been some critical government initiatives. Today, the city-state attracts tourists and significant business investments, harnessing sustainability initiatives as a lucrative avenue for growth.

Humanity-Centered design

How do we deliver an experience that people love?

How do we support the communities and networks that our end users belong to?

How do we help solve the biggest challenges facing humanity?

Figure 6: The HXI Studio concentric impact domains of humans in a humanity-centered design model
(Source: the HXI Studio, Indigo Slate, A Zensar Company)

How does increased sensitivity to the environment and its impact on society lead to a rethink of product and service design strategy? Organizations are now focusing on humanity-centered design, an advancement over human-centered design. Human-centered design principles do not consider issues such as sustainability and social impact. The emphasis is usually on addressing immediate problems rather than solving for long-term impact. Most of the technological and consumer products we use today are based on human-centered design principles applying human factors, usability habits, ergonomics, and related techniques.
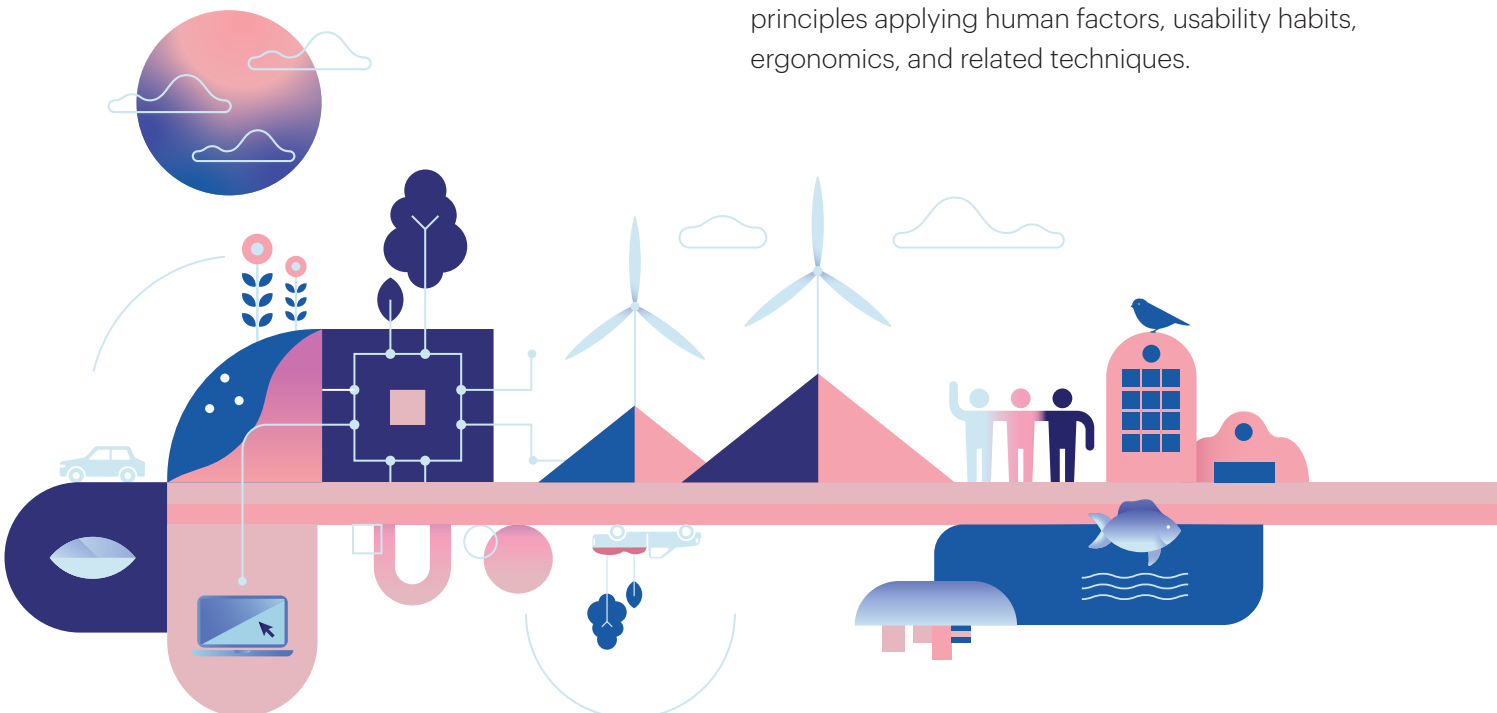
The works-in-progress in humanity-centered design thinking

A key figure in moving the humanity-centered design agenda is Don Norman, a pioneer researcher and author in design. His new book Design for a Better World: How to create a meaningful, sustainable, and humanity-centered future (expected publication in early 2023) will be a crucial piece of literature in the field.

Interaction Design Foundation, a globally leading online design education platform, is also among the leading entities promoting humanity-centered design thinking. The foundation benefits from the backing of some world-renowned figures, including Don Norman and Ken Friedman. It defines humanity-centered design as:

Humanity-centered design is a practice where designers focus on people's needs not as individuals but as societies with complex, deep-rooted problems. Designers can co-create proper solutions when they work with populations, address the right problems, perform systems analyses, and co-design small, simple interventions.

The Interaction Foundation's definition of humanity-centered design — HumanityD — is based on transitioning from four principles of human-centered design (HCD) to five broader and more comprehensive principles of HumanityD. It argues that while the principles of HCD are important, the big problems, such as sustainability, inequity, and bias, are ignored, and the emphasis is often placed on immediate challenges rather than long-term impacts. Figure 8 summarizes the transforming HCD to HumanityD principles:

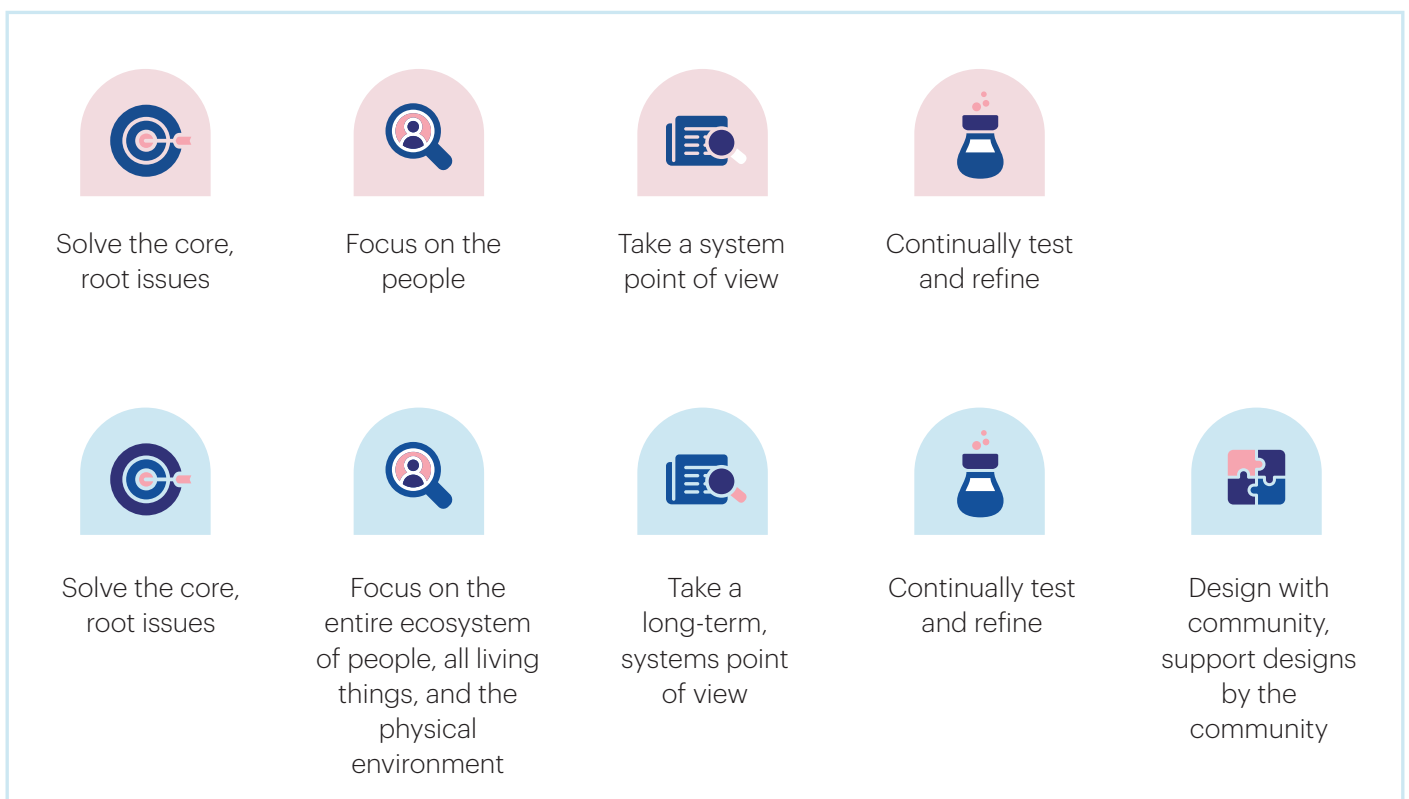| Solve the core, root issues | Focus on the people | Take a system point of view | Continually test and refine | |
| Solve the core, root issues | Focus on the entire ecosystem of people, all living things, and the physical environment | Take a long-term, systems point of view | Continually test and refine | Design with community, support designs by the community |

Figure 7: Above row: four principles of human-centered design (HCD); Lower row: the five principles of humanity-centered design (HumanityD) according to Interaction Foundation. (Source: Summary and visualization by the HXI Studio, Indigo Slate, A Zensar Company)

The current definitions consider humanity-centered design as an opportunity and ultimate challenge for designers to help people improve their lives. The human-centered approach creates journey maps for users. In contrast, the humanity-centered approach aims to expand the reach and vision to the societal level with highly complex and interrelated issues, often tangled up in large, sophisticated, human-caused systems. The foundation continues to assert why designers should use 21st-century design, an approach discussed by Don Norman that allows designers to analyze complex problems that are socio-technical systems.

Humanity-Centered design

21st century design

Humanity- centered design

Human- centered design

People-centered design

Interaction design foundation
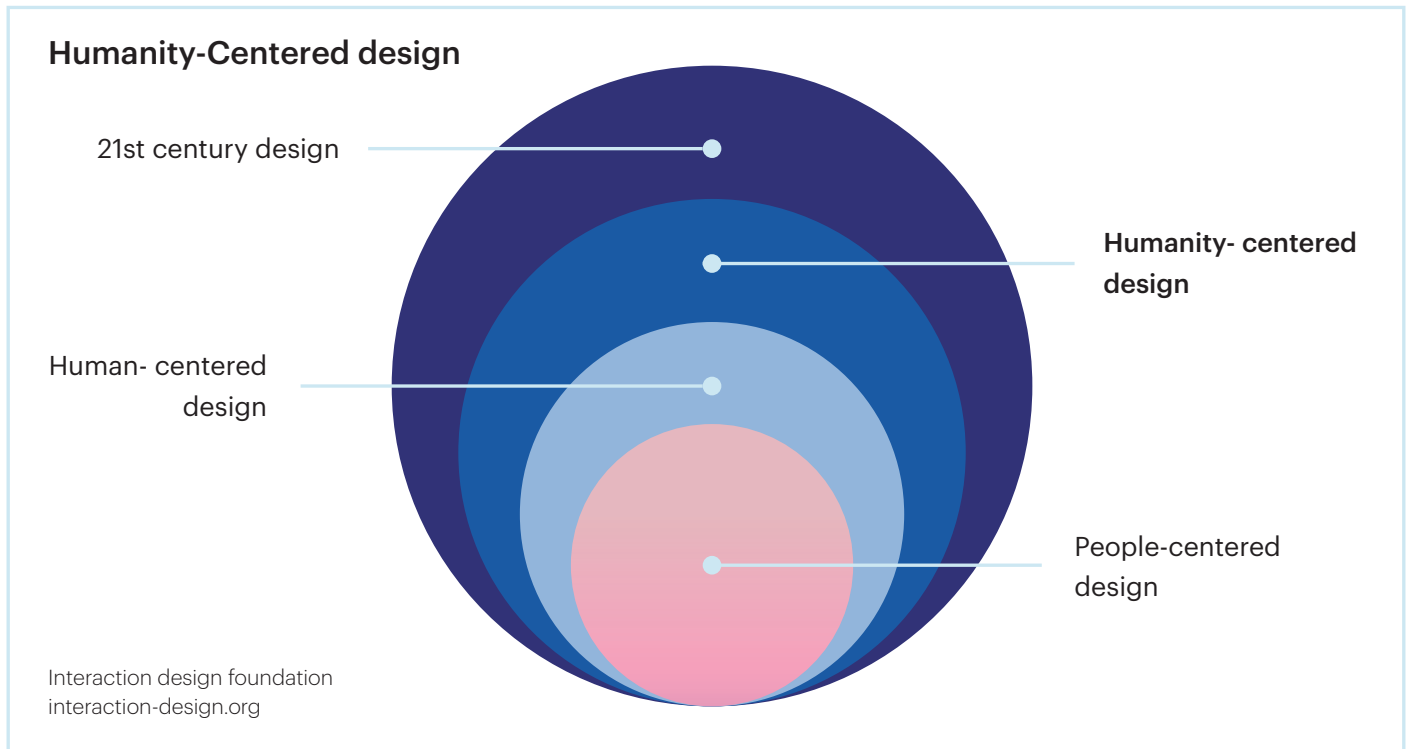interaction-design.org

Figure 8: Interaction Design Foundation's diagram depicting the progressing and expanding domains of people-centered, human-centered, humanity-centered, and 21st-century design domains.

Humanity-centered design is ready to move away from designing small, simple things to designing systems — political systems that can effect real change and real solutions to big problems affecting our planet. This approach is an ecosystem-life-centric approach in which all living systems are considered interconnected and vital for the overall health of humanity.
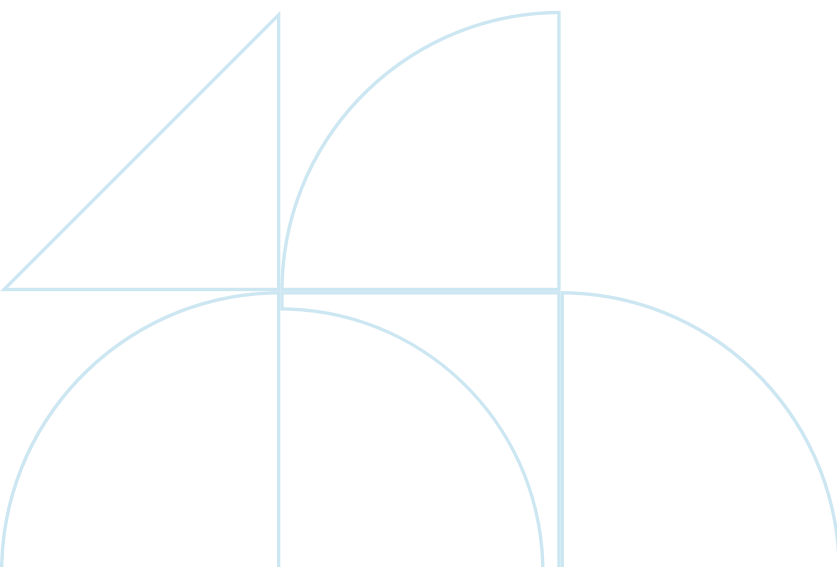
Key tenets of humanity-centered design thinking

The future of design will have to marry the tenets of human and humanity-centered design. The focus on society, environment, and the economy are the primary goals of sustainability. Moreover, design thinking must focus on business feasibility, customer experience, and technology. The need for a plastic-free society, renewable energy sources for fuel and electricity, bio-degradable products, better waste management, and all other options that reduce environmental harm is imminent. As the field of humanity-centered design materializes, there are principles and ideas that organizations can use immediately to adopt a more humanity-centered approach:

1. **Look for workarounds** - To find great opportunities for sustainable innovation, consider where your customers are already using workarounds to become more sustainable. Can you offer this capability as a product or service that reduces your customers' time, effort, research, or cost? Examples include plastic-free products, reusable packaging, product recycling, decarbonizing the home, choosing providers for sustainable products and services, vetting credentials of sustainability claims, and improving accessibility of ESG-driven investing.

   Native, a producer of natural deodorant, listened to customer feedback and launched a plastic-free packaging option for their deodorant.

   Ridwell, a Seattle-based service company, provides doorstep pickup of hard-to-recycle items, including plastic film, clothing, batteries, light bulbs, Styrofoam, electronics, and extra diapers. Items are sorted, recycled, or donated to local organizations and artists for a second life.


PLASTIC-FREE: **NATIVE DEODORANT**
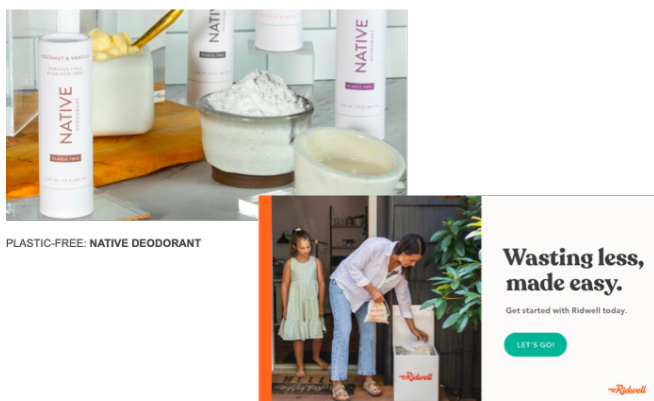
RECYCLING: **RIDWELL**

2. **Aim for positive impact** – Take actions that ensure that the impact on societal, economic, and environmental aspects is net positive rather than negative or zero. Instead of aiming for reduced carbon footprint, aim for solutions that are carbon negative. Instead of reducing waste, ideate solutions that remove pollution from the environment. Instead of using less material to slow down deforestation, explore materials and sourcing options that sustain and regenerate ecosystems.

   Air Company produces spirits and other products using carbon extracted from the atmosphere, resulting in a carbon-negative product.

   Outland denim hires and trains victims of human trafficking to fabricate their fashion products, providing a living wage and lifelong skills to ensure long-term income.

DRAWDOWN: **AIR COMPANY**

ENRICHING EMPLOYEES: **OUTLAND DENIM**
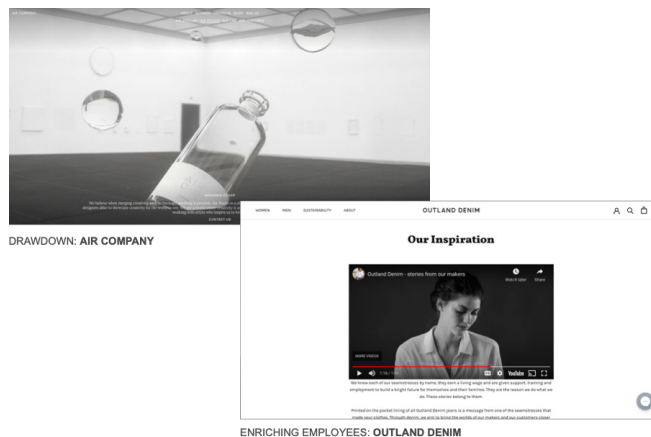
3. **Weave sustainability into the organization's goals** – Use your company's purpose to guide your sustainability and social impact goals. The organization's long-term goals consider the factors that matter to the employees, customers, and the community. Using these core values to define your sustainability focus areas helps bring these efforts into your business's core work and supports sustainability becoming integral to achieving your organizational purpose.

The toilet paper company, Who Gives A Crap, based in Australia, leverages its purpose-driven profit donations as a key pillar of its brand. In addition to exclusively selling sustainable toilet paper and other paper products, 50 percent of the company's profits are used to build toilets for communities worldwide that lack them.

The big box retailer Walmart centers its brand around low prices, and its many sustainability initiatives align with cost savings. For example, solar power installations to reduce operating costs and efforts to optimize product size and weight for lower-carbon shipping and reduced shipping cost.


SOCIAL EQUITY: **WHO GIVES A CRAP?**
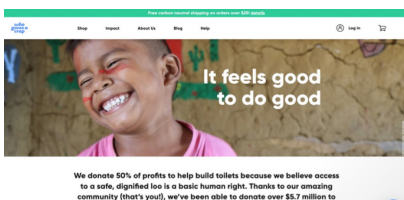
COST SAVINGS: **WAL-MART**

4. **Opt for systems that align with humanity-centered goals** – The impact of a solution goes beyond the product itself. By looking closely at the partners and systems involved in manufacturing, shipping, supply chains, and finance, organizations can find opportunities to improve their product impact beyond the product. Each decision is an opportunity to align an organization with humanity-centered objectives and support other businesses prioritizing sustainability.

Global CPG company, Unilever, prioritizes sustainable sourcing for its products and has invested in building up fair-trade and sustainable production of the ingredients and forging an industry-wide alliance to protect rainforests.

Community solar provider Arcadia makes clean energy accessible and affordable for renters and others who experience barriers to home solar panel installation. They are also developing a digital platform that allows API integration with utilities to make clean energy more accessible and transparent across the industry.


REGENERATIVE SOURCING: **UNILEVER**

CLEAN ENERGY & SOCIAL JUSTICE: **ARCADIA**
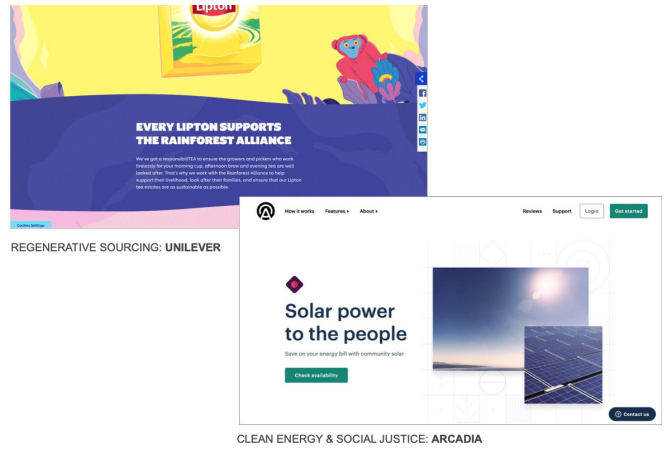
5. **Reimagine experience architecture** – To achieve sustainability, organizations must now think outside the legacy product and business model assumptions and consider disruptive changes to their market to drive the transformation toward sustainability. Many companies often aim to replace materials or energy sources to become more sustainable but assume the core product, business model, or value proposition will remain the same. By exploring alternate experience architectures, businesses can leap forward in sustainability rather than incremental steps with diminishing returns. Examples of reimagined architecture include switching from a linear to a circular business model, from a product ownership model to a subscription service model, or from planned obsolescence to a business model that supports upgrades over a much longer product lifespan.

The Loop Store provides durable, reusable packaging as an alternative to single-use disposable packaging. Offering a range of

name-brand consumer packaged goods, their business model includes free container pickup with no need for customers to wash the containers before returning.

Armoire is a fashion company that provides a subscription-based service for fashion. Instead of purchasing clothes, customers can borrow clothing with return and cleaning costs built into the business model.
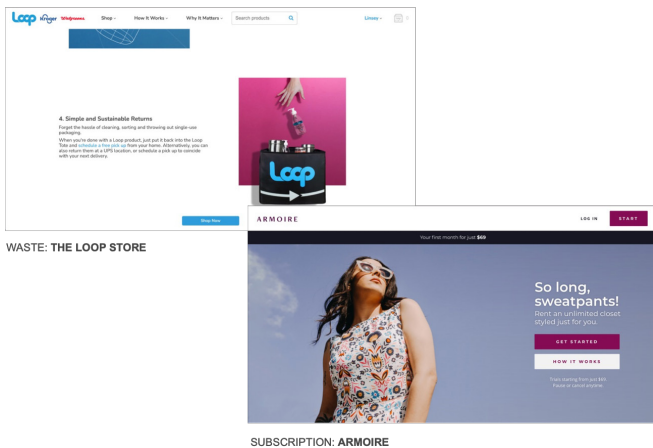
WASTE: **THE LOOP STORE**


SUBSCRIPTION: **ARMOIRE**

6. Influence behavior through experiences –
As businesses create new experiences, they can also use these experiences as opportunities to influence beliefs and behavior. Adding sustainable

elements to an experience can send strong social signals and reinforce the cultural shift toward a more sustainable society. This could mean including sustainability-focused search criteria for online retailers, making it easy to find and select ESG-focused funds for retirement investors, or using high-visibility events to generate awareness of environmental impacts.

Amazon's climate pledge friendly search filter enables customers to find sustainable products on the retailer's website, signaling to all Amazon users that this is a growing priority among shoppers.

Extreme E racing brings all the excitement of auto racing, showcasing the performance of electric vehicles while attracting attention to parts of the world affected by climate change.
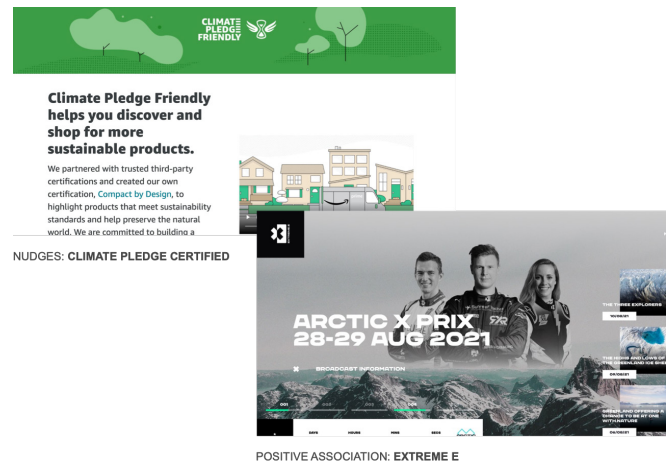
NUDGES: **CLIMATE PLEDGE CERTIFIED**

POSITIVE ASSOCIATION: **EXTREME E**

The future of humanity-centered design

With more organizations, think tanks, and creative consultancies taking a broader approach to human-centered design thinking and including a broader agenda for the public good, substantial efforts are being made to define the new paradigm of humanity-centered design thinking.

Several organizations have already proposed agendas and frameworks for the new paradigm. While these are valuable and critical steps forward, the field must have a universally accepted standard. When we broaden the scope of design thinking to include humanity-centered thinking, we enter the domain of problems that require more than a single solution. Achieving a universal standard for humanity-centered design will be a gradual process led by the collective work of design-thinking professionals worldwide.

At Zensar, our Human Experience Innovation Studio aims to contribute to this global work by developing and refining humanity-centered design methodologies practiced within our sustainable innovation service line. By practicing and refining these methodologies in our sustainable innovation work with clients, we are using the iterative design thinking approach to validate, test, and refine our methods. By sharing our sustainability-focused methods and insights, we hope to support and accelerate the adoption of humanity-centered design in organizations worldwide.
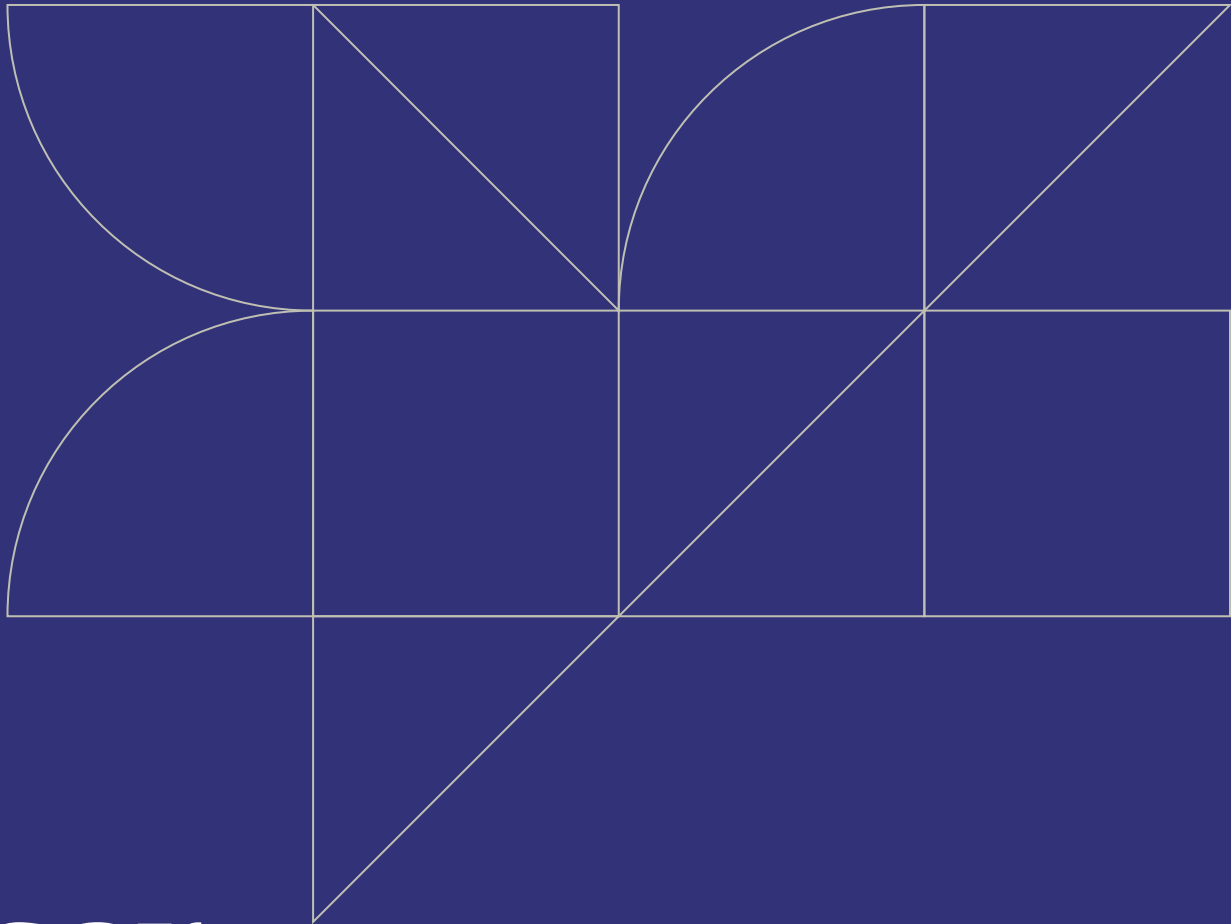
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We conceptualize, build, and manage digital products through experience design, data engineering, and advanced analytics for over 145 leading companies. Our solutions leverage industry-leading platforms to help our clients be competitive, agile, and disruptive while moving with velocity through change and opportunity.

With headquarters in Pune, India, our 11,500+ associates work across 30+ locations, including Milpitas, Seattle, Princeton, Cape Town, London, Singapore, and Mexico City.

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