

Inclusive, Accessible, Sustainable – Designing A Different Future

By

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Abstract

Merging concepts of accessible, sustainable, and inclusive design practices with respect to the fashion industry, this thesis examines ways of doing design that encapsulates many design methodologies into one. I argue that the overall aim of this thesis is to prove that there are ways that designers can be mindful of accessibility, inclusion, and the environment from conception to production to consumption as a whole, while honoring their aesthetic viewpoints. Through a literature review, case study, practice-based reflection, and methodology, a look into what the future of design might look like is explored. The literature review examines perspectives from the design gap illustrated in the introduction, which discusses why there is not more crossover among the following categories in meaningful ways: accessibility and inclusion, contemporary aesthetics, environmental responsibility. The case study provides insights from within the design world, presenting the results from four surveys and three interviews with practicing Canadian designers/design businesses. The practice-based reflection portrays the experiences of the author as this thesis work was progressing and as they assembled their own practice into a tangible design studio, serving clients and conceptualizing inherently adaptive products. The final section showcases the iterative and qualitative design methodology that has been developed from the combination of conducted research. This thesis is intended as an offering of curated research findings and lived experience perspectives, that can be built on for further analysis, critique, and development.

Keywords: Inclusive Design, Accessible Design, Slow Fashion, Slow Design, Sustainable Design, Adaptive Design, Design Process, Design Method, Accessible Fashion, Responsible Design, Inclusivity, Accessibility, Sustainability, Eco-friendly, Design Practice

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Definitions

Ableism - A prejudice or exclusion of disabled people due to design and/or thinking that inherently centers around non-disabled use cases, thus othering disability and disabled people.

Accessible Design - A design method that caters to the needs of those living with a variety of disabilities.

Capsule Collection - A limited run and limited quantity collection of items that a brand or company releases.

Chronic Illness – incurable diseases that persist throughout people’s lives, they include vast symptoms that can be permanent or temporary in the form of flare-ups/relapses.

Co-Design - The process of designing an item with end user collaboration throughout the whole process.

Cradle to Cradle - Thinking about the end of a product lifecycle at the beginning to ensure that there is a way for the product to continue to have a life or fully biodegrade, creating minimal impacts on the world.

Cradle to Grave - The beginning of a product life to the end of its life, without repurposing as an option.

Deadstock - Unused fabrics from previous collections or seasons that sits in warehouses unused, but available to be resold and repurposed to be used for new designs.

Disability – 3 Models defined¹:

Social Model: disability is created by the environments we live in and the ableist barriers that are in place by our societies.

Medical Model: defined by the physiological nature of a person's body and mind.

Capabilities Model: believes that several factors should be examined, from level of bodily capability and function to environmental and societal factors that impact an individual's level of access to supports that may impact their overall capabilities compared to other individuals in seemingly similar situations.

Empathic Design - A design process that keeps in mind the feelings of their end-users, imagining diverse lived experiences to help guide the end product or service.

End-user - The customer or client intended or not intended to use a product or service.

Ethical Design - A design method that stems from the beliefs and values of a business or individual with the intention of doing good.

Equitable Design - A design method that has in mind an even playing field for a variety of users, thus creating fairness in all aspects of the end product or service.

Fast Fashion - Fast fashion is the term used for mass-produced unethically manufactured apparel.

Greenwashing - The act of promoting that sustainable initiatives are being taken seriously when in fact they may not be, and sustainability is only being used to acquire customers or false trust.

¹ Burchardt, "Capabilities and Disability."

Inclusive Design - A design method that centers around diversity and creating solutions that work for all regardless of class, race, gender, ability, etc.

Multi-Disciplinary Design - A design method that includes many different types of disciplines and backgrounds.

Naming – 2 options defined²: This is not to say there is a right or wrong way, it is always best to refer to people however they prefer. For the purpose of this thesis, the latter option was chosen, based on conversations with friends/family with disabilities/chronic illnesses and research conducted in this area.

Person first: Person with a disability – this is most preferred by the governments and organizations, as it emphasizes the human before the condition or diagnosis.

Condition/Diagnosis first: Disabled person – this is considered more reflective of being disabled by the exclusionary world we live in and how it is built, it is the environment that is disabling, not the person.

Responsible Design - A thoughtful was to design that broadly includes environmental and inclusive elements, it harkens back to a businesses or designers core values and is very mindful at its core.

Slow Fashion - The antithesis of fast fashion, the process of creating low impact ethically manufactured apparel.

Sustainable Design - Design method that centers around the wellness of the earth and lessening negative impacts on the environment.

Universal Design - Design method that focuses on making things universally usable via one solution in hopes to encompass all end user capabilities.

² McColl, “Should I Say ‘disabled Person’ or ‘Person with a Disability?’”

Preface

I began this research part-time as an employee at Queen's University and mid-way through, a global pandemic occurred. My research adapted along the way, due to the longer-term factor of being part-time and the addition of Covid-19 which made certain aspects of this research more challenging, such as recruiting study participants and in-person networking/collaborating. Something else that transitioned during the pandemic was my career, I formalized my own company, a design studio. This was a side project to the schoolwork, being loosely guided by the research I was doing and developed into what could qualify as a tangible major project. I will touch on some of the designs and work I have done in this paper; however, most of the thesis is focused on the case study research results and the design methodology I created as a guide for other designers/creatives. I have a background in fashion design, art, technology, and accessibility. I also happen to have a chronic illness; I note this because it is an important factor in how I experience life but does not mean that in order to do research or care about accessibility and inclusion that one needs to have a chronic illness or disability. In fact, my hope throughout both my academic and pragmatic endeavors is to normalize disability and chronic illness in a user-friendly way.

The intention of this research is to contribute, even if only in a small or abstract way to the literature around conversations about design, inclusion, sustainability, and aesthetics. There are many ways to analyze and build further on this research, so if it sparks an interesting idea or exploration for you, feel free to reach out as I'm always up for a conversation about these topics.

Chapter 1 – Introduction

“Ask a hundred people what inclusion means and you’ll get a hundred different answers. Ask them what it means to be excluded and the answer will be uniformly clear: it’s when you’re left out.”

- Kat Holmes, *Mismatch*, *How Inclusion Shapes Design*³

Designing for the future must include responsible and inclusive practices. This thesis provides insights into ways to design the type of future that is reflective of the needs of the diversity of the global population and the biodiversity of earth. As Buckminster Fuller said, “the best way to predict the future is to design it”⁴.

The “Inclusive, Accessible, Sustainable: Designing a Different Future” thesis began with a few simple questions; “why aren’t there more accessibly designed items made out of sustainable materials?” and “how come most sustainable products focus on the inclusion of eco-friendly efforts but omit the inclusion of diverse mobilities?”. The specific design category that is examined in this thesis is apparel/fashion design. However, this is not to say that these research findings cannot be used in relation to other market segments, the apparel and fashion industry is what was most aligned to the community of the researcher.

³ Holmes, *Mismatch*.

⁴ Padda, “Designing with a Conscience.”

Non-academic resources have been referenced along with traditionally academic texts, to provide practical and multi-dimensional examples of how these topics exist and are talked about in more casual day-to-day situations as well as formal ones. Thus, providing, hopefully, a more inclusive way to absorb this research for a broader, not strictly academic audience. The goals of this research are to contribute to the conversation and amplify the literature that exists surrounding accessible, inclusive, and responsible design practices. Consider this thesis a pilot project for further research and development from a designer's perspective.

Beginning as a proposal in a methodologies class titled "A New Look at Universal Design Practices", this initial research expanded greatly beyond the original scope, morphing into this thesis. The questions that guided the thesis research are as follows:

- Do some inclusionary design practices risk segregation of end users from the population at large?
- Can a design method be developed that merges inclusive, sustainable, universal, equitable & ethical design practices?
- Does stigma affect the impact and acceptance of inclusively designed products?
- Can a designer's preferred style and aesthetics be equally represented within ethical, equitable, sustainable, and inclusively designed products/services/environments?

To pose these questions, theories initially examined included the Capabilities Approach, Stanford Design Theory, Universal Design and Grounded Theory. Nussbaum's Capabilities

approach⁵, centers on the individual, examining broader questions regarding what affects one's opportunities, both socially and personally in relation to disability and accessibility. Kelley's Stanford Design Theory (Design Thinking)⁶, follows specific steps (Empathize, Define, Ideate, Prototype, Test) to create inclusive and effective designs developed from an empathetic core. Mace's Universal Design⁷ follows seven rules (Equitable Use, Flexibility in Use, Simple/Intuitive Use, Perceptible Info, Tolerance for Error, Low Physical Effort, Size/Space for Approach/Use) which aid in ensuring expansive market use with a "design for all" mantra. Glaser and Strauss' Grounded Theory⁸, is a qualitative methodology used for meaning making, this is demonstrated through the development of the EESI Method in Chapter 5.

This thesis unfolds as follows. The definitions section before the introduction includes brief simplified explanations of some of the terms mentioned throughout and related to this research. Chapter 2 includes a literature review that is organized thematically by three main areas of analysis: Accessibility and Inclusion, Environmental Responsibility and Contemporary Aesthetics. Chapter 3 presents the findings of the case study "Developing Helpful Guidelines for Accessible and/or Inclusive Brand Creation". This community-based case study highlights experiences and opinions of select Canadian designers and brands surrounding the topics of accessibility, inclusivity, sustainability, and aesthetics. Chapter 4 presents a practice-based reflection on the experience of the researcher from a practical hands-on perspective,

⁵ Robeyns and Byskov, "The Capability Approach."

⁶ *What Is Design Thinking?*

⁷ "The 7 Principles | Centre for Excellence in Universal Design."

⁸ "Glaser or Strauss? Considerations for Selecting a Grounded Theory Study - Lynlee Howard-Payne, 2016."

documenting the conception of their design studio and the challenges faced when aiming to implement all-encompassing inclusive practices as a small self-funded business. Chapter 5 exhibits the EESI (Ethical, Equitable, Sustainable, Inclusive) Method, developed as a part of this project. This method has been developed as a type of framework/guideline to aid other small businesses and creatives whether in startup or more established phases that want to incorporate more inclusive practices/processes. The EESI Method has been envisioned to act as a free guide for design industry professionals to be able to introduce inclusive practices more easily without having to compromise on their artistic and creative visions. The EESI Method contemplates universal needs beyond the end user, thinking of the environment and manufacturing supply chains as well. Chapter 6 highlights discussions and analysis of all the research within chapters 2, 3, 4 and 5. Conclusions and future work are presented in Chapter 7, containing insights on how this work could be expanded and explored in the future. The overall participatory action research-based foundations of this thesis touch on the sentiments of a “Think Global Act Local”⁹ approach.

⁹ Walter, *Think Global Act Local: The Life and Legacy of Patrick Geddes*.

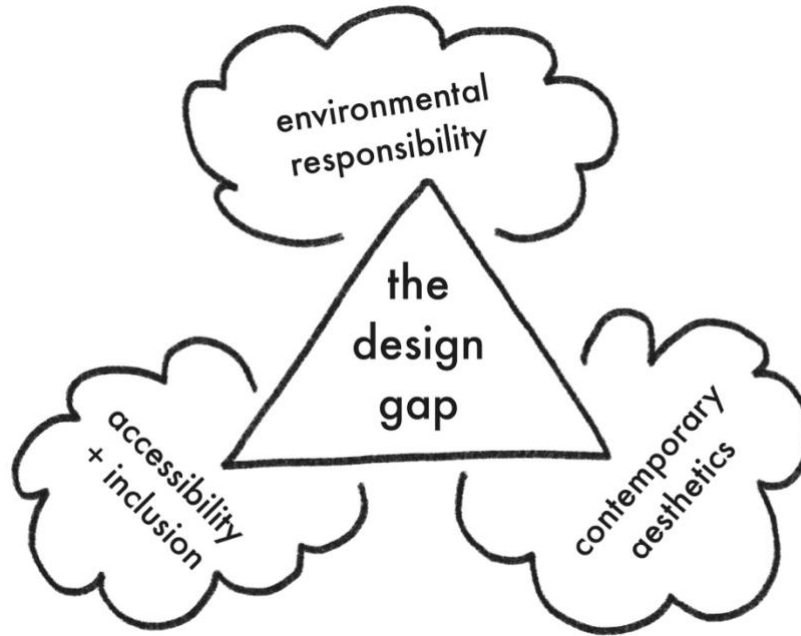


Figure 1 - The Design Gap

The Design Gap (fig. 1) infographic illustrates the areas that are examined in the literature review and the thesis at large. This illustration also highlights the gap that exists in the overlap of these categories within the fashion industry. The Design Gap graphic has acted as an influencer to the researcher's personal design practice and as a guide throughout the ebb and flow of the development of the thesis research.

Chapter 2 – Literature Review

This literature review is divided by themed sections based on the Design Gap illustrated in Chapter 1. These themes are important to the future of design because they speak directly to the needs and desires of the global population. Accessibility and inclusion are consistently increasing as an imperative feature in design due to aging populations and increased awareness around disability and chronic illness, even if at a mainstream level that awareness is narrow. Environmental Responsibility directly related to climate change and how the effects of what we design/produce and how we design/produce it inevitably impacts our futures. Contemporary aesthetics is relevant to understanding what people are drawn to, why they are drawn to it and how it can help or deter adoption of inclusive/accessible/sustainable/ethical products.

Three themes permeate my reading of the literature:

- [Accessibility & Inclusion](#)
- [Environmental Responsibility](#)
- [Contemporary Aesthetics](#)

Varied topics within these three main themes indicate the siloed effects in the field and touch on subjects like, allyship, stigma, disability, inclusive perspectives, researcher limitations, environmental impacts, sustainability, ageism, sexism, and body shaming. The differentiation of the themes further illustrates the gap that there is no all-encompassing design method that is inclusive of the end-user, the environment, manufacturing process and product lifecycle equally. Literature reviewed includes academic articles and books as well as non-academic

videos, websites, and articles. This approach mirrors the Cultural Studies ethos of being multi-disciplinary and collaborative in nature. This academic research is meant to be inviting, to not intimidate, but welcome room for feedback, questioning, critique, and lots of ideas for future projects/expansions.

Accessibility & Inclusion

Accessibility and Inclusion act as a main pillar to this literature review. According to the Oxford English Dictionary¹⁰ the definition of accessible is “Capable of being entered or approached; ease of access; readily reached or got hold of” and the definition of inclusion is “The action or an act of including something or someone”. The Accessibility and Inclusion Infographic (fig. 2) provides a visual roadmap of aspects included within this section. Community, diverse lived experiences, and adaptability are highlighted as three specific groupings. These sections have not been defined within the text as headings because their presence is meant to be felt and pondered throughout the literature review. The “Community” heading includes collaborative design, product testing, transparency/openness, living wages/safe spaces. The “Diverse Lived Experiences” heading includes empathetic design, desegregation, de-stigmatization, learning and unlearning. The “Adaptability” heading includes inherently multi-functional, broad target markets, thoughtful slow design. Some of these sections apply within other aspects of the literature review too, as will be demonstrated there is potential for crossover between these

¹⁰ “Oxford English Dictionary.”

themes in some ways and opportunities for more linkages through increased collaborations and communications.

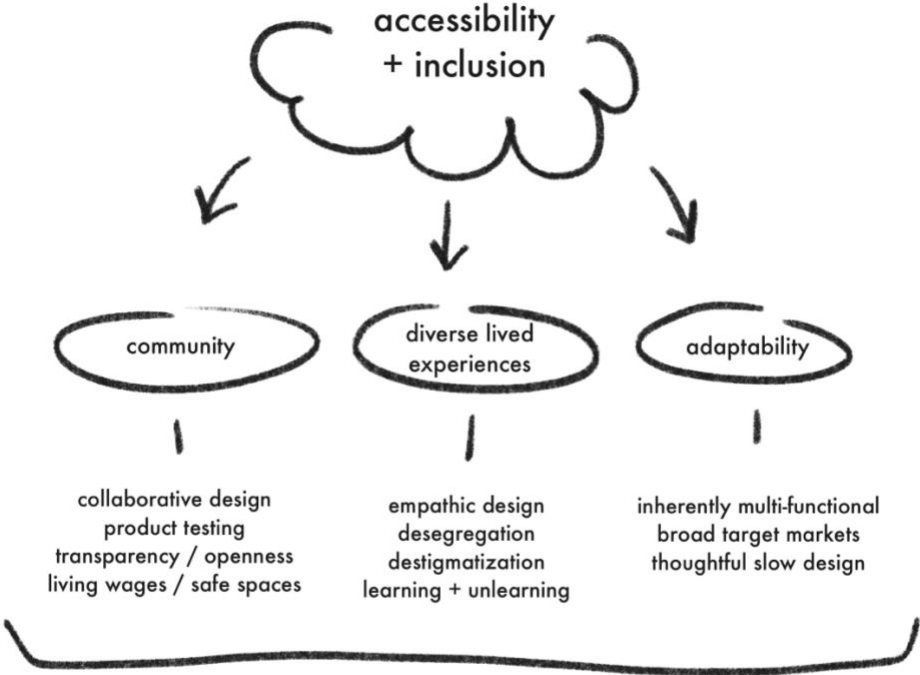


Figure 2 - Accessibility & Inclusion infographic

Although it may seem intuitive or obvious for some that having an inclusive mindset when designing a product is important, this is often not the case. Whether it be due to lack of understanding or education on inclusive and adaptive design practices, or exclusionary perspectives, teaching and learning around this subject matter within the design world is a must. Kat Holmes’ “MisMatch: How Inclusion Shapes Design” examines how designing technology and environments can both be improved by implementing inclusive design

practices. Holmes steers the reader away from the notion of “normalcy”, as what is deemed as “normal” is often ableism speaking and taking charge. The reality that Holmes depicts is that by expanding one’s understanding and empathy on the nuances of the communities they are serving makes the result better for every person at a multitude of ability levels. As Holmes points out, “ability is one of the few categories that transcends all other types of human diversity” and designing solely from our own perspectives is short-sighted and can create inherent ability biases. Therefore, designing without an inclusive mindset can lead to a more siloed solution, bringing in the importance of collaboration/co-design through the design process to ensure that multiple perspectives are being considered and understood from the beginning. Holmes urges designers to view designing for inclusion as an ongoing process that may require updates over time, that it is imperative to continue learning and growing, there is no perfect version to be achieved. Holmes’ “Solve for One, Extend for Many” ethos, is a departure from universal design, focusing on defined “personas” to guide and provide constraints for optimal solutions. Overall, taking the position of learning from and inviting to the table, those who have experienced high levels of exclusion throughout their lifetimes. This book is focused mainly on providing more inclusive solutions in technology, however many of her offerings and insights are transferable to design practices in a multitude of fields like fashion design.

Reading Sarah Richards' book "Content Design"¹¹, two phrases stuck out that could easily be adapted to work for the fashion industry.

"Don't force readers to work your way, work theirs."

"Not more content, smarter content"

These opinions are transferable to notions of not forcing bodies to work in the ableist ways that have become normalized and stopping the flow of mass-production, focusing on slower more thoughtful design processes. The article "Inclusive Design and Making in Practice: Bringing Bodily Experience into Closer Contact with Making"¹² by R. Luck also sheds light on the importance of fostering designers to be inclusive in their making practices. The authors provide examples from the UK-based volunteer led initiative "Remap"¹³. The non-profit, hands on, and truly inclusive approach of Remap allows clients to feel empowered by the design process. Designers listen to what the client's needs are and can attempt to experience them by working closely alongside the client in a co-design effort.

"The advantages of closer collaboration, as we have seen, is it enables people to be more engaged, to act as an expert in their own design process, articulating and physically demonstrating a problem, suggesting routes towards a unique design solution."

¹¹ Richards/Winters, *Content Design*.

¹² Luck, "Inclusive Design and Making in Practice."

¹³ Remap, "Disability Equipment & Aids for Independent Living at Home | REMAP."

The problem of economic accessibility is brought up as well relating to the important factor that how financially challenging it is for some disabled and chronically ill people attain products designed for them:

“Inhabiting a world where many things do not suit everyone’s individual capabilities bespoke designed products are one solution, however these are expensive.”

Thinking of the temporality or ever-changing symptoms of some disabilities/chronic illnesses, the necessary adjustments and adaptations to everyday items can be vastly nuanced, which is why the work Remap is doing is so important. There is an increasing diversity of projects by designers globally involving a deeper connection to end users/customers. Lupton’s “The Senses: Design Beyond Vision”¹⁴ showcases the many designers and products working in this field. The concept that “smell doesn’t have a quantifiable spectrum, like colour or musical tones” has led to the development of a detailed smell lexicon, creating, and allowing space for a type of smell culture and language. The Smellmap¹⁵ creation by graphic designer Kate McLean incorporates the use of colour, texture, aesthetic layouts, and boundaries which opens the door to a new way of navigation, mirroring itself to the importance of navigation within DeafSpace.

Smellmaps provide potential to significantly change the way blind and/or Deaf people interact with a space. The addition of scents in a world where more and more products are unscented, brings into question whether steering away from synthetic scents and into natural essential oils

¹⁴ Lupton and Lipps, *The Senses*.

¹⁵ “Sensory Maps.”

would be beneficial, much like more emphasis on natural fibres is important for sustainability in design. Throughout Lupton's book, the impact of aesthetics is noted as well, such as taste being more or less vibrant to a person depending on the colour of packaging, the product, or the plate from which it is eaten. There is much discussion around branding and imagery, provoking thoughts around the optics of the disabled body and how it is packaged and promoted within popular culture. These visualities have the potential to lead how the public has viewed and continues to view disability, thus directly influencing stigma.

Tensions within the optics and product development between the fashion industry and disability are explored in Pullin's book "Design Meets Disability"¹⁶. Pullin examines how fashion and disability have faltered and how they have succeeded together. A call towards blurring the boundaries between disabled and non-disabled markets is encouraged, therefore requiring a blur between mainstream and adaptive/accessible design practices. Pullin continues towards a point surrounding the homogenization of disability and disabled people that occurs, the bad habit of not paying attention to the differences in style and culture that are ever present as they are with all people, disabled or non-disabled.

"Traditionally, design for disability has paid more attention to the clinical than the cultural diversity within any group. The same prostheses, wheelchairs, and communication devices are often offered to people with a particular disability, whether they are seventeen or seventy years old..."

¹⁶ Pullin, *Design Meets Disability*.

In the article “Think Disability is a Tragedy, We Pity You”¹⁷ by Heidi Janz and Michelle Stack relate to Pullin’s sentiments in differing ways by illustrating how ableism and stereotyping contributes to stigmas surrounding disabled people.

*“We must see disability for what it is – a natural part of human experience,
rather than something to be feared.”*

They mention the notion of the “super-crip” a hero like figure that overcomes extreme odds to be able to integrate more “normally” into society, just like every person dreams of, right? Wrong, these are inherent ableist biases that stigmatize and undermine disability.

The term “inspiration porn” relates to ableist habits to sensationalize and find awe in disabled people, that can result in fetishization of diverse bodies and skewed perceptions of disability. As Stella Young describes in her Ted Talk “I’m Not Your Inspiration Thank You Very Much”¹⁸ the way disabled people experience the world, like anyone else does, is normal to them. We all have diverse lived experiences and just because someone does something in a different way than another is not necessarily cause for a celebration. Young’s description of inspiration porn is the act of “objectifying one group of people for the benefit of another group of people”. By doing this, it creates an othering effect, an expectation that disabled people are inherently victims overcoming all the odds and “objects of inspiration”. Young states that “we’ve been

¹⁷ Janz and Stack, “Think Disability Is a Tragedy?”

¹⁸ *I’m Not Your Inspiration, Thank You Very Much.*

sold a lie that disability is a bad thing”. Juxtapositions like this, comparing life with a disability to life without a disability and framing the former as worse or even unimaginable creates a type of erasure towards disabled lives and bodies. Viewpoints like this add to negative stigmas of disability as being something unwanted, turning what could be experienced as many microaggressions and turning them into larger macroaggressions and misunderstandings / misrepresentations societally. These social aspects of disability include attitudinal, systemic, and exclusionary factors both unintentional and intentional that can impact the ability to gain equal opportunities and access to basic human rights like employment, safe environments, education, and quality living wages/incomes.

From an accessibility perspective, stigma seems to play a major part in why mainstream markets are hesitant to incorporate accessibly designed items as commonplace, non-segregated items, a “blurring of the boundaries” as Pullin¹⁹ has suggested. The fear of the accessible market being too “niche” that mainstream markets will not purchase accessibly/inclusively designed products with more than an ableist end use in mind connects back to the impact of capitalist hegemony²⁰. Humans are changing and adaptive beings whose mobility needs become altered throughout their lives, whether simply due to natural aging, temporary accidents, acquired diseases, or permanent injuries. Thus, in viewing disability as “niche”, it perpetuates a stigma contrary to these fundamental human qualities. Everyone is essentially waiting to live life with some sort of disability at some point whether temporary or

¹⁹ Pullin, *Design Meets Disability*.

²⁰ Ryan, “Why Are There More Clothing Lines for Dogs than Disabled People?”

permanent, so why aren't more products designed with diverse mobilities in mind from the start? Whether they be easily adaptable or modifiable or simply happen to be inherently accessible in nature from the root, this harkens back to the design gap that exists in figure 1. Liz Jackson, otherwise known as "The Girl with The Purple Cane"²¹, points out risks relating to the commodification of the disabled form that can become problematic when brands create accessible and/or inclusive product lines in efforts to address the design gap. Jackson conveys that simply launching a product line because it is seemly trending upwards to do so, is not ideal. Not truly having an inherent ethos of inclusion within the company or design practice can lead to inauthentic, damaging, or useless products. For example, cases where designs are made without the consultation of the end user/target market which ultimately lead to exploitation and landfill.

There are economic benefits and acceptance amongst consumers regarding the affordability factor of the accessible lines by Tommy Hilfiger²² or Kohls²³ due to the lower price points and a streamlined appeal. This is important to note because the reality of economic impacts on disabled populations is huge. While it is important to take note of and question where the impetus to create these adaptive lines is coming from when analysing large fashion brands with mass production facilities, whether it be to hop on a "trend" from a capitalist perspective or because they truly want to provide more inclusive efforts going forward, it cannot be ignored

²¹ Jackson, "I Speak - Girl with The Purple Cane."

²² Nast, "Tommy Hilfiger Ramps up Adaptive Fashion. Who's next?"

²³ "Adaptive Clothing: Find Functional Clothing For Your Family's Special Needs | Kohl's."

that having more affordable accessible apparel options is game changing for a lot of disabled people. Some good aspects to investigate with larger companies is if they are engaging with disabled and chronically ill communities and hiring them to assist in product development. Since the category of accessible design is still considered relatively new and emerging, with less competition in the industry, it is an area that is apt to get attention when large brands that have been notoriously exclusionary begin launching inclusive products. This again, can be a good thing when it comes to topics of representation and providing more access and portrayals of diverse models in campaigns seen by large public audiences, but it is always wise to question and be aware of commodification for the purpose of advancing a brand or business in ways that do not honour or protect the consumers, models, or marginalized public.

Some examples of businesses that have been offering accessible/inclusive apparel options and/or services from equitable roots include IZ adaptive²⁴, a company that specifically designs clothing for disabled people with diverse mobility related adaptations. Liberare²⁵ designs accessible front closure bras, conceptualized from the founders personalized experience of chronic illness from a young age. Slick Chicks²⁶ makes adaptive loungewear and Unhidden²⁷ makes adaptive ready to wear apparel. All is for All²⁸ provides another example within the industry that incorporates inclusion as a main pillar to their mission. All is for All works with businesses to be more inclusive, they have a growing roster of talent and work with large- and

²⁴ "IZ Adaptive."

²⁵ "Liberare | Hassle-Free Front-Closure Bras."

²⁶ "Slick Chicks - Adaptive Panties for Women | Side Fastening Underwear."

²⁷ "Sustainable Adaptive Fashion Brand - Unhidden Clothing."

²⁸ "All Is for All - #Fashionwithoutbarriers."

small-scale companies to work towards normalizing disability. These are just a few businesses of many, to demonstrate a portion of the market that is more removed from the mass produced and mass consumed options currently available on the market.

The importance of including diverse perspectives in the design process is clearly demonstrated through David Lepofsky's accessibility videos. The impacts of not incorporating the experiences of disabled and chronically ill people from the root of design processes is illuminated. In the YouTube video "Accessibility Problems at New Toronto Area Public Transit Stations"²⁹ Lepofsky highlights important missing elements that would allow for real accessibility in this heavily trafficked public location. Lepofsky includes a wide variety of visuals, uses references, photos, video footage and explains why and what is and isn't helpful/not helpful. As Lepofsky states in the video:

*"If you don't have a disability now, these barriers will hurt you later
because everyone is bound to get a disability as they age."*

Lepofsky illustrates the benefit of accessible design for all and the oversights that can occur when proper consultation or knowledge of accessible and inclusive design is not implemented. Examples like tactile surface warnings not existing along every edge of the subway, demonstrates a lack of quality control on behalf of the designers/officials of the transit station, thus resulting in unsafe platform development. The example of railings that stop midway down a staircase exemplifies similar problems in the review of the Toronto Metropolitan (formerly

²⁹ *Accessibility Problems at New Toronto Area Public Transit Stations (Long Version)*.

Ryerson) University Student Learning Centre³⁰. These videos are helpful and needed resources for the development of policies like the Accessibility for Ontarians with Disabilities Act (AODA)³¹ and Web Content Accessibility Guidelines (WCAG)³². Organizations like AccessArt³³ are working towards improving public art spaces by conducting detailed surveys of art in public settings and providing public facing maps with accessibility content and descriptions included. The need for marginalized voices to be taken seriously and included from the conception of not only guidelines and policies, but buildings, products, built environments and services has never been more pertinent.

Industrial designer Patricia Moore famously went undercover for years in an elaborate disguise as an elderly woman³⁴ to experience the barriers both societally and environmentally that arose day to day. These experiences are detailed in her book “Disguised: A True Story”³⁵, which despite being published in the 80’s still carries some relevant sentiments and observations to the design of the present world. These lived experiences that Moore had, led her to become a pioneer in the world of universal and inclusive design. Leaning more into the topic of empathy, “Empathetic Engineering: helping deliver dignity through design”³⁶ co-authored by Hosking et al. surrounds the concept of how empathetic design can directly impact the dignity of medical patients, reminiscent of Stanford Design Thinking with the first step in the method being

³⁰ *Accessibility Problems at Ryerson University Student Learning Centre (Long Version)*.

³¹ Kovac, “What Are AODA Standards?”

³² Initiative (WAI), “WCAG 2 Overview.”

³³ “AccessArt - About.”

³⁴ Pandell, “She Sacrificed Her Youth to Get the Tech Bros to Grow Up.”

³⁵ Moore and Conn, *Disguised!*

³⁶ Hosking et al., “Empathic Engineering.”

“Empathize”, then followed up by “Define, Ideate, Prototype, Test.”³⁷. The concepts discussed in this article prove that there is a strong case for empathy from a designer’s perspective in relation to dignity from the customer’s perspective. This article focused on the medical industry, but the theory is transferable to a myriad of different fields like fashion. This article prompts a reimagining of how accessible and inclusive design can be championed with co-design and storytelling.

In attempt at more intersectional considerations, the paper “‘You’re Calling Me a Racist?’ The Moral and Emotional Regulation of Antiracism and Feminism” by Sarita Srivastava³⁸, although not directly referencing accessible or inclusive design, is relatable to this research because it demonstrates the damage of misrepresentation and nonrepresentation in an area that claims to be all encompassing. Srivastava examines the traditional western history of white feminism and its inability to view difference without bias and how it affects feminist group governance structures. The issues of white feminists dismissing the cultures/identities of women of colour are depicted. This same notion could be mirrored for example in inclusive/accessible design efforts that are completed without inputs or feedback from disabled and chronically ill people who have lived experiences and insights that are valuable, yet often dismissed by non-disabled communities. Universal perspectives that assume the needs of all are being met without proper care towards understanding the nuances that can exist risk ableist and exclusionary optics. Sina

³⁷ Lewrick et al., *The Design Thinking Toolbox*.

³⁸ Srivastava, “‘You’re Calling Me a Racist?’”

Bahram denotes key perceived differences between inclusive and universal design in the essay “Inclusive Museum”³⁹ stating:

“While “universal” implies a potentially unattainable burden for designers and developers, “inclusive” is an invitation. It’s warm, and it aligns with most people’s basic values...Inclusive design recognizes that people have multiple forms of identity and difference, including age, ability, language fluency, socioeconomic status, and cultural background. Accounting for those differences doesn’t mean making everyone the same.”

Bahram goes on to refer to accessibility as being more linked with functionality and the users’ specific functional needs. Another important point Bahram makes is regarding the strive for perfection and how that pursuit can lead to nothing getting accomplished. They share,

“Inclusion is not a binary pursuit with a finite destination. Inclusion is a state of thinking and acting toward a shared purpose based on a commitment to iteration, refinement, and self-improvement.”

Bahram provides a permission and allowance for the significance of continuous research processes within one’s design practice. Embracing the mistakes as building blocks to improve upon. The notion that Bahram speaks to gives an ease to not feeling like one needs to know everything before getting started, it’s in fact through the doing that one will do the most learning.

³⁹ Lupton and Lipps, *The Senses*.

Accessibility and inclusion are found at all parts of the design process. Beginning with examinations of the importance of diversity inclusion in design through Holmes and Richards books, Luck and Lupton's works are explored to showcase co-design and the range in designing for the senses. Notions of desegregation between disability and design were reviewed relating to Pullin's book. Reflections on economic attributes and stigmas within disabled communities and the importance of intersectionality were also highlighted. A nod to Lepofsky's important work in the area of channelling policy changes and incorporation of diverse voices in public spaces was provided. Design from empathetic perspectives was touched on as well as universal design limitations. This segment of the literature review demonstrates where needs exist in the design industry to be more inclusive and accessible and an array of examples of ways in which to consider doing so. It also provides critiques and questions.

Contemporary Aesthetics

This review of contemporary aesthetics begins with an infographic (fig. 3). This graphic includes three sections below the heading Contemporary Aesthetics: forward thinking, de-categorization, and youthful energy. Similar to the previous theme, the idea is for the infographic to act as a reference/reflection visualization on what is discussed. Thoughts like, unconcerned with trends, optimal essentials, circular modern taste, all bodies/all lifestyles under the forward-thinking section are meant to act as a guide, giving a sense of a vibe. The same goes for the de-categorization section that includes gender neutral/unlabelled, everyone is welcome and multiple styling options as casual prompts. For the last section youthful energy,

happinistance, ageless vibe, differing from industry traditions and playful silhouettes are all listed.

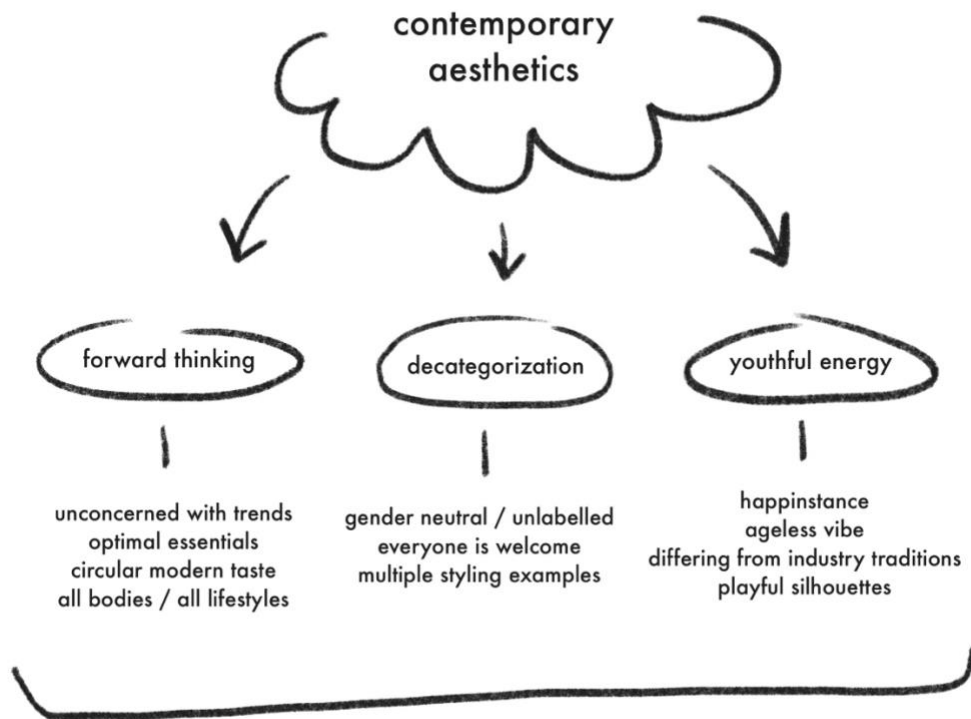


Figure 3 - Contemporary Aesthetics infographic

“Radical Visibility: A Disabled Queer Clothing Reform Movement Manifesto” By Sky Cubacub⁴⁰ brings up the issues around aesthetics being lost among accessible clothing⁴¹, with more impetus on a medical look.

⁴⁰ Wong, *Disability Visibility*.

⁴¹ “Rebirth Garments.”

“Most clothing made for disabled people caters to senior citizens...The styling isn’t active-oriented, assuming that the wearer won’t be moving around much independently, and the garments look like hospital gowns or scrubs. This assumes not only that clothing for disabled people and clothing for older folk are synonymous, but also that all disabled people aren’t capable of being active through sports, swimming, and dancing...society holds a very one-dimensional view of people who are old or disabled.”

Cubacub highlights what has been a present thread through much of this research, that the visibility and representation of the wholeness of disability and chronic illness experiences need to be incorporated into designs to be truly successful.

Siebers’ “Disability Aesthetics”⁴² examines the role that disability plays in art and its inherent acceptance within the art world, being depicted and revered in many famous historical paintings and sculptural works. Yet, this same acceptance and adoration is not transferred into everyday life in how society predominantly engages with disabled and chronically ill people, especially those with visible disabilities and chronic illnesses. Liz Moores’ essay “I’m Tired of Chasing a Cure” from the book “Disability Visibility”⁴³ notes:

⁴² Siebers, *Disability Aesthetics*.

⁴³ Wong, *Disability Visibility*.

“There is a persistent belief amongst abled people that a cure is what disabled people should want. To abandon our disabled selves and bodies and assimilate into a perhaps unachievable abled skin.”

And the essay “So. Not. Broken” By Alice Sheppard (also from the book Disability Visibility⁴⁴) mentioned a similar sentiment:

“Many nondisabled people attribute a degree of brokenness to disability; it arises from the medicalization of our bodyminds. To be disabled is, in this world, to experience a problem of body and/or mind so severe that it distinguishes a disabled person from a nondisabled person.”

Merging Siebers, Moores, and Sheppards’ perspectives, illustrates the prevalence of ableist aesthetic values that are tightly woven throughout the dominant culture. For accessible and adaptive products to be acceptable by non-disabled and chronically ill consumers, it’s almost as if the original use case needs to be hidden and the aesthetic needs to rise above. An example that comes to mind and is popular amongst universal design is OXO⁴⁵, the kitchen tools that were made with the initial intention of being easy to grip for people with arthritis and have now become widely popular and accepted products that all people enjoy using because they look nice and feel good in the hand. It’s like the saying goes, anything can become desirable with the right narrative, but what narrative is being told? Because many things can be true at once.

⁴⁴ Wong.

⁴⁵ “Oxo - About Us.”

Although aesthetics often come first in terms of what we see, the comfort aspect is also important and so often style is chosen over comfort, but what about the concept of comfort in disguise? In *The Pretty One*⁴⁶, author Keah Brown comments that:

“Comfort and accessibility deserve to go hand in hand, but often accessibility feels like folklore. Like a fable told many years ago that loses its magic when you learn that it should be real and isn’t a fable at all. It’s just something a group of people deserve but do not have in the way that they should.”

Ableism in design forces disabled/chronically ill people to come up with creative solutions constantly, often at a moment’s notice. Beyond the physical barriers, there exist attitudinal barriers that people need to overcome. Brown emphasizes that it is not just disabled and chronically ill people who should care about accessibility, but all people since it can affect us all at different points in our lives. Brown also states the importance of being able to find options that work for you but are also fitting to your own personal style in a way that represent your own full identity.

Clothing has long been segregated by gender, body type, age for example, instead of general aesthetics and style preferences. A nod to how gender is an outcome of ‘market’ formation and vice versa. Personal style is exactly that, personal and unique to everyone, and being able to express ourselves is important. Many stores/brands offer different lines that follow certain colour stories or themes providing aesthetic categories, but what if clothing in general was

⁴⁶ Brown, *The Pretty One*.

marketed solely based on mood or vibe? Shops could offer clothing that was gender free, age group free, offering varying size and mobility/adaptability options all in the specific aesthetic of the designer, allowing those who subscribed to the same aesthetic to shop there regardless of labels and categories that society had forced on them. Historically societal norms try to fit people into boxes based on the myriad of boxes they check off. It's unrealistic and unfair to assume that just because a person is a certain age or experiences life in a different way than another person, that they do not wish to express their style in certain ways. However, this seems to be the kind of thinking that has been traditionally depicted in fashion and retail landscapes. Designing for personal aesthetic over categorical attributes like age, gender, ability, etc. could be an antidote to exclusion and othering within the fashion industry.

Designers are challenging these norms. Consider The Rational Dress Society launched Jumpsuit⁴⁷, which applies a more universal, almost Marxist aesthetic to their line with the idea that everyone wears practically identical jumpsuits based on an anthropomorphic sizing chart offered on their website. These jumpsuits are open source, and the patterns are available online for those interested to download and make or have made. This anti-fashion approach works towards de-gendering, simplifying and equalizing access to fashion. It also removes itself from the usual sizing systems and offers transparency to the customer by its approach to sharing data and information openly. Another brand that is inherently size inclusive is Free Label⁴⁸, they portray a comfy minimalist aesthetic of comfortable loungewear inspired

⁴⁷ "Jumpsuit."

⁴⁸ "Free Label Clothing."

silhouettes. Brands like Universal Standard⁴⁹ have chosen to make size inclusion a given. They make and portray all styles on their website on size inclusive models from 00-40, moving away from traditional fashion brands that excluded people above a certain size. Universal Standard describes themselves as “fit obsessed”, they accept and celebrate their customers as they are. Good American⁵⁰ is an example of a brand that is committed to inclusive sizing by only allowing retailers that agree to purchase their whole size run from XS-5XL to sell their products. Unlike what often happens during the buying process where larger sizes are not included in purchase orders, this enables them to have a say in forcing more inclusion with the companies to which they sell. However, this is easier to do as a large company with more financial capital to stand firm against retailers’ usual demands, a luxury many brands entering the wholesale market do not have. As a note, both Good American and Universal Standard are examples of larger more mass-produced brands as opposed to the examples of Jumpsuit and Free Label. Issues surrounding mass production and consumption will be covered in more detail in the following section theme about environmental responsibility.

Aesthetics in medical tools link the aspects of environmental materiality and disability that are important aspects of the literature review. In the article “Design of Medical Devices - A Home Perspective”⁵¹, Bitterman tackles the opposition between the function of medical devices within home and clinical settings and the importance that aesthetics plays. The facts

⁴⁹ Universal Standard, “Universal Standard | Elevated Women’s Clothing. Sizes 00-40.”

⁵⁰ “GOOD AMERICAN | REPRESENTING BODY POSITIVITY.”

⁵¹ Bitterman, “Design of Medical Devices—A Home Perspective.”

surrounding the diversity of environment, patient/end user and education that exist and need to be considered when using a device that was designed for one set of circumstances are vast.

Succinctly stated by Bitterman,

“Household and community settings, in direct opposition, are unpredictable and uncontrolled environments. Each user’s home is unique and the location of medical devices at home is unknown...sometimes requiring improvisation...”

The challenges concerning aesthetics are not surprising, as aesthetics are known to have great value in consumer desirability and choice as much as functionality.

“In addition to technological and ergonomic issues, health care equipment placed at home is challenged with concerns of aesthetics, design trends, style, fashion and compatibility with the home’s interior design...just as any other consumer product.”

Aesthetics and function equally matter in gaining user acceptance. What is astounding is the lack of a marriage between pleasing looking products that are also highly functional, adaptable, and specialized whether within the medical field or beyond⁵², like adaptive fashion. The addition of sourcing responsible materials inserts in another rarity and challenge. If these seemingly opposing sides collided, many hurdles could be eliminated in end user satisfaction and stigmatization towards the “ugly face” of medical devices and adaptive design in general.

⁵² “In the Accessible Design Space, Style Is Too Often Overlooked.”

Carrol and Kincade⁵³ identify the apparel needs from the broad target market of working women who have physical disabilities. One definition used in this article, referenced from The Centre for Inclusive Design and Environmental Access (2003)⁵⁴, states:

“The goal of inclusive design is not to change but to improve the design of environments and products by making them more usable, safer, and appealing to people with a wide range of abilities”

Carrol and Kincade succeed in challenging the notion that the sole way to create an inclusive apparel product is to target a specific type of disability. By gathering qualitative data with the use of an Enabler diagram they were able to define users’ needs based on mutually shared mobility issues. They ask two research questions: “Can the needs and the preferences of a specific group of consumers (i.e., working women with disabilities) be incorporated into an inclusive apparel product?” and “Will apparel industry constraints impact the ultimate realization of that product?” Simply put by one end user:

“Women with physical disabilities want apparel that does not set them apart from other women.”

By making evident the lack of aesthetically pleasing options for working women with disabilities to choose from and the need for a streamlined approach across industry standards, Carrol and Kincade make it clear that there needs to be a shift of perspective within the fashion industry.

⁵³ Carroll and Kincade, “Inclusive Design in Apparel Product Development for Working Women With Physical Disabilities.”

⁵⁴ “Welcome to the IDEA Center.”

The article “Inclusive Design 2.0 - evolving the approach and meeting new challenges”⁵⁵ by Donahue and Gheerawo acts as a brief overview of the evolution of Inclusive Design into a new and improved design framework. It provides a plethora of additions that surely will lead towards a future of better design, thus better products/services. The sentiment of niche practices becoming an inherent simply put thoughtful element of design is explored.

“...the desperate need to maintain aesthetic quality in inclusive design, moving away from inclusivity as a niche practice and representing it as just a part of thoughtful design...”

As noted in the article, the creation of more mandatory inclusions should not be viewed as limitations, but challenges on how design can be done differently to best meet the needs of our diverse population in a way that does not negatively impact the environment or take individual expression out of the equation. Becoming more inclusive of different end users and communities to create non-niche products enables more openness towards lessening stigmas. With this inherent inclusion of a broader target market, the validity of the need for personalized and pleasing design aesthetics is exemplified.

Don Norman’s acclaimed book “The Design of Everyday Things”⁵⁶ examines the importance of listening to the end-user through the design process, with human centred design as the focus.

⁵⁵ Donahue and Gheerawo, “Inclusive Design 2.0 - Evolving the Approach and Meeting New Challenges.”

⁵⁶ Norman, *The Design of Everyday Things*.

The perception of a product, how it looks and how it will be engaged with being an imperative factor. Norman notes,

“Interaction design draws upon principles of psychology, design, art, and emotion to ensure a positive, enjoyable experience.”

It is through interaction, physically and visually that users will engage and understand a product, design and/or service. Norman also notes the importance of emotion in guiding decisions and acceptance of certain designs over others. This segment from the book speaks to some of what Siebers writes about, regarding the disconnect between visual acceptances:

“Would you use a walker, wheelchair, crutches, or a cane? Many people avoid these, even though they need them, because of the negative image they cast: the stigma. Why? Years ago, a cane was fashionable: people who didn’t need them would use them anyway, twirling them, pointing with them, hiding brandy or whisky, knives or guns inside their handles... Why can’t devices for those who need them be as sophisticated and fashionable today?... why not transform them into products to be proud of? Fashion statements, perhaps.”

This statement itself is problematic in some ways because if the world’s perception of disability was less ableist, then the need to make these things more desirable and aesthetic, may not be necessary. These adaptive tools could exist as they are, as the hope would be for disabled and chronically ill people to exist as they are and as they wish to be, with full inherent acceptance and normalization. As Norman states,

“Complex things are no longer complicated once they are understood”.

But of course, the flip side to that is, of course, why not make these adaptative devices beautiful and stylish as well, however that again highlights the question of what is and isn't deemed beautiful? Because the answer to this is ever personal, is why it is important for many aesthetics and styles to exist.

Together, the literature on Contemporary Aesthetics suggests, normalizing disability, and difference in all aspects from an aesthetic perspective is an important puzzle piece towards getting to a place of inherent mainstream understanding and acceptance. This theme began with a comparison and analysis of Siebers' "Disability Aesthetics" and essays from the book "Disability Visibility". Important insights from Keah Brown on personal style, comfort and accessibility were noted. Ideations around desegregating and de-labelling in favour of communal aesthetic categorizations were presented. Examples of both mass produced and slow fashion brands using inclusive aesthetic marketing were highlighted. The importance of aesthetics in swaying user acceptance and adoption of medical devices was illuminated. Lastly, an overview of interaction design from Norman and how important perception is to how users interact with products. These examples were chosen to show an array of areas that aesthetics meet disability meet sustainability meet user adoption and how transferable these concepts are to fashion design despite not all being directly related.

Environmental Responsibility

The last theme in the literature review is Environmental Responsibility. This section also has an infographic (fig. 4) acting as a loose guide. The three sections below the heading Environmental

Responsibility are: Product Lifecycle, Sourcing and Supply Chain and Mother Earth. The topics of design for disassembly, cradle to cradle, take back programs and biodegradable materials are listed under product lifecycle. The sourcing and supply chain section houses manufacturing facilities, local economies, and textile fibres/dyes under it. Under mother earth, carbon neutral / net-zero, ethical consumption promotion, repurposing / reimagining and restoration are listed. The same mantra goes for this infographic, that is be envisioned as a vague roadmap for where this theme will be going, providing some thoughts to ponder as one reads.

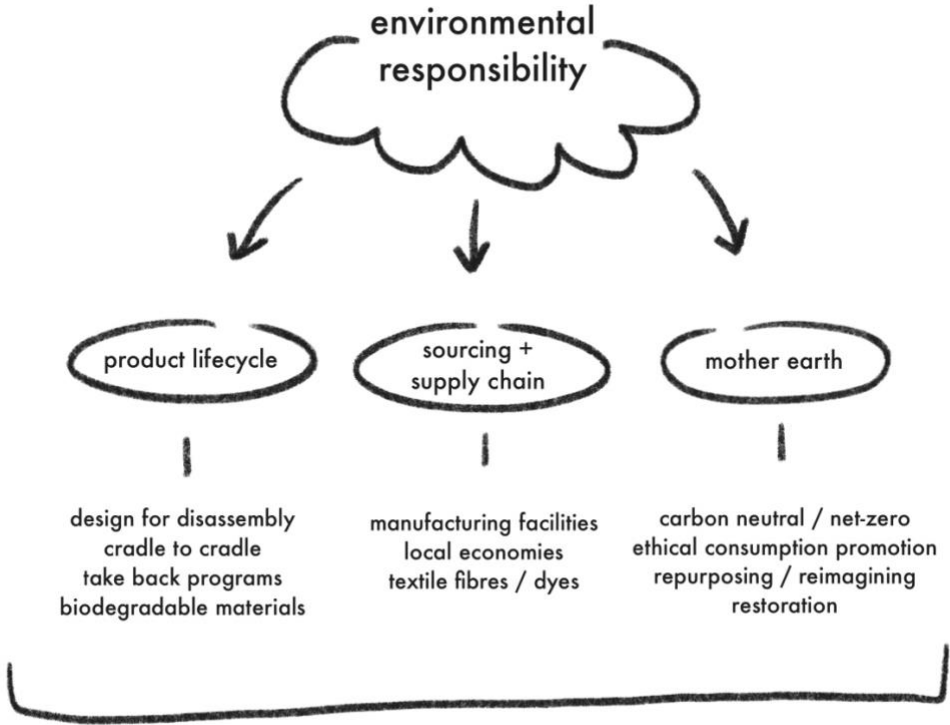


Figure 4 - Environmental Responsibility infographic

Eco-friendly design has recently become popular due to the rise of Global Warming awareness and initiatives aiming to improve climate change issues. While inclusive and accessible design practices aim to be mindful of many aspects, sustainable environmentally responsible practices are often still left out. Instead of these design methods running parallel to one another, are there areas for more intersection to occur? Why is this and in what ways can successfully merging accessibility and sustainability be accomplished? When thinking of sustainability and prioritizing it, should we not be also pondering the temporality of our own abilities and how that impedes the lifecycle of a product?

The book “Cradle to Cradle: Remaking the Way we Make Things”⁵⁷, by Michael Braungart and William McDonough highlights the inefficiencies in many sustainable design efforts. Similar to issues that are brought up in “Magnifeco: Your Head-to-Toe Guide to Ethical Fashion and Non-Toxic Beauty”⁵⁸ by Kate Black, Cradle to Cradle describes how beyond the problematic/sometimes toxic properties that can exist in polyesters and synthetic materials being worn against the skin, the recycling process itself is highly unsustainable and still produces a result of cradle to grave at the end of a products lifecycle. Despite this, many brands continue to steadily produce and heavily market, products made using recycled plastic water bottles and/or netting. For some this is an act of greenwashing, while for others it may just be an act of pure innocent ignorance since the generalized understanding is that all recycling is

⁵⁷ McDonough and Braungart, *Cradle to Cradle*.

⁵⁸ Black, *Magnifeco*.

good and that recycled materials are better than non-recycled ones, although this is not always the case at all.

“At its deepest foundation, the industrial infrastructure we have today is linear: it is focused on making a product and getting it to a customer quickly and cheaply without considering much else.”

- *Cradle to Cradle*

The notion of “away” is discussed, from the perspective of where things go when they are discarded and thrown away or donated, if these items are not fully recyclable or repurposeable, the “away” is inevitably a dump somewhere in the world, it is argued that “away” does not exist. Many items designed and produced today are not conceptualized from this perspective, even the recycled plastics have a shelf life to how many times they can be recycled. Unlike natural resources like cotton that can not only be recycled more times, but also if not blended with other synthetic fibres, can be able to fully biodegrade. Ultimately non-ecological materials like plastics and even metals are downcycled rather than truly recycled, since each time they are put through the process of repurposing the quality goes down, making continual use impossible with current technologies. Thus, thinking from a cradle-to-cradle perspective and imagining the journey of a product from purchase to use to end of life with a plan for disassembly at the beginning stage that is incorporated into the design is paramount. Just as adaptations to an existing design can create feelings of otherness or afterthought, trying to make something more environmentally responsible without addressing the root of how it is

conceptualized/manufactured/farmed/produced is never going to be as successful as being proactive and mindful of sustainable and inclusive factors at the beginning.

Designing for the natural aging human body and change as an inherent factor in the continuation of our lives is paramount to creating longer lasting more lifetime value within a product or service for that matter. Yes, using low impact materials is important, but shifting mindsets to be inclusive of low impact designs themselves in terms of future adaptivity is also important. It's important to not only be mindful of how consumers purchase things, but how those things are designed. Designing for the future should include nuanced broad scope creations that are mindful of the notion of changing bodies equally to the state of our environment. Traditional Indigenous practices⁵⁹ make efforts to ensure that what is being created will not be deemed harmful seven generations into the future. This inherent practice and belief system demonstrates a deep appreciation and connection with the earth. This connection is unfortunately missing in many aspects of the fashion industry⁶⁰.

The sustainability of our future and the equitable/ethical treatment of our population affects every living organism on the planet. If basic human and environmental rights are not being upheld within all aspects of design (especially mass-marketed design) the world will continue to become depleted of its natural resources. Building on that, the health of planet earth is a topic that universally impacts the health of our population. One must acknowledge the root causes

⁵⁹ "What Is the Seventh Generation Principle?"

⁶⁰ Pucker, "The Myth of Sustainable Fashion."

for environmental harm from a sustainable perspective: over-consumption and capitalism.

Fashion Takes Action⁶¹ is an organization that is focused on making the fashion industry more sustainable. They promote the “7 R’s of Sustainability”; Reduce, Reuse, Repurpose, Resale, Recycle, Rent, Repair⁶². This speaks to today’s younger consumers who are carrying the burden of what over production and consumption has created, offering a way to combat these issues.

Forty years ago, it was commonplace to take things to the tailor to have them fitted to your unique silhouette⁶³. As years have gone by, tailoring has become viewed as a type of luxury since the rise of mass produced and mass consumed fast fashion has dropped the cost of clothing significantly. It is difficult for people to rationalize spending money at a tailor when the cost of the clothing they are purchasing makes throwing it away or donating it the easier option. Thrift stores increasingly have more and more donations resulting in continuous issues around what to do with items that don’t sell. Many people assume that once an item has been donated, that it signifies the end of its lifecycle and the beginning of its new lifecycle into its new owner’s closet/home. However, this is often only the first step in a long or sometimes very short second life⁶⁴. Alterations to these pre-existing garments could allow for a rebranding of the thrifted garments removing the classist and socio-economic background of the garment to breathe new life to it and to allow/encourage a new life cycle. This is a “catch 22” for many people, yet the reality is that for disabled and chronically ill people, adaptations to clothing and

⁶¹ “Fashion Takes Action - Creating a Conscious Fashion Future.”

⁶² Drennan, “The 7 R’s for Fashion Lovers | Fashion Takes Action.”

⁶³ “Where Have All the Tailors Gone?”

⁶⁴ Updated, “The Secret Life of Second-Hand Clothing.”

home products is a well-known reality. The move away from mending and tailoring creates negative environmental impacts because it indicates less care and continued use of items once worn out. Offering easily modifiable pieces, buy-back/recycling programs or custom alterations is aspirational, but often very hard to incorporate logistically and economically, especially for small businesses. Companies like Mud Jeans⁶⁵ offer a leasing program where jeans can be leased out and then returned when they are no longer wanted, to be recirculated as vintage at a lower price point to the next wearer. Buy-back programs are gaining popularity among brands that are realizing that there is in fact value in the resale market. Resale is not strictly lucrative for “sneakerheads” or “Supreme fanatics” anymore, the concept of curated thrift/resale is on the rise⁶⁶. Whether it be from Poshmark or your favourite local boutique that is offering incentives to return garments after they are no longer wanted by you for a discount on future purchases for example, these options still come with implications linked to the continuous need for more. This uprise in thrift is indicative of a positive shift in terms of consumers not needing to buy something brand new made with new materials only, but it does not battle the rise of over-consumption in general. Patagonia famously published advertisements⁶⁷ surrounding this idea of directing consumers to fight capitalism, by simply suggesting they not buy a new item and instead wear what they have and repair it when needed. The ad read in large font “Don’t Buy This Jacket”, attempting to make consumers think twice about their purchasing habits.

⁶⁵ “Send Back Old Jeans.”

⁶⁶ Nast, “Shopping Secondhand Is Now a Badge of Honor—Not a Dirty Secret.”

⁶⁷ “Don’t Buy This Jacket, Black Friday and the New York Times - Patagonia Stories.”

Extended producer responsibility (EPR)⁶⁸ was introduced in the 90's by Thomas Lindqvist who suggested that brands and companies should be taking responsibility to not only think about but build in ways to be more sustainable from the root of their processes. This includes thinking not only about the impacts of manufacturing, but also of the end game of a product. What happens when the customer is done with it for example, will it biodegrade back to the earth as food or as poison?

This notion of creating from the root for in a more circular way brings up the practice of designing for disassembly⁶⁹. Meaning that the brand is either prepared to take garments back at end of lifecycle for the customer and disassemble them for reuse or proper recycling, or they are simply easily compostable and biodegradable in nature so the customer can contribute to the end of lifecycle themselves in sustainable ways. This concept works towards mitigating issues around pre- and post-consumer waste, both of which are gigantic issues in the fashion industry. Examples of this issue have been covered in articles about fast fashion chains deciding that burning clothing that didn't sell or was returned was more economical for them than repurposing it⁷⁰.

In "Radical Matter – Rethinking Materials for a Sustainable Future"⁷¹ by Kate Franklin and Caroline Till, alternatives to commonly used less environmentally conscious materials are explored. Highlighting creative professionals and companies that are doing research in the

⁶⁸ Lindqvist, *Extended Producer Responsibility in Cleaner Production*.

⁶⁹ "Design Lessons in Disassembly."

⁷⁰ "Why Do Some Fashion Brands Burn or Destroy Unsold Clothes?"

⁷¹ Franklin and Till, *Radical Matter*.

areas of sustainable material development and responsible design. There are elements of re-education and of re-modelling required to the current state of the industry, if people, policies, and institutions are not going to change, then finding ways to meet them where they are and educating them in easily digestible ways is needed to not further perpetuate these issues. Books like *Radical Matter* provide an interesting and approachable way to learn about the work that is being done and why it is important.

Ezio Manzini's system of cosmopolitan localism⁷² aims to bridge the gap between communities, creating connections between otherwise disconnected communities and sharing expertise amongst different locales. The idea being that local economies are supported and able to thrive while producing in ways that are comfortable and known to them. Safia Minney's documentary *The True Cost*⁷³, demonstrates the unethical practices that occur in supply chains that are built differently, from the mass-produced side of the fashion industry, and how labour laws and environmental laws are infringed with many current day practices globally due to the lack of policy and union protection. Minney, also the author of "*Slow Fashion - Aesthetics Meets Ethics*"⁷⁴, advocates for better ways of doing business that are ethically sound, bringing light to the pitfalls of the fashion industry, as well as highlighting companies and brands that are bringing positive change. Developing fair trade and global organic textile standards, Minney is working with a team of industry leaders focused on finding ways to produce textiles and fashion

⁷² Manzini, "Distributed Systems And Cosmopolitan Localism: An Emerging Design Scenario For Resilient Societies."

⁷³ "The True Cost."

⁷⁴ Minney, *Slow Fashion*.

in ethical, non-harmful ways. For example, having strong relationships and transparencies with the factories a brand is working with, sourcing fair trade organic textiles and overall fixing the wrongs that have happened, like the Rana Plaza factory collapse in Bangladesh in 2013⁷⁵. This tragedy took the lives of over 1100 people due to unsafe working conditions within the run-down factory which workers had been trying to get help with but weren't listened to. This disaster forced focus towards the needs of garment worker safety, but many of these issues persist today. The United Nations' 17 Sustainable Development Goals (SDGs)⁷⁶ are a consolidated effort to bring change globally in all sectors. Many of these SDGs are imperative to the future of fashion, with fashion being one of the highest polluting industries next to oil and gas, having sustainable goals being internationally implemented is just one step among many that came before and many that need to happen. Organizations like Fashion Revolution⁷⁷ provide ongoing educational and engaging content via newsletters, social media and resource guides that align with these goals. "The ReDesign Canvas: Fashion Design as a Tool for Sustainability"⁷⁸, provides an excellent example of an initiative being researched that has been created by Dr. Anika Kozlowski which focuses on ways to improve the landscape of sustainability within the fashion industry in Canada and globally, in support of the UN's SDGs.

Aja Barber writes about the uphill battles against mass production and overconsumption in "Consumed - The Need for Collective Change: Colonialism, Climate Change and

⁷⁵ "Rana Plaza."

⁷⁶ "THE 17 GOALS | Sustainable Development."

⁷⁷ "Fashion Revolution."

⁷⁸ Kozlowski, Searcy, and Bardecki, "The reDesign Canvas."

Consumerism”⁷⁹. Taking an important stance against fast-fashion and addressing CEOs and billionaires head on. Barber writes,

“Demand is essentially an artificial creation, something that is essentially valueless if it’s in the wrong place at the wrong time.”

Fast fashion has devalued apparel and textile goods, so that they are seen as worth less and worthless due to the over saturation of the market. Due to this mass production, fair pay has become a misnomer in large production facilities, leaving people in dire straits and providing garments that to the end user seem cost effective and economically accessible, but hold so much unethical history within them. As previously mentioned, the fact that fast fashion companies have been known to incinerate/destroy products rather than of repurposing them or employing a different method of production forecasting such as pre-ordering for example. Barber argues for the importance of intersectionality and decentring the traditionally centred voices, narratives, and perspectives portrayed in the fashion industry. Barber instead promotes the invitation to an array of diverse perspectives be brought to the table, that this is imperative in the fashion industry to make positive changes that will stick.

Companies that offer transparency to their factories, pricing structures and business ethos like Everlane⁸⁰ have chosen a model that had sustainability and ethical practices at the forefront when they began. They showcased their product on diverse bodies but do not market that they

⁷⁹ Barber, *Consumed*.

⁸⁰ “Everlane.”

offer adaptive or accessible options within their product line. Reformation⁸¹ uses the slogan, “being naked is the #1 most sustainable option, we’re #2”. Reformation’s product pages, along with usual product images, size guides and descriptions, also include a sustainability impact tab. They use a lot of deadstock materials to create their products, although in recent years it’s been debateable how responsible deadstock is, since it’s still a by-product of over-production. These are examples of large companies that may have not done everything right but were earlier on the scene in terms of providing awareness and transparency to their customers about these business insights. Newer brands like Brother Vellies⁸² and KOTN⁸³ are examples of social enterprises, creating production lines that provide economic opportunities to the diverse communities and artisans they work with. Unlike brands like Toms, a shoe company that inevitably created negative disruption to the local economies they thought they were going to be helping by providing a “buy one give one” model⁸⁴. Toms would have been better off to give money rather than free pairs of shoes that ended up competing with and taking business from those local economies; Toms has since shifted their strategies. The B (Benefit) Corporation⁸⁵ is an organization that provides certifications to companies that not only align with but practice ethical and responsible duties. The B Corp certification signals to consumers whether or not a company truly aligns with the ethics they promote. The B Impact Assessment tool⁸⁶ on their

⁸¹ “Sustainable Clothing and Accessories | Reformation.”

⁸² “Brother Vellies.”

⁸³ “Kotn | Sustainable Clothing & Home Decor. Quality, Comfort, Ethics.”

⁸⁴ Hessekiel, “The Rise And Fall Of The Buy-One-Give-One Model At TOMS.”

⁸⁵ “B Lab Global Site.”

⁸⁶ “B Impact Assessment.”

website offers transparency into what is expected from an organization or company. This tool is free to use so that when and if the time comes to apply, hopefully less surprises will arise.

Ellen Köhrer and Magdalena Schaffrin illuminate fashion brands that are operating in more responsible ways in the “Fashion Made Fair; Modern, Innovative, Sustainable”⁸⁷ book through profiles, imagery, and interviews. This approachable and aesthetic book provides some great examples of ways to do design better while maintaining a unique brand image. Proving that it is very possible to create fashion that is responsible and stylish, whether minimal or maximal in styling. The curated selection of brands moves away from outdated stereotypes of sustainable fashion tropes and moves towards the simple notion of wanting to “simply look like regular fashion” in some cases few if any visible differences from non-responsibly designed traditional heavily accepted fashion are noticeable.

For many years Universal Design has been an effective design method across several industries as a response to increased demands for greater accessibility and inclusivity. As time has gone on, it has expanded to include diverse accessibility requirements and contributed to the advancement of assistive technology. In more recent years, the rise of global warming awareness has triggered a focus on Sustainable Design⁸⁸ as a method for combatting climate change issues. Both design models have evolved as a reaction to the challenges of the modern world and the changing nature of our communities and shared living spaces. While Universal

⁸⁷ Köhrer, Schaffrin, and Michael, *Fashion Made Fair*.

⁸⁸ “What Is Sustainable Design?”

Design follows the mantra of “Design for All”⁸⁹, Sustainable Design follows an eco-friendly mantra that sometimes includes ethical and equitable practices. Unfortunately, these design models seemingly run alongside each other, creating parallel categories that seldom intersect. There are more papers discussing this notion regarding the virtual realm, for example “Universal Design, inclusive design, accessible design, design for all: different concepts – one goal? On the concept of accessibility – historical, methodological, and philosophical aspects”⁹⁰ includes analysis on the similarities and differences between concepts. In the fashion realm, this has been explored less. On one side there are design practices that place accessibility/inclusivity at the forefront and on the other side are design practices that uphold environmental/ethical/equitable values as paramount. Inclusive products/spaces that are made in unethical/non-environmentally friendly ways, further perpetuate environmental issues. Sustainable/ethical/environmentally conscious products/spaces that are inherently exclusive of those who do not fit within the “beauty ideal” in the way that they are marketed/designed/built risks further perpetuating stigmas towards disabled, chronically ill and marginalized people⁹¹.

Overall, when it comes to your relationship with your clothing, buying second hand, buying less of higher quality, and taking care of what you own continues to be a strong takeaway for the consumer. In summary, the Environmental Responsibility section provided insights on cradle-

⁸⁹ Nast, “Design for All.”

⁹⁰ Persson et al., “Universal Design, Inclusive Design, Accessible Design, Design for All.”

⁹¹ Hamraie and Fritsch, “Crip Technoscience Manifesto.”

to-cradle concepts and the realities of recycling. Notions around thrifting, resale markets and tailoring were presented. The idea around consideration of the temporality of our bodies abilities being used as an important factor to drive emphasis behind thinking of long-term use cases when designing with sustainability in mind. Some organizations, researchers and brands that are doing good work in this area were mentioned. Sustainable Development Goals and Extended Producer Responsibility were introduced. Impacts and implications on local economies was explored along with the importance of working in safe environments. The importance of repositioning voices in power, allocating fresh and diverse perspectives was included to envision a new future in design that is more inclusive. The literature examined in this theme demonstrates how environmental considerations within the fashion industry are woven into many areas and must be included as an inherent aspect when designing for a future that allows for continued inclusion and accessibility.

This literature review provides a snapshot of the three categories; Accessibility and Inclusion, Contemporary Aesthetics and Environmental Responsibility as defined in the Design Gap illustration (fig. 1) in the introduction. The literature explored was deliberately chosen from diverse angles, meant to demonstrate how relevant these topics are across many industries as well as the fashion industry. The concepts, theories, businesses, and methods are all able to be connected in some way, whether it be through a transferable process or idea. At the end of the thesis a list of additional reading recommendations has been included in [Appendix M](#) for further research and interest reading.

The literature on accessibility, aesthetics and sustainability provides a conceptual backdrop for the macroscopic and micro-level work to be done. On a macro-level the difference in design practices may seem to be vast, on a micro-level when examining the steps for design development and implementation, many of these steps converge across industries. This proves that although there is indeed a gap, that filling it is possible.

Chapter 3 – Case Study

“A Case Study: Developing Helpful Guidelines for Accessible and/or Inclusive Brand Creation”

The case study section of the thesis also includes methodologies around how this research was conducted. Graphs and tables are included throughout the section with links to the relevant appendices with further information. The case study for this research aimed to gain insight from at least 5-10 Canadian designers/brands that market themselves as inclusive/accessible in nature, but this number was affected by the pandemic as previously stated. The outcome of the study includes the feedback from the participants, one of whom was only available to complete the initial survey portion. The participation in this survey was confidential with no intention of revealing the names of the companies/designers interviewed. To broadly provide a scope of the types of businesses / companies / designers targeted; each participant needed to be based in Canada, working for or be a founder of a Canadian brand that created inclusive / accessible apparel / accessories. Participants are anonymously coded using the pseudonyms P1, P2, P3 & P4, with the P standing for Participant.

Methods

Open axial selective coding based in Grounded Theory⁹² was used as a guide to analyze the qualitative data. The qualitative data was coded and categorized through affinity mapping

⁹² “Glaser or Strauss? Considerations for Selecting a Grounded Theory Study - Lynlee Howard-Payne, 2016.”

based on likeness. The participants were initially contacted through email, where they were guided to select a link to the Case Study Survey. There were four participants for the survey portion and three for the interview portion. Survey data was collected on Qualtrics and then coded in an Excel spreadsheet. The interviews were conducted over Zoom and audio recorded to allow for transcription. The interview data was added to an additional tab in the Excel spreadsheet used for the survey data. The initial plan for research methods surrounding this thesis were to analyze three sections of the market from designers, customers, and producers/factories. What ended up being attainable and within scope due to time constraints and setbacks was an analysis from the design perspective only. Since the Case Study research began during the pandemic lockdowns, changes to study/socializing activities greatly affected the way in which recruitment could be done for this study. It also impacted the willingness and availability of participants due to the added stress, anxiety, and time constraints many people were under.

Margaret Kovach's "Creating Indigenous Research Frameworks"⁹³ details the author's first-hand experience with finding a research methodology/model that makes sense to them and feels authentic. Kovach challenges the traditional system, therefore fighting for equal respect for new/different ways of how one can conduct research, illuminating the concept of "you vs. everyone else". Kovach addresses the questions "How can one do research, when they are not aware of where they are starting from as a researcher and what biases they are coming with,

⁹³ Kovach, *Indigenous Methodologies*.

how can they be expected to participate in doing research within a predetermined system that does not truly meet them where they are and how they are?”. Kovach also provides insight on alternatives to random sampling which shift the focus towards “depth rather than breadth” of a sample group. The argument is that a smaller sample group that is of “higher quality” is better than a larger sample group of “lower quality” and in theory could create more authenticity within research. Kovach emphasizes the need to find the right fit for your research, which may lie outside the norm of traditional research methods/practices. Leaning towards qualitative vs. quantitative data was important for the case study research since it demonstrates the need to know ‘more than’ and finding ways to look deeper to uncover common denominators. The use of qualitative data gathering was useful having a smaller participant pool also.

The research stance for the Case Study is that of an inside learner who is seeking to understand and provide improvements upon existing methods/practices. The study was guided from both environmentalist and humanist perspectives, seeking to find a linkage between the two theories that could help connect the dots of this varied research. Abductive reasoning helped to observe what is currently happening/has happened in the themes from the literature review to support this study. The trial-and-error theme from Popper’s critical rationalism guided the research when it came to sorting this research into tangible results. The case study went through the General Research Ethics Board (GREB) approval process (GREB approval document included in [Appendix A](#), the recruitment script can be found in [Appendix B](#)).

Surveys

The online survey ([Appendix C](#)) consisted of 11 open ended questions, developed with an underlying goal to capture qualitative answers without too much guidance. These surveys were conducted using Qualtrics. The recruitment email was sent to 15 different businesses/individuals in total with one to two follow up emails to check in, depending on the responses or lack of response received. Since the letter of consent was included at the beginning of the survey, it was visible that many of the people/businesses emailed selected the link, but then abandoned the survey shortly after. This was interesting to notice, and these individuals/businesses were followed up with in case they had simply forgotten or got distracted at the time. The nature of the survey allowed for it to be completed on the participants' own time, when it worked for them. Since it was a very stressful time due to the pandemic, the feedback gathered was that timing was just not good and people were feeling overloaded. The survey questions asked were as follows:

1. What do you feel is the most important aspect when developing a brand or designing a product?
2. When thinking about inclusivity, what are the first thoughts that comes to mind for you?
3. When thinking of accessibility, what are the first thoughts that comes to mind for you?
4. What first interested you in working for an inclusive/accessible brand or creating inclusive/accessible products?
5. What do you believe are the easiest parts of creating an accessible brand or product?
6. What do you believe the biggest hurdles are to creating an accessible brand or product?

7. Are there any elements of product/brand development that you wish you had more resources for? If so, what?
8. Have there been moments where you have had to set aside part of your vision due to time/budget restraints?
9. Have you done any prototype testing and/or target customer research? How has this influenced your brand/product development?
10. Do you believe that inclusive and/or accessible products/brands should also incorporate ethical and sustainable aspects in their design/development processes/methods?
11. Is there anything else that you would like to include that you believe will be useful to the researcher? If yes, please elaborate in the text box.

Survey Results

Of the four survey participants, it was interesting to see how their answers differed and how they aligned. Some short excerpts from the survey answers are as follows,

In response to Question 2, When thinking about inclusivity, what are the first thoughts that comes to mind for you?

- P3: *"The most important aspect is listening to our clients"*

In response to Question 3, When thinking of accessibility, what are the first thoughts that comes to mind for you?

- P1: *"Inclusivity to me means (in part) designing products to accommodate extreme users without giving them a separate or less desirable product. Almost any product can be made to be both attractive, mainstream, AND accessible."*

In response to Question 4, What first interested you in working for an inclusive/accessible brand or creating inclusive/accessible products?

- P3: *“Accessibility is something that is ever changing and evolving.”*
- P4: *“Being able to use a product without feeling singled out, stigma, ability to live comfortably due to thoughtful infrastructure and products which allow for physical and mental disabilities.”*

In response to Question 5, What do you believe are the easiest parts of creating an accessible brand or product?

- P1: *“There is no shortage of cheerleaders when a product is truly needed.”*

In response to Question 6, What do you believe the biggest hurdles are to creating an accessible brand or product?

- P1: *“There is still such a gap where mainstream products are not accessible products - almost as if accessibility automatically means undesirability. There is an enormous need for desirable, mainstream, accessible products.”*

In response to Question 7, Are there any elements of product/brand development that you wish you had more resources for? If so, what?

- P1: *“The largest hurdle to creating an accessible product is identifying and accommodating as many different diverse abilities and needs as possible. There truly are so many considerations to make a product truly accessible, and this takes time and effort to do correctly.”*

- P3: *“This demographic is so diverse that reaching them is the challenge. Just because a person lives with a disability doesn't mean they are all interested in the same things or that their disabilities are the same.”*

These qualitative responses were very interesting to read since they were from the perspectives of designers who were aware and adept with inclusive and accessible design practices. Commonalities and themes between them were already visible. Questions and thoughts began arising at this point around how different these answers may have been from designers' perspectives that are not as educated in inclusive and accessible practices. These sample excerpts provided are from the larger chunks of data and sections of responses that could risk anonymity in the Case Study were omitted from the thesis.

Table 1 breaks down the themes that were determined from coding the qualitative survey responses. They are colour coded to further demonstrate the pattern and coincide with the pie chart that is forthcoming. There are black and white versions of the survey tables and pie charts in [Appendix D](#). More excerpts from the survey data are included in [Appendix E](#). This extra data includes more excerpts and the coded theme categorization in the form of a screenshot from the Excel file used to code the data. The themes determined were not surprising, based on the literature review and lived experiences as a designer in this area who is also aware of some of the challenges associated with this type of work. Gathering this data as a starting point was exciting and insightful to begin noticing that it wasn't far off from the design gap illustrated in the literature review. It is important to note potentials for confirmation bias, although efforts

were made to remain neutral and analyze data in a removed manner, the potential for this bias still exists and must be noted.

Table 1 - Survey Questions Coding Theme Breakdown

Themes broken down by question	
Question (Q) 1	inclusivity and accessibility
Q2	Authenticity and Transparency, Inclusivity and accessibility, Gap in Market
Q3	inclusivity and accessibility
Q4	inclusivity and accessibility, Comfort and aesthetics, Observing and innovating
Q5	inclusivity and accessibility, Gap in Market, Comfort and aesthetics, Observing and innovating
Q6	Research, testing, feedback, Observing and innovating, Challenging
Q7	inclusivity and accessibility, Challenging, Marketing and Awareness, Expenses/Affordability, Authenticity and Transparency
Q8	Ethical manufacturing, Research, testing, feedback
Q9	Expenses/Affordability, Ethical manufacturing, inclusivity and accessibility, Sustainable mindset, Challenging, Research, testing, feedback, Observing and innovating
Q10	Research, testing, feedback, Observing and innovating

Q11	Expenses/Affordability, Ethical manufacturing, marketing and awareness, sustainable mindset, inclusivity and accessibility
Q12	Marketing and Awareness, Expenses/Affordability, Comfort and aesthetics

The following image depicts these categories in the form of a pie chart (fig. 5). This compilation of graph data was done in Microsoft Excel. Different types of charts and graphs were tested, but the best portrayal of the outcomes were through pie charts.

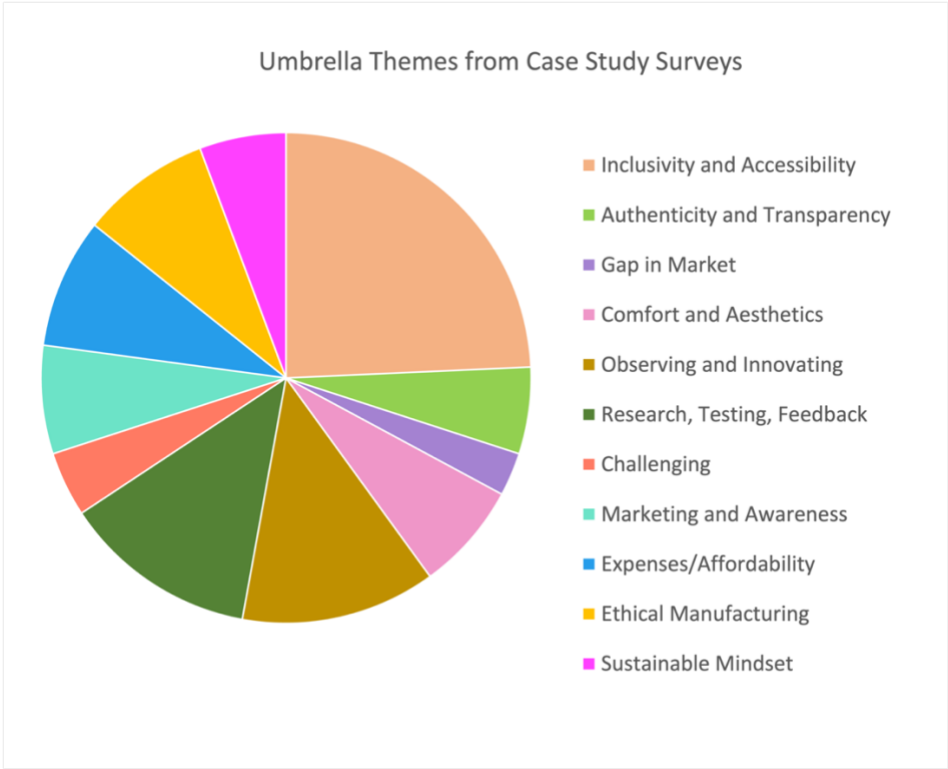


Figure 5 - Umbrella Themes from Case Study Surveys

After examining the results at this stage, further narrowing of the coding was done to narrow the number of categories. From this, the results were captured into 4 overarching categories that made sense based on the coding from the themes. The findings remained in keeping with the literature review and infographic of the Design Gap (fig. 1). The four overarching themes

(Table 2) that captured the myriad of categories were Honesty & Inclusion, Innovation, Empathy & Engagement, Environmental Mindset & Implementation & Viability. Areas that are not included in the Design Gap infographic include notions about the feasibility of addressing the gap itself. The data gained from the surveys also did not have a large emphasis on the aesthetic aspects as much as other aspects like accessibility and inclusion.

Table 2 - Four Main Coded Survey Categories

Four Main Coded Survey Categories	
Authenticity and Transparency Inclusivity and accessibility	Honesty and Inclusion
Observing and innovating Gap in Market Comfort and aesthetics	Innovation, Empathy and Engagement
Sustainable mindset Ethical manufacturing	Environmental Mindset
Challenging Marketing and Awareness Expenses/Affordability Research, testing, feedback	Implementation and Viability

The following pie chart “Survey Coding 4 Main Categories” (fig. 6) portrays the percentages of the categories, which could indicate importance, but it also could simply be an indication of

what was most top of mind to the participants at the time and date they took the survey.

Additional follow up surveys would be recommended to ensure more accuracy in hierarchy of categories. Implementation and Viability 33%, Honesty and Inclusion 30%, Innovation, Empathy and Engagement 23% and Environmental Mindset 14%.

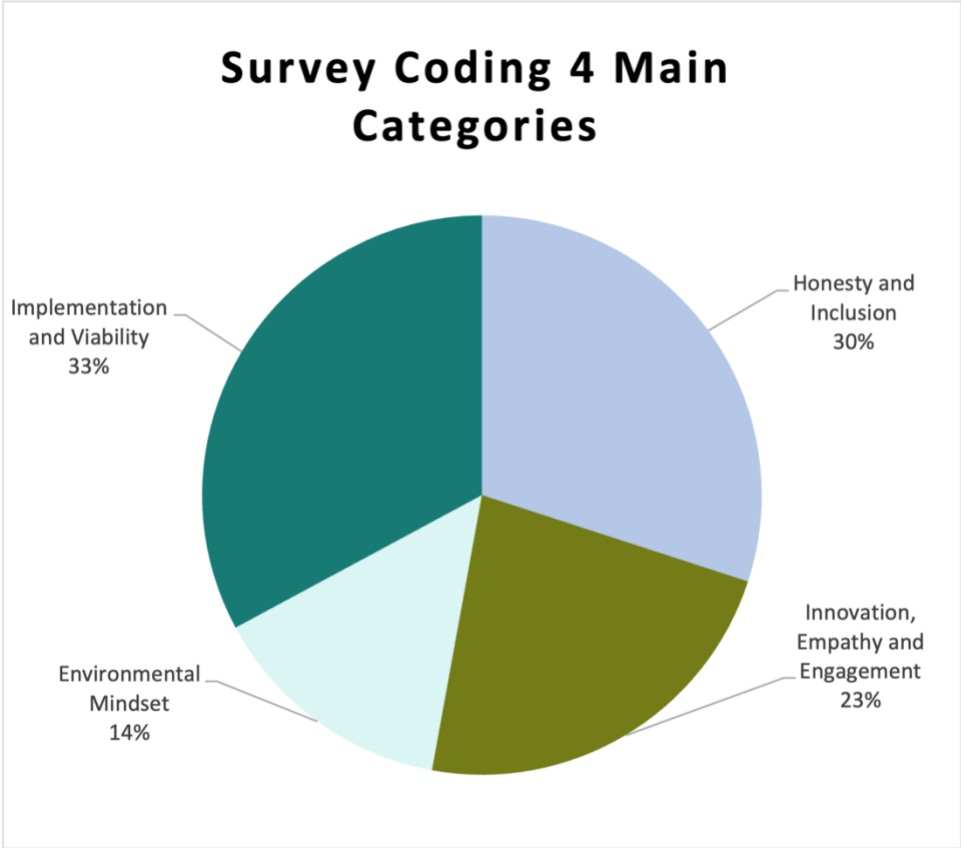


Figure 6 - Survey Coding 4 Main Categories

This concludes the survey data analysis portion.

Interviews

Reflective and open-ended interview questions ([Appendix F](#)) were provided post-survey completion. The interviews were conducted over Zoom and were audio recorded only for the purpose of transcription after they were completed. The coding for the interviews was also done within the same Excel spreadsheet as the surveys, but in its own tab. This way both portions of the Case Study could be compared and contrasted easily. The interview questions asked were as follows:

1. Were any of the questions in the survey portion of the study difficult for you to answer?
If so, which questions did you find the hardest to answer?
2. Are there any answers that you would like to add on to now from your survey responses, having had time to step away from them?
3. What Canadian brands come to mind when you think of accessibility and inclusion?
4. Do you think that there is a need for more accessible and inclusive brands in Canada that target a younger market and why?
5. After having some time to think things over since the survey questionnaire, are there any other comments that you wish to add?

Interview Results

The interview questions were even more open ended, and after completing the interviews it was determined that if this research were to be repeated, the interview questions would benefit from slightly more structure. Having some follow up questions prepared to ask as needed depending on what direction the answers went for example would have been helpful at

times. This being said, if there were more participants, it may have mitigated the need for this. For example, if the study was able to go ahead as originally planned pre-pandemic with insights gathered from customer, manufacturer, marketer and designer perspectives, these questions may have been good enough.

In response to Question 4, Do you think that there is a need for more accessible and inclusive brands in Canada that target a younger market and why?

- P1: *"I think it's a huge gap right now in, I would say almost all industries. I don't think any company, especially a Canadian company stands out to me that is targeting a younger population and trying to make their products accessible...It's really just a matter of inclusive design principles that need to be worked into all types of products from the get-go, so designing for extreme case users and it's something that really shouldn't add that much of a challenge, or even add that much of a production cost to regular products."*
- P3: *"...the category is just at its infancy and people are definitely hungry for it, at the same time, a younger demographic still needs to be warmed up to the category. A lot of times people don't want to wear adaptive clothing because it just sounds medical, and it sounds like special and younger people kind of just want to wear what everyone else is wearing...there's definitely room for more brands for sure, but it's not an easy endeavor"*

In response to Question 5, After having some time to think things over since the survey questionnaire, are there any other comments that you wish to add?

- P1: *“it shouldn’t be an accessible company that’s designing all these clothes, it should be all companies that are just tweaking their products slightly and even their websites just to make it more user friendly for all different types of people. Because people are all unique, and we need to celebrate that, and I think finally society is moving in a direction that is inclusive to all sorts of types of people so it’s time for our businesses to step up and reflect that.”*
- P3: *“Another piece of advice is that whatever you want to do and whoever you want to serve, is to speak with them and see what they need and see what their challenges are so that you can fill a void or fill a need that they need and do your homework... If you have an opportunity to sell to people that don’t have a disability, I think that normalizing adaptive clothing is important, so that if you do have something that can work for many people, than that’s good... it’s great for it to work for everybody and that it’s all inclusive whether you’re able bodied or not. I think that as a person living with a disability, knowing that your brand works for everybody kind of takes the stigma out of it”*

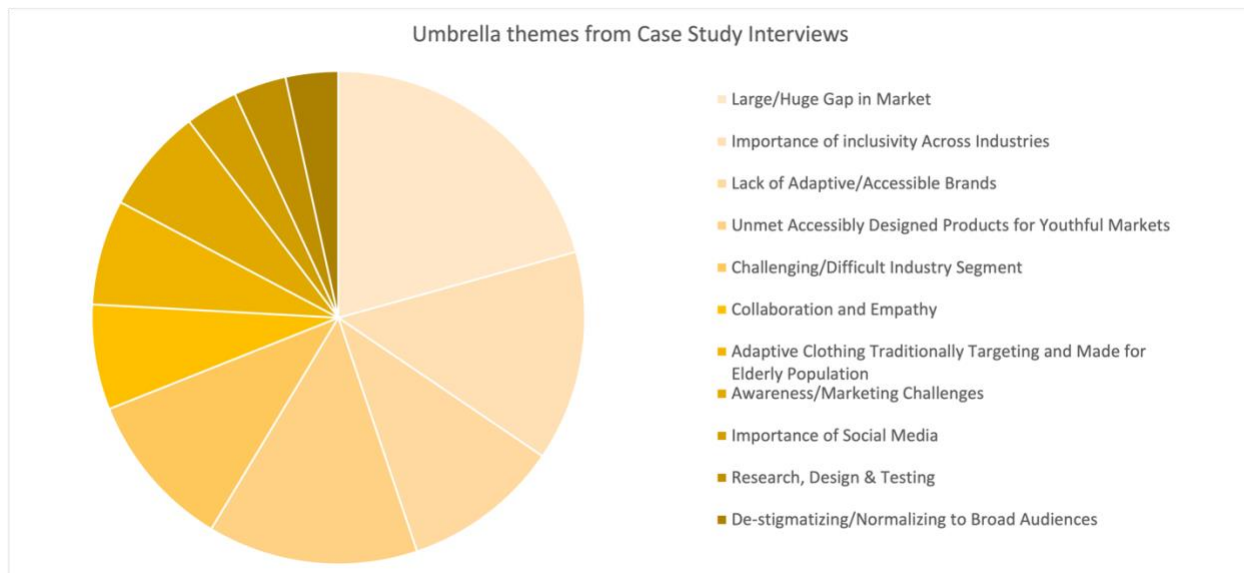


Figure 7 - Umbrella Themes from Case Study Interviews

What proved difficult through the interview and survey portions was the diversity in answering styles, some being more elaborate and some being quite short. The data was still able to be coded and common themes found throughout (fig. 7). In the survey portion, the most prevalent theme was Inclusivity and Accessibility, however in the interview portion the gap in the market took up a larger portion of the category theming. The importance of aesthetics and lack of a variety of styles for adaptive apparel was also a more prevalent theme throughout the interviews. The colour coded tables and graphs are included below, but same as the survey responses, black and white alternative versions for the survey charts and graphs are included in [Appendix G](#). Additional excerpts and screenshots of the interview data can be found in [Appendix H](#). That include additional insights and quotes from participants as a screenshot from the Excel data spreadsheet.

Table 3 - Four Main Coded Interview Categories

Four Main Coded Interview Categories	
Importance of inclusivity Across Industries Collaboration and Empathy Research, Design & Testing De-stigmatizing/Normalizing to Broad Audiences	Inclusivity Focus
Large/Huge Gap in Market Lack of Adaptive/Accessible Brands	Significant Market Gap
Unmet Accessibly Designed Products for Youthful Markets Adaptive Clothing Traditionally Targeting and Made for Elderly Population	Need for Youthful Aesthetic
Challenging/Difficult Industry Segment Awareness/Marketing Challenges Importance of Social Media	Challenging Market Segment

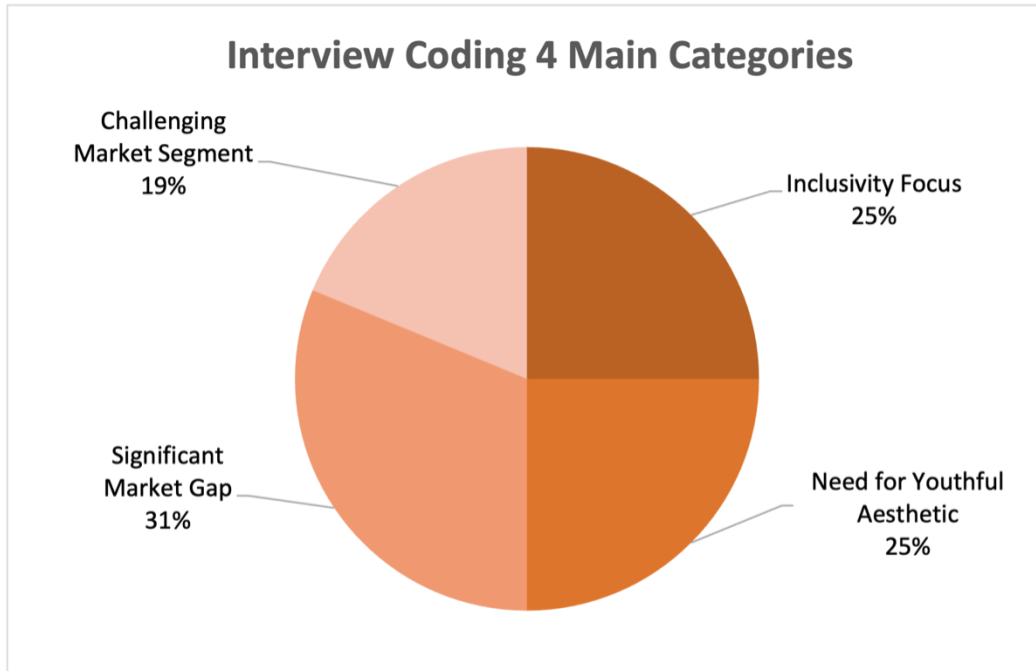


Figure 8 - Interview Coding 4 Main Categories

The four main categories from the interviews (coding in Table 3 and depicted Fig. 8) were Inclusivity Focus (25%), Challenging Market Segment (19%), Need for Youthful Aesthetic (25%) and Significant Market Gap (31%). Three of these categories directly correlate with the hypothesis of the design gap infographic (fig. 1) in the introduction, the challenging market segment provides insight into why it may be that this gap exists. With the addition of sustainable factors, that were not as prevalent throughout the survey and interview responses, it makes more sense as to why these types of products can be hard to find. At the end of the thesis in the Discussions section, a graphic is included to demonstrate the collected survey and interview data merged with the practice-based reflection research. The EESI Method also creates a guideline based on some of the information gathered from the Case Study. This case

study, although challenging to complete through a global pandemic, did gather insightful qualitative data that is a good complement to the other work completed in this thesis.

The case study reinforces the design gap described in the extant literature. I address the design gap in the section to follow. The Case Study, despite having fewer participants than expected proved to be worth it to be able to gain insights from designers working in the inclusive/accessible design field and sharing their expert opinions.

Chapter 4 – Practice-Based Reflection

“Work for woman artists is never just the moment when we write, or do other art, like painting, photography, paste-up, or mixed media. In the fullest sense, it is also the time spent in contemplation and preparation. This solitary space is sometimes a place where dreams and visions enter and sometimes a place where nothing happens.”

- bell hooks, *Women Artists – The Creative Process*⁹⁴

“To the designer, reflection is perhaps the most important of the levels of processing. Reflection is conscious, and the emotions produced at this level are the most protracted: those that assign agency and cause, such as guilt and blame or praise and pride.”

- Don Norman, *The Design of Everyday Things*⁹⁵

To align with the more casual nature of this practice-based review, the tense is changed to first person for this chapter.

⁹⁴ hooks, *ART ON MY MIND*.

⁹⁵ Norman, *The Design of Everyday Things*.

Initially only the case study was planned for the thesis, however due to the unforeseen circumstances of the global pandemic, the idea for the practice-based reflection arose. Already having a creative practice, my entrepreneurial spirit felt the desire to create a tangible proof of concept for what I was researching, but from my own design aesthetic.

Over the course of several years, I had recorded and collected research as a designer conceptualizing my own design studio merging all my work and research experiences. This is something I've done on a casual basis, to either share on social media or keep for my own archival purposes. Although it was my intention to formalize the design studio work at some point, the decision to include it as a part of the thesis ended up being complementary, as it demonstrated the vulnerable, transparent, and realistic journey of a small business entrepreneur navigating and applying inclusive, accessible, and responsible design processes to their business.

When conducting the case study research, I was forthright and open about how I hoped to work in this industry doing accessible design work at some point and was met with encouragement from participants. One thing I have really noticed in the inclusive/accessible design community is that there is an overall feeling of collaboration versus competition.

Many of my experiences and learnings throughout grad school naturally became something tangible through the piloting and development of plans for my own brand, taking form as a design studio. Transparency is something that felt vital to me as I began conceptualizing how I

would want to run my own studio and the values that would help to shape it, which is another reason why I've chosen to include this practice-based reflection as a part of the thesis. What follows are notes and imagery of this work to demonstrate how this work came to life.

It started with wondering... What would it look like to put all the methods, processes and research gathered from my findings into practice? How hard would this prove to be?

I found myself interested in finding out the differences between researching and analysis versus taking action and creating a practical solution. I took a heuristic approach, there was and continues to be a lot of trial and error through the iterative work that I do. I had drawn lots of sketches and ideated logos and wire frames for a website, I had several lists of journal posts to write, collaboration ideas and pages upon pages bookmarked for natural materials sourcing and ethical Canadian manufacturing companies. This is not to say I no longer have these things, I do, but at the point of origination they were very much still in the idea state, not in the in-progress stage.

In "Exposing the Magic of Design"⁹⁶, Jon Kolko writes about design synthesis and how important this process is for designers. When I read this book, I thought a lot about how I had been effectively synthesizing what I wanted to do and how I know I had wanted to do it for years.

Kolko writes,

⁹⁶ Kolko, *Exposing the Magic of Design*.

“Obviously, designers cannot guarantee success, even when the work is informed by intuition, yet designers also cannot know whether they will succeed until they try.”

Kolko continues later in the book with:

“Simply put, synthesis is a spark. It is the ability for the human mind to grasp multiple, often incongruent and even competing ideas, and to manipulate them – at once, and in parallel – into something amazing. Synthesis allows for multiple hypotheses, ideas, themes, patterns, or trends to be mapped and diagrammed, and consumed and explored.”

Upon reflection through notes going back 5 years, I found some interesting reflections and patterns. I noticed a pattern of over consumption of knowledge, a need to know and find it all out, however never feeling like I would be able to fully understand everything needed to truly start a business. Almost an enforced, self-sabotaged imposter syndrome-esque overload. With so much new learning to do, everything truly felt like dessert as I read and learned more and more. This was great and all, but I had essentially gotten myself stuck in the research aspects and needed to shift into action mode to begin making waves in developing the studio in a tangible way. A cognizant shift away from the desire for perfection and a realization that there was never going to be a perfect time or an ability to know everything eventually happened.

Since I was effectively entering the world of entrepreneurship while still being a student writing a thesis, it inevitably forced a slower pace. However, this was in keeping with the thoughtful slow design/slow fashion ethos I was all about anyway. I tried to compartmentalize schoolwork and business work so that I could shift focus one day on the business development and another day on the thesis work, but it was difficult to do. In the very essence of the words, I took my time and was open with the community I began building online. I was transparent and honest in my communications and continue to be. Although I understand that engaging regularly on social media is recommended to enhance and grow interest, I am also only one person, so things happen when they happen.

One day I felt like it was finally time to build the website, so I did (emske.ca⁹⁷). I agonized over it for a bit, and then the design synthesis seemed to happen again, and I just built it and then figured over time I would likely adjust some things, and I did. The screenshot (fig. 9) is how the website homepage looks presently. Additional screenshots of the website pages can be found in [Appendix I](#). It was and still is important to me that the design of the website be accessible, with high contrast, alt text, properly nested headings, and an open feedback form. By incorporating these accessibility features, I am still able to represent my desired aesthetic, and having static constraints to work within is actually very helpful. This is not to say that I get things perfectly accessible and inclusive and right every time, but the intention is there at the core, with an openness to always be learning and adapting.

⁹⁷ "Responsible Design | Emske | Canada."

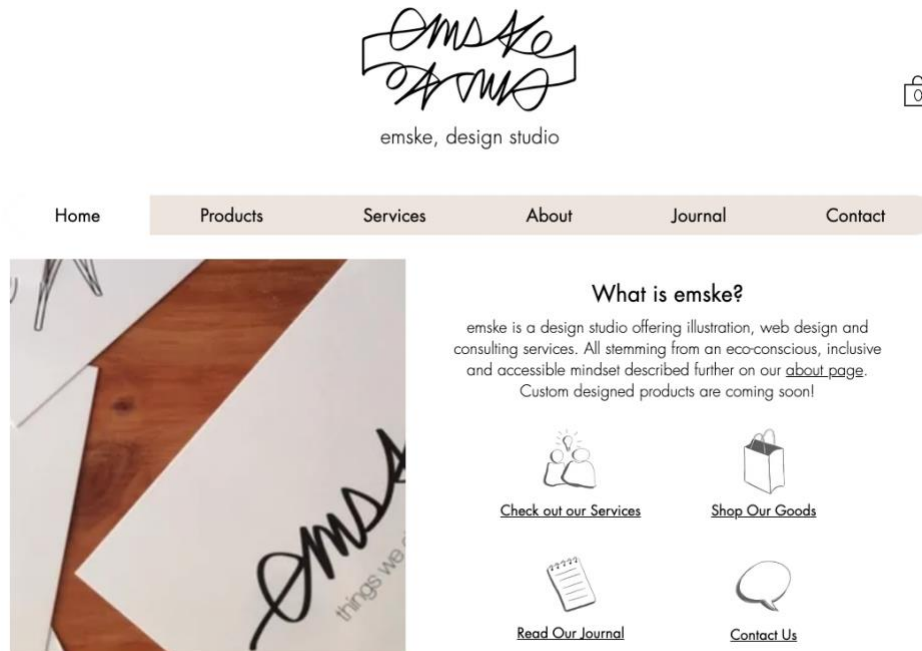


Figure 9 - emske, design studio website homepage

The website was built using Wix website builder. Wix has an “Accessibility Wizard” built into their platform, which is an added bonus in double checking that the ALT (alternative) text has been added and the website can be tabbed through easily using a screen reader. The website also has an accessibility statement and land acknowledgement, signifiers that there is care and empathy behind the company.

While the products section of the business was under research and development (which will be covered in following sections), the services side of the business was underway. What felt missing and in ways, very challenging to include were services that were complimentary to the mission and ethos of the brand, but that wouldn’t create confusion to the customer (fig. 10).

This is still something I am working on but feel that it is important to offer collaboration and the

opportunity to be hired, as that further gives back to design communities that want to be more inclusive and accessible in their practices but don't know where to start.

What I knew for sure was the aesthetic and vibe that I wanted to capture through emske. This was something that I felt came through in the logo and I wanted it to be mirrored in the site design. It felt important to create an inviting and beautiful online space for the design studio. Often, and as was gathered from the case study results as well, the emphasis of adaptive apparel is depicted in medicalized or geriatric viewpoints. I wanted the website to sing a very different tune. The energy needed to be vibrant and youthful, with a professional edge.

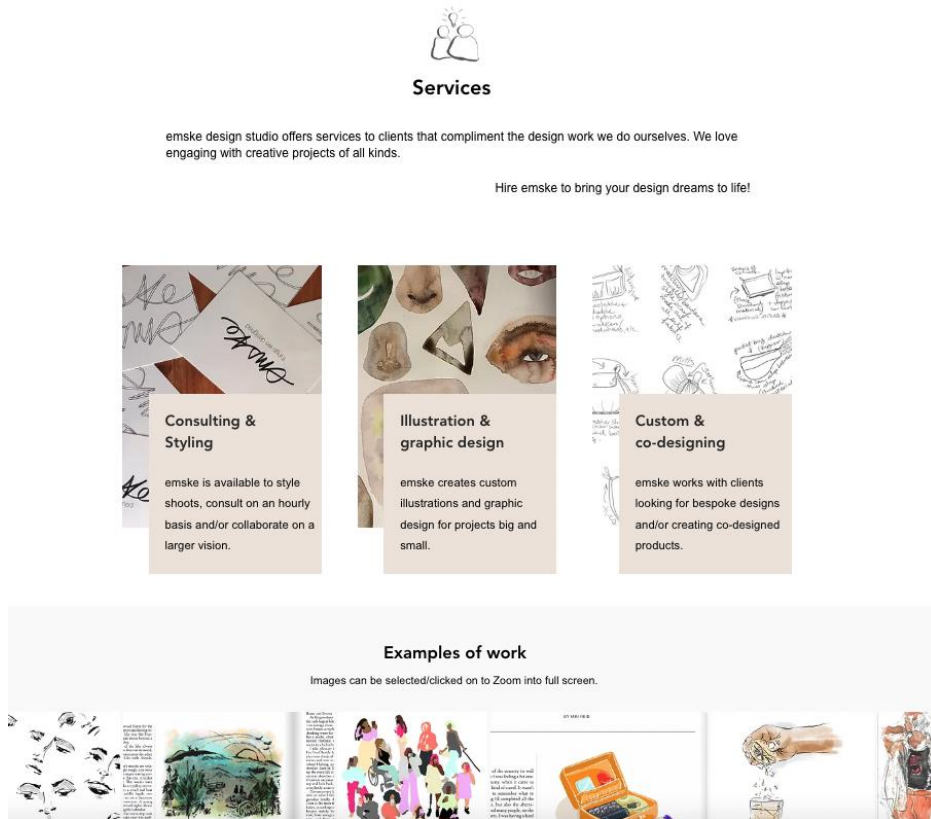


Figure 10 - emske, design studio website services page

The act of the design studio website and the other online social media platforms it occupies acts as an archive – something to reflect on as time goes on. It is a vessel to capture and test the many questions that have arisen throughout this research like:

- What if designers simply began including customizations as a natural component of their production?
- Is there a way to universally design something, with specific individual desires top of mind?
- How is identity lost when you don't feel you can express yourself the way you really feel inside especially through the act of getting dressed?

When chatting with a colleague they mentioned Asset Based Community Development⁹⁸ otherwise known as the acronym ABCD. After checking it out more, although being more policy based, it felt familiar to what I was trying to do with the design studio. To create products and services that were useful for the community of customers. Doing so through collaboration, co-design and sharing stories and engaging via the journal on the website. In the book “The Conscious Creative: Practical Ethics for Purposeful Work”⁹⁹, Kelly Small writes:

⁹⁸ *Mobilizing Community Assets.*

⁹⁹ Small, *The Conscious Creative: Practical Ethics for Purposeful Work.*

“It has been said that the difference between universal and inclusive design is that inclusive design is not a result, it’s a process. Core to that process is the act of creating with the people for whom the product is intended.”

This is an important aspect in the design studio, co-design and community building through storytelling and story sharing.

“We believe that fewer, deeper personal conversations with people provide richer, higher quality insights than gathering data from a larger group at a shallower level. By observing people doing things in the context of their environments and providing probes to spawn conversation, we can discover more. Get closer to the people you are designing for. Spend quality time with them. The subtleties based in real experiences cannot be detected from afar.”

- Roshi Givechi & Velma L. Velázquez, Positive Space – IDEO Design & Emotion Conference Proceedings¹⁰⁰

I was initially going to share the above quote alongside in the case study chapter, but it ended up making more sense here. Because essentially this is what the design studio is offering, a space where I can get closer to the people I am designing for and with, and a space where they can interact and learn that hopefully feels more personal too. The following screenshot is of the journal section of the website (fig. 11) where community and collaboration are shared.

¹⁰⁰ McDonagh et al., *Design and Emotion*.



Journal

This spot holds our thoughts, recommendations and general information about the things we at emske care about. There is no timeline to when we post to our journal, just when the mood strikes.

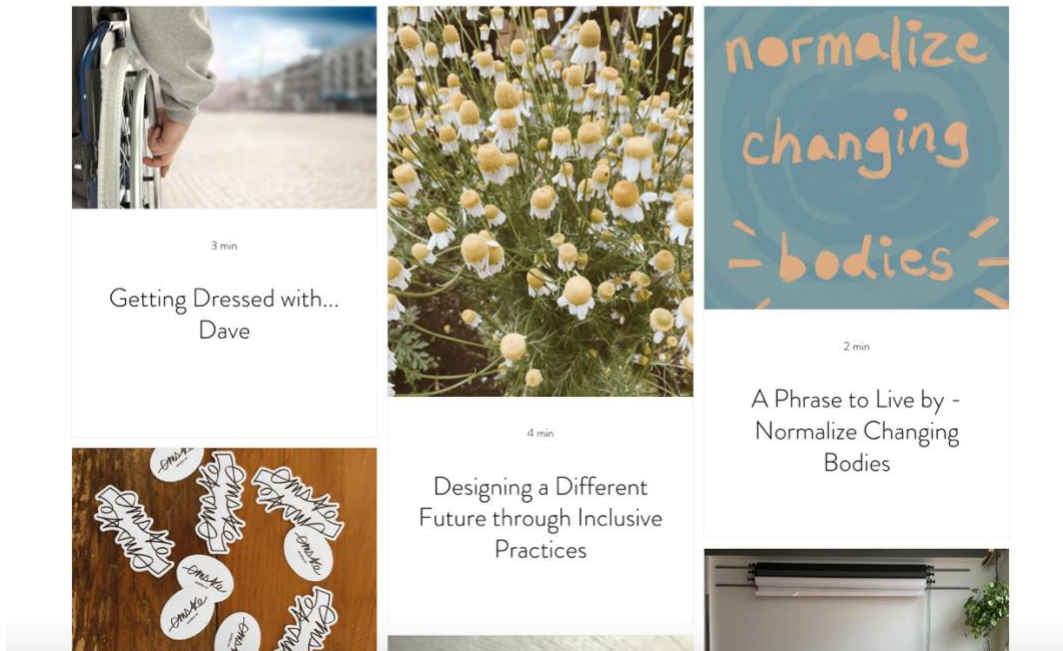


Figure 11 - emske, design studio website journal screenshot

Through the continued work done via emske design studio (fig. 12), it has become apparent that the need for further individualization and adaptation of products will still exist, regardless of how accessible a garment is designed. This is due to the diversity of lived experiences, and diversity of style and taste levels between people. What can be done is the desegregation and de-labelling of things, to avoid othering. The idea is to not create a brand that uses the disabled body as a commodity. It is to make the notion of customizations and nuanced design work based on mobility and sensory requirements normalized in ableist communities, and through

this process lessen stigmas around chronic illness and disability. Having a company that aims to be inclusive from the start and having open dialogues with customers is a great start. An ethos that is welcome to feedback is important, as is having empathetic approaches to the design process. emske is not about prescribing a solution, but about continuous attempts to iterate towards an ever-evolving goal of creating things that work for people and aren't manufactured in ways that are harmful to the environment.



Figure 12 - rough ideation sketches for apparel products

Designing adaptively is inherently sustainably minded, due to the longer-term thinking approach that goes into adaptive apparel being something that will be exactly that, adaptable and useful to the user as they go through different stages of their life. This type of thinking is directly linked to sentiments around product lifecycle from sustainability perspectives. Something that I wrote in the initial proposal for this thesis research was:

“This research project is titled “A New Look at Universal Design” rather than “A New Look at Sustainable Design” because Universal Design by default is intended to be inclusive of all. It is my intent that the “All” in “Design for All” become inclusive of the environment, ethical/equitable practices of labourers and sustainability best practices. In other words, ‘Mother Nature’ should be included in the target market of Universal Design.”

My thinking at the time, was already wanting to be inclusive of environmental responsibility. This is an aspect that I thought would be more prevalent in the case studies, yet the aspect I hadn't thought as much about, was the feasibility and challenges that were highlighted surrounding how hard it truly is to create in sustainable and inclusive ways as a small business with a small budget. Throughout the design studio development process, it became clearer as to why perhaps, the sustainability factor isn't as much at the forefront in accessible design. It is expensive, this is not to say that it always will be, especially if it becomes the norm. This is also based on my experiences this far; it is my hope that as I continue with this work that some of the upfront costs will be offset as the business grows. There are ways that I compartmentalize work in the design studio, client work being the most important focus (front facing), and then all the background work being separated based on theme. Sourcing being one largest themes of this background work, the amount of research that goes into finding ethical and natural materials for sampling is way more than I had anticipated. Despite having a background in fashion and an understanding of textiles, it was the hidden-ness and non-centralized approach (more silos) that surprised me. Finding ethical fabric and responsible fabric suppliers is very

challenging, especially as a small-scale designer, my empathy and understanding towards why it is often easier for brands/companies to sample and manufacture using less sustainable materials grew.

Another theme was ethical manufacturing located in Canada that would produce samples for me, because despite having the skills to do this myself, I liked the idea of being able to offload some of the iteration process to allow for more rapid prototyping. This was also challenging, and as one would expect, more expensive. There is so much emphasis on the efficiencies of mass production, that the intricacies, benefits, and ethical nature of small-scale production gets lost. It is more expensive yes, but it allows for easy accessibility to check out the facilities, chat with the sewers and ensure quality control.

Another theme was the aesthetic style and design of the products, a helpful aspect in this process has been sharing as I go through Instagram stories and TikTok to gain insights from the community that is being built online. For example, a video (Reel, fig. 13) that I posted on Instagram showcasing the first round of prototypes for the apparel capsule has gained a lot of engagement through likes, comments, and direct messages. Gaining insights from the case study around the importance of social media in brand awareness, especially for adaptive and accessible apparel was something I wanted to test. It can be time consuming to produce content though, so being mindful of how much time I can allot here has been important to factor in.



Figure 13 - Screenshot of first round of prototypes video on Instagram

At this point, the business was underway, the sourcing process was happening with many deliveries of fabric samples being sent to my house, the manufacturing conversations have started via Zoom and trips to Toronto to view the product development and manufacturing floor in person were happening (and still are). I began working steadily on projects for clients including illustration work, consulting, and web design. This is when I began looking into pitch competitions and grants, which led to the development of a formal business plan. I have competed in two pitch competitions so far which have been enormously helpful in learning how to talk about and represent an entrepreneurial start-up in reserved business environments.

Despite it seeming intimidating, it helps when sharing with others. For example, I'm not sure if I would have gotten to developing and writing things like a pitch deck (fig. 14) or an executive summary. The executive summary reads,

“emske is a for-profit business design studio with a social conscience. emske offers products and services that bridge the gap between responsible, inclusive, and accessible design. The design studio is business to consumer and sells directly online. As a slow fashion apparel and home goods company emske offers bespoke services such as illustration/graphic design, co-design of custom products, brand accessibility/web accessibility advising and consultations that complement the brand ethos. The business focus of the emske design studio is to emphasize the importance of accessibility and inclusion in all aspects of design work through engagement with its target market, client base and online community. emske believes that being able to express your personal style through design goods and apparel is a choice that everyone should be able to access, no matter what.”

One of the most interesting reflections from this experience is networking with both the business and creative sides of the industry. I have been witness to the lack of understanding of what accessible and inclusive design is, why it matters and how to implement it. There also seems to be an emphasis that what I am doing is more special in a way, when from my perspective it is simply inherent to my design process and should be inherent in all design processes in the future.



Figure 14 - Screenshot of slides from the emske pitch deck

During a talk I gave on accessibility and design¹⁰¹, and a question came up about the worry of how incorporating accessibility may impede their ability to create in ways that were authentic to them, which is precisely what I have been trying to disprove. Questions like these are great because they demonstrate that a person is interested in learning about accessibility and inclusion. As Eames¹⁰² believes, constraints are essential in the design process, and essential to good design. My answer was encouraging to them, letting them know that it shouldn't be

¹⁰¹ RGD Accessibility in Design Webinar.

¹⁰² DESIGN Q & A (1972).

perfection they are after, but improvements, even if minimal at first, because over time incorporating inclusive and accessible practices do become naturalized and, in the end, enhance every aspect of the work being done. The way I refer to the design of the apparel and home goods products I'm designing now are that they "happen to be created with environmental responsibility and accessibility in mind", just as I refer to myself as happening to have a chronic illness. These are factors, but they do not have to be the most interesting most highlighted aspects. Based on the research I've done; the worry is that focusing too greatly on the sustainability or disability factors in a marketing sense could lead to unnecessary segregation that can occur through labelling and categorization. The optics can be skewed, making public audiences not be able to see past the label or feel excluded by a label, to decide if they envision themselves using or wearing the product. This process of building something tangible has been very rewarding (fig. 15), but it has also acted as a way to prove some of the assumptions I had and work towards answering some of the questions asked in the introduction that guided the direction of the research.



Figure 15 - emske, designed for long-term use social media tile

Chapter 5 – EESI Method

Pronounced ēzē, the EESI Method checklist ([Appendix J](#)) aims to provide answers and/or trouble shooting opportunities in a manageable way, because creating inclusive spaces, buildings, and things, should be easy or at least easier. The EESI Method (fig. 16) reflects on the initial questions posed in the introduction, as listed below, and combines them with the outcomes of the case study and practice-based reflection research results.

- Do some inclusionary design practices risk segregation of end users from the population at large?
- Can a design method be developed that merges inclusive, sustainable, universal, equitable & ethical design practices?
- Do stigmas affect the impact and acceptance of inclusively designed products?
- Can a designer’s preferred style and aesthetics be equally represented within ethical, equitable, sustainable, and inclusively designed products/services/environments?



Figure 16 - EESI Method logo

The first iteration of the EESI acronym was Ethical, Equitable, Sustainable & Inclusive Method. Upon further research into sustainable practices and the existence of greenwashing in many

industries, to avoid false representations, the decision to use ecological in exchange for sustainable was made. There are many definitions of sustainable/sustainability, and it can mean different things to different people. Ecological being focused on the relationship between organisms and the effect they have in the world was more in line with this method. To be mindful and responsible of what is being produced and how it is being produced. Stylish was also added in as the “S” because aesthetics are very important in design and to the unique vision of most creative professionals and an imperative factor to how customers connect with products/services. Thinking more broadly about the term inclusion, it has been used as more of an umbrella term which houses what Equitable was initially included to cover. The EESI method logo development sketches are located in [Appendix K](#) for interests’ sake.



- what is eesi?
- the checklist
- downloads



Figure 17 - Top of EESI Method webpage

The top of the EESI webpage (fig. 17) includes the logo and a cube shape with a video of clouds moving within it. This is intended to promote the idea of blue sky, out of the box thinking. Below this are three links to the different sections of the webpage: What is EESI?, The Checklist and Downloads.



Figure 18 - What is EESI Method website screenshot

The middle of the webpage includes the “What is EESI?” section (fig. 18). This section describes in detail what the EESI method is:

“There are tons of design methods out there, and really no wrong way to practice design. Challenges arise when it comes to knowledge gaps, especially large ones that feel seemingly segregated.”

The EESI Method (pronounced ezee) is a tool created in the form of a checklist that can be completed in part or in full, in whatever order works for you. It is intended as a guide, but who doesn't like checking things off right? So, that's why it's in list format... because some of us may be more Type A than we like to admit.

By creating a one-stop-shop of sorts for guidance in the areas of inclusively, environmentally, and aesthetically inclined design efforts the EESI Method aims to provide a loosely structured pathway that one can meander. If you are looking to start a business that incorporates all of these elements, we sure hope this is a helpful resource!

The EESI Method was developed by researcher Em Harmsen while creating and researching for her MA in Cultural Studies at Queen's University.”

E E S I • e e s i • E E S I • e e s i • E E S I • e e s i • E E S I

E - Ethical E - Ecological S - Stylish I - Inclusive

Ethics Related Considerations

Intention & Responsibility
What is at the core of your brand ethos?
Are there any aspects of your company that could be deemed or viewed as unethical? In what ways?
How can unethical aspects that may arise be mitigated or avoided altogether?

End Users
Why is it important and appropriate for you to be selling your product/service?
How will your product/service/company affect its end-users?

Business Structure
How is the structure of your business ensuring ethical and equitable practices will be upheld?

Outreach, Research & Advocacy
What are some ways that you can engage with others to help provide continuing ethical and equitable guidance to your business?
What types of research has been done surrounding the ethical landscape of the industry you are in?

Figure 19 - Screenshot of EESI Method checklist on website

Sourcing & Manufacturing
 Where are you intending to purchase supplies from and what are the ethics of these suppliers/companies?
 Where do you intend to have products made and can you easily visit this location(s)?
 Are workers being compensated fairly?
 Are working environment conditions safe?

Shipping & Receiving
 Are you able to find out the ethics of the shipping provider you want to use?
 Are there ways to streamline the shipping processes for workers involved?

Marketing & Branding
 Is the way the product/service/brand is being marketed truthful and authentic?
 Is the branding mindful of cultural appropriation and representing itself in an ethical way that is not stealing from or misrepresenting other cultures?



Figure 20 - Bottom of EESI Method website

The point of this checklist (figs. 19 & 20), as described on the website and within the intro of the checklist itself is for it to act as a non-linear guide to incorporating more inclusive, accessible, and environmentally conscious practices into businesses large and small. The reasoning for not forcing the checklist to be hierarchical or linear in how it is filled out came from personal experiences discussed in the practice-based reflection. It was not always possible to complete tasks in desired order due to external factors like awaiting on responses from manufacturers or being prompted by a mentor to investigate a specific topic sooner. This excerpt from Don Norman’s “The Design of Everyday Things”¹⁰³ also came to me at a crucial

¹⁰³ Norman, *The Design of Everyday Things*.

time in developing the EESI Method and it further solidified this emphasis on a more organic approach:

“Designing an effective checklist is difficult. The design needs to be iterative, always being refined, ideally using the human-centered design principles...continually adjusting the list until it covers the essential items yet is not burdensome to perform... printed checklists have one major flaw: they force the steps to follow sequential ordering, even where this is not necessary or even possible. With complex tasks, the order which many operations are performed may not matter, as long as they are all completed... in general it is bad design to impose a sequential structure to task execution unless the task itself requires it. This is one of the major benefits of electronic checklists: they can keep track of skipped items and can ensure that the list will not be marked as complete until all items have been done.”

Normans’ point on iterative-ness is something that will be offered within the EESI checklist, adding different versions of it from time to time as design practices/theories/factors evolve. Although the point about printed checklists was noted, offering options for download is still important based on desired use case. These forms are also fillable in both PDF and Word formats. Due to how complex the design process is, it made good sense for the checklist to allow for someone to contemplate a few of the sections and be able to return when they felt ready to tackle another segment. Much like the design studio, the EESI Checklist acts as an archival piece to add onto which one can reflect. The website eesimethod.com is up and running, people can check it out and refer to it whenever they like. The hope is that it provides

a streamlined guide for those wanting to create a business that is mindful of the aspects of inclusion, accessibility, and sustainability but struggle on knowing where to start.

Being a culmination of all aspects of the thesis leading up to this, the EESI Method is the most tangible and accessible representation of the thesis work. It is a complimentary casual companion to the formality of this thesis.

Chapter 6 – Discussions

In “Being Heumann”¹⁰⁴, Judith Heumann writes about their experiences not having equal access to education as their peers did as a child due to their disability and the internal biases/prejudice that the optics of their physical disability brought. Heumann goes on to describe disability culture as “a culture that has learned how to value the humanity in all people, without dismissing anyone for looking, thinking, believing or acting differently.” What this research has proven is that it is up to us, as designers, to be eager to understand and adopt practices of inclusion and accessibility into our worlds to share with others. Because the fact is, that we live in a world that has been traditionally built in exclusionary ways and in societies that make it easy to remain complacent and ignorant to diverse lived experience beyond our own.

The unfortunate reality though, is that simply asking designers to be more empathetic in their viewpoints, although good in theory, negates issues around economic feasibility. Because there are huge factors at play here. The economic aspects of doing design in more inclusive ways, was not explored in enough depth through this thesis to be able to provide a full analysis of, but is worthy to be included in this discussions section. Not only is it made more financially challenging for designers (especially those running privately owned small businesses), it also creates a financial barrier to access for customers who do not have the funds to access products like this that are made with them in mind, but due to the costs of ethical labour and natural materials that make retail prices much higher than shopping at less expensive more

¹⁰⁴ Heumann, *Being Heumann*.

mass produced companies. This inevitable is something that perpetuates the cycle of fast fashion. Fast fashion, ironically is much more accessible in nature from a cost perspective, making it challenging to garner higher perceived values from customers that are not used to nor able to purchase higher priced items due to low incomes from programs like the Ontario Disability Support Plan (ODSP)¹⁰⁵ or other issues. It's all well and good to try to convince people why it is important to buy ethical products and convince designers why it is important to design from a place of empathy, but even with best intentions, financial discrepancies cannot be ignored. With the rise in costs globally for everything from insurance to groceries to housing, it is understandable that some of these ideas put forth in this thesis may seem unattainable for some people. Overall, the hope is to initiate a mindset shift, and as depicted in the EESI Method, a guide that doesn't need to be completed in whole, but even in part as is doable.

When thinking of ways to summarize this research, the idea of a diagram based on Maslow's "Hierarchy of Needs"¹⁰⁶ came to mind. From analysis of the research findings from the Literature Review, the Case Study, the Practice-Based Reflection, and the EESI Method, the "Hierarchy of Mindful Design" (fig. 21) was created. This graphic aims to provide a clear way for designers to "opt-in" to this way of designing, to visually understand what is required and where to focus efforts in ways they can manage. It's a simplified and clarified visual of the EESI Method, combined with the practical hands-on design studio work.

¹⁰⁵ "Ontario Disability Support Program | Ontario.ca."

¹⁰⁶ "Maslow's Hierarchy of Needs - Video - Films On Demand."



Figure 21 - "Hierarchy of Mindful Design" diagram

Reviewing the work produced here, it became clear that the most important aspect in creating successful inclusive and accessible designs, especially in the fashion industry is inclusion and having an inclusive nature from the root of the design phase. This is why Inclusion is listed at the bottom, offering a strong foundation to the other elements. Innovation is next because innovation is a requirement when constraints are involved. Being highly innovative and open to iteration in the design process will set you up for the following elements. During this phase, iterative and interactive work is aimed to be completed through co-design and user group collaborations, product testing and feedback. A major aspect that was omitted from the original thinking around the design gap was the importance of engagement, in relation to both customer and audience engagement with the brand/product and vice versa. Engagement is a key factor in ensuring perceived viability and collaborative approaches in relation to challenging markets. This would look like sharing on social media, learning more from customer bases,

mentors, competitors, and getting to know them even more. Above engagement is responsibility, this was originally contemplated to be switched with the position of engagement, but in the end, the thinking was that without proper engagement it could create bigger hurdles to be able to secure the means to incorporate as many responsible practices as possible. Responsibility will shine in how ethically and equitably the products being designed are manufactured and what materials are used to product them. Responsibility will also include thinking processes around what the intended lifecycle of the product is deemed to be. The top of the pyramid acts as the icing on top, the aesthetics. Aesthetics are what will draw people in and symbolize to them if they can see themselves and their personal styles in the products. These aesthetics will be woven through the marketing, packaging, and imaging used to promote the product. Once customers interact with the product that drew them in, they will be pleasantly surprised that it also happens to be built on such a powerful base of inclusion, innovation, and responsibility. This is how the thesis work is visualized as an easily digestible output.

I acknowledge the objection that this work is too personal. I argue that a situated design methodology is intendable in addressing the design paradox. That being said, there are limitations that exist in the study based on researcher perspectives and any unconscious biases that may be present despite trying to remain neutral. The research being linked to a personal practice in the practice-based reflection could benefit from further external analysis from more perspectives beyond that of the researcher/designer.

The following collages (figs. 22 & 23) depict examples of sketches, social media posts, sample fittings, prototype development, books, and completed/ongoing work. These collages provide a collaged visual summary of the work completed for the thesis and portray the multi-disciplinary nature of the work accomplished.

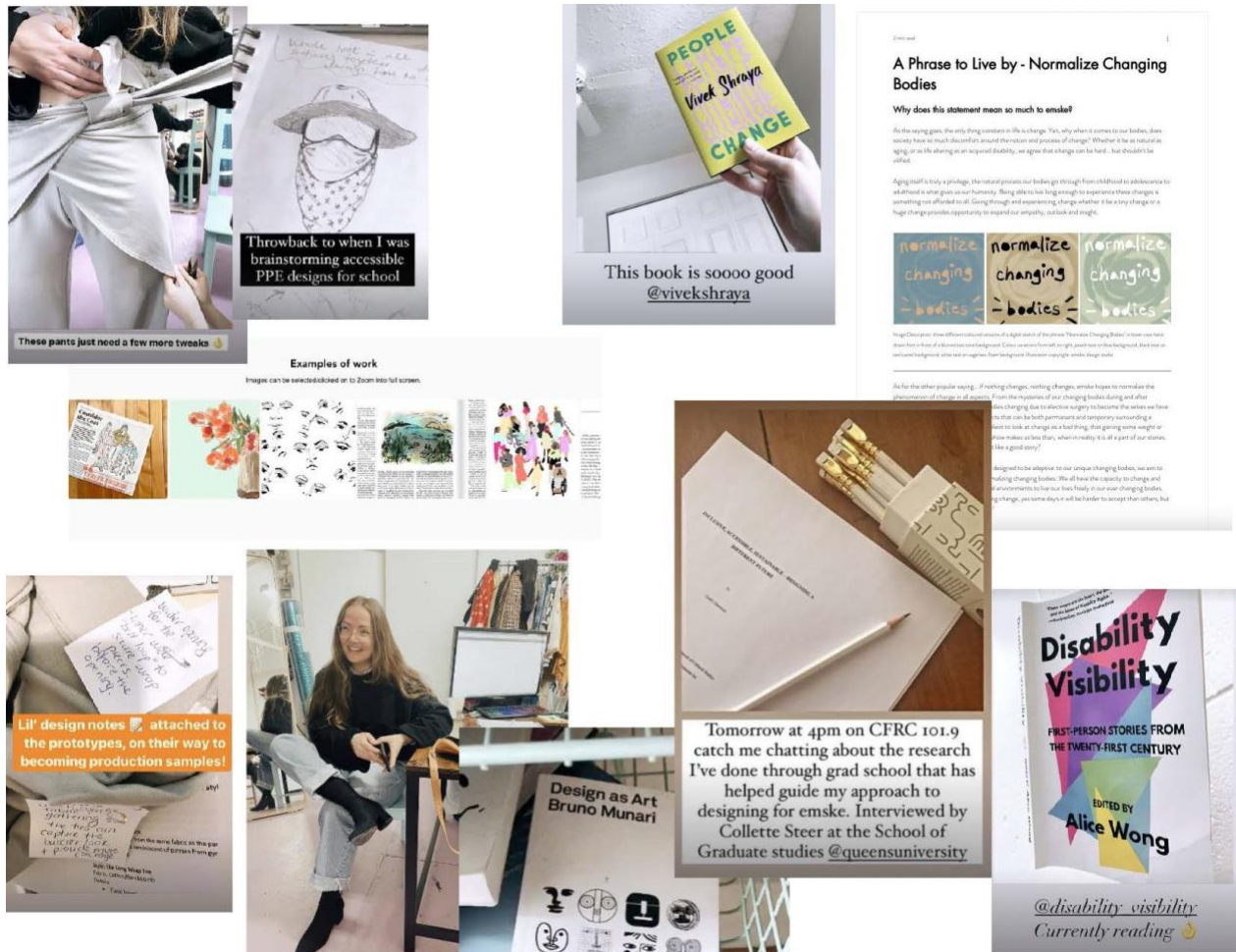


Figure 22 - Summary of Research Collage A

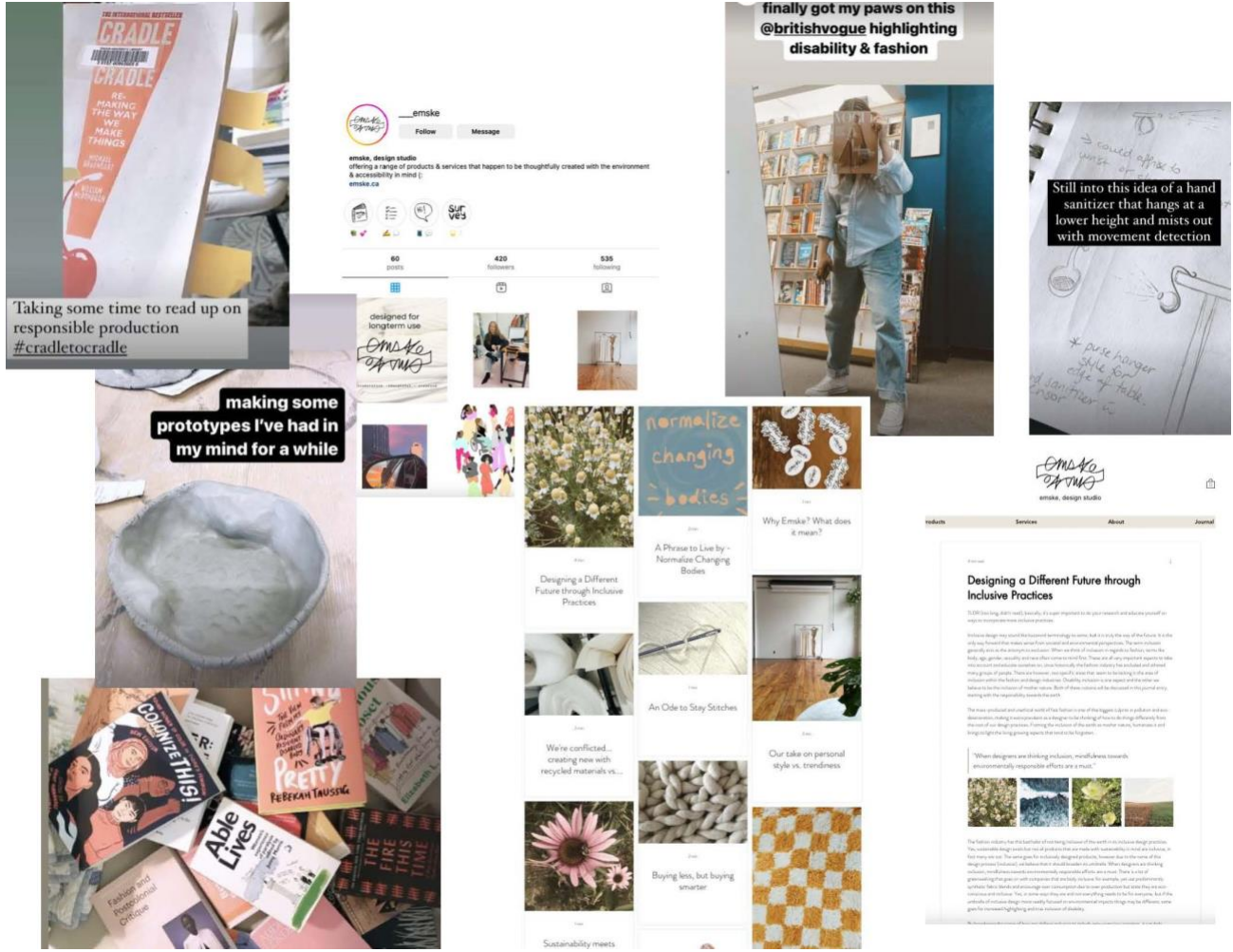


Figure 23 - Summary of Research Collage B

Chapter 7 – Conclusion & Future Work

“There is so much that able-bodied people could learn from the wisdom that often comes with disability. But space needs to be made. Hands need to be reached out. People need to be lifted up.”

- A.H. Reaume¹⁰⁷

What was determined through this thesis research is that coming up with one solution that will truly work for everyone is quite difficult, if not a futile effort that is likely impossible. What has become evident is that starting at the root, throughout the design process itself, with an inclusive mindset that is accounting for accessibility is certainly going to make for better more useful design overall. Although it may be impossible to determine one linear way to design that captures the needs of a broad group of people while incorporating nuanced details, it may be possible in non-linear iterative ways that are driven by collaboration and co-design.

Clear conclusions around being empathetic from your standpoint will also enhance the design process, allowing space for adaptative, responsible, and aesthetic considerations. Design has the power to be a catalyst not only for the betterment of our eco-systems and disabled/chronically ill communities, but for the entire population. By incorporating more

¹⁰⁷ Wong, *Disability Visibility: First-Person Stories from the Twenty-First Century*.

inclusive practices that are broadened to include mother nature as well as diverse mobility/sensory needs, the future of design has the capacity to have grander positive impacts.

The initial questions listed in the introduction “why aren’t there more accessibly designed items made out of sustainable materials?” and “how come most sustainable products focus on the inclusion of eco-friendly efforts but omit the inclusion of diverse mobilities?” have been answered through the literature review and case study findings. Sustainable natural materials are often more expensive and challenging to source, there is also not enough understanding and value placed on the need and importance of providing more lifestyle options in the accessible design space. Similarly to the second question, accessible and inclusive design is still considered emerging and although there are not as many representation of brands that are incorporating these design methods together yet, there will be in the years to come.

Whether it be permanent or temporary, disability and chronic illness is universal, being the largest minority group worldwide. Those living without disabilities or chronic illnesses are simply put, waiting to at some point in their lives with an acquired disability or chronic illness, it is a natural part of human life and aging. Yet, we live in a world that is inherently built in ableist ways, with buildings and products made of materials that are often not mindful of the environment and through processes that are not ethical. The hope is that as these new ways of designing become normalized, that stigmas surrounding these topics will inevitably begin to shift and minimize. Instigating a shift change towards more inclusive practices universally,

therefore breeding more innate inherent understanding and acceptance of the diversity of lived experiences.

There was a lot of talk around the need for an equally shared ethos between accessibility and environmentalism, yet no real conclusion as to how this can be done in a simple way. The depiction of the “Hierarchy of Mindful Design” (fig 21) attempts to capture and present this ethos. The notion of this shared ethoc will continue to be explored and tested the practice-based design work, and the EESI method prompts/guidelines. More conversations and collaborations need to be had between these disciplines. The siloed effect between disciplines and methods is significant, but with increased awareness and communication around the importance of bringing these segments together through research like this, that future of design will include all these aspects as commonplace.

As noted in the introduction, further work should address these intersecting areas. Specifically, with the expansion of research groups and market analysis. A larger case study participation pool would be ideal for further research in this area, not only looking at designers’ experiences, but the customers perspectives, needs and wants ([Appendix L](#)). Branching out further from this would be the continuation of many of these surveys/interviews in the manufacturing fields. Looking more in-depth at the ethical and equitable areas of manufacturing in all stages of the design process. Archival research and a historical analysis of what has worked and what hasn’t concerning similar products/services/theses. A much more in-depth critical analysis of pre-existing methods, theories, designs, and designers. Facilitation of workshops, courses and

hands on approaches to the EESI method to determine proof of concept, beyond the academic realm is also a consideration for future work. The case study could be expanded beyond the Canadian market and target key areas worldwide that are hubs for this type of design. Further analysis of consumer buying choices and stigma could lend itself to proving the impact of celebrity tastemakers/influencers on inherent biases of consumers. Examining what the main drivers are for spokespeople to promote specific products (whether it is money, status, etc.) could be helpful in strategizing ways to improve acceptance of universally accessible, sustainable, and ethical products. Expanding the breadth of the study to include disabled people's opinions would also be an amazing improvement as just getting designers perspectives is a good start, but not well rounded enough. In addition to this, expanding into the sourcing, manufacturing, and production industries, would also be great to gather data on to ensure inclusion is happening from all areas in the process of conceptualizing and making a product from start to finish. A look into what has changed in the past 10 years in terms of inclusive design acceptance/stigma, forecasting what may change in the next 10. Researching how much has the rise of offshore manufacturing impacted inclusive design manufacturing and if this may be due to change with the rise of shipping costs and interest in rebuilding local economies (i.e., support local initiatives). Developing a comparative study based on how the Canadian market differs in all these aspects from the American market, European market, etc. These ideas are vast, but so is this subject matter. The list of how this research could be expanded could go on.

By conducting this research, the hope is that it will contribute to the conversation surrounding design practices throughout diverse industries. May this research prove that reimagination of design practices is plausible, necessary, and welcome.

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Appendices

Appendix A – GREB Ethics Approval



April 14, 2021

Emily Harmsen
Master's Student
Cultural Studies Program
Queen's University
Kingston, ON, K7L 3N6

GREB Ref #: GCUL-101-20; TRAQ #
Title: "GCUL-101-20 A Case Study: Developing Helpful Guidelines for Accessible and/or Inclusive Brand Creation"

Dear Emily Harmsen:

The General Research Ethics Board (GREB), by means of a delegated board review, has cleared your proposal entitled "**GCUL-101-20 A Case Study: Developing Helpful Guidelines for Accessible and/or Inclusive Brand Creation**" for ethical compliance with the Tri-Council Guidelines (TCPS 2) and Queen's ethics policies. In accordance with the Tri-Council Guidelines (Article 6.14) and Standard Operating Procedures (405), your project has been cleared for one year.

You are reminded of your obligation to submit an annual renewal form prior to the annual renewal due date (access this form at <http://www.queensu.ca/traq/signon.html>; click on "Events;" under "Create New Event" click on "General Research Ethics Board Annual Renewal/Closure Form for Cleared Studies"). Please note that when your research project is completed, you need to submit an Annual Renewal/Closure Form in Romeo/traq indicating that the project is 'completed' so that the file can be closed. This should be submitted at the time of completion; there is no need to wait until the annual renewal due date.

You are reminded of your obligation to advise the GREB of any adverse event(s) that occur during this one-year period (access this form at <http://www.queensu.ca/traq/signon.html>; click on "Events;" under "Create New Event" click on "General Research Ethics Board Adverse Event Form"). An adverse event includes, but is not limited to, a complaint, a change or unexpected event that alters the level of risk for the researcher or participants or situation that requires a substantial change in approach to a participant(s). You are also advised that all adverse events must be reported to the GREB within 48 hours.

You are also reminded that all changes that might affect human participants must be cleared by the GREB. For example, you must report changes to the level of risk, applicant characteristics, and implementation of new procedures. To submit an amendment form, access the application by at <http://www.queensu.ca/traq/signon.html>; click on "Events;" under "Create New Event" click on "General Research Ethics Board Request for the Amendment of Approved Studies." Once submitted, these changes will automatically be sent to the Ethics Coordinator, GREB, at University Research Services for further review and clearance by GREB or the Chair, GREB.

On behalf of the General Research Ethics Board, I wish you continued success in your research.

Sincerely,

A handwritten signature in blue ink, appearing to read "Dean A. Tripp".

Chair, General Research Ethics Board (GREB)
Professor Dean A. Tripp, PhD
Departments of Psychology, Anesthesiology & Urology Queen's University

c: Dr. Claire Davies, Supervisor
Dr. Lisa Guenther, Chair, Unit REB
Carrie Miles, Dept. Admin.

Appendix B – Case Study Recruitment Email

Email subject heading: Seeking Participants – For a study on Inclusive/Accessible Brand Building/Product Design

Dear _____

I'm a graduate student in Cultural Studies at Queen's University. My thesis work focuses on accessible and inclusive design methods and practices. I am looking for participants to volunteer their time to complete an online survey as well as a brief follow up online interview answering questions about inclusive/accessible brands and design.

The purpose of this study is to gather feedback and insight from participants about their experiences when developing an inclusive/accessible brand or product. The intended outcome for this research will be to aid in the development of a new design framework aimed at making it easier for designers/entrepreneurs/companies to ensure more ethical and all around accessible, inclusive & sustainable products that service a broad scope of customer's needs without compromising the unique aesthetics of the brand or product being developed by the designer/entrepreneur/company.

If you are interested in participating in this study, please read the combined letter of information/consent form attached and provide consent by signing the form and sending it back to Emily Harmsen at 17eh7@queensu.ca

Researcher: Emily Harmsen, Cultural Studies, Queen's University

Supervisor: Claire Davies, Mechanical and Materials Engineering, Queen's University

Thank you for your time,

Emily Harmsen, B. Des

she/her

Masters Student, Cultural Studies, Queen's University

17eh7@queensu.ca



Appendix C - Case Study Survey Questionnaire

The purpose of this study is to gather feedback and insight from participants about their experiences when developing an inclusive/accessible brand or product. The intended outcome for this research will be to aid in the development of a new design framework aimed at making it easier for designers/entrepreneurs/companies to ensure more ethical and all around accessible, inclusive & sustainable products that service a broad scope of customers' needs without compromising the unique aesthetics of a brand or products being developed by the designer/entrepreneur/company. This survey will be kept confidential.

I consent to participate in this research study and verify that I have read the Letter of Information and all of my questions have been answered:

- Yes or No

I give my permission to audio record my responses to the online interview portion of this study.

(Post completion of the survey you will be contacted to set up a virtual interview meeting time):

- Yes or No

Questions – to be answered in as much detail as you want.

Participants email:

Participants Brand:

Participants Product:

1. What do you feel is the most important aspect when developing a brand or designing a product?

Answer:

2. When thinking about inclusivity, what are the first thoughts that comes to mind for you?

Answer:

3. When thinking of accessibility, what are the first thoughts that comes to mind for you?

Answer:

4. What first interested you in working for an inclusive/accessible brand or creating inclusive/accessible products?

Answer:

5. What do you believe are the easiest parts of creating an accessible brand or product?

Answer:

6. What do you believe the biggest hurdles are to creating an accessible brand or product?

Answer:

7. Are there any elements of product/brand development that you wish you had more resources for? If so, what?

Answer:

8. Have there been moments where you have had to set aside part of your vision due to time/budget restraints?

Answer:

9. Have you done any prototype testing and/or target customer research? How has this influenced your brand/product development?

Answer:

10. Do you believe that inclusive and/or accessible products/brands should also incorporate ethical and sustainable aspects in their design/development processes/methods?

Answer:

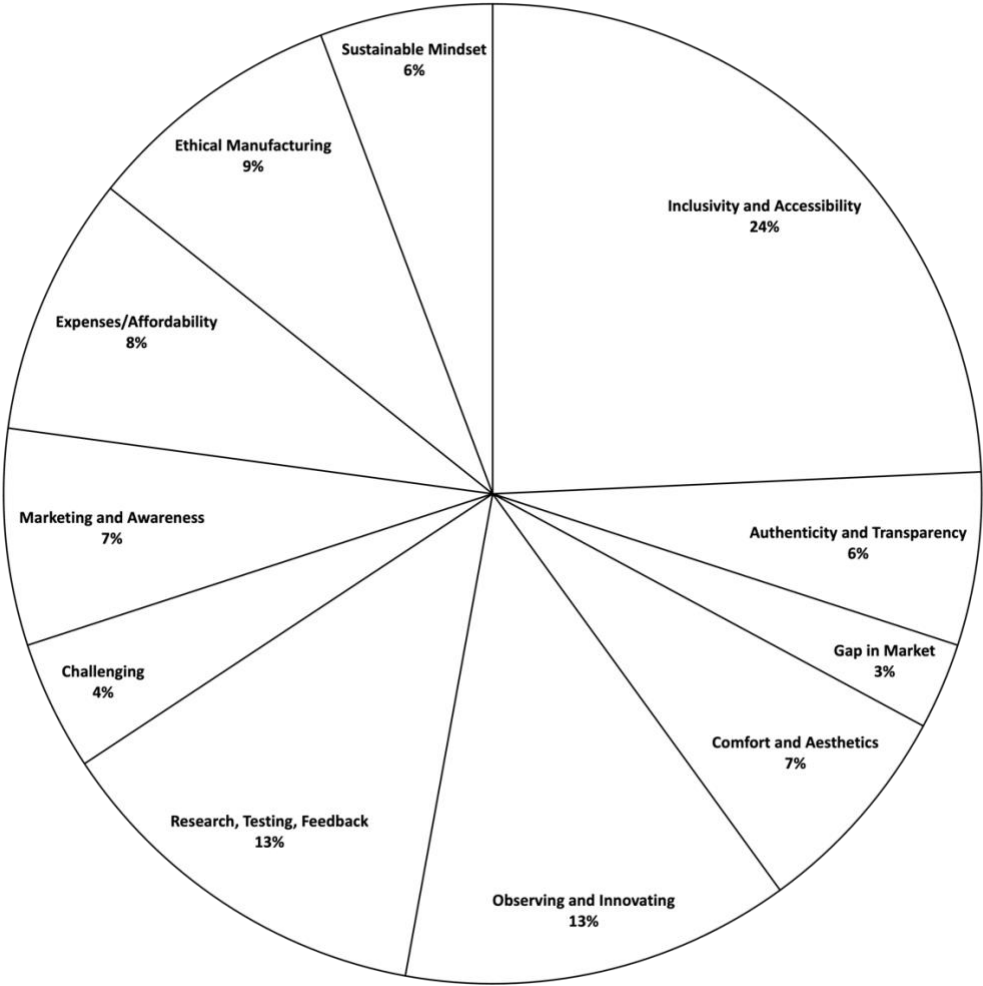
11. Is there anything else that you would like to include that you believe will be useful to the researcher? If yes, please elaborate in the text box.

Answer:

Appendix D – Case Study Survey Coding Tables & Charts (black/white versions)

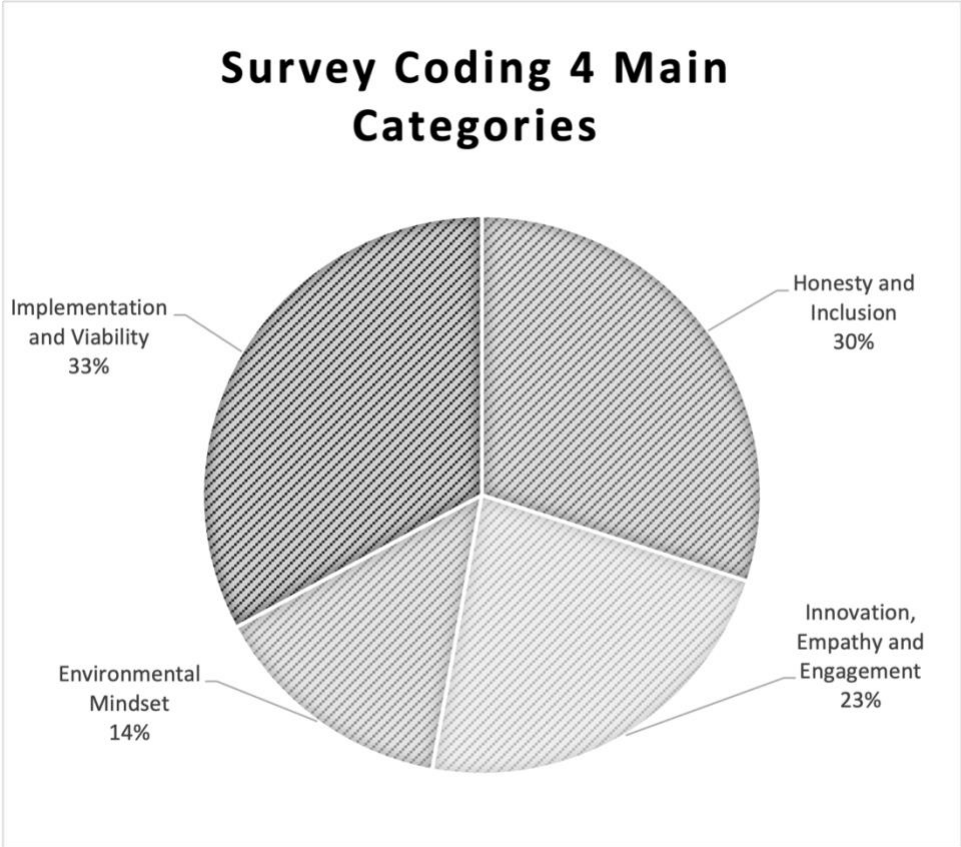
Themes broken down by question	
Q (Question) 1	Inclusivity and accessibility
Q2	Authenticity and Transparency, Inclusivity and accessibility, Gap in Market
Q3	Inclusivity and accessibility
Q4	Inclusivity and accessibility, Comfort and aesthetics, Observing and innovating
Q5	Inclusivity and accessibility, Gap in Market, Comfort and aesthetics, Observing and innovating
Q6	Research, testing, feedback, Observing and innovating, Challenging
Q7	Inclusivity and accessibility, Challenging, Marketing and Awareness, Expenses/Affordability, Authenticity and Transparency
Q8	Ethical manufacturing, Research, testing, feedback
Q9	Expenses/Affordability, Ethical manufacturing, inclusivity and accessibility, Sustainable mindset, Challenging, Research, testing, feedback, Observing and innovating
Q10	Research, testing, feedback, Observing and innovating
Q11	Expenses/Affordability, Ethical manufacturing, marketing and awareness, sustainable mindset, Inclusivity and accessibility
Q12	Marketing and Awareness, Expenses/Affordability, Comfort and aesthetics

UMBRELLA THEMES FROM CASE STUDY SURVEYS



Four Main Coded Survey Categories	
Authenticity and Transparency	Honesty and Inclusion
Inclusivity and Accessibility	
Observing and Innovating	Innovation, Empathy and Engagement
Gap in Market	

Comfort and Aesthetics	
Sustainable Mindset Ethical Manufacturing,	Environmental Mindset
Challenging Marketing and Awareness, Expenses/Affordability Research, Testing, Feedback	Implementation and Viability



Appendix E – Survey Coding Spreadsheet Screenshots

Surveys - Coding (open, axial, selective)				
Survey Questions	Excerpts	Key segments	Codes	
			Themes	
Q1 - Please provide us with your email and brief description of your brand and/or product.	Attractive and accessible bras, diversity - size, skin tone, ability	Adaptive & inclusive clothing	Inclusive apparel	Inclusivity and accessibility
	Adaptive clothing	Adaptive clothing	Inclusive apparel	Inclusivity and accessibility
	Adaptive clothing	Adaptive clothing	Inclusive apparel	Inclusivity and accessibility
	Inclusive bra	Adaptive & inclusive clothing	Inclusive apparel	Inclusivity and accessibility
Q2 - What do you feel is the most important aspect when developing a brand or designing a product?	Passion for universal design, company responsibility, extreme users, simple changes for big impacts to traditionally ignored target markets, more inclusion from beginning to end	Universal design, responsible design, user experience, addressing a market gap, inclusive design	Authenticity and Transparency, Diverse Use Cases, Market Gap	Authenticity and Transparency, Inclusivity and accessibility, Gap in Market
	Consistent and honest approach, accuracy in research and analysis	Consistency, honesty, and accuracy	Authenticity and Transparency	Authenticity and Transparency
	Importance of listening to clients, clothing needs, inclusive designs, promoting dignity and sense of self	Listening to clients apparel needs, inclusive design, dignity/sense of self	Diversity inclusion	Inclusivity and accessibility
	Brand image driven by social impact, authentic not gimmicky	Marketing, authenticity, social impact	Authenticity and Transparency	Authenticity and Transparency
Q3 - When thinking about inclusivity, what are the first thoughts that comes to mind for you?	Designing to accommodate extreme users, not compromising quality/desire of end products, making products attractive, mainstream and accessible	Designing for diverse user experience, quality and aesthetics, mainstream and accessible	Diversity inclusion	Inclusivity and accessibility
	Inclusive of disability	Design for disability	Diversity inclusion	Inclusivity and accessibility
	Equality for all people in all aspects, skin tones, race, abilities, orientations	Equality for all, race, ability, sexuality	Diversity inclusion	Inclusivity and accessibility
	Skin tones, size ranges, abilities	Race, Size, Ability	Diversity inclusion	Inclusivity and accessibility
Q4 - When thinking of accessibility, what are the first thoughts that comes to mind for you?	Equal access to products and services, going out of ones way to consider all use cases, diversity of needs, accommodations for ease/equity	Easy and equal access, consideration of diverse use cases	Equality and Ease, Diverse use cases	Comfort and aesthetics, inclusivity and accessibility
	Ability to access physical spaces with ease independently if desired	Easy independent access to physical spaces	Equality and Ease	Comfort and aesthetics, inclusivity and accessibility
	Everchanging and evolving, reflective of past mistakes/norms, adapting what exists while doing better moving forward via universal design mindset, designing for all	Constant change, always adapting and improving upon, universal design for all	Changing, nuances, innovating	Observing and innovating
	Equal access, not feeling singled out, stigmas, comfortable living available due to thoughtful design for physical/mental disabilities	Equality, comfort, thoughtfulness	Equality and Ease	Comfort and aesthetics, inclusivity and accessibility

<p>Q9 - Have there been moments where you have had to set aside part of your vision due to time/budget restraints?</p>	<p>No, taking time to decide on full product image, post launch making product continually more inclusive</p> <p>Yes - but no further analysis available</p> <p>Many times</p> <p>Yes, focusing on lots of inclusive design while being eco friendly, but manufacturing options are too pricey so far</p>	<p>Focused on taking time to realize product with continued improvements expected</p> <p>N/A</p> <p>Often</p> <p>Budget and costing restraints with inclusive and sustainable practices/options</p>	<p>Researching and designing continually, innovating</p> <p>N/A</p> <p>Challenging</p> <p>Affordability, inclusive and sustainable</p>	<p>Research, testing, feedback, Observing and innovating</p> <p>N/A</p> <p>Challenging</p> <p>Expenses/Affordability, Ethical manufacturing, inclusivity and accessibility, Sustainable mindset</p>	
<p>Q10 - Have you done any prototype testing and/or target customer research? How has this influenced your brand/product development?</p>	<p>Extensive prototyping and target market research, essential to understanding product accessibility and market, how to become more accessible and different perceptions of product</p> <p>Provides knowledge of popular products and client needs</p> <p>Ongoing prototype testing/customer research</p> <p>Yes, helps immensely with reiterating products/prototypes</p>	<p>Prototyping and market research is essential designing accessibility, continued improvements</p> <p>Essential for product development and market research</p> <p>Ongoing product testing and market research</p> <p>Immense impact for product/prototype design</p>	<p>Researching and designing continually, innovating</p> <p>Researching and designing continually, innovating</p> <p>Testing and research</p> <p>Designing and researching</p>	<p>Research, testing, feedback, Observing and innovating</p> <p>Research, testing, feedback, Observing and innovating</p> <p>Research, testing, feedback, Observing and innovating</p> <p>Research, testing, feedback, Observing and innovating</p>	
<p>Q11 - Do you believe that inclusive and/or accessible products/brands should also incorporate ethical and sustainable aspects in their design/development processes/methods?</p>	<p>Yes but can be difficult with low budgets/limited resources, essential piece to building holistic ethical brand, social impact missions shouldn't compromise back end ethics, as a whole striving for sustainability, ethical and impactful</p> <p>Yes - but no further analysis available</p> <p>Yes, but cost is a factor, do the best to incorporate ethics/sustainable practices</p> <p>All part of same ethos, one should not come at the expense of another which is often the case</p>	<p>Limited budgets/resources, essential for ethical brand building, social impacts, striving for sustainability</p> <p>N/A</p> <p>Cost, ethics, sustainability</p> <p>Same ethos, equal importance</p>	<p>Small budgets, ethics, brand building/awareness, sustainability</p> <p>N/A</p> <p>Overall ethics and affordability</p> <p>Equality and sustainability, ethos</p>	<p>Expenses/Affordability, Ethical manufacturing, marketing and awareness, sustainable mindset</p> <p>N/A</p> <p>Expenses/Affordability, Ethical manufacturing, sustainable mindset</p> <p>Inclusivity and accessibility, Sustainable mindset</p>	
<p>Q12 - Is there anything else that you would like to include that you believe will be useful to the researcher?</p>	<p>Educating caregivers/facilitators/Occupational Therapists on available time/cost saving products, products that make lives easier removing institutional aesthetic</p> <p>N/A</p> <p>N/A</p>	<p>Education and awareness, time/cost savings, ease of use and aesthetics</p> <p>N/A</p> <p>N/A</p>	<p>Awareness, affordability, ease, aesthetics</p> <p>N/A</p> <p>N/A</p>	<p>Marketing and Awareness</p> <p>Expenses/Affordability, Comfort and aesthetics</p> <p>N/A</p> <p>N/A</p>	

Appendix F - Case Study Interview Questions

The purpose of this study is to gather feedback and insight from participants about their experiences when developing an inclusive/accessible brand or product. The intended outcome for this research will be to aid in the development of a new design framework aimed at making it easier for designers/entrepreneurs/companies to ensure more ethical and all around accessible, inclusive & sustainable products that service a broad scope of customers needs without compromising the unique aesthetics of the brand or product being developed by the designer/entrepreneur/company.

This online interview will be recorded (audio only), kept confidential and will only be available to the researchers. If you would like to choose your own pseudonym, please let me know, otherwise one will be assigned to you.

Questions:

1. Were any of the questions in the survey portion of the study difficult for you to answer?
If so, which questions did you find the hardest to answer?

Answer:

2. Are there any answers that you would like to add on to now from your survey responses, having had time to step away from them?

Answer:

3. What Canadian brands come to mind when you think of accessibility and inclusion?

Answer:

4. Do you think that there is a need for more accessible and inclusive brands in Canada that target a younger market and why?

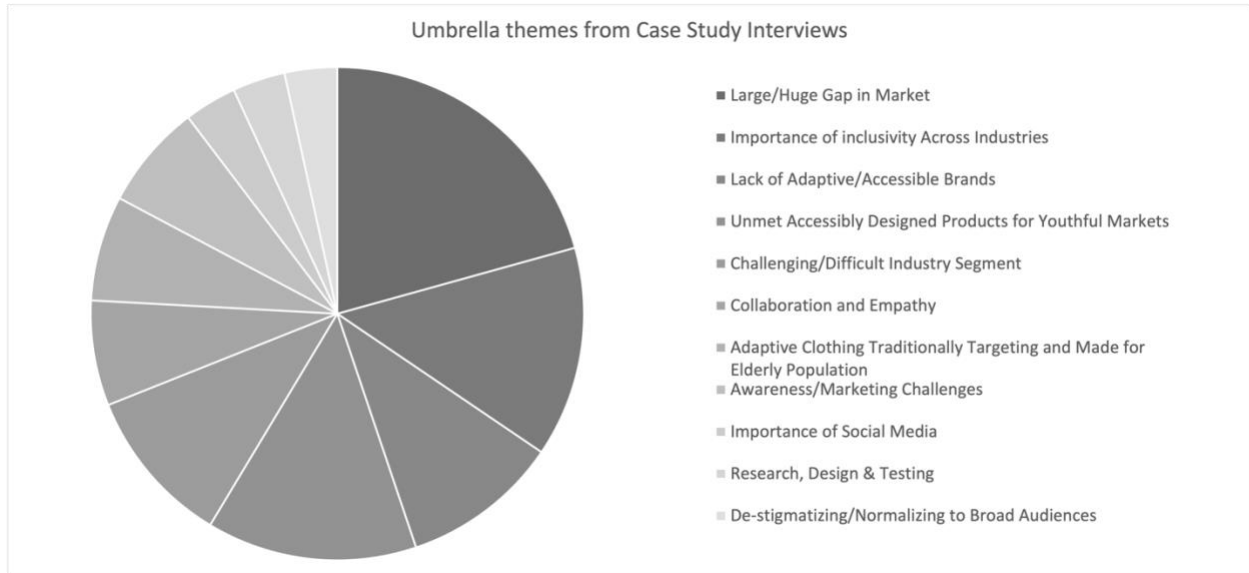
Answer:

5. After having some time to think things over since the survey questionnaire, are there any other comments that you wish to add?

Answer:

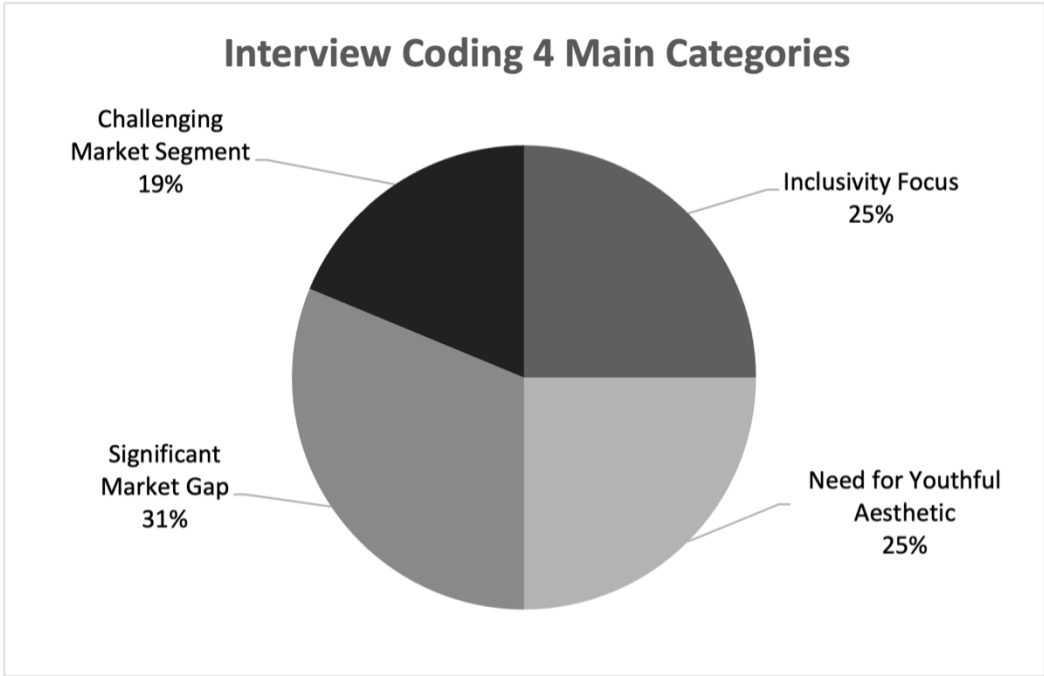
Thank you very much for your time (:

Appendix G – Case Study Interview Coding Tables & Charts (black/white versions)



Four Main Coded Interview Categories	
Importance of inclusivity Across Industries Collaboration and Empathy Research, Design & Testing De-stigmatizing/Normalizing to Broad Audiences	Inclusivity Focus
Large/Huge Gap in Market Lack of Adaptive/Accessible Brands	Significant Market Gap

<p>Unmet Accessibly Designed Products for Youthful Markets</p> <p>Adaptive Clothing Traditionally Targeting and Made for Elderly Population</p>	<p>Need for Youthful Aesthetic</p>
<p>Challenging/Difficult Industry Segment</p> <p>Awareness/Marketing Challenges</p> <p>Importance of Social Media</p>	<p>Challenging Market Segment</p>



Appendix H – Interview Coding Spreadsheet Screenshots

Interview Questions	Excerpts	Key segments	Codes	Themes
<p>Q1 - Were any of the questions in the survey portion of the study difficult for you to answer? If so, which questions did you find the hardest to answer?</p>	Focus on inclusivity, always something in the back of our minds	A stance of inclusivity as a given, using inclusivity as a tool	Inclusivity matters	Inclusivity focus
	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A
	N/A	N/A	N/A	N/A
<p>Q2 - Are there any answers that you would like to add on to now from your survey responses, having had time to step away from them?</p>	<p>*Note re: limitations, should have provided more of an overview of previous answers and also slightly more guided questions overall.</p> <p>Canadian brands, knix period proof underwear, targeting group of people traditionally left out, still room for improvement, attempting to address inclusivity, Silverts is a Canadian brand, have a lot of adaptive clothing, traditionally geriatric clothing, a weak point, where they don't really cover or address younger people with mobility restrictions or other accessibility challenges. addressing inclusive, inclusive bras for all. Non-focused on geriatric population, attractive, inclusive bras for all. Non-Canadian Tommy Hilffiger adaptive clothing line, stylish and attractive</p> <p>Canadian Brand Super Fly Apparel Inc</p>	<p>Targeting traditionally left out markets, more options for elderly adaptive clothing, weak point of not addressing younger markets, addressing mobility and accessibility challenges, attractive and inclusive</p> <p>Adaptive fashion in Canada, lack of awareness, lack of options</p> <p>More adaptive elderly clothing</p>	<p>Adaptive clothing as traditionally elderly, gap in market, lack of options for more youthful non-elderly customers</p> <p>Lack of Adaptive Fashion Brands</p> <p>Adaptive clothing more known as elderly clothing</p>	<p>Need for youthful aesthetic, significant market gap</p> <p>Significant market gap</p> <p>Need for youthful aesthetic</p>
<p>Q3 - What Canadian brands come to mind when you think of accessibility and inclusion?</p>	<p>Silverts, most established, adaptive clothing for elderly/long term care, have been doing for a long time, prosthetic leg covers</p>			

<p>Q4 - Do you think that there is a need for more accessible and inclusive brands in Canada that target a younger market and why?</p>	<p>Huge gap across industries, nothing stands out regarding companies targeting younger markets with accessible products. Inclusion needed to happen across industries from beginning so that adapting/designing for extreme users is less of a challenge/extra cost. Huge gap. Needs to happen, industry wide, range of social movements providing spotlight. Hopeful for positive change for accessibility and younger population.</p> <p>Lack of availability</p> <p>Category in its infancy, people are hungry for this, younger demographic needs warming up to this, adaptive clothing can sound medical and be a turn off, younger people want to wear what everyone else is wearing, room for more brands and more choice, sold in Canada and globally, can be a hard sell to retailers due to being new category, sell direct to consumer, lower quantities, selling more to individuals than mass, not an easy endeavor</p>	<p>Huge gap in market, lack of options/availability, lack of accessible youth oriented options, importance of inclusion from the very beginning of design processes, industry led change, positive outlook</p> <p>Gap in market, lack of choices overall, industry wide inclusion, positive change</p>	<p>Significant market gap, need for youthful aesthetic, inclusion focus</p>	<p>Significant market gap, need for youthful aesthetic, inclusion focus</p>	<p>Significant market gap, need for youthful aesthetic, inclusion focus</p>	<p>Significant market gap, need for youthful aesthetic, inclusion focus</p>
<p>Q5 - After having some time to think things over since the survey questionnaire, are there any other comments that you wish to add?</p>	<p>Huge need, all companies should be making changes, small tweaks for big impacts, overall to improve user friendliness for all types of people, virtual and tactile, celebrating uniqueness, time for businesses to step up, lots of need for this</p> <p>Difficulty to break into and succeed in market</p>	<p>Importance of inclusion industry wide, embracing multiple use cases/lived experiences, gap in market, small changes creating big improvements</p> <p>Challenging/Difficulty</p>	<p>Inclusion focus, significant market gap</p>	<p>Inclusion focus, significant market gap</p>	<p>Inclusion focus, significant market gap</p>	<p>Inclusion focus, significant market gap</p>
<p>Q6 - After having some time to think things over since the survey questionnaire, are there any other comments that you wish to add?</p>	<p>Unmet needs in new industry, look towards existing examples, marathon not a sprint, marketing and awareness challenges, disability nuances, social media exposure, collaborate and listen, fill the gap, research and test, challenging market to enter, normalizing and de-stigmatizing, inclusive lens</p>	<p>Unmet needs/gap in market, long road/challenging, marketing is a challenge, designing for all disabilities - collaboration/empathetic design, social media importance, research and development, de-stigmatizing/normalizing, inclusion matters</p>	<p>Inclusion focus, significant market gap, challenging market segment</p>	<p>Inclusion focus, significant market gap, challenging market segment</p>	<p>Inclusion focus, significant market gap, challenging market segment</p>	<p>Inclusion focus, significant market gap, challenging market segment</p>

Appendix I – Extra Practice-Based Reflection Imagery



Shop Products

Designed in house means that the product is unique to the emske brand, if you customize it further then it will be unique to you and one of a kind! The turn around time for these products may take longer since they are made by hand and often made to order.

We work with ethical distributors and co-design some of our products with clients. To align with our design philosophy to create a minimal impact on the environment, emske also curates thrified pieces that fit with the brands aesthetic. These pieces can be purchased as is, or customized as needed.

Use filters to refine your search. More items to be added soon, thanks for looking!

Filter by

Category

All occasions

Price



"Sifted, Aesthetically" print
Out of stock



Logo Stickers
Out of stock



The Adjustable Tie-Up Dress
Out of stock



The Rabbit Mug
Out of stock



The Overhead Wrap Top
Out of stock



The Salvaged Tote
Out of stock



Contact & Feedback

Note: for all product order support, please include your order number and date that your order was placed if applicable

<input type="text"/>	<input type="text"/>
<input type="text"/>	
<input type="text"/>	
<input type="text"/>	
<input type="submit" value="Submit"/>	

We always encourage community feedback, recommendations & ideas (-:

- Do you have constructive feedback for us?
- Thought of a cool idea that you would love to see come to life?
- Something you'd like to share regarding ableism or disability?
- Have a suggestion on a journal/blog topic?

Let us know!

<input type="text"/>	<input type="text"/>
<input type="text"/>	

What are your thoughts? Recommend, share and brainstorm away:

About



The Studio

emske offers products and services that are ethically made in Canada, environmentally responsible and happen to be designed with accessibility in mind.

emske is all about the love of design, art and fashion firstly, and sharing that with others. creating with accessibility in mind is the cherry on top, because access to style should always be a level playing field. We want to create items that otherwise may be hard find, products that celebrate all the ways that we live life.

emske is a full service design studio that is driven by an empathetic core. The mission of the brand is to work towards mitigating stigmas around disability and chronic illness. Counteracting everyday ableism one slow design step at a time.

We offer in house designed products (coming soon), and custom service offerings from illustration, co-design and consulting.

Join us in creating space to learn and grow together.

You can find more thoughts in our journal, where we jot down ideas and topics that interest us.

Have an idea for a blog post or want to contribute? Send us an email at hello@emske.ca or send us a note in our [contact page form](#).

The Founder

Em Harmsen has a deep love for design in all forms, she has a keen eye for detail and stays well informed about contemporary style, art and fashion.

Em freelanced for many years while working in public sector, but decided to switch gears in 2021 to focus full-time on the studio. She dreamt about running a design studio while completing an undergrad degree in Fashion Design at Toronto Metropolitan University. It wasn't until years later while finishing a masters focused on inclusive/accessible design from Cultural Studies at Queen's University that she conceptualized the focus of the studio.

After being diagnosed with a chronic illness, Em better understood the experiences of temporary and nuanced symptoms, mobility issues and bodily changes. Learning from family members and friends with disabilities, chronic illnesses and all around diverse lived experiences aside from her own, has always improved how she approaches design.

If nothing else, she hopes that the ethos of this studio might create a conversation for people or spark a thought around fashion, creativity and style that otherwise may not have come up.

Appendix J - EESI Method Checklist

This checklist is non-linear, steps can be achieved at any time, in any order that makes sense for your business goals and schedule. Think of this checklist as more of a guide, where questions are meant to prompt you to think further about specific areas, once those areas have been explored and potentially implemented, you can check them off knowing you're being mindful of these areas in your design process.

Not all areas will apply to every product, brand, service in the same way, however all the areas in the EESI checklist are important to think about, nonetheless. The EESI method is not exhaustive of all aspects.

Specific categories are listed within each section; Intention & Responsibility, End Users, Business Structure, Outreach, Research & Advocacy, Sourcing & Manufacturing, Shipping & Receiving, Marketing & Branding.

E - Ethical

Ethics Related Considerations

Intention & Responsibility

- What is at the core of your brand ethos?
- Are there any aspects of your company that could be deemed or viewed as unethical? In what ways?

- How can unethical aspects that may arise be mitigated or avoided altogether?

End Users

- Why is it important and appropriate for you to be selling your product/service?
- How will your product/service/company affect its end-users?

Business Structure

- How is the structure of your business ensuring ethical and equitable practices will be upheld?

Outreach, Research & Advocacy

- What are some ways that you can engage with others to help provide continuing ethical and equitable guidance to your business?
- What types of research has been done surrounding the ethical landscape of the industry you are in?

Sourcing & Manufacturing

- Where are you intending to purchase supplies from and what are the ethics of these suppliers/companies?
- Where do you intend to have products made and can you easily visit this location(s)?
- Are workers being compensated fairly?
- Are working environment conditions safe?

Shipping & Receiving

- Are you able to find out the ethics of the shipping provider you want to use?
- Are there ways to streamline the shipping processes for workers involved?

Marketing & Branding

- Is the way the product/service/brand is being marketed truthful and authentic?
 - Is the branding mindful of cultural appropriation and representing itself in an ethical way that is not stealing from or misrepresenting other cultures?
-

E - Ecological

Eco Related Considerations

Intention & Responsibility

- Think about the product lifecycle for your designs. How do you envision their journey from conception to manufacturing, to reaching the customer to after the customer is done with it? Are they cradle to cradle?
- In what ways can you design for disassembly and end-of-product-life/end-of-company-life?
- Do you have a buy back or recycling program?

End Users

- How healthy are your products/services for your end-users?
- Do you engage about the eco-conscious efforts of your company truthfully with customers?

Business Structure

- Has the company considered carbon offsets and/or being net zero?
- Is your business being mindful of the environment as much as possible?

Outreach, Research & Advocacy

- How updated are you about environmental related issues within your industry?
- Are there ways your company can support positive environmental initiatives through exposure, partnerships, or donations?

Sourcing & Manufacturing

- What types of materials are you using? Are they natural and more easily recyclable or synthetics or blends of natural/synthetic fibres and therefore harder if not impossible to properly recycle?
- Are the materials you are using easily biodegradable, or do they require equipment and technology to break down?

Shipping & Receiving

- How far are shipments travelling? Are there ways to combine shipments or lessen the amount/distance of shipping?
- What type of packaging are you using for shipping and is it environmentally responsible?

Marketing & Branding

- What kind of messaging are you conveying to end users about how to recycle, re-use, repurpose products?
- Does your brand image and ethos truly uphold the environmental standards you promote?

S - Stylish

Style Related Considerations

Intention & Responsibility

- How clear is your point of view as a brand/company?
- What artists, designers, musicians create an inspiration or interest for you?

End Users

- Is there a clear vision of the customer you are hoping to attract to your product/business/service?
- Does the product/service make you feel good when you wear it/use it?
- Will customers easily be able to recognize your company from others?

Business Structure

- Are the business plan and business-related documents laid out in a way that is in keeping with the brand aesthetic?
- Are the locations, offices, studio spaces reflective of the brand aesthetic?

Outreach, Research & Advocacy

- Are there ways that you can include your target audience into your design processes, finding out their aesthetic desires and what they feel is missing in your industry?
- What about co-designing and collaborating with others on specific designs?

Sourcing & Manufacturing

- What types of materials and supplies are you sourcing? Are the colour stories in line with the brand aesthetic?
- Do you have a collection or capsule in mind? Will the textures, colours, design elements work well together?

- How important are small details to you? Have you been clear with your manufacturer on your expectations?

Shipping & Receiving

- What do you envision the packaging to look like?
- How do you hope the customer will feel when they receive an item in the mail from your company and how can your packaging cultivate this feeling you want to evoke?

Marketing & Branding

- What are the main colours that rule your brand story?
 - How are you conveying your aesthetic vision to the public, is it being well received by your audiences?
-

I – Inclusive

Inclusion Related Considerations

Intention & Responsibility

- How do you envision incorporating inclusive practices into your brand/company/products/services?

End Users

- Who is your end user and what are their main priorities are you providing them with something they want and/or need?
- How easy is it for your customers to provide feedback and/or reach someone at your company?

Business Structure

- Is the language used in internal and external business communications inclusive?
- How can you further diversify your team in meaningful ways?
- How do you implement open welcoming spaces for your team, vendors, customers, collaborators?

Outreach, Research & Advocacy

- How can you engage with communities that you are hoping to serve?
- How can you learn from communities you are not a part of?

Sourcing & Manufacturing

- Are the manufacturers you have chosen aware of accessibility and accessible design?
- Are there ways you can meaningfully hire or work with vendors that have more diverse teams to gain broader perspectives within your design processes?

Shipping & Receiving

- What are the return policies like? Do they allow enough time for people to schedule time to get to the post office?
- How easy are shipments to open and access what is inside?

Marketing & Branding

- Are you marketing your products/services/company in a way that aims to not exclude and/or other people?
- Do you include thorough details and explanations about your product in addition to imagery?

- Is the end user able to use your website, business materials with ease? For example, captions, alternative text, video and image descriptions properly nested headings and tab ordering? What about colour contrast?

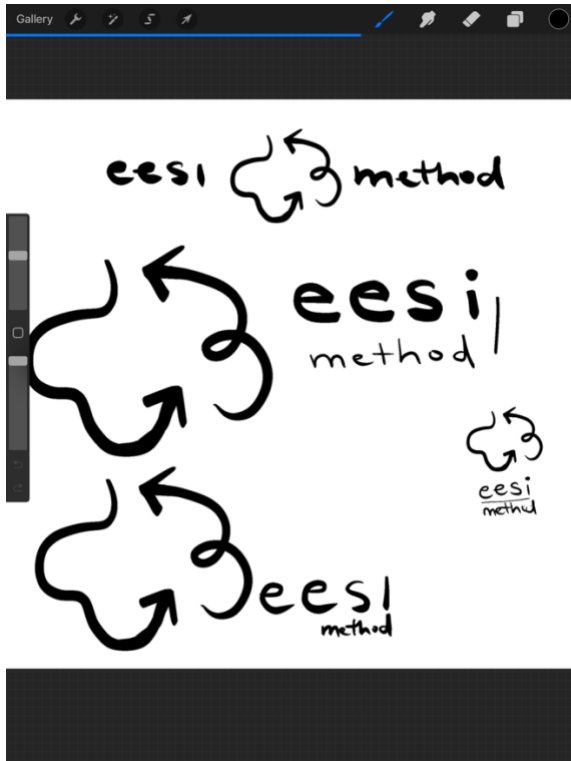
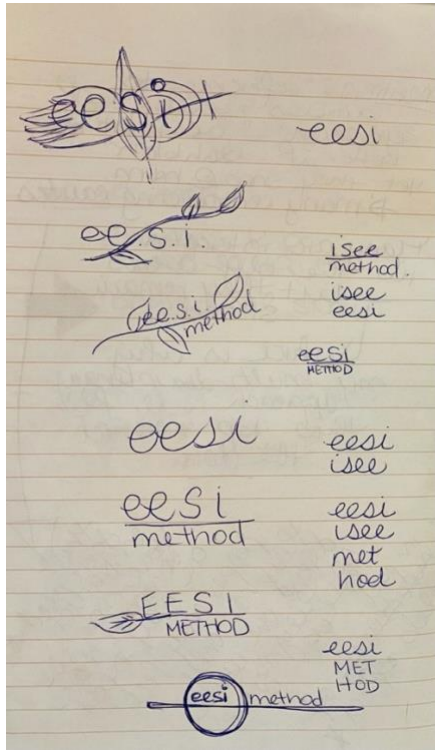
Wow, you've made it to the bottom! Congratulations!

Perhaps you've just skimmed the checklist or filled it out partially, either way – getting to this section is an accomplishment. Some important things to remember with EESI Method; it is intended to be an iterative, malleable method that takes shape differently for everyone. The EESI Method itself, will likely change and adapt as research continues, the world evolves, and industries transform.

This guide is as it states, a guideline to hopefully send you on your way to create a more inclusive, more ethical, more aesthetic, more eco-conscious company in whatever way makes sense for you, your customers and your community.

On , I completed the EESI Method Checklist.

Appendix K – EESI Method logo development sketches



Appendix L - Questions for Broader Research

End User Questions

1. What do you believe are your biggest hurdles to attaining accessible products?
2. What are the 3 main/top features you look for in an accessible product?
3. What do you believe are your biggest hurdles to attaining sustainable products?
4. What are the 3 main/top features you look for in a sustainable product?

Designer/Brand Questions

1. What do you believe are your biggest hurdles to creating accessible products?
2. What are the 3 main/top features you aim or would aim to include when designing an accessible product?
3. What do you believe are your biggest hurdles to creating sustainable products?
4. What are the 3 main/top features you aim or would aim to include when designing a sustainable product?

Influencer/Activist/Spokesperson/Journalist/Marketing Agency Questions

1. What do you believe the biggest hurdles are in getting audiences to take notice and care about accessibility issues/accessibly designed products?
2. What are the 3 main/top features you aim to highlight when writing about/speaking on/presenting/marketing an accessible product or accessibility issue?

3. What do you believe the biggest hurdles are in getting audiences to take notice and care about sustainability issues/sustainably designed products?
4. What are the 3 main/top features you aim to highlight when writing about/speaking on/presenting/marketing a sustainable product or sustainability issue?

Appendix M – Further Reading Recommendations List

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