

Design Delight from Disability

Analyst: Rich Donovan | rich@rod-group.com

2020 Annual Report:

The Global Economics of Disability

An Emerging MarketLarger than China

With an estimated population of 1.85 billion, people with disabilities (PWD) are an emerging market larger than China. Their Friends and Family add another 3.3 billion potential consumers who act on their emotional connection to PWD.

Together, the disability market controls over \$13 trillion in disposable income.

Disability is amplified human functionality. How people experience products and services is materially affected by the way they interact with people and objects. These functional realities and interactions change with situation, age, technology and macro trends. The experiences of people with disabilities inform core design and process for outsized returns.



Action in market required to earn returns

Enterprises seeking new ways to create value for stakeholders have a strong interest in attracting the spending of this increasingly powerful cohort.

Companies and brands seeking to maximize returns in a market rewarding innovation have placed disability at the core of consumer insights and design.

Focus must shift from CSR, charity, and risk to a plan focused on specific actions to attract and delight customers and talent in disability markets.

C-suite executives must understand that earning profit from disability is driven by a better customer experience, product development, and maximizing human capital — actions that focus on delighting customers.

Our primary research shows that 27.5% of the largest U.S. companies have publicly observable activity in relation to PWD. Of the 1,283 firms analyzed, only 3.6% are acting to create shareholder value. This represents a material opportunity for companies seeking to add shareholder value by establishing first mover status in their sectors. They have the potential to connect with this large market with a low level of additional investment.

To seed your knowledge of changing demand, read the entire report.

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About The Return on Disability Group

The Return on Disability® Group is a Toronto-based research and design advisory firm founded in 2008 by Rich Donovan, a person with disabilities. The Return on Disability Group publishes this paper to help companies and governments create new and different experiences from and in disability markets.

For our clients, The Return on Disability Group helps large companies and governments understand value drivers specific to their operating environment. Our research and design process allow clients to set up the framework, metrics, and change management actions required to delight customers and talent with disabilities thus increasing economic value.

Our insights gathering process is primary research – recruiting PWD to experience and test goods and services that our clients offer. We translate those insights into actions that improve design for core customers as well as PWD. This approach equips companies and governments to act to best serve the PWD market. Available globally, Return on Disability Insights and Design Guardrails include a detailed assessment of a company's individual performance versus their peers, along with our recommendations for actions that create value. Based on these recommendations, we develop a prioritized set of processes, models, and adjustments with clients' design teams to improve products "on-shelf" and customer experiences that maximize delight and revenue growth.

Our methodology is based exclusively on economic and

experience drivers. Each analysis draws from a universe of more than 300 economic and experience drivers spanning customer, employee, and productivity areas. The Return on Disability Model measures 30 publicly observable data points, which are weighted to reflect their relative importance to value creation for a given company or sector. The result is one number—the company's actual Return on Disability Result. This Result also determines the company's inclusion in a market's Return on Disability Index, a set of indices managed by various global financial institutions.

For the past nine years, we have independently analyzed over 1,600 companies' yearly performance across 30 observable disability-related factors. These 432,000 data points have given us the insight required to identify key performance indicators. We then apply this data to guide further qualitative research that is specific to a client's product, retail, and/or digital experience. Better design "on-shelf" that grows revenue is the objective.



How To Use This Document

In the last five years, people with disabilities (PWD) have moved from a theoretical market to the proven status of PWD as consumers and employees.

This has created identifiable global economic value.

While global technology firms have led to raise PWD as a growth market with valuable demand and design inputs, large gaps still exist between aspiration and reality. The next step is to go beyond proof of concept into broad-based market activation.

The intent of this paper is to inform those grappling with how to position their products and services relative to disability markets. We do this by establishing a set of common statistical, economics-rooted measures of the market's size and features, and by describing how firms are engaging disability markets.

Managers should use this document internally to inform their customer and talent-facing teams, provoke action, and to design experiences that delight all stakeholders.

The first iteration of this paper was published in 2010. At the time, it was the only source of economic data focused on PWD and the value of engaging disability markets was not widely understood. In that context, efforts were made to report observed fact while refraining from subjective analysis. Our team has made conscious efforts in this 2020 update to include conclusions from a comparative analysis of observed activities since 2010. This has occurred based

on reader demand. Further, the analyst has brought the assessments contained in this paper to a practical footing, focused on understanding demand and translating that demand into experiences that delight people.

Those who have consumed previous versions of this document will notice a shift away from analysis of the regulatory environment and various legal frameworks enacted by governments around the world. It is the assessment of our analyst that these regimes have been ineffective in directly causing their intended behavior change nor have they resulted directly in creating economic value. Those readers seeking a regulatory analysis should refer to the 2016 version of this document. No material change has occurred relative to regulation.

Instead, our analyst has chosen to follow a three-level approach to structure the discussion of disability market:

- 1. Macro Market level, aggregate of segmented people and organizations
- 2. Micro Organization level, value to individual business units
- 3. Experience the set of contexts that companies touch customers/employees– what works, and what fails

These changes have been made to provide a logical framework to travel from market theory to practical design. While there are hundreds of concrete examples of design – from high to poor quality – the focus of this paper are the elements of process that lead to the end result of a delighted customer or employee. This process does not rely on policy/program/practice. It relies on repeatable and scalable steps to listen to the voice of the customer and then translate those insights into experiences create maximum utility and returns.

Finally, while the objective of design is an experience that causes delight, the end result must maximize value. With multiple competing facets of demand to act

upon, and scarce resources available, economic and financial returns ensure sustainability. Returns also rely on human self-interest within complex organizations. Human managers act on those things that enhance their career. In most organizations, the key fuel for careers are economic and financial returns. Delighted customers buy bigger and more frequent baskets. Delighted employees attract the best talent and are more productive. Higher revenue and lower cost are the elements to maximize value.

What is Delight?

Throughout this paper we refer to "delight". Delight in our context is used as a benchmark for customer satisfaction. While some view satisfaction as binary – one is either satisfied or not – our view is that a demand can be fulfilled in many ways, using multiple factors. By acting on these factors, brands can increase the strength of satisfaction to gain pricing power and repeat purchases to grow revenue. In a highly competitive environment for customer transactions, the strength of customer satisfaction can maximize revenue over the lifetime of a customer. From a customer point of view, people enjoy maximum satisfaction.

Delight is measured by "wow". The simple question, "does it make you say wow?" is used by our team to define whether delight has occurred. "Wow" delivers beyond expectation, putting brands in a strong competitive position for medium-to long-term maximum value creation. In a disability market context, "wow" is an extreme change from expectations of mere "accessibility". It allows our clients to get beyond poor legal/regulatory regimes and focus on what matters to all of their customers. "Wow" also makes some uncomfortable, because it is a non-standard benchmark. Solving for uncomfortable causes innovation.

Executive Summary

At 1.85 billion people globally¹, PWD represent more than one in four on the planet— a market larger than China. Unlocking the potential of this large subset of the global marketplace will have a transformative effect on economic growth, public and private institutional cash flows, and on how economies manage an aging population.

Private Sector

Disability is not yet a material contributor to the profitability of the typical company. While firms like Google, Apple, and Amazon are acting in material ways, most organizations are oblivious to the opportunity that PWD represent.

Regulations in G-10 nations have set hiring quotas, operating standards, and tax measures to create PWD hiring incentives for private business. However, this should not be the focus of profit-seeking entities. Rather, marketing to the 73% of the marketplace that disability touches has a greater impact on the creation of both shareholder and social value.

As global organizations begin to value the unique methods that PWD employ to navigate a world not built for their functionality, a number of facts are clear:

- PWD and their Friends & Family represent a large group of consumers whose identity and functionality are critical to making purchasing decisions.
- Most companies focus on compliance, not value creation, when it comes to PWD. They are missing their biggest value driver: serving PWD as customers.

- 25.7% of the largest U.S.-based public companies that Return on
 Disability Group has analyzed indicate an interest in this market, up
 from 24.0% in 2016, the last release of this data. 3.6% of these 1,283
 firms back that interest up with measurable effort that is material to
 shareholder value, down from 4.0% in 2016.
- 30.1% of the largest Canadian public companies indicate an interest in this market, up from 25.0% in 2016. 6.2% of these 259 firms amplify that interest with measurable effort that is material to shareholder value, up from 4.0% in 2016.
- There are repeatable successes in delighting the disability market.

Public sector

PWD are consumers, employees and taxpayers of government services. An estimated \$350 billion² is currently spent on services to PWD in the U.S. alone.

More than \$663 billion is lost in tax revenue annually due due to limited utilization of PWD in the U.S. workforce.³

This represents a GDP impact of 4.78%, ignoring any multiplier effects—an amount that exceeds 93% of total U.S. defense spending.

Until today, discussions around PWD have focused almost solely on policy linked to the 'social safety net'. Governments must begin to shift the conversation to take steps that best deliver services to and leverage the talent of PWD while ensuring protection of taxpayers. This requires a massive shift from a 'caretaking' posture to one that focuses on service and maximization of social assets. There is evidence that this shift is beginning to occur in Canada, as the Federal bureaucracy in 2019 released its plans for a strategy to serve and employ PWD as a "model organization" relative to the Accessible Canada Act passed in 2019.

^{2.} US budget data includes Medicaid/care and other transfers.

^{3.} US BLS statistics on participation rate & unemployment rate.

Disability Market Snapshot – Top Line Demographics

Identity and functionality as disability

Disability begins with identity. An individual with a learning disability may not be deemed 'medically disabled' but having to develop alternative methods for interacting with the external environment may cause them to develop an internal identity as having a disability. The 'tag' of disability, rooted in medical terms for the last two centuries,⁴ is a matter of self-perception. Identity is key, as it impacts the relationship between individuals, brands, and organizations as customers and employees.

As of 2018, 80.3 million people, representing 25.7% of the non-institutionalized population in the United States, identified themselves as having a disability.⁵

Closely related to disability identity is an individual's functional difference to the "norm". This functionality is created by a medical diagnosis, but in practice causes an individual to adapt to a world designed for the "average user". The demands of PWD are similar (if not identical) to core users of products and services, but those demands are amplified. These 'extreme users' are ideal muses and test markets for brands seeking to innovate and discover new ways for delighting core customers and growing revenue.

When considering functionality, most focus solely on physical. How do mobility

^{4.} The field has a long history in religion and warfare, but for our purposes we focus on 2010 onward.

^{5. 0.2570*(}US pop >5yrs of 312.4mm) = 80.3 million - source: US CDC (2018), CIA World Book.

differences affect wheelchair users? Is my experience physically accessible? Statistically, these users represent less than 6% of PWD and less than 2% of potential value to shareholders. Cognitive functional difference is far more prevalent, represented by at least 60% of PWD, including those managing learning disabilities. Cognitive functionality has the potential to provide returns to brands that seek to provide simplicity of process and ease of information transfer to customers in an increasingly competitive landscape.

The best methodology of data collection around self-identification of disability is the U.S. Census. This approach was more recently adopted by the U.S. Centers for Disease Control for a functional study released in 2018. Statistics Canada has also adopted this approach. The questions asked do not rely on medical diagnosis, but instead on how the individual assesses their own functionality. Making the logical assumption that disability does not recognize borders, the global estimate of the population of PWD is 1.85 billion people.⁶

Exhibit 1: Population and income data for PWD and their Friends and Family

	Global	US	Canada	Europe	Asia	
PWD Population	1.85B	80.3mm	9.1mm	123.9mm	1.15B	
PWD Income	>\$3.00T	\$1.68T	\$171.2B	\$1.17T	NA	
PWD Disposable	>\$1.90T	\$1.28T	\$82.2B	\$547.1B	NA	
Friends & Family Population	3.43B	149mm	17mm	229mm	2.13B	
Friends & Family Disposable	>\$10.71T	\$7.10T	\$538.5B	\$3.07T	NA	

Since our research began in 2008, there have been changes in how disability statistics are measured. The struggle between medical diagnosis (generally by someone without a disability) and self-identity has evolved to a point where many now accept the broad nuances of self-identity. In the past, disability was represented by activists and those representing extremes of a normal population distribution. Today, sophisticated players understand that PWD are, and have always been, part of our active economy and society. Practically speaking, their demands were ignored. This is no longer the case.

Demand can be measured

A key part of our research approach is to engage actual PWD in conversations regarding their experiences as customers and talent.

When asked, people with disabilities say that between 75% - 80% of their customer experiences are failures.⁷

The data and insight in the context of a specific experience is critical. Most of the insights are related to functionality, namely 'how' PWD consume/use/experience things and/or environments. Researchers can harvest these insights to increase utility and ultimately gain pricing power.

People with Disabilities

The disability market is not exclusively wheelchair users, Braille readers and sign language gurus. Individuals with visible disabilities constitute fewer than 29% of PWD.⁸ The vast majority – 71% of PWD – have non-visible disabilities such as a learning or cognitive disability. The interplay between identity and functionality in a specific experience context has profound design implications that routinely stretch to core users and positively affect economic value.

^{7.} Based on focus group and surveyed feedback generated by The Return on Disability Group Inc. beginning in 2008. Sample size = 753 PWD in Canada and U.S.

U.S. Census Bureau Current Population Report: Americans With Disabilities: 2002 (P70-107) by Erika Steinmetz

Broader Market Everyone Opportunity benefits from Friends & innovations and **Family** insights derived from disability. People with 'Evangelists" **Disabilities** Ready to act and Design for All = 'preach' to others (PWD) non-visible Scale about the value Sensory, inherent in People Cognitive, 29% with Disabilities. Chronic. Visible Market Size/

Exhibit 2: Demographic analysis of the disability market

Friends and Family

This large group represents family, friends, and those that have an innate reason to understand disability and its impact on those with whom they have an emotional connection.

Our estimate is that this segment represents 3.43 billion consumers and employees worldwide, controlling more than \$10.71 trillion dollars in annual disposable income.

These individuals have witnessed first-hand the challenges of interacting with mainstream infrastructure and service experiences that PWD encounter in daily life. They are passionate – driven by a mix of perceived injustice and inefficient

Population (%)

use of the resources that PWD represent. In formal discussions with this group, findings indicate that Friends and Family are 'evangelists', ready to act and 'preach' to others about the value inherent in PWD. This has profound ramifications for companies seeking to establish brand loyalty amongst PWD as consumers and to increase retention of PWD as employees.

Baby Boomers (age 55+)

In the United States, Boomers account for more than 77 million people between the ages of 56 and 74 with an aggregate annual spending representing 52% of aggregate spending in the US.¹⁰ This segment controls more wealth than in any previous generation.

Boomers have re-defined every stage of life that they have attained, from creating the 'teenager' to launching into middle age with gusto. As people age, their needs change. These same individuals will not fade quietly into retirement, maintaining their identity as consumers and employees well beyond age 65.

The prevalence of disability above age 65 is 51.8%.¹¹ Experiences and workplaces must adapt to demand.

As the functionality and demands of this influential group change, both the private and public sectors must adapt to attract and delight. This occurs by listening to the voice of the customer to understand and design for delight. As Boomers transition out of the economy, they are transferring their wealth to Millennials who act on "social" demands in ways their parents did not. Brands must act on these "new" demands to avoid losing this valuable generation extension as lifetime customers.

^{10. &}lt;a href="https://usa.visa.com/partner-with-us/visa-consulting-analytics/baby-boomers-still-outspend-millennials.html">https://usa.visa.com/partner-with-us/visa-consulting-analytics/baby-boomers-still-outspend-millennials.html

The Broader Market

It is critical that disability is not viewed in isolation from the "norm" but is levered as a part of the broader consumer and talent marketplace. The amplified functionality that PWD manage as their routine experience has proven to be a valuable tool for product and experience design.

That is because insights and innovations derived from disability improve the experience for all.

Implemented effectively, product development and customer experience are innovations proven to drive firm-wide ROI. For example, experiences that are intentionally designed by leveraging how people with cognitive issues consume data are more attractive to core customers that are bombarded with useless information at the check-out, improving the retail experience for everyone. Technology and process that benefits PWD evolves into technology and process that benefits all consumers. When you simplify and shorten a warehouse process for someone with limited mobility, you simplify and shorten for all while driving down cost. Designing an "app" that meets "accessibility standards" may meet a compliance mandate but misses the opportunity to improve the total service experience connected to the ecosystem that support the "app".

"Accessibility" is not the goal. Designing experiences that delight is the goal. "Accessible" is an outcome of success.

Apple's Siri is a good example. It is a voice recognition program originally developed for people who read differently or have issues interfacing with a keyboard. Siri has become a market-wide application that has been copied by many types of devices connected to data and digital control mechanisms.

Market Trend Analysis

A Shift - With Business Case Proven, Brands Build Process

Design has overtaken compliance as the focus amongst the lead actors in disability markets, creating a change in which actions are prioritized and which teams own success. Organizations have grappled with disability regulation for three decades, and have largely failed to produce the kind of change that global policy makers intend. Regulations have succeeded in causing companies to act, but for 95% of these firms, these actions are not meeting the customer's requirements and unrelated to delighting customers and/or talent. The biggest failure of these regulations is that they incentivize a compliance mentality. They should instead focus on encouraging brands to build auditable process that delights disability markets. The process must be auditable, less for regulatory purposes, but most critically for continuous improvement over time. After all, that is the spirit of these laws.

A decade ago, the "business case" for acting in disability markets was unknown and unproven. Today, high quality organizations understand the potential returns earned by intentionally reaching out to PWD and adjusting product and experience design. Successful firms have largely ignored "standards" and resulting "regulation", focusing instead on demands of the two primary cohorts of people that fuel their organization: Customers and Talent.

Customer Trends (or Citizens – in a public sector context)

In disability markets, the bulk of the potential economic value is generated by delighting customers. ¹² This is true for both private sector organizations and public sector entities. The impact on revenue growth and cost reduction from customer relationships far outstrips the potential cost and productivity gains from intentionally employing PWD. While the vast majority of customers in disability markets shift their spend based on activation of identity and functionality, the primary revenue opportunity goes beyond merely delighting PWD-linked customers. Leveraging "extreme" functionality to materially improve core design is where the largest potential returns exist.

Over the most recent five years, approximately 5% of our research universe of 1,500 large corporations have acted successfully to build insights from disability into their core offerings. Those innovations have focused in three primary areas:

- 1. Product design largely focused in consumer technology
- 2. Experience design emerging area of activation, led by digital banking/retail
- 3. Packaging design levering sustainability as an impetus for change

These activities are remarkably different than those initiatives being encouraged by activists and regulators. They have been proven to increase returns while also increasing utility and delight for all customers, including those with "extreme" functionality. While there is enough activity in the market to prove value, the adoption has been narrow. Those companies acting – in consumer technology and packaged goods – have proven value via low-cost re-tooling and software changes and are now growing process into areas outside those initial efforts. They are re-investing gains (and more) driven by realizing initial low-risk success.

Activation on revenue growth is the primary value driver for most firms. 12

Talent Trends

Government-led employment schemes have failed, and continue to fail, since the late 1980's. Conversely, when companies, including those in the public sector, focus on value drivers specific to their organization and their traditional talent base, success occurs. The models that have had success are numerous and have been demonstrated across the talent spectrum – from highly-skilled knowledge workers to service professionals to process-heavy manual labor. Every industry has multiple "success stories" that satisfy both financial and "social" objectives, ranging from financial services to technology to logistics. The missing piece today is repeatable process and scale.

Unfortunately, the dominant result for almost all firms globally is failure in recruiting, hiring, and engaging PWD. There are clear reasons for these failures:

- 1. Relying on disability "agencies" "agencies" are not connected to talent base.
- 2. Focus on disability PWD demand success, not disclosure or accommodation.
- 3. Condition-based hiring PWD are not conditions. Not all Autistics are coders.

Scaled and process-driven success in hiring and engaging talented PWD is rare. In our research universe of 1,500 large North American firms, only 23 score above 2.5 out of 5.0, with 4 companies scoring above 4.0 out of 5.0. All of these firms are pro-actively seeking PWD within their traditional talent pipelines or have built a new source that they control. They are focused on the business success of the individual employee, and have been sincere to source talented PWD – not using diversity PR. They are building tomorrow's leaders, not gathering quota hires. Those focused on compliance lack sincerity. Without sincerity, there is no trust.

Success relies on leaders and hiring managers acting to achieve business value of hiring PWD, and employees that trust that the business values their contribution.

COVID-19

No analysis of 2020 would be complete without a pandemic lens, and disability markets are no exception. While further study is needed to understand details, response to "viral" life experience has generated observations regarding how those who manage functional disabilities interact with the designed world.

Observation #1 – The functional demands of disability markets have been proven. Retailers have instituted "special hours" for PWD and "older folks" in response to their functional needs. The response has been to reserve the first hour of the day to allow for overnight cleanliness and an enriched service experience. Operators have observed how these consumers shop and are building a set of insights for adjustments. The debate about whether these demands exist, and in financially-viable volume, is over. The adjustment to these demands during a public health crisis are not optimized for experience or revenue generation. While directionally correct, post-crisis refinement is required. For example, confining efforts to exclusionary "hours" sends a negative message to customers. Adjustments must be embedded into all operations.

Observation #2 – Working from home is possible and productive. PWD have experienced flexible work arrangements and have built mechanisms into their routine to maximize productivity. Remote work became the "norm" during the crisis; these mechanisms can be studied to enhance productivity for all remote workers. There is a perceived productivity gap associated with remote work. Now that it is a "norm", that gap must be eliminated. One mitigating factor to "trade-off" productivity is potential to reduce real-estate footprints and their associated costs. This principle can also be applied to digital retail and service delivery.

COVID-19 has proven functional demands inherent in disability markets.

Media Trends

In the first iteration of this paper, published in 2010, there were 23 companies employing PWD-targeted messaging in their advertising efforts in our research universe. 17 of those imprints were from brands based in Canada. At the time, these efforts could be described as "gestural". A "token" nod such as having a model in a wheelchair in a one-off TV ad or a pity-filled advertisement highlighting the printing of braille on a "special edition" of a cardboard package that no one is ever going to find on shelves in broad release. Times have changed, with savvy brands – largely multi-national consumer and media companies – now routinely featuring those with visible disabilities up front. In 2019, 104 companies in our universe employed PWD in their media footprint.

PWD imprints are being deployed successfully as core elements of global brands reach out to core customers, in three primary areas:

- 1. Original content Key properties feature PWD stories and as core characters
- 2. Advertising Tech and consumer brands feature PWD in every advertisement
- 3. Global CSR/PR Disability has crept into Sustainability, results yet to be seen

Of the above trends, only #1 and #2 impact the value of the firm directly. Content and advertising – executed properly – increase revenue. While CSR/PR is a weak reaction to demand shifts, these efforts may ultimately lead to quality strategy and action to engage and delight disability markets. Of those firms acting materially in disability markets today, all have publicly stated that innovation, customer delight, and revenue growth caused their behavior change. Not a Strategic Development Goal. Not a Pledge. More than 90% of messaging today in disability markets is squarely in the CSR/PR category.

Businesses must shift messaging to support design that delight customers.

The Diversity Quandary

The simple reality is that most diversity programs have failed to achieve their potential. Corporate diversity programs were born out of a reaction to regulations around "affirmative action" hiring. Some of these programs have evolved into sophisticated responses to demand and utility curves that differ from the "norm". Recent protests lay bare demand for delight. Brands must respond.

It is generally accepted today that customers and employees carry traits that are different from any one brand's core persona. The best brands build that ethos into their daily operations, typically outside of diversity. Actions led by human-centered design and insights to dive deep into human empathy add value by improving experiences with specific products and services. The insights and models to impact experiences are found by spending time and treasure to understand "different" use cases and routinizing "difference to improve the norm". That result is not found in regulatory mandates, standards, self-surveys, "top-100 employer" lists, or conferences. It takes design-thinking and operational excellence. Compliance and charity is a blunt tactic to mitigate noise and risk.

In most organizations today, the opportunity is to repurpose its diversity team to be insights and design-driven, reporting to the leader who owns customer experience. Today, the budget and head-count exist under the CHRO or General Counsel. Compliance mandates can remain with legal, but the business value must be generated by the owner(s) of the customer. This aligns the value chain and provides the right incentives to act in the interests of customers, employees, and shareholders. The only "awards" that matter are delighted customers, the best employees, and outsized returns to shareholders.

Organizations must re-tool diversity to deliver business results.

Market Observations

Disability - Actions that build shareholder value

Amazon has designed and built its digital platforms by leveraging disability functionality to improve ease-of-use without losing focus on maximizing the customer experience. Built into merchandising, logistics systems, packaging, and Alexa are design features that make the experience possible, and often superior, for PWD. Amazon states that actions in disability markets are key to its "vision to be Earth's most customer-centric company". It is not merely compliance, but key to innovation and maximized customer experience.

The company has tapped into "extreme user design", adapting innovations created for PWD for all customers. These include "frustration-free" packaging, a design ethos that removes complexity resulting in easier transactions called "Shopping Made Simpler", and extending that ethos into logistics networks to remove costs. Through-out these designs, Amazon maintains focus on its core brand which is a delighted customer. Key to delighting PWD is an integrated service offering that provides "connective tissue" between various platforms. Amazon delivers delight via its customer-centered approach.

There are many examples, but by and large, businesses have yet to develop insights and design from disability.

To realize the economic value in disability markets, leaders must quickly get beyond compliance and diversity into human-centered design. Like core customers, PWD do not shop at stores only because they have accessible front doors; they shop for the experience inside the store. Understanding and designing for "different" use cases is how Amazon, Alphabet, and Apple have harnessed disability markets to change how they attract customers and talent.

Risk Management

Any good manager understands the balance between risk and reward. The ideal approach is to attain the greatest return while keeping risk as low as possible. Risk is a factor in the decision to engage with PWD. One can't ignore the possibility of ending up on the wrong side of an anti-discrimination lawsuit, producing an unintended cultural slight, or simply not realizing that the constituency exists and failing to plan appropriately. While failure is an acceptable part of learning, repeated failure must be painful.

Our analyst observes a two-step "learning-by-fire" process that most companies go through when they engage disability markets:

- 1. React to lawsuit/regulation/bad PR the CEO/board wakes up to a "headline". Delegates to CHRO or Chief Legal Officer to manage. Without inhouse expertise, management reaches to outside counsel and/or disability charities ("experts") for strategy. The approach misses the market and therefore fails to "fix the problem". This "step" takes 2 10+ years to prove a failure, costing the firm \$5mm \$10mm annually. Most large US firms acting in disability markets are in this category. To be clear, this step destroys value and can be skipped.
- 2. Re-center on demand and process after multiple failed attempts, the best firms in disability markets assign "ownership" to the most senior customer officer. Her team then develops the required consumer intelligence to

incorporate experience-specific insights into design. This typically starts with a "pilot" and expands across a firm according to its culture to innovate and take risk.

Risk management is a valid piece of a business plan to engage disability markets. It cannot be a replacement for a demand-driven business plan. This is the single-biggest mistake made by firms engaging disability markets today.

Responding to Market Demand

In order to change attitudes and to capitalize on rewards that outstrip risks, corporate perceptions of disability must translate into shareholder value that can be measured in a traditional manner: revenue and cost.

The disability market has matured since 2010, albeit in a narrow slice of the economy. Those firms and public sector entities that are acting on disability demand and supply are beginning to embed functional requirements in the procurement process. There is evidence of this occurring from global technology companies and public sector entities. While the demand is clear and is now measurable, the process to deliver on demand is immature. A procurement demand does not equal a finished product that meets (or exceeds) end user demand. In conversations with and independent analysis of corporate and public sector entities' procurement executives, our analyst makes the assessment that the existence of a procurement policy does not equate to goods and services procured that are designed for disability functionality. One highly respected procurement leader in the public sector told our analyst "I manage \$67B of infrastructure spending annually. Every dime must meet accessibility standards. We have no way of measuring that mandate."

To create value, demand must convert to revenue. Value creation in disability revolves around product design, designing delightful experiences, and designing service delivery across channels. Leaders in disability markets adjusted design and process in multiple ways, including:

Strategic Objective: Attract and Delight

For established brands, new ways to engage a mature market is a valuable opportunity. Since PWD touch 73% of the global consumer marketplace, they represent an attractive demographic. A tiny minority of the value-add of marketing to the PWD demographic comes from the reputational effects of talking about inclusion, empowerment, and sustainability. The bulk of the opportunity comes from the market's sheer size and its functional impact on core design. Since no company is yet unabashedly seeking to bond the PWD market to its brands, a meaningful opportunity exists for first movers. The disability opportunity is materially larger than that of the "green" design/messaging opportunity of recent decades.

Capture Innovation from Disability Functionality

Innovation is born from the need to solve a problem outside the norm. Since PWD do things in ways that average consumers tend not to think about, they are extreme users of technology and infrastructure.

The design that solves pain points facing extreme users also improves usability for the average user.

For example, creating a process that helps a young mother—whose functionality is impacted by having one hand and limited vision—to locate a product in a grocery store, buy it, open it, and consume it—makes it easier for all consumers to

locate, buy, open, and consume products. This represents a powerful opportunity for companies to jump-start human-centered design and have increased pricing power for commoditized products. These types of opportunities are rare, yet with a disability functionality lens they exist in every product vertical.

Source Talent

The competition for talented employees is real, and PWD represent an excellent pool of talent. PWD talent sourcing is not simple to address. Billions of dollars in costs, directly tied to diversity programs, have been expended since 1989 in attempts to hire PWD. These efforts have failed to deliver even passing results, destroying material amounts of shareholder and social value. There are clear reasons for these failures. Primary amongst these failures is a focus on regulatory compliance as opposed to understanding what actions attract PWD to build a career within their specific company. Talented PWD are embedded in talent pools where companies are already successfully hiring great people. Instead of trying to find/build talent pools exclusive to PWD (which do not exist in any scale), successful firms are learning how to attract PWD that already represent at least 30% of their traditional talent pools. 13

Since 2005, our analyst has met with thousands of PWD – both formally and informally. Unsurprisingly, PWD are resolutely focused on their career success and the success of the business they join. Conversely, materially all large employers in North America are focused on regulation. This creates a mismatch between supply of labor and demand for labor. Employers are focused on legal accommodations and disclosure, solely serving their regulators. PWD tell our analyst that this regulatory approach is sending the message to them that "employers do not think we are capable to do the job."

Companies that are successful at recruiting and engaging PWD at every level execute with excellence in three distinct areas:

- 1. Recruit for PWD within traditional talent pools both campus and lateral
- 2. Pro-actively engage PWD and hiring managers on career and business success
- 3. Downplay disclosure and make accommodations routine (24-hour turnaround)

Models with a Visible Disability

Employing models with a disability is an easy way for a firm to signal its interest in the PWD market. This includes visual and/or auditory cues of—and for—PWD in external communications such as advertisements and websites. Approximately 7% of our research universe engages in the practice today, up from 1% in 2010. Given the size of the market and the ease with which this can be done, stepping up efforts in this area represents a good opportunity for businesses that engage in marketing. In our experience, advertising agencies and brand professionals default to philanthropic rather than consumer-driven messages. Consumer research tell us that this off-brand approach repels those in disability markets.

Visible Evidence of an "Accessible" Website

This is the lowest hanging fruit for firms in the PWD market. Making websites "accessible" is a well-known, extremely capital-efficient endeavor that has observable results. In our U.S. research universe, 132 firms have observable evidence of "accessible" websites, including text size modifiers, accessibility statements, standard conformance 'marks' (WCAG, 508 etc.) and a text version of the website. While these conformance 'marks' are touted as evidence of "accessibility", the quality of design relative to disability functionality is less clear.

Designers are encouraged to focus on meeting/exceeding users' functional needs as a priority, referring to various standards as tools that inform design. It should also be noted that "accessible" is not a uniform or stable benchmark. One can design an app that perfectly conforms to a "standard", yet the experience for the customer results in failure. This is simply because "standards" are not contextual. The "standards" do not account for factors such as service and the ecosystem that technical "things" interact with in day-to-day routines.

Technology design is one area where there is a high risk of litigation for large organizations without "accessible" platforms, because non-conformance to a "standard" is relatively simple to prove. High profile lawsuits against retail brands have settled out of court for amounts in the range of \$6 million.¹⁴ The settlement amount is small relative to the damage done to the brand by adverse publicity.

Websites are no longer a stand-alone property. They integrate with multiple platforms for real-time product/service delivery. These integrated platforms must be built and maintained with seamless design for customers with a wide range of functionality, beyond narrow technically-driven disability 'standards'.

Accommodations Statement for Recruiting

Accommodations statements are usually found on career pages and state that a company will provide accommodations to job applicants who require them. They are usually accompanied by a contact phone number or email. There has been a dramatic uptick in this practice, probably in a poor attempt to satisfy new affirmative action regulations. On the surface, these statements seem like a good idea. However, it is a more complex and nuanced undertaking than it appears. After analyzing these statements, we concluded that the vast majority of

statements are aimed at legal compliance, not attracting talent. One such statement reads as follows:

In accordance with applicable federal and state laws, Firm XYZ will attempt to reasonably accommodate qualified individuals with known disabilities unless doing so would create an undue hardship on Firm XYZ.

This is an example of an attempt to comply with the letter of the law. It has the opposite of its intent — saying to PWD "we don't think you can succeed here" — and provides no legal cover. 'Negative pledges' dominate – destroying trust.

Beginning in 2012 we included an analysis of the number of customer or employee-driven lawsuits as an indicator of responsiveness to stakeholders and potential for negative brand impact. Without using a legal database—to mirror stakeholders' interactions—we uncovered evidence of 285 firms with legal actions filed by individuals or US regulators. This represents 22% of our research universe. While not an extremely high number, it does represent a legitimate risk and should be included in the decision-making process. The key for managers given a legal mandate for compliance is to convert that mandate into actions—grounded in repeatable process—that attract and delight customers and talent.

Observations Over Time

Beginning in 2010, our analyst has taken account of publically available observations of company activity regarding disability. Most of these observations provide little or no value to the company or PWD. The activities are notable as the most prevalent actions taken. These actions further solidify the assessment that most organizational activity in disability markets are shallow and destroy value. The following chart shows the most common activities since 2010

showing the change every 2 years – simply to fit on the page. This chart gives a sense of the actions that companies think are important. Few of these actions add value to customers, employees, or shareholders. In the next section, we shall explore specific examples of the actions that successful companies are taking in disability markets.

Exhibit 3: Observed activity at large U.S. Firms

	# Firms				18 - 19		
Visible Effort	2010	2012	2014	2016	2018	2019	Change
Accommodations statement – recruiting	17	144	387	529	543	547	1%
Business Resource Groups (PWD & Friends/Family)	26	59	88	110	125	136	9%
Visible evidence of accessible website	26	86	137	138	134	132	-1%
Product/experience design for disability functionality	2	41	88	108	121	131	8%
Accommodations statement – digital	8	34	69	81	102	118	16%
Dedicated site for PWD	7	37	96	110	113	111	-2%
Models with visible disability	6	28	71	89	84	84	0%
Disclosure invitation	1	2	12	30	41	47	15%
Specific mention in Diversity of PWD	2	20	24	26	24	24	0%
Specific recruiting outreach to PWD	3	12	14	14	14	13	-7%
Business Unit focused on PWD	2	8	18	17	14	13	-7%
NGO employment partnerships	1	1	2	5	4	4	0%
Evidence of business related lawsuit (Regulator/Customer)	n/a	101	183	236	268	285	6%
Outsourced on-line application system	n/a	n/a	n/a	695	791	785	-1%

United States: Large Companies That Create Value In Disability Markets

U.S. companies that design from disability reward shareholders for buying their stock. For the ninth consecutive year, The Return on Disability Group has analyzed the largest publicly traded U.S. companies (1,283 in 2019), independently assessing each with regards to how disability impacts corporate profitability.

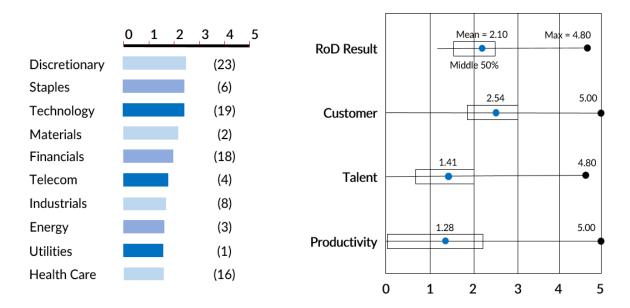
We accomplished this by utilizing the Return on Disability (RoD) Model, a proprietary tool that measures firm activities relative to PWD that create shareholder value. The RoD Model covers 30 publicly observable data points in the categories of Customer, Talent, and Productivity, each of which is weighted to reflect its relative importance in creating value for the specific individual firm. The output is a single number—the RoD Result.

The most striking part of the analysis of 1,283 firms is that 930 companies do not register a result at all.

That is, these 930 companies exhibit no publicly observable activity in relation to disability. Exhibit 4 displays the aggregate analysis of the top 100 of the 355 companies that do register a result. A result of 0 is low, while 5 is high. The data shows that, even amongst the top 100 companies, there is significant room for increased value creation and enhanced competitive advantage.

The level of activity in the 'Customer' category continues to outpace activity in the 'Talent' category, proving that active companies are now focusing on PWD as consumers as much as employees. This contradicts the mainstream conversation: companies are overwhelmingly focused on recruiting talented PWD, indicating a disconnect between message, action, and result.

Exhibit 4: Aggregate data of RoD Results for the Top 100 Companies in the U.S.



The top 25 companies are clustered broadly around a result of 3.5, an increase from 3.0 in 2016, and up from 2.5 in our original analysis in 2010. This sets a short-term benchmark for company activity relative to PWD while providing ample room to gain competitive advantage in the PWD marketplace. Improving results would not require much effort, especially for the 930 companies that do not register a result at all. Given the size of the PWD market and the low level of initial investment required to be in the top 100, our view is that competition drives these results higher. Note that the top score in North

America is held by a U.S.-based innovation firm, Alphabet Inc. (the firm formerly known as Google).

An analysis of activity since 2010 reveals multiple insights and conclusions regarding how large US firms are behaving:

- 1. Overall Results are poor after 10 years of action, 94% of firms are not acting in disability markets in ways that positively impact their stakeholders. For clarity, only 77 firms out of 1,283 are acting to positively impact stakeholders. Even these 77 firms are acting at less than 50% potential. 276 firms are responding to regulations, lawsuits, or acting in ways that do not materially impact value (for example, hiring 6 PWD into an employee base of 250,000.) The business leaders at these firms must demand results and hold managers accountable for success. More than \$19B in shareholder value has been destroyed in low quality PR and diversity efforts since 2010 by these 276 firms. These failures represent a risk barrier for 930 firms that are not acting in disability.
- 2. Regulation has incentivized the wrong behavior the vast majority of activity amongst the 355 firms acting is driven by regulation, not the best interests of customers, employees, and shareholders. While the intent of regulation is to cause companies to act, these regulations have focused companies on disclosure and accommodations neither are important to delighting and engaging PWD. In fact, thousands of PWD we have interviewed over the past decade have told us they do not trust these behaviors/messages. While firms are responding to regulations, the response is poor. Regulators must employ behavioral economics to improve responses. Companies may be better served by understanding and designing for demand than attempting to

follow tangential standards and regulation. This is the path that successful firms have taken.

3. Understanding and designing for demand is effective – brands in technology, consumer goods and financial services have earned excess returns by gaining insight from and designing from disability functionality. This is no longer theory. There are products and experiences "on-shelf", some with financial results publicly disclosed, that have altered entire product lines and categories.

The Return on Disability Group has identified firms that are best in class for PWD. Listed below are the top large U.S. public companies, listed alphabetically, as per the Return on Disability Model as of December 31, 2019.

Information Technology – Alphabet Inc.

Alphabet became the #1 firm in our North American universe for disability in 2015. The firm has a robust approach to leveraging PWD in their innovation pipeline across product verticals. Our research indicates PWD components in the majority of R&D efforts. Alphabet has continued to build internal muscle focused on disability functionality by assigning senior design leaders to the file, learning from and adapting to functionality gaps in its platforms. This process-driven approach is a critical indication of embedded disability functionality in design. In 2015, Alphabet announced a \$20mm Google Impact Prize focused on disability. Perhaps because it was limited to non-profits, the results of the Impact Challenge are unclear. Alphabet has been the leader in PWD talent for years because of how they attract talented PWDs, but the commitment to functional design keeps the firm in our #1 position.

Adapting innovations from disability functionality to delight all customers improve experience for everyone.

Information Technology -

Amazon.com Inc.

Amazon has designed and built its digital platforms by leveraging disability functionality to improve ease-of-use without losing focus on maximizing the customer experience. Built into merchandising, logistics systems, packaging, and Alexa are design features that make the experience possible, and often

superior, for PWD. Amazon states that actions in disability markets are key to its "vision to be Earth's most customer-centric company". It is not merely compliance, but key to innovation and maximized customer experience.

The company has tapped into "extreme user design", adapting innovations created for PWD for all customers. These include "frustration-free" packaging, a design ethos that removes complexity resulting in easier transactions called "Shopping Made Simpler", extending that ethos into logistics networks to remove costs. Through-out these designs, Amazon maintains focus on its core brand, a delighted customer. Key to delighting PWD is an integrated service offering that provides "connective tissue" between various platforms. Amazon delivers delight via its customer-centered approach.

Information Technology – Apple Inc.

Apple has had the most interesting journey into and through disability markets. As an early adopter of the "extreme user" design approach, their platforms are almost natively designed from disability functionality. Where Apple stands out is in how the firm has weaved this ethos beyond technology into packaging, retail stores and service delivery. Apple's most powerful act in disability markets is seamless incorporation of design elements into their branded ecosystem. No need for call-outs, because as users tell us "stuff just works".

Our analyst considers Apple to be the global benchmark for packaging design – although given the high average ticket price, some design features may be difficult to duplicate at lower price points given margin realities. The Apple Store is a fascinating case study in retail design. Prior to 2014, consumer

feedback from PWD consistently rated the Apple Store as their worst retail experience. This was a shock to our analyst, as the Apple Store was the most celebrated, and copied, retail model at the time. Among PWD shopper complaints were a lack of clear process when moving through the store, no clear check-out, and service that was wholly unresponsive.

Fast-forward to 2015 and beyond, PWD now routinely tell our insights gathering team that the Apple Store is their favorite retail experience. When asked "why?", PWD point to exceptional service and the ease of finding and purchasing what they want. The Apple Store is an excellent example of listening carefully to customer demand and adjusting to delight.

Consumer Discretionary – Helen of Troy Ltd.

In 2004, Helen of Troy acquired OXO International. OXO is best known for its design approach initiated by its founder designing kitchen tools for his wife who managed arthritis. What began as a simple potato peeler has grown into an industry-changing design ethos that has expanded beyond the kitchen into household utility and product design for babies and toddlers. Consumers demand simple. Consumers demand ease-of-use.

Today, the focus on "extreme use" that results in better design for core users is the celebrated brand asset at the firm. The design process at OXO has started to infuse other Helen of Troy brands. Further gains can be had by expanding these activities to the Health & Home and Beauty business lines for brands such as Braun, Vicks, and Revlon.

Health Care – Insulet Corp.

The Health Care sector tends to get disability wrong simply because people with disabilities are viewed as patients first, customers second. Customer experience is generally an afterthought. With its Omnipod drug delivery system, Insulet has found a way to simplify routinized delivery into the body of complex drug therapies such as insulin for those managing diabetes. The pods, that adhere to the skin, automatically inject various drug regimens into a customer. The benefits are both clinical (improved adherence/outcomes) and lifestyle (improved convenience) related. The pods simplify use and they just look "cool", allowing for enhanced identity for some customers.

Consumer Discretionary – Lennar Corp.

As homebuilders adjust to shifting demographics and technology trends, they are designing new offerings to attract homebuyers. Lennar has been consistently developing its "Next Gen" product line for older customers who wish to age in place with their family. Billed as a "Home Within a Home", these customizable offerings allow aging parents to live independently – perhaps with a little assistance as needed from other family members. Lennar also offers resort-like "Active Adult Communities" for home-buyers "aged 55 and better", allowing for shared amenities and an enhanced social environment. These product offerings position Lennar well, particularly as Boomers shift away from long-term care facilities – a trend that will be accelerated by tragic outcomes caused by COVID-19.

Information Technology – Microsoft Corp.

Microsoft has been active in disability markets for decades but has materially accelerated their efforts under Satya Nadella's leadership. Mr. Nadella, who has a close family member that manages a disability, combines that experiential knowledge with a passion to lead teams to design exceptional experience, shifting Microsoft from a compliance footing to one of "extreme user" design.

These new design efforts manifest in the Xbox platform, leveraging an active "accessible gamer" hacker culture. Microsoft has developed a "universal controller" for the Xbox, including "easy-to-open" packaging. The commercial viability of this platform is questionable, and our analyst views the effort as a proof of concept for other business lines to adopt the design approach.

Microsoft must quickly pivot to their key properties such as services, Office, and operating systems to start realizing material customer experience gains and the financial returns that follow. Microsoft has been successfully hiring PWD in small numbers and would benefit from a shift in messaging that is more in-line with its brand of unlocking potential via technology.

Consumer Staples – PepsiCo Inc.

As an early leader in disability markets, PepsiCo has repeatedly leveraged The Super Bowl as the biggest advertising event of the year. In 2008, Pepsi chose to use one of its slots to air a silent commercial aimed directly at the disability market. The commercial, called 'Bob's House,' has collected over 4.5 million YouTube hits as well as positive coverage inside and outside of the PWD community. At the 2013 Super Bowl, PepsiCo sponsored the ASL interpreter

for the national anthem. The individual chosen epitomizes the brand ethos of the firm—fun/sexy/cool—and upstaged Alicia Keys and Jennifer Hudson, earning 60 million+ additional views.

PepsiCo has made efforts in another area: they have formed public relationships with leading third party PWD talent recruiters. This signals interest in attracting talented PWD candidates. They have a design process for packaging and Food Services terminals with disability functionality at the core – in stark contrast to their competition.

Consumer Discretionary – The Walt Disney Co.

A Disney theme park is an excellent example of through-put efficiency. The company has designed its theme parks to process a large number of customers as quickly as possible, without losing focus on maximizing the customer experience. There are numerous design features incorporated that make the experience possible, and often superior, for PWD.

The impressive aspect of how Disney deals with disability is the way in which they talk about it. It is not a compliance issue, but part of the customer experience, tapping into "extreme user" design, adapting innovations created for PWD for all customers.

The Studios business has featured characters with disabilities as key protagonists in most, if not all, of their releases since acquiring Star Wars. Obvious properties include the Star Wars saga, Finding Nemo/Dory, and Inside Out – but often the nods to disability are subtle, but powerful to audience members in disability markets.

Financials -

Wells Fargo & Co.

U.S. Financial Services firms struggle with disability. They generally focus on responding to regulatory requirements, and the execution can only be described as poor. Wells Fargo has quietly emerged from the herd as a leader. In recent years, the firm has focused on digital design and external messaging in attempts to attract those in disability markets. It should be noted that Wells Fargo – and its banking peers – have a long way to go to catch up to technology and consumer goods brands.

Canada: Large Companies That Create Value In Disability Markets

An analysis of the largest 259 publicly traded companies in Canada demonstrates that 30% show any kind of business-related mention of disability. The following is an analysis of actions that create value and more common actions being taken by large companies in Canada as evidenced by their websites, marketing materials, and in conversation with their agents. As with U.S. firms, our experience shows that these efforts are rarely backed up by process or design. Of the 259 firms we analyzed, 6% have materially engaged PWD as measured by observed process and design to attract and delight customers and talent in disability markets.

Outside of a few firms, the activity in Canada continues to be driven by regulation, not demand.

Observations continue to reveal a remarkable focus on legal compliance in Canada thanks to national and provincial laws that cover employment and customer service activities. The culture of diversity is also less developed in Canada than in the United States. This is due in part to the smaller size of consumer markets and the perception amongst most individuals that disability is a niche market.

In 2018, the Canadian federal government passed the Accessible Canada Act, a regulatory regime aimed at the federal public sector, and companies that fall under federal regulation – largely banks, telecommunication firms, and airlines. In

terms of economic value, the law covers a large portion of the country. However, substantially all of the actual experiences that Canadians face day-to-day fall under an inconsistent series of provincial regulations that are either un-enforced or non-existent. While our analyst expects material impact on the federal public sector, where action in serving and hiring Canadians with disabilities has lagged firms that they regulate, little value creation impact should be felt by private sector firms covered by these new regulations. This is because Canadian banks and telecoms have been acting in disability since 1989, some executing better than others. The firms facing the widest gaps are Canada's airlines.

Transportation companies materially lag banks and telecoms in their actions to delight and attract those in disability markets. To be clear and fair, Canadian airlines' current actions in disability markets far exceed those of their American peers.

The biggest challenge for Canadian companies is to avoid the 'compliance trap', which is that mere compliance will not lead to designed experiences that delight customers and talent. If that were the case, Chief Compliance Officers would lead investor calls. Ironically, even full compliance with existing laws fails to meet the 'correct' public policy goal of equal opportunity and enjoyment. To achieve this goal, businesses must be incented to act in ways similar to those that led to the success of 'green' energy production and electric vehicles. A mix of incentives to spur existing firms to change insights and design models to spur innovation is an approach that disability—and indeed many other social verticals—is beginning to embrace.

To achieve the kind of results earned by large global technology and consumer firms, Canadian banks, retailers, telecoms, airlines, and public sector entities must remove compliance as an objective. Compliance is a symptom of delighting

customers and talent. After all, that is the original intent of the regulation. To delight customers and talent, one must first understand demand. This is achieved via the routinized gathering of consumer insights regarding a specific customer experience. Once understood, these demands are designed into adjusted customer experiences. These adjustments to demand occur every day, in every product/experience refresh cycle. Today, refresh cycles simply do not seek out and leverage insights from disability functionality. Only 10 of the firms in our Canadian universe demonstrate evidence of this approach. Of the 10, only 2 Canadian banks have embraced the insights/design approach. Instead, organizations waste time and treasure on the type of activities listed in Exhibit 5 in a mis-guided quest to be "inclusive".

Exhibit 5: Observed activity at large Canadian Firms

	# Firms					18 - 19	
Visible Effort	2011	2012	2014	2016	2018	2019	Change
Accommodations statement - recruiting	4	5	15	27	27	27	0%
Business Resource Groups (PWD & Friends/Family)	6	6	7	9	10	13	30%
Visible evidence of accessible website	38	58	61	61	61	56	-8%
Product/experience design for disability functionality	5	5	7	10	10	10	0%
Accommodations statement - digital	14	21	25	27	27	29	7%
Dedicated site for PWD	22	34	48	41	41	40	-2%
Models with visible disability	17	12	14	20	20	20	0%
Disclosure invitation	0	0	0	0	0	0	0%
Specific mention in Diversity of PWD	7	7	7	9	9	8	-11%
Specific recruiting outreach to PWD	8	9	9	6	6	6	0%
Business Unit focused on PWD	0	1	1	2	2	1	-50%
NGO employment partnerships	1	1	1	1	1	1	0%
Regulatory Policy Statement (AODA, ACA)	n/a	n/a	n/a	73	73	80	10%
Outsourced on-line application system	n/a	n/a	n/a	22	21	22	5%

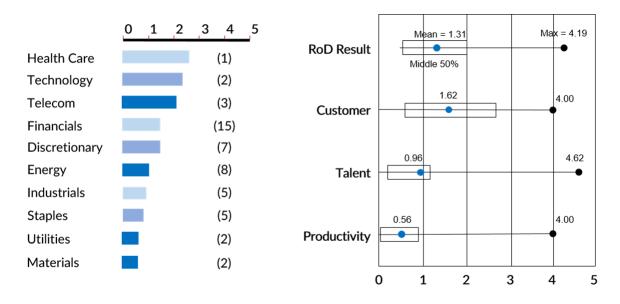
The Return on Disability Group analyzed the largest 259 firms listed on the TSX, scoring each company on disability with respect to corporate profitability using the same Return on Disability (RoD) Model as used with U.S. companies.

181 companies within the RoD Canadian research universe do not register a result at all as there is no publicly observable activity relative to disability.

Of the 78 companies that do register a score, Exhibit 6 displays the aggregate analysis of the top 50. It is clear that amongst the top 50 companies there is room for increased value creation and enhanced competitive advantage.

The average result in Canada is 0.79 points lower (38%) than in the U.S., reflecting a greater focus on regulatory compliance. Our hypothesis in 2016 was that this gap should have narrowed as U.S. based firms' results degrade due to

Exhibit 6: Aggregate data of RoD Scores for the Top 50 Companies in Canada



their increased focus on compliance while Canadian firms improve by moving beyond the law. The emergence of the Accessible Canada Act has slowed that shift. Talent scores can only be described as poor, in line with anecdotal evidence from recruiters who struggle to fulfill legal mandates. It goes without saying that attracting talent is hampered by messaging that infers or proclaims that 'the law requires us to hire you'.

While top U.S. firms have improved their results by 50% since 2016, the top 10 companies in Canada remain clustered tightly around a score of 2.5, save 1 outlier at 4.2. The majority of these are financial institutions that have struggled to comply with government mandates for more than 30 years and continue to struggle with how to design for PWD as a customers and as employees. The percentage of companies acting on the PWD market in Canada is slightly higher than that of the U.S., but the results of the top firms are lower. This suggests that the business case outperforms regulatory demands, which has potentially profound implications for policy in the future. Governments have yet to learn from their successes in other verticals like the environment and technology. Applying similar structures will both promote a problem-solving mindset and 'prime the pump' with material incentives for business, encouraging disruptive models to enter the space.

In ten years of research, our analyst has avoided making conclusions on the regulatory approach taken in Canada. After investing 3 years as Chair of Ontario's regulatory advisory body, coupled with observing poor and stagnant results in Canadian Return on Disability research, it is time to assert a conclusion on Canada's approach to disability regulation. It has failed.

Canadian for-profit companies have not responded to feckless and generic regulation. Canada and its Provincial regulators must dramatically shift their approach beyond mandating specific outcomes and aspire to mandates that demand the existence of quality process, design, and material execution as their regulatory approach. Understanding and meeting demand for disability functionality is a shared goal between regulators and companies that aspire to absorb and project the demands of their customers and employees. As currently structured, regulation is a barrier to that objective for private sector organizations in Canada. The successful players have acted despite failed regulations by understanding and designing for demand.

The federal public sector, in contrast, is well-positioned to act on the new Accessible Canada Act. The advantage of acting in the public sector is that budgeted policy gets enacted once senior leaders commit. In the Canadian federal public sector, there is a clear budgeted mandate with expressions from senior leaders across a wide number of Deputy Ministers, departments, and Crown agencies. Critically, and surprisingly, the stated strategy from leadership is to become a model organization by "serving, hiring, and engaging both Canadian citizens and our employees". This approach is critical to success. The objective requires acting beyond regulation to follow an insights-driven design approach. Success relies on the public sector moving past how they typically do business. A work-flow grounded in biased consultation and policy regimes must be replaced with curated insights and broad-based design that changes how services are delivered and how talent is engaged. The aspirations held by the Canadian Federal public sector are directionally correct.

Our analysis of the largest publicly traded Canadian firms identifies best-in-class performers in a given sector. The following are amongst the top 20 firms – curated quasi-alphabetically to avoid sector concentration in banks and telecoms – as indicated by the Return on Disability Model as of December 31, 2019.

Financials -

TD Bank Financial Group

TD Bank leads its Canadian bank peers in its publicly observable activities in disability markets. TD remains the #1 company in our Canadian research universe. While its peers have been almost resolutely focused on meeting regulatory mandates, in 2013 TD shifted to focus on demand. The difference in their approach is evident not only to our analyst, but also to consumers of financial services when polled in Return on Disability insights gathering sessions. In October 2019, TD Economics published the first legitimate research paper from a global financial institution measuring the economic impact of engaging disability markets – largely focused on labor markets and potential economic gains of \$50B in Canada.

While TD partners with leading third-party recruiters in disability, they have been successful at building the in-house process required to attract and retain talented bankers. They understand the subtleties of downplaying disclosure, using business-focused messaging to increase rates of disclosure among Canadian employees above 6%. They foster ERGs to serve as a laboratory for innovation and connection to their employees. They have selectively placed PWD and Boomers in their ads—and have done so for many years. The senior public faces of leadership come from the business, with the Head of Consumer Banking leading the way, albeit with basic customer conversations such as sign language

interpretation and audio-linked ATM. TD is well positioned for growth in the PWD marketplace and sets an excellent example for firms in any sector keen on accelerating their progress. TD's challenge is to resist the complacency that leadership brings, as its competitors are catching-up quickly. TD must shift gears to focus on the "next-level" customer designs to get beyond 'the basics", to build upon their learnings in disability functionality to produce great designs that outpace emerging financial technology (fintech) competition.

Industrials -

Air Canada

While North American airlines have struggled in disability markets, Air Canada has been one of the better carriers. Domestically, and in large hubs globally where they control staff and process, their level of service is superior to their North American peers. That said, this service is not process-driven and is highly dependent on individual staff and passenger volume at any given moment. The key to success is to seamlessly move passengers from entry to assigned seat, from assigned seat to exit, and every stop/checkpoint in between. This is a complex cuing optimization that requires a deep understanding of demand and a customer delight viewpoint, as opposed to a regulatory approach. Air Canada is better positioned than its peers to achieve this goal, reaping the excess profits of a larger share as the average age (and disposable wealth) of travelers rises. As age rises, so too does the demand for alternate mobility and cognitive systems in and around airports and airplanes.

Consumer Discretionary – Canadian Tire Corp

In a rare twist, Canadian Tire has had success featuring athletes with disabilities

in its core advertising cycle. While featuring athletes with disabilities is a common tone-deaf trope for banks and car companies, it works well for CanTire. Why? Well, to begin with, the firm sells more than \$5B in sporting goods annually. Second, their brand is closely associated with Canadian pride and its core sports such as hockey and basketball. The management intent behind these efforts is clear, as the Chairman of the Board has been "pounding the table" publicly for years on the business value of delighting customers in disability markets.

Energy – Imperial Oil Ltd

Imperial Oil has a strategy to attract PWD as customers and employees. The company seeks to attract motorists with disabilities to their gas stations and stores by the simple device of inviting them to honk their horns to be served. This can serve as a step to a more sustainable and rewarding process to understand and design for disability functionality. Imperial Oil also makes explicit mention of recruiting PWD, although the proportion of PWD at the company still amounts to only 1% of their workforce. Recently, the firm has asked its employees "what do you need to be at your best?" – an excellent gating question for conversations around productivity tools (accommodations).

Consumer Staples – Loblaw Companies Ltd

Loblaw has engaged in activity in the PWD market, signaling that it understands the opportunity exists and is 'testing' execution strategies. There is evidence of franchise-driven hiring efforts and collaboration for content creation with other firms and various levels of government. There is intent to improve the customer

experience both in-store and via digitally-driven delivery platforms. In response to COVID-19, retail locations have added early "reserved" hours for PWD and seniors.

Consumer Discretionary -

Restaurant Brands International

Tim Horton's franchise owners have had success in hiring PWD into stores as both front- and back-of-house employees. One of the material costs of running a QSR restaurant is staff turn-over, often measured at 150%. By hiring PWD into these roles, these costs have been reduced to 40%. While our analyst questions the sustainability of this strategy, as it assumes the lack of mobility for PWD labor, it remains a material value proposition while available.

Consumer Discretionary -

Shaw Communications Inc.

Shaw was an early leader in Canada due to how they managed to convert a heavy-handed CRTC mandate into a customer-centric conversation – even if that conversation is one-way. Shaw structures its "accessible" menu in a way that is relevant to how customers use their products and manages customer service inquiries as opportunities to delight.

Information Technology – Shopify Inc

New to the Return on Disability research universe since the most recent publication of these results (2016), Shopify is an example of technology firms that started acting on regulatory mandates but shifted to customer-centered design. In our 2018 research cycle, we could only identify activity focused on compliance with Ontario's Information and Communications AODA regulation.

These regulations are unenforced, rendering them as merely suggestions. In our most recent assessment, Shopify has developed an excellent on-brand messaging platform focused on digital accessibility. Less clear is user experience, due to the 3rd-party nature of Shopify's business model.

Telecommunications Services – TELUS Corp

TELUS differentiates itself from its cable and mobile/landline competitors in two primary ways: 1) customer-focused experience and 2) innovation. Its activities in disability markets are in-line with its core approach to business. As is evidenced through its public regulatory filings, the firm has spent some effort to understand retail design from disability markets. TELUS has begun to focus on customer demand, while its two major competitors invest in narrow regulatory responses.

Designing From Disability

Understanding Amplified Human-Centered Design

A path to persistent and consistent process that leads to a delighted customer is the goal of today's successful designer. In disability markets, this is no different. The nuance missed by brands is to extend the functionality of PWD to core customer applications. By understanding a core customer demand, that has been amplified by a disability use-case, designers understand demand in ways that had not been considered previously.

Process is a machine. It need inputs that define its outputs. How a process dissects inputs is consistent, repeatable, and scalable. Most design processes only use technical specifications as inputs – the "thing" must be 44 units wide and not conduct heat. Human-centered design focuses on how humans experience "things" – defining "positive/negative feedback" via experiential testing. Customer-centered design adds in a revenue model to human-centered process that balances "positive/ negative feedback" with revenue factors.

The science of design process is in developing a machine that extracts and shapes the "positive/negative feedback" in a repeatable and scalable manner into an experience. The art of design process mines the right "positive/negative feedback" and translates it into a delightful experience that maximizes returns. Quality and differentiated inputs guide designers to maximize end-user delight. Those inputs are difficult to mine and refine into experiences – thus, valuable.

Designs that do not meet customer requirements by resting on specifications and/or only core users as sources of feedback have opened opportunity for functional delight and brand differentiation. By using core customers as inputs, feature-focused designers have not only produced experiences that are easy to compete against and duplicate, but they constrain their customer base and revenue potential.

The key to quality design is a differentiated set of inputs that amplifies core customer demands. It is a concept our advisory team calls "extreme user design". It begins by sourcing people that both experience "stuff" in different ways than 95% of customers and have the competencies to articulate their usage in detail. Armed with insights, designers then translate "extremes" into core design features that improve experience for all customers – increasing returns via scale.

There have been defined successes by brands in technology and consumer sectors that follow a repeatable path. This path has trisected into three areas:

- 1. Insights from Extreme Users
- 2. Adjusting the Design Process for Functional Demand
- 3. Managing Risk, Standards and Regulation

Insights from Extreme Users

PWD interact with a set of experiences that were not designed with their functionality as a factor in specifications. Some loosely refer to this as a "mismatch". In reality, "core-driven design" stems from an intentional approach to narrow inputs due to perceived efficiency, expediency, or laziness. The result is 90%+ of experience and product design fails to delight customers. The "wow" factor is absent, or at best, randomly generated rather than designed by process.

Technology and access to information has made the competitive environment intense. Rapid prototyping and speed to market have reduced the value of marginal innovation – a tweak in design – simply because that tweak can be copied quickly and cheaply. Those same technologies make large-scale changes less costly, while placing a premium on the intellectual capital that ensures that those large-scale changes maximize experience for the customer. While it may be less expensive to re-tool, the risk of doing so remains. The value of understanding how to innovate to maximize experience has never been higher.

Innovation is borne from extremes. To find break-through design, brands must get outside "normal" use. Outside two standard deviations. PWD experience a world that was designed for someone else. The reasons are less important than the reactions. The reactions have been a series of unrelenting adaptations and customer experience (CX) failures that can be captured, deconstructed, and mined for new approaches to experiences that most consider mature. In these adaptations and CX failures are a treasure trove of "why didn't we think of that" and "head-to-desk" moments that form a Petri dish of innovation.

In "stress testing" experience through the lens disability functionality, brands not only solve for PWD, but they also open a new path to delight core users. The demands of PWD are similar to core customers. The amplification of those demands can be wildly different, and that amplification is the source of value. A "pain point" or "wow moment" for PWD is likely an "ow/wow" for everyone. Most insights gathering processes do not identify the "outlier" pain points due to research study design. By actively seeking PWD user inputs, the likelihood for core user insights that lead to delight increases – the goal of innovation.

Gathering quality insights from PWD requires intentional process and the

context of a specific experience. All facets of disability functionality are sensitive to context. The statement "people that manage vision issues demand tactile definition to navigate" may be true in one context and ridiculous in the next, even within the same context with different variables. Understanding what drives those contextual variables requires engaging PWD that have contextual experience and are adept at articulating their demands.

Adjusting the Design Process for Functional Demand

Models translate insights into repeatable and scalable results. Models are not ends unto themselves, but tools to ensure completeness and consistency.

When modeling for disability functionality, the desired outcome is not PWD "accessibility". The goal is core customer delight. The model is a tool to achieve the goal.

Linking functionality beyond disability is critical to excite design teams beyond their current foot-prints. It also allows for scale that drives return on investment. While an insight may apply to an amplified functional demand of PWD, extending that demand to core users has proven a successful muse for designers. A lens of disability functionality is leveraged by designers to help answer, "what is missing?", a key tool for innovation. One inspired designer is not an institutional success. To apply functionality consistently across experiences and time, process (and measured success) must survive human turn-over. Brands that have been successful – Google, Apple, and Amazon – have built functionality into their standard operating and design models. "Heroes" and "Champions" walk out the door (and cannot scale). Successful models – linked to experience and revenue – persist. They evolve. They continuously improve.

Design processes that meet customer requirements are not static. The best processes proactively seek new inputs, digest them, and absorb the bits that improve design and expel the bits that do not add value. Only a few brands today are levering disability functionality in their design process. All of these brands are earning experience and financial rewards from doing so.

Managing Risk, Standards, and Regulation

Western governments have raced to enact various anti-discrimination laws and their associated regulations to 'guarantee' PWD equal rights with other citizens. In large part, these regulations have manifested into 'standards', modeled after civil rights laws, focusing on physical access and the workplace. They have had mixed results. There is evidence that they have fostered discussion and awareness around disability. Still elusive, however, are broad behavioral changes within institutions and concrete, measurable results from the increased participation and leadership of PWD in society. Penalties for non-compliance are not burdensome. These laws have not caused broad societal change, but they do signal social intent.

While advocates preach about broad legal frameworks such as the Americans with Disabilities Act (ADA), the new Accessible Canada Act (ACA), and the Accessibility for Ontarians with Disabilities Act (AODA), these laws have minimal practical implications on customer experience. They do provide legal grounds for litigation in the United States, and for regulatory action everywhere else. While risk management should play a role in bolstering the business case for acting, accounting for and managing risk is not a valid replacement for sound strategy. It is this litigation and regulatory risk that wrongly cause legal and PR departments to play an overwhelming role in corporate activity in disability markets.

It is those regulations that require public sector departments to procure "accessible goods and services" that are just now beginning to have a broad effect on demand via procurement mandates. While these mandates have existed for decades, technology companies and public sector entities are now prioritizing their enforcement. This is simply because their customer and employee bases are demanding products and services that they can use easily. Technology companies and universities, in particular, are leading these actions requiring all vendor designs to account for disability functionality. These demands are not compliance-based, but based on ease-of-use relative to disability functionality. Quality execution is winning competitive bids. Poor execution is leading to exclusion from corporate and college campuses. This is a key recent development, stemming from learned sophistication from delivering to their customers and employees. This type of behavior leads to broad societal change and creation of economic value.

There are 3 main "standards" of which to be aware. While our analyst recommends avoiding their use, they are referred to so often, they must be covered. There is significant overlap in the content of these "standards". While detailed, they are prescriptive and static. They are technical "standards", and by definition, not customer-centric. In plain English, do not rely on these standards as they will result in poor quality design. The "standards" are as follows:

 WCAG (wee-kag) – an accepted acronym for "Web Content Accessibility Guidelines", WCAG are generated by a consortium of technology company mid-level employees and "accessibility experts". These voluntary "standards" were developed to apply to websites but have attempted to evolve as technology touches most aspects of design. Despite WCAG's limitations – including governance, ease of application (the cognitive ease-of-use of WCAG is ironically comical,) and lack of contextual framework – the underlying functional "requirements" are directionally correct. The fatal flaw of this approach is its prescriptive attempt to definitively answer the question "is this accessible?" The WCAG process has as its stated intended outcome "conformance" to specific levels A, AA and AAA. In practice, "conformance" to these levels may satisfy multiple "experts" but rarely result in good design or, most importantly, a delighted customer in a specific experiential context. WCAG can be used as one tool in a wider insights-driven design process, but WCAG is not a strategy replacement that leads to quality output. The best version of this tool is always the latest version available, in this case WCAG 2.1. WCAG governance and "requirements" are heavily influenced by "experts" who manage vision issues.

- 2. Section 508 an amendment to The Rehabilitation Act in 1986, Section 508 lays out the requirement for most federal technology platforms in the United States to be "accessible". This law has been interpreted by some to apply to all entities that receive US federal funds and federal contractors although in practice, this is not reality. With significant overlap to WCAG, Section 508 faces the same limitations as WCAG. Section 508 requirements have gone beyond "the screen" to include broader requirements and "standards" for physical design. Our research has identified that these requirements are beginning to influence demand from procurement officers. What is less clear is whether this demand is for compliance purposes or to connect with and delight customers.
- 3. International (Canada/EU) a recent trend in "standards" development has been to focus on design process and the functional requirements of actual

users. Regulations from the European Union and Canada have shifted away from technical requirements to mandate a broad process to account for disability functionality and "consultation" with PWD. While directionally an improvement over technical orders that fail to evolve over time and account for context, these new approaches have done little to incentivize behavior change across wide swaths of the economy. While demand has pushed a handful of firms to change, behavioral-driven policies could speed broader results.

Disability as Sustainability

The causal connections in serving the disability market are clear: designing for customer demands, leading to stronger brand connections, and ultimately higher transaction quantity and size. On the surface, these actions grow revenue from attracting the \$13 trillion in disposable income attached to PWD. As more brands prove that extending disability functionality into design for core customers improves overall customer experience, these activities accelerate. The acceleration provides for opportunity to engage customers' changing utility curves to account for demand that most companies view as socio-political, not consumer-driven.

Consumers have changed their behavior. Broadly, they have shifted purchases to brands that they perceive as "good" stewards of the environment and more inline with their "new" value for equality. Entire industries have emerged in response to consumer demands for electric vehicles (despite oil prices remaining low). Less mature are efforts to act on changes in demand for "human" difference such as gender, race, LGBTQ, and disability. The demand is there, but supply has been slow to capture volume/price benefits.

Despite this, the current Environmental, Social, and Governance (ESG) market practice is to measure 'diversity' or 'sustainability' practices that are not directly linked to value creation for shareholders. It should come as no surprise that executives and investors struggle to tie 'good social practices' to measurable profit increases.

Companies that have success in disability markets have proven that specific actions must ultimately lead to increased shareholder value in one of the two following forms:

- 1. Additional net revenue (above the cost of acquisition)
- 2. Reduced costs

Both add value to an investment. The Return on Disability Group engages in research that establishes a direct link between observable activity that engages PWD as customers and/or employees and the above forms of value creation.

For example, a consumer packaged goods firm that reaches 95% of the consumer base in a broadly defined market can increase market share by including PWD in its experience design and/or packaging development. If executed effectively and at minimal cost, the changes increase market share via greater customer utility (delight) that results in an increase in transaction size/volume.

By isolating the factors that drive shareholder value and linking them to the outcome of serving disability markets, The Return on Disability Group uses stock price returns as an indicator of value creation with respect to disability market engagement.

Firms with the highest results in disability-driven value creation outperform their competitors in terms of long-term stock price.

We attribute this fact to the following:

1. Current outperformance – The Return On Disability Group has found overlap between high performers in disability and the concurrent existence of a 'great franchise'. These firms are highly responsive to their customers, innovative,

process-driven, and generally well managed. In other words, disability is a proxy for better performance. There are a handful of large global technology firms that leverage "extreme users" and engage disability markets to the extent that resulting revenue gains are material to quarterly profitability results.

2. Future outperformance – These firms are positioned to build value as PWD emerge as a powerful market force.

These dual objectives allow for value measurement based solely on stock price. The Return on Disability Group uses an 'enhanced beta' approach to prove that positive, value-linked action in disability is a viable way for any company to deliver greater financial value (as well as a positive social value) to shareholders.

The Return on Disability Model measures only those factors that lead to net revenue increases and/or cost reductions, and those factors vary in their impact from sector to sector, and often from firm to firm. While proven at the portfolio level, further research is required at the firm specific level – alpha generation driven specifically by disability.

It is the Return on Disability Group's hypothesis that as disability markets mature and materially affect revenue and cost over the next five years, firm-specific effects will become increasingly evident, enabling an active portfolio strategy.

Portfolio Construction and Results

Every year, Here Markets Inc. publishes stock market indices including the Return on Disability US LargeCap ETN Total Return USD Index and the Return on Disability Canada 50 Index. Our analysts collect independent observations on

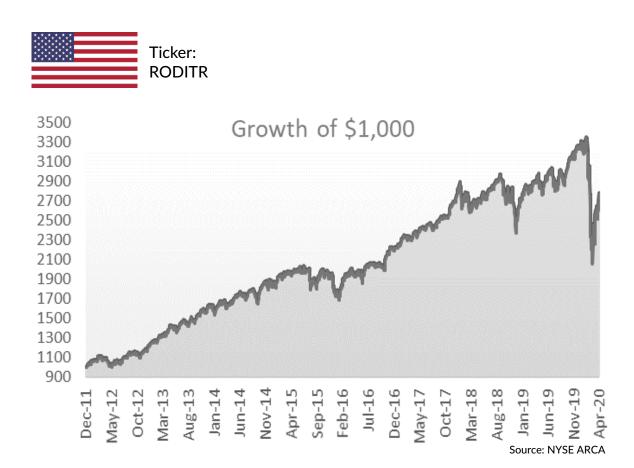
over 1,500 U.S. and Canadian companies, generating constituent lists of companies that outperform not only in terms of disability but also in terms of shareholder value.

Calculated daily in real time and broadcast by our global financial institution partners, these indices encompass the best performers using the Return on Disability Model. The Return on Disability equity indices give investors a simple way to identify Environmental, Social, and Corporate Governance (ESG) investments that have a higher probability of outperforming in a given sector. In addition, the indices help investors to improve portfolio performance by providing a new financial lens through which to evaluate new and existing investments.

These portfolios are equally weighted to avoid size biases and constructed so as to ignore sector balancing. While financial fundamentals are ignored in the model, current Index Methodology considers aspects of financial stability and liquidity to ensure that each Index is investable.

Exhibit 7 (see page 54) charts the performance of the US Return on Disability Stock market index since its inception in March 2012. The Return on Disability US LargeCap ETN Total Return USD Index listed on the New York Stock Exchange on September 11, 2014 as an Exchange Traded Note under the ticker RODI. It is the world's first investable index based on disability, offered by Barclays.

Exhibit 7: Stock market performance of an equal-weighted portfolio of the top 100 U.S. large companies in disability markets



Next Steps

The Need for Value-Driven Process Led from the Top

As a body of evidence has accumulated since organizations have acted in disability markets since 2010 – there are now solid conclusions that can be made and scaled. Promising macro data has evolved into process that delights PWD and rewards shareholders.

The question is not "why" engage disability markets, but "how" to translate the amplified demands of PWD for all.

HR does not own success - Owner(s) of Experience is accountable for success

One constant amongst organizations that succeed in engaging disability markets is that a single senior business leader owns initial success and holds their team accountable for time-bound failure. This leader is in the C-suite, and is charged with improving customer experience. While the CHRO or Chief Legal Officer may be accountable for a small portion of the overall result, none of the successes outlined in this paper came from HR/Legal. Yet, HR/Legal is where 95%+ of organizations acting today place accountability for success in disability markets. These are three primary drivers of success from senior business leadership:

- Revenue growth causes corporations to change, not regulation or HR policy
- Managers act on direction formal and informal from business leaders, not policy
- Budgets and mandates get set at senior levels, allowing for direct reports to take risk

In our analyst's experience, this has been a necessary but not sufficient requirement for success. A well-meaning CEO can derail success, generally by acting on emotion/passion and forgetting business fundamentals. A motivated leader, acting rationally, is powerful.

Actions must impact Experience - Measure in revenue/cost (not quotas/equality)

In the US and Canada, diversity programs are a response to Affirmative Action (US) and Employment Equity (Canada) laws. There are similar regulations and responses in the EU, Asia, and LATAM. Our research shows that 95%+ of these responses are limited to policy and "awareness" campaigns. While these responses may be considered "first steps" by some, policy/"awareness" still dominate the sample of actions 10 years later. This can only be considered failure as the action has no direct impact on customers or employees.

Successful action in disability markets delights the end user and is measured in revenue growth and cost reduction. A delighted customer visits more and spends more – increasing revenue. A delighted employee base is more productive and attracts higher quality talent – decreasing cost. PWD do not visit a store merely to enter the door; they have a set of demands to be acted upon. While a regulator may be interested in a disclosure rate or accommodations program, your employees are focused on maximizing their career success – and tell us they may never disclose if it does not benefit them. Too many companies are focused on the demands of their regulators or proxies for PWD demand. The prevailing approach is like trying to sell a Ferrari by focusing on the benefits of its seatbelts.

Getting a context-appropriate solution into the market is a key first step. Change an experience. Measure the impact of that change in the same ways your firm

measures customer delight and economic value. Learn from what works and what fails. By doing this, risk drops and rewards become known. Even if the first step is not a big success, experience designers can visualize a path to improvement. Other managers want to be involved. This becomes viral, making step two (and beyond) easier. This is how complex organizations change. Senior leaders can speed this process in firms with strong innovation culture by providing "air cover" to reduce risk for their direct reports. Government funding – ideally cash – can speed this process in firms with risk-averse cultures coupled with clear process mandates to delight users based on functional disability demands.

Insights → Design → Continuous Improvement

The first step in creating a framework for disability is experience research. What makes PWD and their Friends and Family buy? What is the psychology and science behind delighting them as customers and employees? How does one account for differences and segments within the group? What turns them on? What turns them off? We now know how to answer those questions. It starts by observing customers with different functional demands consuming experiences. Good managers act on observable facts.

Hypotheses, hunches, and intuition of how PWD act and think dominate. Experiential research provides contextual insights.

It should be noted that most large consumer insights firms have attempted to gather insights into disability markets and have failed, miserably. This is simply because they do not have the expertise to ask the right questions, nor do they have the knowledge to identify a commercially material insight relative to

disability identity/functionality. The past attempts were pointless "one-offs", without the staying power to commit to learning how to elicit and interpret feedback that is material to creating great design for all customers. Getting those insights right, gathered by global platforms, is key to gaining economies of scale.

Design is a process, not an outcome. With quality inputs, design consistently churns out experiences that delight customers while maximizing net revenue. The process utilizes models that converts insights into features, platforms, and/or service that makes people say "wow". Most design processes do not account for amplified functionality, missing opportunities to innovate for the core user. Typical process instead does an "accessibility" check at the end. The result is a missed opportunity at best, and more often, poor quality design.

Finally, insights gathering and adjusting design is not a one-time execution. It is a living, breathing process that evolves with demand. Quality output requires constant conversation with customers, adjusting to their changing tastes and values. As technology changes it provides for better, more cost-effective solutions. Design that was unthinkable six months ago is now profitable. This requires a design mind-set of continuous improvement.

Success in an Emerging Market

What if someone gave you the opportunity to invest in China in 1975? With the knowledge that you have now, would you have taken it? Successful investing in China over the last 40 years took research, a budget, and execution, in addition to good timing. It certainly did not happen overnight. One could say the same thing today about disability.

Here is a summary of our findings regarding the disability market today:

- The market is large and complex. Disability does not come down to a simple medical diagnosis, but rather is about identity and functionality as a customer and employee.
- 2. With few large firms (5%) already acting on the opportunity that disability represents, there is substantial unmet demand.
- 3. A delightful customer experience in the context of a specific brand is the goal and leads to increased revenue. This requires intentionally gathering experiential insights and adjusting design process to maximize experience and net economic returns.

For those businesses that are interested in seizing the opportunity that disability represents, it is essential to:

- 1. Seek and curate insights: Talk to PWD to understand factors that maximize delight in the context of your brand's offerings and talent markets.
- 2. Adjust design process: Act on the knowledge gained from insights.
- 3. Build for continuous improvement: Set clear goals and measure progress.

The disability market is a large emerging market. At 1.85 billion people globally, it represents a population larger than the size of China. Unlocking its potential has serious ramifications for GDP, public and private institutional cash flows, and how economies grapple with an aging population and functional demand changes post COVID-19.

The disability market has started to tip. The question now is, how and when does the global platform of disability mirror the scope and revenue generating power that its demographics and innovation catalysts imply?

End Note

1. Prior to 2016, The Return on Disability Group had been using a widely accepted study published in 1999 by the United States Department of Labor stating that the disposable income for PWD was \$220 billion in the U.S. At time of publication, that implied a per capita disposable income for PWD of approximately \$3,500. Our analysts felt that number did not reflect the average person with a disability. We decided to build our own income data.

A 2014 income survey performed by Cornell University found that the average income for PWD was 90.7% of the average income for the total population. The Return on Disability Group then applied that percentage to market-specific income breakdowns to arrive at total and disposable incomes for the U.S., Canada and the EU. The U.S. example is below:

U.S. average income	63,179
U.S. average disposable income	47,818
Disposable/Total income	76%
PWD/Total population income	0.907
% of PWD working age	67%
# PWD age 16-65	53,381,900
Implied PWD average income	57,303.35
Implied PWD disposable income	43,370.93
Historical participation rate	59%
Current employment rate	93%
# of PWD Employed	29,394,078
Aggregate PWD income	1,684,379,217,273.88
Aggregate PWD disposable income	1,274,848,373,852.11

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Design Delight from Disability

Analyst: Rich Donovan | rich@rod-group.com

2020 Annual Report: The Global Economics of Disability