Creating the DEEP Community—Approaches to Effective

Cultural and Systemic Changes Through Joint and Concrete Action

Major Research Project

by

Pina D'Intino

Submitted to OCAD University in partial fulfillment of the requirements for the

degree of Master of Design in Inclusive Design

Toronto, Ontario, Canada, June 2013

I hereby declare that I am the sole author of this MRP. This is a true copy of the MRP, including any required final revisions, as accepted by my examiners.

I authorize OCAD University to lend this MRP to other institutions or individuals for the purpose of scholarly research.

I understand that my MRP may be made electronically available to the public.

I further authorize OCAD University to reproduce this MRP by photocopying or by other means, in total or in part, at the request of other institutions or individuals for the purpose of scholarly research.

SIGNATURE _____

Abstract

Participants of the DEEP 2012 Think Tank have said that more progress is needed and expressed a strong desire and need to unite through a community of experts. Using the DEEP white paper as a base and through a plurality of research methods including thematic review, the author has amalgamated findings, outcomes, insights and approaches that emerged from the DEEP 2012 conference and expanded on proposed strategies to identify priority themes and develop additional actions and recommendations for consideration and review by the DEEP community. An online DEEP Community portal has been developed where participants will continue the conversation. The DEEP community enables collaboration that enables participants to move forward by developing new strategies and approaches that can influence change while leveraging resources, standards, policies and best practices that already exist and open the discourse on what more can be done to support the UN CRPD and achieve accessibility globally.

Acknowledgements

Jutta Treviranus, for her leadership, motivation, direction; her support and immeasurable wealth of knowledge and experience in this field of accessibility and inclusion. Without her the DEEP community could not exist or take form. Axel Leblois, my external advisor on this work. His global outreach and understanding of accessibility issues goes far beyond the promotion of the United Nations Convention on the Rights of Persons with Disabilities and his undeniable passion promotes unlimited collaboration and engagement from stakeholders worldwide. Dr. Vera, advisor and co-author, who has spent countless hours editing and formatting numerous iterations of the DEEP 2012 White Paper. Without her guidance, recommendations and perspectives this work could not be possible. Dr. Peter Coppin who challenged my thoughts and approaches and provided valuable insight and feedback to the work done in this project. Management and colleagues at Scotiabank for providing me the necessary support and flexibility to participate in DEEP, for their patience while I juggled work priorities to meet academic deadlines, and for their undeniable commitment to accessibility and inclusion. I profoundly thank them for their financial support throughout this program. Lastly, to all those who touch my life on a daily basis - my peers in the accessibility and inclusion field, my colleagues, friends and family members - who have inspired, motivated, encouraged and supported me along this journey. There are many of you and naming each one might create the risk of missing anyone who so deserves to be called out.

Dedication

I dedicate this work to all those accessibility professionals and my friends with different abilities who have taught me so much about accessibility, opened my eyes to different perspectives and views on disability and inclusion and who have for decades put in their hearts and soul in an effort to affect and achieve change for all of us who have different abilities and are often challenged. Together I hope we will continue to inspire the good work that has begun and will continue it to a time where we recognize people for their abilities equally on an equal footing. Thank you for my Faith and the strength I have been able to persevere and find within.

Table of Contents

1   Background and Context for the Project

On May 24-26, 2012, the first Toronto Designing Enabling Economies and Policies (DEEP,

http://DEEP2012.idrc.ocad.ca) workshop was hosted by the Inclusive Design Research

Centre (IDRC, http://idrc.ocadu.cs)   at Ontario College of Art and Design University

(OCAD U, www.ocadu.ca) and supported by the Global Initiative for Inclusive

Information and Communication Technologies (G3ICT, www.g3ict.org) organization. The

event was planned in support of the United Nations Convention on the Rights of Persons

with Disabilities (CRPD, www.un.org/disabilities/default.asp).

The unique contribution of this project has two components: first, it begins with the

amalgamation and synthesis of the happenings of the DEEP conference which has

helped develop the DEEP white paper (please see section 12 Appendix C: DEEP White

Paper Executive Summary); second this MRP strives to design processes to create a

community of experts that can help identify and prioritize potential areas of actions as

they relate to accessibility levers. While the discourse at the DEEP conference addressed

a vast number of topics and levers, this MRP will focus on how a community of experts

can address the implications for policy makers involved in implementing the ICT

accessibility agenda of the Convention on the Rights for Persons With Disabilities (CRPD)

and how approaches developed by the Accessibility for Ontarians with Disabilities Act

(AODA, www.aoda.ca) could be used as a base to effect concrete and tangible change.

The researcher will use a reflective approach based on the outcomes of the DEEP Think

Tank conference 2012 and a combination of personal observations and insights,

perspectives and experience, further supported and substantiated by the examples provided in this work.

1.1 Current Position

Many of the current resources touching on accessibility and inclusive design focus on a specific tool, standard, demographic, or type of disability or present a repository of information, best practices and resources. Additionally, under the diversity and inclusion umbrella there has been a significant amount of attention and effort on topics such as standards, legislation and regulations, accommodations, social inclusion. However, none of these efforts brings together a community of multi-disciplinary experts that is cross-functional and includes enablers as well as users promoting a collective and collaborative approach to resolving issues around accessibility. Furthermore, while many existing websites and repositories can be very useful by providing a collection of data, most only capture current and existing solutions and findings. Many of these websites attract participants from one or more limited geographies or industries (such as AODO - specific to Ontario[1]; Center for Accessible Society – specific to journalists[2]), lack in reflecting or promoting collaboration, innovation and creativity and do not promote global outreach.

Many of the topics under the accessibility umbrella have been researched at length globally for many years and have provided important perspectives on where inclusion

---

[1] www.aodoalliance.org.
[2] http://www.accessiblesociety.org.

for accessibility has failed and/or succeeded (G3ICT CRPD Report 2012[3]; WebAim Report[4]). While we have significantly raised awareness around these topics, there is still a great deal to do to create a culture of inclusion.

Despite many advances in technology and the development of stronger policies such as the AODA in Ontario, Canada, Section 508 (http://gsa.gov/portal/category/21293) and the Americans with Disabilities Act (ADA, www.ada.gov) in the USA and standards such as Web Content Accessibility Guidelines (WCAG, www.w3.org) by the W3C, we continue to see limited progress in the ability to cohesively implement solutions that result in sustainable and measurable social, systemic and cultural change. The lack of harmonization amongst these policies, standards and regulations makes the effort for inclusion disjointed and vague and even isolating. Many solutions further segregate or categorize individuals, which promotes division over inclusion, and in many cases, creates confusion that often results in new barriers. Often designers and developers of current and emerging technologies do not have a clear understanding of accessibility compliance requirements which only perpetuates the situation. A good example of this lack of understanding can be seen in the 2009 survey from the Assistive Technology Industry Association (ATIA) where developers have indicated that even though accessibility standards exist, their ability to implement accessibility in what they do is difficult and unsustainable.

---

[3] G3ICT CRPD ICT Accessibility Progress Report 2012, downloaded from http://g3ict.org/resource_center/CRPD_2012_ICT_Accessibility_Progress_Report on Sep 2, 2013.
[4] http://webaim.org/articles/policies/policies_pilot/ last accessed on September 2, 2013.

1.2   Recent Concerns

At the Designing Enabling Economies and Policies (DEEP) conference held in Toronto, Canada in May 2012, subject matter expert's (SME'S) expressed that much of this failure may be directly attributed to the lack of ownership and accountability from stakeholders. For example, one can type the word accessibility in any search engine and end up with thousands of results, but few provide the user with the ability to understand and effectively use those results to implement accessibility or inclusive design in their organizations or communities. Overall, it is observed that accessibility solutions have been developed in isolation or silos, often for specific industries or even a specific or limited type of need or disability which then has a limited scope and outreach. Whether in technology, policies, education or standards, this myopic approach significantly limits the product or service from achieving its full benefit or potential. Evidence of this limit can be seen in the education forums where many educational institutions each develop their own unique policies and approaches rather than recognizing the benefits of a unified and/or universal approach to deliver accessible E-Learning. Another example can be seen in the development of standards that may be unique to one or a limited number of technical devices or platforms rather than developing harmonized, transportable or usable solutions for most or all.

Many researchers and solution providers have also not considered the potential for global impact or the opportunity for reuse and redeployment. As a result, a solution developed for one technical environment may be retried or re-invented in different environments, industries and countries without success. While we have seen some good

examples of how things like standards and best practices could be reusable and transportable to more than one solution, such as those developed by the W3C group for websites (WCAG V.2.0), more needs to be done to achieve harmonization and unification. While there have been a number of events and examples of social movements in an attempt to evolve the dialogue on accessibility and inclusion, we continue to marginalize and segregate people through categorization, and introduce new barriers. We are not effectively leveraging research, people, best practices and resources to foster collaboration and global outreach that could result in better systemic and cultural change.

Most importantly while many have expressed that a global repository of resources could benefit individuals in locating materials and resources, many participants at the DEEP 2012 Think Tank, agreed that the dialogue does not go far enough and does not consider how the many levers in society are inter-dependent and truly affect economic prosperity. Studies from the Canadian Institute for Competitiveness and Prosperity further support these findings and provide solid financial examples to articulate the missed economic opportunities[5].

The inability to effectively collaborate hinders everyone's ability to build sustainable momentum and to leverage work to achieve concrete and tangible outcomes. Furthermore, many conversations in this field do not have the necessary depth to evolve and allow full inclusion or have the required outreach. Despite international and global

---

[5] http://ebookbrowse.com/agenda-prosperity-report-full-pdf-d52050718

efforts such as the ones promoted by the United Nations Convention on the Rights of Persons with Disabilities, many countries define and treat disability matters differently, develop mandates and policies that are unique to their country that are, at times disparate and loosely governed and/or mandated.

Under the diversity umbrella, accessibility and inclusion seems to have taken the forefront in many areas such as:

- Judicial and societal discussions;

- Standards;

- Regulations;

- Technology evolution and progression;

- Advancements in alternate learning and E-learning programs in education;

- Flexibility in the workplace;

- Adoption of web and content standards.

For many years, a growing number of researchers of disability studies, disability levers, barriers and past solutions have continued to articulate the complexity of this topic. The challenge we face today is that much of this work is published in many different modalities and diverse channels, often presenting a case for change, presenting possible theories, hypothesis and possible solutions, but not taking enough accountability and responsibility to effect the necessary change through effective implementation and governance . During the DEEP 2012 Think Tank, participants expressed a strong need to better identify and understand the levers that affect accessibility and inclusive design. They also voiced the need to build stronger collaboration and partnerships in an effort

to better leverage costs, resources and tools and a desire to accept accessibility as an integral component of inclusive design. There is a great need to arrive at a common definition for accessibility and develop harmonized standards and policies that can be integrated and easier to implement and manage. Most importantly there is a need to create processes and standards that are evidence based and that can easily be used and transported across different platforms, devices and environments.

In social networks such as Facebook, LinkedIn, twitter, and other social media, this conversation has gained tremendous traction and growth; all in an effort to build solidarity and arrive at some level of consensus or common understanding on what needs to be done to achieve accessibility. However, even with the growing number of on-line communities, conferences, tools and resources, effective and sustainable integration continues to be an elusive goal for many. More importantly, despite many advances, we continue to see a notable degradation in services for people who have different needs and we continue to negatively impact their ability to achieve their full potential whether in education, employment or social independence. The digital divide has reached new heights and many people with disabilities who were already underserved, who have multiple or complex disabilities continue to be left behind. Disability has no face, no age, no gender, no ethnicity, no colour, and no financial status; it affects us all at some point in our lives. The community building portion of the proposed project addresses the need to provide a global platform for sharing resources, knowledge and lessons learned as well as evidence of progress. The DEEP community promotes collaborative efforts from all levels of state and government, affected

stakeholders and users of services through strong and global alliances and partnerships that move the goal of inclusion forward with maximum benefit.

1.3 Making DEEP an effective community

In order for communities to be effective and successful they must include some of the theoretical characteristics of engagement. These characteristics include such things as the fostering of active participation, diversity, inclusion and collaboration. Many examples of effective communities also demonstrate a propensity towards infusion of open ideas and discourse, perspectives and views and are result and outcome driven (e.g. : ClickFix). Many of these principles and approaches along with a voice for advocacy and empowerment of individuals can also be observed in effective and successful communities such as http://miusa.org, YahooGroups, Eldis Community, e-Agriculture, W3C Business and Community Groups, complex 3D interactive environments (additional examples of effective communities can be found on: http://knowledgenetworks.wikispaces.com/examples).

Successful characteristics of these effective communities also include a focused approach, global presence, engaging topics and discussions and tangible and measurable outcomes. [6]

Unlike many communities that provide a forum for knowledge sharing and resources, and do not provide in-depth conversations, the DEEP community is about moving forward by developing new strategies and approaches that can influence change while

https://en.wikipedia.org/wiki/Virtual_community

leveraging resources, standards, policies and best practices that already exist and open the discourse on what more can be done to support the UN CRPD and achieve accessibility globally. Focus will be on taking those strategies and recommendations and evolving and transforming them to concrete actions. The DEEP community will adopt some of those same characteristics and leverage some of those existing models and further promote increased community engagement by fostering a community of experts to take a strategic and actionable approach. Cultural change, community building and communities of practice are fundamental to success. As an illustration, Etienne Wenger identified seven actions that could be taken in order to cultivate communities of practice:[7]

- Design the community to evolve naturally.

- Create opportunities for open dialog within and with outside perspectives.

- Welcome and allow different levels of participation.

- Develop both public and private community spaces.

- Focus on the value of the community.

- Combine familiarity and excitement.

- Find and nurture a regular rhythm for the community.

The DEEP community touches on all aspects of accessibility and the DEEP website will offer great insight, content and questions that are compelling, inspiring, and focused. This approach is key to keeping the community members active and coming back. There

---

http://en.wikipedia.org/wiki/Community_of_practice#CITEREFWenger_et._al2002

is no online conversation without outreach. Getting the word out via social and traditional media outlets is essential to getting the kind of engagement we want. Annual touch points discussing progress and success will also keep the conversation fluid and fresh.

1.3.1 The DEEP Community Approach:

It is becoming clear that "in order to build communities that are successful at improving conditions and resolving problems, we need to better understand and appreciate many cultures, establish relationships with people from cultures other than our own, and build strong alliances with different cultural groups. Additionally, we need to bring non-mainstream groups into the center of civic activity. We need to bring accessibility into the main stream and not view it as a customized or specialized effort. In order to build communities that are powerful enough to attain significant change, we need large numbers of people working together. If cultural groups join forces, they will be more effective in reaching common goals, than if each group operates in isolation."[8]

The DEEP community offers an opportunity for stakeholders to build alliances, collaborate and partner to achieve impactful outcomes by providing a holistic view on all levers affecting accessibility. Furthermore, the DEEP community proposes to engage representatives that are cross-industry, multi-disciplinary, multi-level and reflect not only the user community but also those who are responsible for the creation of

---

[8] Axner, M. Understanding Culture and Diversity in Building Communities in *Community Toolbox* (Bill Berkowitz, ed) http://ctb.ku.edu/en/tablecontents/sub_section_main_1168.aspx.

accessible solutions and policy. It is acknowledged from the outset that, for the

evolution to meet its objectives, a full ecosystem is required spanning International,

National, State/Provincial, local areas of government, as well as private sector voluntary

codes of conduct. From the adoption of standards and policies to achieving a common

language, from the creation of inclusive services and products to the deployment and

supportability of such products and from the infusion of best practices to a place where

individuals can share case studies and examples, the DEEP community involves policy

makers, creators and consumers at many intervals. Through strong alliances with

existing accessibility driven communities, such as G3/ICT, UNESCO, GPII, WC3 and

institutes that promote the CRPD, DEEP will be positioned to leverage resources and

insights as well as to actively promote the need for and benefits of accessible and

inclusive practices through progress and reporting. To ensure continuity, participants

will be required to present evidence of progression; a requirement that is not typically

addressed in many other communities. While the above examples illustrate how some

efforts had marginal success, examples such as the following illustrate a more engaged

process by the multiple layers of people involved in disability:

> The [UN Economic and Social Commission for Asia and the Pacific] Governments
> . . . adopted the Ministerial Declaration on the Asian and Pacific Decade of
> Persons with Disabilities, 2013–2022, and the Incheon Strategy. . . . The Incheon
> Strategy provides. . . the world, with the first set of regionally agreed disability-
> inclusive development goals. . . . With governments and civil society
> stakeholders, the Incheon Strategy comprises 10 goals, 27 targets and 62
> indicators. . . . The Incheon Strategy will enable the . . . region to track progress

towards improving the quality of life, and the fulfillment of the rights, of the region's 650 million persons with disabilities, most of whom live in poverty."[9]

This process illustrates how a policy can be expanded to methods and approaches that document and enable progress.

The DEEP participants recognize that there is a need to share and evolve a wide range of ideas, customs, and wisdom to solve problems and enrich community life and share the philosophy that "bringing non-mainstream groups together and into the center of civic activity can provide fresh perspectives and shed new light on tough problems."[10] Participants of the DEEP community recognize that the people affected by a decision have to be involved in formulating solutions. "Members (of informational communities) believe their contributions matter and feel some degree of social connection with one another."[11] Without the input and support of *all* the groups involved, decision-making, implementation, and follow-through are much less likely to occur. According to Lew Feldstein (New Hampshire Charitable Foundation and co-chair of the Saguaro Seminar), "We must learn to view the world through a social capital lens. . . . We will become a better place when assessing social capital impact becomes a standard part of decision-making."[12]

---

[9] Social Development Division. (2012*). Incheon Strategy to "Make the Right Real" for Persons with Disabilities in Asia and the Pacific*. http://www.unescap.org/publications/detail.asp?id=1523
[10] Axner, M. Understanding Culture and Diversity in Building Communities in *Community Toolbox* (Bill Berkowitz, ed). http://ctb.ku.edu/en/tablecontents/sub_section_main_1168.aspx
[11] Wikipedia, (Jenkins, et al. 2005) https://en.wikipedia.org/wiki/Virtual_community
[12] Drawn from Wikipedia http://en.wikipedia.org/wiki/Community_building

It is recognized that some participants will simply navigate or lurk on the site for resources and best practices, and may contribute marginally but we hope to foster a community of leaders that will take concrete action to evolve solutions and outcomes. To encourage leadership, The DEEP community engages a cross-disciplinary, industry and cross-disability audience which includes people with cognitive, hearing, learning, mental health, physical, systemic, vision and other disabilities. Additionally, the DEEP community brings together those stakeholders who can also influence systemic and cultural change and can bring forward inclusive solutions. By inviting participants and subject matter experts to take the floor on topics and discussions they deem important and relevant and by providing a forum where partnerships and collaboration can be promoted, individuals are empowered to moderate discussions and take steps to carry strategies and actions forward. "Community is something we do together. It's not just a container. . . . People working together with shared understandings and expectations are what provides a place of strong community." (sociologist David Brain)[13]. Through regular intervals and monitoring, new and emerging strategies and ideas can be tracked and promoted globally.

The DEEP community is a virtual and synchronous community that is organized around the topic of accessibility and inclusion and the actions required to move the conversation forward to effect tangible and measurable change. Through its social network, the DEEP community participants will interact through social media and cross

---

[13] Drawn from Wikipedia http://en.wikipedia.org/wiki/Community_building

geographical and political boundaries in order to pursue a mutual interest or goal. This DEEP community brings together subject matter experts in technology and assistive technology, education, policy and standards and governance, all in an effort to promote collaboration, inter-operability and inclusion.

Appropriate and critical stakeholders must be part of the conversation in the earliest possible stage. Critical stakeholder engagement can be further influenced and promoted through the publication of articles or the use of media, through peer pressure or the recognition of competitive advantage, through lobbying or responding to effective advocacy movements or the participation in reward programs that promote successes. Making sure relevant stakeholders are engaged begins by inviting them to share their experience, challenges and successes. The DEEP community uses a staged approach that focuses on *how* to achieve concrete actions and outcomes unlike many other communities that ask, "Why?" instead.

Contrary to many communities and sites that already exist, DEEP is not a place to regurgitate known facts and issues. It is also not a community or forum to be used simply as a repository of resources and data. While links and reference materials may reside on the site, the main purpose and goal of this community is to encourage open and frank conversation that will generate actions through collaboration and unification. This community also has a broad outreach on the topic of accessibility which differs from many communities that address a specific issue or concern. Using characteristics popular with crowdsourcing, participants will engage using social networks to voice their thoughts and ideas. By inviting participants to invite other participants, by engaging

students from accessibility and inclusive design programs to share their efforts and ideas, the momentum can be further expanded, sustained and dialogue can be kept fresh and current. Other points that differentiate DEEP from other communities include:

- DEEP begins with a number of recommendations and strategic approaches from the DEEP 2012 conference that were presented by the participants;

- DEEP encourages participants to take ownership of actions through active collaboration and partnerships;

- DEEP encourages participants to share resources, best practices and case studies globally;

- DEEP is a virtual and synchronous community which promotes global outreach through global alliances ;

- DEEP stakeholders/participants are from a number of cross disciplinary, industry and disability communities;

- DEEP is a completely open and inclusive forum;

- DEEP is a blend of bottom-up, open creative process with top-down organizational goals;

- DEEP community is based on a three-tier model encouraging and promoting engagement from the grass root up while also engaging leaders who can influence change;

- DEEP promotes innovation and creativity based on inclusive design principles;

- DEEP is based on a common global and universal goal making the world more accessible and inclusive for all;

- DEEP promotes global initiatives that support the UN CRPD.

By providing flexibility and empowering participants to take on a role that best fits their level of engagement and expertise, a more inclusive process is created and silos can be broken and opportunities to introduce new barriers can be further reduced.

2 Project Goals

Through an exploratory, reflective and informative approach, the researcher has recapped the events of the 2-day think tank by amalgamating all the content, presentations and discussions that took place. Based on her personal experience, knowledge and engagements in other related initiatives, the researcher developed a number of recommendations and strategies related to each plenary and brainstorming session to further fuel discussion and promote action through membership in an on-line community. The project was made up of 2 parts: 1) the development of the DEEP white paper which amalgamated synthesized outcomes and provides analysis from the conference and 2) the development of a DEEP Community website which invited all participants to carry the proposed strategies and recommendations forward. The research goal was to consider if a community of accessibility experts can turn discourse into concrete action to truly effect social, cultural and systemic change.

2.1 Expected Outcome and Contribution to the Field

The expected outcome of this project was the creation of a forum where accessibility experts would come together and form alliances, collaborate, foster a culture of innovation and creativity and exponentially improve inclusion and accessibility. The forum would allow ongoing dialogue as it relates to systemic and cultural change through the creation of a community of experts and by doing so, make a difference in the lives of individuals by catalyzing dialogue and effort on accessibility matters. The goal of the community was not to regurgitate the known issues and challenges surrounding accessibility but to create a better understanding of the dependencies and inter-dependencies so that through strong collaboration and partnerships, results of initiatives can be maximized while reducing work, avoiding duplication, containing costs and reducing risk.

Participants of the DEEP community have been encouraged to inject and promote fresh ideas and recommendations to empower all stakeholders to promote new ideas and thinking, adopting guidelines and practices that have been proven to work and promote a collaborative approach to achieving accessibility and inclusive design. The DEEP online community is not a forum to re-invent what has already been done, but an opportunity to look at how the successes and failures of these efforts could benefit others or be avoided going forward.

The DEEP white paper includes a number of recommendations and proposed strategies shared by participants and developed by the author. These recommendations and strategies have been shared with moderators and facilitators for feedback and will then

be shared with the rest of the participants. The DEEP community will then take the strategies and recommendations to the next level of action through adoption, expansion and development. This connection between the initial dialogue of DEEP 2012, represented by the white paper, and the forum for continued collaboration, represented by the online community, will enable participants to actively continue the dialogue through focused and targeted discussions or actions.

3 Project Design

While this project had two distinct deliverables, the DEEP journey will carry on far beyond the prescribed timeframe of this project. The starting point was based on the 2012 DEEP Think Tank that took place in Toronto, Canada on May 24-26, 2012. The first phase was the creation and publication of a white paper synthesizing and recapping the happenings and the outcomes of the 2012 DEEP Think Tank. This synthesis phase served as a base for the new DEEP on-line community. The second phase saw the development and launch of the DEEP on-line community website, www.deep.idrc.ocadu.ca, which provides participants a forum to openly discuss what has been done and what can be further explored to promote inclusion and accessibility. Participants and subject matter experts are invited to take on recommendations, proposed strategies of particular interest or expertise and develop actions to achieve tangible and measurable outcomes. Each moderator and facilitator from the DEEP 2012 event has been invited to reach out to their respective group members, prioritize recommendation and/or proposed strategies and create active forums for participants to contribute their thoughts and

perspectives. They are encouraged to challenge each other and form partnerships and alliances in order to move strategies forward. Each group is encouraged to identify and then focus on two or three top recommendations or strategies and see how they can be further developed into measurable and tangible outcomes.

A list of topics that were touched on during the conference and being further explored by the web community include such discourse as how is the Ontario experience through the AODA initiative influencing change, to where are we now and what have we learned from our predecessors? What past experiences and movements have served to move and invigorate the conversation and movement forward as it relates to cultural and organizational change?

Participants have agreed that accessibility levers such as the technical evolution, advances in telecommunication, new and existing policies, regulations, legislations and standards all play a key and critical role in achieving inclusion and accessibility, so they were encouraged to identify what can be done to harmonize them so that a common goal is achieved.

Participants were also encouraged to explore how through collaboration and partnerships, they can better work together and benefit from each other's learning and experience as well as better promote innovation and creativity by bridging innovators with businesses. As alliances are formed, understanding the priorities and expectations as they relate to return on investment, employment, and education will be required.

Lastly from a cultural and organizational perspective, discussions on how accessibility commitments, roadmaps and mandates can be developed to better promote integration

and adoption. Participants were and are encouraged to challenge the current disability definition in order to shift attitudes and promote inclusion for all through the diversity lens versus the notion of special accommodations.

During the DEEP 2012 Think Tank, discussants recognized how each of the above subjects positively or negatively affected the ability to achieve inclusion and accessibility and all agreed that there is much more to do to truly make a difference. We live in a very inaccessible and non-inclusive world relative to what we might all want to aspire to. There is a lot of activity around the topic of accessibility and inclusion but many discussions are disjointed and incomplete and create greater disparity because many view this as an opportunity to compete rather than collaborate. Participants were and are encouraged to take ownership of issues and ideas, build partnerships, promote innovation and creativity and develop new approaches that can be collaboratively implemented.

4   Research Methods

The construct of the DEEP white paper and community entailed a plurality of research methods and approaches including a high-level, critical review of the DEEP 2012 Think Tank outcome/results, a review of the AODA approach, an exploratory and personal reflective approach providing insight and recommendations. Techniques used in the development of the DEEP white paper and community included literature reviews, survey, thematic reviews, amalgamation, and summation of conference material and presentations.

4.1 Procedure

The construct of the DEEP white paper began with a data collection exercise which included the gathering of all conference materials such as participant notes, presentation material, outputs from the various brainstorming and plenary sessions and a collection of presentation videos and files. All presentations were noted, organized and summarized. The information was then amalgamated into a draft outlining what the white paper could look like. The structure was then reviewed and refined through discussions with the co-author and editor.

Upon the thematic review of the recommendations and proposed strategies from the many sessions, it became evident that many issues and concerns overlapped, had similarities and in some cases were actually identical. The thematic review was developed to identify common themes and trends from all the sessions. The outcome of the thematic review provided the author the ability to group issues and concerns into 11 general categories. These categories were then further refined, consolidated and grouped into three major themes which served to frame the author's findings, observations and conclusion.

In addition, through personal reflection, the researcher further expanded on some of the findings expressed by the groups and developed additional recommendations and proposed actions. Moderators and facilitators from DEEP 2012 are invited to provide feedback and help organize and prioritize the recommendations and actions to then share with the DEEP 2012 participants for engagement, collaboration and development.

4.2 Online Community Development

In parallel with the DEEP analysis, requirements for the on-line community site were begun. Through critical reviews of existing related and community websites, the researcher developed a requirements document and a preliminary design of the website. The requirements include a plan for governance of the two tier community site and the expectation that it will meet the need for a private and public community. The requirements document may be reviewed in Appendix A.

The online DEEP community was the second part of the DEEP Think Tank. Its purpose is to continue the discussions started in the DEEP conference, to build a collaborative community for developing strategies and innovations, to engage the general public, and to be an online resource for collaboration.

The DEEP community is designed with three tiers of participation. As illustrated by Wenger, there are 3 main levels of participation: 1) The core group who participate intensely in the community through discussions and projects. This group typically takes on leadership roles in guiding the group; 2) The active group who attend and participate regularly, but not to the level of the leaders; 3) The peripheral group who, while they are passive participants in the community, still learn from their level of involvement. Wenger notes the third group typically represents the majority of the community. In the DEEP community, the first tier is comprised of the administrators and founders of the community and forums. This Tier ensures that participants adhere to the accepted principles and code of ethics of the community. The website administrator is responsible for the maintenance of the website, its membership, and ensuring quality of the

content. The administrator may also flag any improper behaviour and have the power to revoke membership for non-conformance to behavioural guidelines.

The tier 2 level is comprised of participants of the DEEP Think Tank and additional invitees. This core group forms the core collaborators and moderators of the discussions and is by membership only. The second tier is open, public participation. This tier is able to participate in public discussions, give feedback on polls and surveys, and generally follow the developments of the community.

The core group as it develops will be divided into sub-groups and led by their own committee. The sub-groups are organized by subject and led by moderators and facilitators. The moderators and facilitators were selected during the original DEEP 2012 conference from participants; they are global representatives who are subject matter experts in their respective areas. The moderators are responsible for inviting group members, organizing the discussions, and generally facilitating the collaborative work.

The third tier; the public tier is open to anyone to follow and give feedback on the discussions and work being developed by the community. This tier will not require membership. The moderators and facilitators manage public discussion forums, mailing lists, polls, surveys, Wikis, and resources, where anyone can follow and engage in the work being created by the community. The purpose of this public tier is to engage a wide audience, get feedback from the public, and help spread the ideas being developed by the community.

The organization of the community is an iterative design process, to allow the groups to adjust as their needs change (Preece, 2004). The roles of the moderators and facilitators

are to encourage diverse membership, diverse discussions, and inclusive behaviour. The goal is to create an agile environment and encourage feedback on the designs, approaches and expectations. Finally, involving the public to give feedback and active participation will keep the discussions evolving and diverse.

As the DEEP website is an iterative project and due to resource constraints, social networks such as Linked-in may be used in conjunction with the DEEP website to launch the different discussion forms and communities.

Success of this project will be measured at several intervals based on multiple factors. The level of engagement and quality of input/contribution will serve to measure and evaluate responsiveness and level of active participation. Participants will be strongly encouraged to seek new members that can broaden the discussion and ensure diverse and inclusive perspectives. The more participants are engaged, the more discussion threads can be created and provide depth. Statistical data will be gathered on the level of hits on the site, number of threads developed and number of participants joining the community. More importantly, it will be necessary to track the number of recommendations and strategies that have resulted in new collaboration and/or partnerships that translate into joint, concrete and tangible actions. The DEEP on-line community website will continue to be developed and closely monitored for engagement well after its June 2013 launch.

4.3 Ethical Considerations

All materials used for this research are within the public domain. Furthermore, release and consent forms were completed by all speakers and participants of the DEEP

conference. In addition, during the conference opening comments, participants were reminded that the conference would be recorded and all material posted and shared publically and that the conference would serve as a base for a white paper and the construct of a DEEP community. No objections were voiced or received by any participants wishing to object or not openly or publically participate. A recording and audio of the conference is available for further consideration and review.

When participants access the DEEP on-line community website, regulations and rules governed by that entity around the use of public space as it relates to language, conduct, privacy and confidentiality apply. To further inform and protect participants, a disclosure statement has also been included on the home page of the website to remind participants that the information shared is non-proprietary and is for public use and can and will be re-used for on-going conversation, consideration and possibly research. Participants may choose to join or leave the community at any time.

4.4   Collaboration and co-authors

The currency, relevancy and application of the findings and recommendations of this project were highly dependent on active and open participation with the DEEP community participants and the author's ability to provide a critical and accurate representation of the ideas, opinions and recommendations presented at the DEEP conference. Ensuring that the appropriate subject matter experts will be engaged through a variety of channels required the use of collaborative and social tools, participation in various forums and open discussion amongst all.

Participants of the DEEP white paper and community that have been identified as pertinent contributors and co-authors included business and organization representatives, subject matter experts, international accessibility (G3/ICT) advocacy and persons with disabilities, academia, regulatory bodies and representatives.

5 Planned Analysis

A number of analysis techniques are planned to review the collected information from the DEEP 2012 Think Tank. These different methods are discussed further below.

5.1 Exploratory Analysis

The DEEP white paper includes a component of reflective approach pertinent to the author's own journey in accessibility to her experience and role in various committees, communities and projects as it relates to accessibility and inclusion. Based on her experience and insights, the author developed a list of additional recommendations and proposed strategies that have been included in the DEEP white paper. The recommendations and proposed strategies serve to fuel and invigorate discussions for participants to debate, critique and/or further develop. Conceivable problems could have been based upon perceptions, so this approach was exercised with caution using the exploratory approach. The exploratory studies (also known as formative research) comes in handy in this case because the problems expressed by participants may be too general or too specific, therefore a hypothesis cannot be formulated. http://en.wikipedia.org/wiki/Exploratory_research

5.2 Subject-Matter Expert Discussions

An iterative analysis was carried out through on-going discussions with various subject matter experts in the field of accessibility and inclusive design provided insight, perspectives and feedback on the construct and direction of the DEEP white paper and work. Reviewers and subject matter experts added depth and personal and professional experience to the finding and recommendations based on their understanding of barriers faced in the technologically mediated society, workplace, the bureaucracy and/or policies that often can hinder progress.

5.3 Thematic Analysis

A thematic and cumulative representation of the participant's views on topics that were discussed during the various brainstorming sessions at the DEEP conference was used in an attempt to identify common trends and prioritize issues. The thematic analysis (Subvista, 2010) involved searching through data included from the various presentations and session summaries which served to identify any recurrent patterns. A theme is a cluster of linked categories conveying similar meanings and usually emerges through the inductive analytic process which characterizes the qualitative paradigm. The exploratory power of this popular technique can be enhanced by the analyst lacking previous knowledge of the research topic as they are not guided by any preconceptions. Thus, the analyst does not have to be an expert in the research topic. However, in order to begin analysis a researcher must have at least some conceptual understanding to guide the insight processes. Through focusing purely upon meaning, the thematic

approach promotes a more discursive interpretation since individual codes can cross-reference multiple themes, which is evident in the topics of the DEEP conference.

The preliminary thematic analysis was conducted by the two authors of the white paper. Each author ranked the themes individually and then differences in assigned scores were discussed. In most cases, the raters agreed, however, there are some cases where their different rankings were maintained. Some may argue that this type of thematic review can be partial or subjective, especially if conducted by a limited amount of participants; however, the analysis was based on 3 different topics/questions providing opportunity for clarity and objectivity. To further critique and/or develop these recommended actions, conference participants are invited to further comment and provide feedback on these findings and conclusions. A risk analysis based on probability and impact could further help prioritize initiatives and actions.

The Accessibility for Ontarians Disability Act (AODA) experience was used as a spring board for this conference. While focus may have been on organizations in Ontario and Canada during the 2012 DEEP conference emphasis was exercised by the author to broaden the dialogue and ensure diverse and balanced perspectives were reflected. Furthermore, the author believed that international and global perspectives were necessary as many organizations have global presence and the need to harmonize policies, standards, solutions, processes and tools is of great benefit to all. The DEEP white paper was supported by the G3/ICT organization in support of the United Nations Convention on the Rights of Persons with Disabilities.

5.4 Risks

The challenge for many authors and researchers involved in these types of research studies is the fear of opening the Pandora box. One must approach the box with absolute caution as each component; each door may and will open more doors. The dependency and inter-dependencies of many of the factors identified in the project and research can positively or negatively impact the individual directly or indirectly. Success is based on the ability to recognize the necessary depth of the research, the dependencies and inter-dependencies of each component and relevancy of the information, while retaining focus on the final outcome. The broader the topic, the more difficult it may be to define the final goal. This could also increase the risk of going into many different tangents, which could dilute the expected outcome and jeopardize the project.

As the author progressed with this project, she found herself with a need to refocus by narrowing and recalibrating the work by extending the timeline. So while the DEEP white paper contains an in-depth review of all the conference happenings as well as documented and defined recommendations to carry forward, this MRP document will primarily highlight the findings and recommendations that support the creation of the DEEP community, a look at the AODA/Canadian experience and how this approach could influence changes to better promote the CRPD.

5.5   Measurements of success:

Success of this project will continue to be measured at several intervals based on multiple factors. During the development of the white paper, moderators and facilitators are called on to provide feedback on the DEEP white paper and invite group participants to contribute to the discussion. The level of engagement and quality of input/contribution will serve to measure and evaluate responsiveness and level of active participation. As each sub-group is formed, participants are invited to join the DEEP community to respond to specific recommendations and/or proposed strategies as they pertain to their area of interest or expertise. This approach was considered to maintain some structure and organization for each discussion thread, but is not intended to preclude anyone from participating in any of the discussions or topics. In fact, participants are strongly encouraged to seek new members and participants that can broaden the discussion and ensure diverse and inclusive perspectives. The more participants are engaged, the more discussion threads can be created and provide depth and views. Statistical data will be periodically gathered on the level of hits on the site, number of threads developed and number of participants joining the community. More importantly, we will track the number of recommendations and strategies that have resulted in new collaboration and/or partnerships that translate into joint and concrete action. This last component will confirm whether this community has reached its true potential and goal.

5.6 Disclosure

It is imperative to note that while every effort and attempt was made on maintaining clear, unbiased opinions during this work, much of the DEEP white paper is based on collected and personal interpretation of the material and resources shared during and after formal and informal discussions of the 2012 DEEP conference. Perspectives were also gathered through participation in various accessibility and Inclusive Design forums, the participation in the Design and Inclusive Design master's program at OCADU and contributions in various events and standards committees.

An underlying factor to also consider is the author's own reflective journey of what she has experienced and learned in her journey to return to work and re-integrate into society as a person who acquired a visual disability in her mid-30's: her continued journey and need to better understand what are the true barriers versus what are the perceived ones.

6 Results

Thematic analysis[14] of the successful strategies (23 statements), promising strategies (36 statements) and trend levers (21 statements) enabled a possible highest score for any theme of 160 (2 raters by the number of statements analysed) although this result would require virtually every statement to fall under one of the ten themes. After inter-rater review of the statements, the highest ranking themes from highest to lowest were:

---

[14] Details about methodology and scoring system provided in Section 4.1.

policies and standards (39), Socio-cultural change and inclusion (31) followed by inter-operability (19) and collaboration (18).

6.1 Emerging Themes

The researcher's, analysis revealed that when looking at successful strategies participants unanimously and consistently expressed that while some policies and standards exist, and played a notable role in the evolution and adoption of accessibility and inclusive design, stronger, clearer and harmonized global policies and standards are required. The analysis also revealed that participants also expressed a greater need for the ability to recognize the benefits and need for strong regulations to promote adherence and compliance and the ability to better measure progression. There was also recognition that increased active collaboration, integration and engagement by all stakeholders will foster stronger partnerships which will improve communication and the delivery of more inclusive products and services.

6.2 Social Trends

When looking at promising strategies and things that can positively influence change and accelerate progression, once again clearer and cohesive policies and harmonized standards were identified as areas where improvement is required. While policies and standards have been instrumental in making progress in some areas, they have also been of great hindrance in many instances.

There is also a real need for socio-cultural change through universal design. This speaks to better integration of stakeholders through effective change in policies, technology,

advocacy and education. We must also recognize the true benefits of proper inter-operability solutions and processes. The need for accessibility and inclusion to be baked in design at the earliest possible phase, rather than retro-fitting; the need to make accessibility more readily available and affordable for all and the need to include personalization and responsiveness in the design to meet mass demand. A range of frameworks for people with disabilities were published by UNESCO wherein the goal is to achieve education for all, "and the right to education for Persons with Disabilities [by 2015]. The challenges for the developing countries were significant (eg. 98% children with disabilities do not attend schools, 500,000 children annually lose some part of their vision due to vitamin A deficiency, 41 million babies born each year at risk of mental impairment due to insufficient iodine in their mothers' diets)."[15] This example of UNESCO research illustrates the benefits of incorporating accessibility in the earliest stages of education to achieve impactful outcome.

A closer look at the aggregated recommendations shows that the leading concerns centred on the need for effective communities that focus on tangible actions. Leaders in the field at DEEP 2012 expressed the undeniable need for socio-cultural change through better inclusion and integration. This socio-cultural change includes such things as the need:

1. to evolve and change the dialogue around the perception of disability;

---

[15] Drawn from UNESCO
http://www.unesco.org/education/efa/know_sharing/flagship_initiatives/disability_last_version.shtml (*see also Flagship Brochure*):
http://www.unesco.org/education/efa/know_sharing/flagship_initiatives/depliant_flagship.pdf

2. to lift the negative connotations associated with accessibility;

3. to foster a much more inclusive culture rather than categorization and/or segregation(by disability);

4. to recognize that disability can affect us all at some time regardless of ethnicity, gender, financial situations, residency, etc. ;

5. to better understand the true benefits of inclusion and advantages such as the return on investment;

6. to build on successes. Many movements such as Pride, MIUSA, movement of Black Sash, and others have had significant impact in creating a momentum for change through positive action;

7. to be proud: persons with disabilities must raise themselves and better project self-confidence and celebrate their successes, leaving negative energies behind;

8. to develop a joint and global plan to make real impact in appropriate ways. Whether it is in joining forces, collecting resources or using social media to promote accessibility and inclusion through positive and impactful examples that are relevant to all;

9. to use humour and visible public performances to demonstrate real and added value.

These social approaches can be further supported by harmonized policies, standards and support mechanisms.

6.3   Policies and Standards

It is imperative if we are going to effect real change that we recognize that policies that touch on accessibility use many levers either from a systemic or framework perspective. The ability to adopt standards, to implement solutions, deliver education and/or engage stakeholders needs attention and needs to take a global, harmonized, integrated and forward thinking approach. Many policies are too vague, do not set any sense of direction and are often fragmented and even conflicting. As more and more standards are being created, harmonization and synchronization of these standards becomes even more critical and relevant to provide clarity, common language and the promotion of consistent and proven practices across borders. Lastly when looking at areas of focus; there is an equal agreement that better advancement in both inter-operability and the need for evidence-based research and references is needed. Recognition of how simple changes such as curb cuts or ramps have benefited all whether you are an athlete, a person with a wheelchair, or a parent pushing a stroller, can be used to raise the awareness of universal design and win-win solutions. While there is great concern about the rapid evolution of technology, increased built-in accessibility and personalization features in products and services, often new barriers are introduced excluding many. There is also a greater need to focus on improved solutions that can better aid individuals with cognitive and/or invisible disabilities; an area that continues to lag. Many participants have expressed strongly the need to report on success based on strong and tangible success criteria and evidence. The ability to promote evidence through case studies would have a direct impact/influence on socio-cultural change.

6.4 Environmental Scan

This approach provided critical analysis of the various factors behind the success or gaps to create effective communities. Further reviews on disability studies as they relate to efforts to affect systemic, organizational and/or cultural change were also undertaken and considered. Resources relating to how technology development [16], standards and policies such as the AODA regulations[17], economic levers, funding models, social trends, human factors and legislation and regulations may impact accessibility and inclusion. Of special interest is how all these factors and levers can intercept in an effort to positively affect the experience that result in social, systemic and cultural change that can be sustained and measured as it relates to economic impact and the quality of lives of PWDs. [18]

6.4.1 Examples of communities that have faced challenges or failed:

The Accessibility for Ontarians with Disabilities Act Alliance (AODA Alliance) (http://www.aodaalliance.org/strong-effective-aoda/08062013.asp) has taken a progressive and persistent approach in following up on the AODA, to ensure the provincial ministries deliver on their electoral promises to make Ontario accessible by

---

[16] For example, http://www.grownupdigital.com/archive/index.php/about/
[17] See http://www.mcss.gov.on.ca/en/mcss/programs/accessibility/understanding_accessibility/aoda.aspx
[18] See http://idrc.ocad.ca/index.php/resources/idrc-online/49-articles-and-papers/453-leveraging- inclusion-and-diversity-as-canadas-digital-advantage, http://martinprosperity.org/2010/06/14/releasing-constraints-projecting-the-economic-impacts-of-increased-accessibility-in-ontario/ and http://rer.sagepub.com/content/79/2/1044.abstract

2025. While the AODA Alliance has been actively engaged in the development of policies and regulation, they have had marginal success in ensuring that the policy makers in Ontario, Canada are kept on track. Under the Accessibility for Ontarians with Disabilities Act, the Accessibility Standards Advisory Committee (ASAC) was created to advise the Government on issues concerning the implementation and enforcement of the AODA. Last year, the Ontario Government announced that it would also assign ASAC with responsibility for developing detailed recommendations for any new accessibility standards that the Government decides to create. The Government also assigned ASAC with responsibility to review existing accessibility standards that have been in force for five years. Despite the repeated attempts by the AODA Alliance to secure a meeting with the government and to obtain a status on the progression of those requirements, no substance or public response has been received to date. Recently, AODA Alliance made the statement on their web site[19] that, "So far, the Government has inexpicably *(sic)* not directed ASAC to develop any new accessibility standards. We have been pressing the Government for many months to develop new accessibility standards in the areas of education, health care, and residential housing." As of July 2013, the government was more than 50 days past the legal deadline to appoint an independent review of the AODA standards. Efforts of the AODA Alliance keep a focus on deadlines and requirements of the Government to meet the AODA but have not yet managed to keep the government to the required timeline and deadlines.

---

[19] http://www.aodaalliance.org/strong-effective-aoda/08062013.asp

6.4.2 Examples of communities with varying degrees of success:

Americans with Disabilities Act (ADA): The US Department of Justice releases quarterly status reports on their activities around ADA enforcement and settlements. The reports may be viewed online at http://www.ada.gov/statrpt.htm

W3C WAI : The standards developed by the World Wide Web Consortium are often the reference point for web accessibility standards and policies; however, the blue-sky goal of a completely accessible web is still a work in progress.

AccessAbill : T-Base Communications (Ottawa), in partnership with Vision Australia, enables individuals who are blind or have low vision or restricted mobility in Australia and New Zealand, to access financial, telecom and utility statements - as well as other private and personal information . . . known as AccessAbill, . . . sends invoices and statements directly to the consumer in the format of choice.[20]

ASK-IT (Greece) : an integrated project, partly funded by the European Commission under the 6th Framework Program, e-Inclusion. The driving vision behind the project is to create a service using ICTs to help improve the everyday lives and independence of mobility-challenged individuals in European cities . . . currently being tested in eight different European cities and has thus far yielded exceptional

---

[20] This case study is provided on the G3ICT web site and may be accessed along with many other examples by viewing "complete list" in their case study database (http://g3ict.org/resource_center/case_study_database/case_study_search/p/type_technology).

results. The intelligence of the system is second-to-none in helping persons with disabilities find accessible resources and facilities while traveling.[21]

BlueEar (Sweden) : part of the Bluetooth Assistive Listening System, aims to develop an open system for assistive listening devices based on the new industry radio standard known as "Bluetooth" (digital wireless communication). BlueEar envisions that, in ten years' time, persons will be able to switch their hearing aid to a common channel and pick up sound. . . . a small set of prototype products will be developed using the new 'Profile' standard. ... Prototype products will be developed and manufactured to validate three different application scenarios (eg workplace, theatre, home). The prototype products will be trialed with groups of hard of hearing users in three countries.[22]

blueIRIS (U.K.) : using broadband internet to create a radio service for the blind that is available over the Internet. Previously, the Society distributed cassette recordings of daily news from local and international newspapers to blind and visually impaired citizens. …The software is also being used to help the visually impaired to navigate the Internet.[23]

FATT or Full Access Through Technology (U.K.) : is a program which works to make more effective use of interpreters for the deaf. Since there is just one interpreter for every 140 deaf persons in the United Kingdom, FATT seeks to leverage emerging

---

[21] Ibid
[22] ibid
[23] ibid

technology to maximize this finite commodity . . . to set up a system for locating and booking an interpreter that is more than ad-hoc, by establishing an emergency call-out system and central administration. By using a bespoke database and a messaging system, a uniform method of booking is possible. The project is being carried out by Just Communication.[24]

UN – CRPD (Progress Report 2012)[i25]: The obligation to provide accessible ICT based products and services and ensure equal access is also reflected in many advanced policies and programs launched or promoted by States Parties around the world. Examples of such programs include (countries with good practices in parenthesis):

- Distribution of free equipment to deaf blind persons funded by a Universal Service Fund to give them access to communications (United States);

- Captioning or signing of television programs (implemented by 58 percent of the countries which have ratified the CRPD);

- Video description of television programs for the blind (Canada);

- Offering relay services for deaf and speech impaired users of telephony , implemented by 29 percent of the countries which have ratified the CRPD;

---

[24] ibid
[25] Drawn from http://g3ict.org/resource_center/CRPD_2012_ICT_Accessibility_Progress_Report

- Ongoing monitoring of web accessibility and compulsory remediation of all e-government web sites (Republic of Korea);

- Implementation of computer-based Assistive Technologies in schools and universities (53 percent of all States Parties to the CRPD have some level of implementation);

- Providing reasonable accommodation at the workplace with publicly funded support centres (United States);

- Developing resource centers to support rehabilitation professionals offering ICT based Assistive Technologies to persons with physical disabilities (Qatar); and

- Public procurement rules including ICT accessibility criteria (United States, European Union policy in development).

6.4.3 Legal cases that exemplify the failure of society and industry to adopt the concept of true accessibility

American Association of People with Disabilities v. Holland [26] -- On June 11, 2011, the Department filed an amicus brief in the U.S. Court of Appeals for the Eleventh Circuit in support of the plaintiffs' petition for rehearing in this lawsuit challenging Duval County, Florida's failure to obtain voting machines that permit voters with visual or manual disabilities to vote unassisted.

---

[26] Drawn from , http://www.ada.gov/aprjun11.pdf

Hiltibran v. Levy[27] -- On April 4, 2011, the Department filed a Statement of Interest in support of the plaintiffs' motion for summary judgment in this lawsuit in the U.S. District Court for the Western District of Missouri. The plaintiffs are challenging the State's refusal to provide needed incontinence supplies for Medicaid-eligible individuals with disabilities who live in the community.

In March 2011[28] a speech by Samuel R. Bagenstos, the Principal Deputy Assistant Attorney General in the Civil Rights Division of the U.S. Department of Justice, cited the NDRM report in explicitly criticizing the entire concept underlying the sheltered workshop.[5] Bagenstos took the position that the principle . . . which he described as "that persons with disabilities have a right to spend their lives in the most integrated setting appropriate for them as individuals is just as sensibly applied to the employment setting." He argued that "a full and equal life in the community—the ultimate goal of Olmstead—cannot be achieved without a meaningful, integrated way to spend the day, including integrated 'work options."[5]

G3ict.org Resource Centre Publications & Reports Benefits & Costs Case Study[29]: Several litigation cases related to e-accessibility that have shaped jurisprudence and illustrate the possible cost of e-accessibility failures, such as the case against universities deploying the Kindle. . . . Although the Kindle DX has text-to-speech

---

[27] Drawn from, www.ada.gov/olmstead/documents/hiltibran_soi.docx
[28] Drawn from, http://en.wikipedia.org/wiki/Sheltered_workshop
[29] Drawn from
http://g3ict.com/resource_center/publications_and_reports/p/productCategory_studies/subCat_1

features, it was inaccessible to individuals who are blind. Plaintiffs alleged that the university's use of Kindle DX for textbooks violated Section 504 of the Rehabilitation Act and Title II of the ADA.

Examples from Zero Project Report 2013 (http://www.zeroproject.org/wp-content/uploads/2012/11/Executive-Summary_e_2013.pdf):

Most strikingly only a tiny fraction of experts stated that the employment rate of persons with disabilities in their country differs 15% or less from the overall employment rate (question 7). Despite all the measures to promote the employment of persons with disabilities, in nearly all countries the rights as defined in UN CRPD Article 27 can barely be exercised.

In addition, in over 40% of countries persons with disabilities have the right to be protected against discrimination in the hiring process (question 1) and to redress grievances (question 9). However, lack of awareness about existing rights – not only among employers and government, but also among persons with disabilities themselves – is very often a key obstacle in translating those rights into action, especially when it comes to protection against discrimination in the hiring process.

7   Discussion

The DEEP journey began as a result of a personal interest to try and capture gaps and discussions on what global subject matter experts view as accessibility barriers and what is being done to address those barriers through collaboration and engagement. Through

the development of the DEEP white paper, it became evident that while many have a common interest when it comes to accessibility and many accessibility experts dedicate their lives to this cause, there is a need for better cohesiveness, harmonization and much stronger collaboration amongst them if tangible and measurable change is going to be affected.

The DEEP White paper is in its final stage of construction and the release is expected in the fall of 2013, and the web on-line community will be introduced as an iterative initiative to all participants shortly after. Based on the learning acquired through the Master of Design in Inclusive Design program (MDes) at OCADU, the approach to develop the white paper along with the development of the on-line web community has been modified significantly to ensure the work met a more scholarly approach versus a business or commercial one. In addition, particular care has been taken to ensure that the findings and participants work captured during the DEEP conference were not compromised or jaded by the author's own reflective perspective. Therefore, it is important to acknowledge that the proposed strategies following each section from the different plenary and brainstorming sessions have been developed by the author based on personal experience, knowledge and additional informal discussions. During the MRP proposal phase, the author defined success criteria's for this work based on projected timeline and expectations. Regrettably, this process has taken more time than expected and while the success criteria's initially defined still apply, we will only know whether this work will generate the expected outcome later on in 2013 after the launch of the

actual web on-line community engagement begins. Therefore, this work will continue to

be gauged and measured at several intervals based on multiple factors.

During the finalization of the white paper, moderators and facilitators have been called

on to provide feedback on the DEEP white paper document ensuring that the

amalgamation and synthesis of the conference content is accurate and reflects the

essence of what was intended at the conference. The governance of the DEEP web on-

line community has been based on a three tier model which provides structure

containing a code of ethic, guiding principles for participants while encouraging open

and free discourse through the injection of ideas, feedback and active interaction. The

intent was to promote inclusion and a platform where relationships can be built through

social networking. The DEEP on-line community has been modeled along the peer

production practices that are often adopted with communities that address a common

goal and support participatory and emancipatory approaches (Haythornthwaite, 2009).

Despite the delay in releasing the white paper and on-line web community, we have

however observed an increased level of interest and engagement from the DEEP

community and have seen several new initiatives promoted and a number of new

communities have emerged since. The AODA, which was used as a springboard for this

conference, has considered much of the feedback received during the event and has

since developed several toolkits including one for employment that can now be used by

many organizations in and outside of Ontario, Canada http://www.aoda.ca/ontario-employers-have-a-new-tool-to-improve-accessibility-for-people-with-disabilities/.   A

group of professionals have supported an initiative to further respond to the need for a

certification program for accessibility professionals by launching the International Association for Accessibility Professionals community (www.accessibilityprofessionals.org). Industry lead initiatives such as in the financial industry have been invited to participate in a global financial and banking survey/ research to promote services and products targeted for seniors and persons with disabilities (http://www.surveygizmo.com/s3/1187917/Survey-on-Banking-Accessibility). One can argue that these types of initiatives may have still been launched outside of this conference or discussion forum, but many will agree that these types of discourses can promote joint and tangible actions that further support the need for change.

The 2012 Toronto DEEP conference served to invigorate the participants and fuel their energy to take ownership and recognize that together we can make a difference. The work undertaken as part of the creation of the DEEP white paper and the development of the web on-line community ensures that the conversation continues.

7.1 The Canadian Experience—a Progressive Approach

For the purpose of this work, the researcher will use illustrative exemplars from the AODA and Canadian experience which demonstrate how a community of engaged stakeholders can served to identify priorities and recommendations in a goal to arrive at a common goal and how such approaches could be used as a base to effect concrete and tangible change. Within Canada, there are various levels of rights for people with disabilities. At the national level, freedom from discrimination is provided through the Canadian Charter of Human Rights. Provinces and municipalities then may enact

regulations around accessibility. In Ontario, accessibility legislation called the Accessibility for Ontarians with Disabilities Act (AODA) has been enacted.

7.1.1 The AODA Experience

The Accessibility for Ontarians with Disabilities Act (AODA) was passed in 2005. Its goal is to make Ontario accessible for people with disabilities by 2025. The AODA is divided into five different regulations[30]:

1. Customer Service - Became law in 2008.[31]

The remaining four standards were amalgamated together and are referred to as The Integrated Accessibility Standards (IAS). [32]These include:

2. Information and Communication
3. Employment and Accommodation
4. Transportation
5. Built Standards of public spaces

Most accessibility legislation globally requires that the wronged party, namely the person with a disability mount a legal process and litigate the offending institution or individual. This process puts an undue burden on individuals who are frequently poorly resourced. It also puts the onus of proof of wrongdoing on individuals with disabilities. The AODA approach is to shift the burden of achieving equal access onto the provincial government and all organizations in the province of Ontario.

---

[30] http://www.mcss.gov.on.ca/en/mcss/programs/accessibility/
[31] Ontario Regulation 429/07, Accessibility Standards for Customer Service
[32] Ontario Regulation 191/11, Integrated Accessibility Standards

The AODA treats accessibility and compliance to accessibility regulations the same way that environmental regulations or public health regulations are treated. Both public and private organizations are required to report compliance and the province inspects and audits compliance and administers fines to organizations that do not comply. Individuals with disabilities help to set the standards but are not required to litigate. People with disabilities still have the option of litigation through human rights legislation and in Canada this process does not financially burden the complainant. Responsibility for enforcing and upholding compliance is the responsibility of the government. All obligated organizations are held accountable for compliance and must report on their progress on a regular basis. This shifts accessibility compliance within an organization from a risk management issue (assessing the risk of litigation against the cost of compliance) to an organizational requirement. [33]

7.1.1.1 The AODA Progressive approach:

The AODA requires for the 5 sets of standards to be reviewed on a regular basis to ensure validity, applicability, currency, and take into account on-going environmental, regulatory and technological changes and evolutions. The 250 participants on The 5 standards committees were made up of 50% of persons with disabilities representing different types of disabilities, and 50% of representatives from various industries, including education and policy makers. Participation by all stakeholders promoted

---

[33] More information can also be found at Accessibility for Ontarians with Disabilities Act (AODA), 2005

inclusion and equality allowing everyone to have a voice during the process. While the ministry retained the final decision on whether a recommendation was accepted or not, participants were encouraged to openly share and debate different perspectives during the development of the standards and each had a vote as active members. This approach fostered and supported active collaboration as everyone had an equal opportunity to support, negotiate or reject any proposed recommendations. In addition, all proposed standards were shared through numerous public reviews before becoming law.

7.1.1.2 Implementing the AODA regulations:

The recommendation to apply the AODA standards to the public sector first provided a unique opportunity for the ministry to demonstrate leadership and commitment. The ministry also recognized the benefits of taking a progressive enforcement measure, with heavy penalties for repeated non-compliance offenders and established penalties to support this approach. The intent was not to penalize organizations that demonstrate good progression towards meeting the accessibility requirements, but is focused on those organizations that openly and repeatedly demonstrate non-conformance.

The AODA also recognized that much was already available to aid organizations to achieve accessibility and opted to adopt existing standards and practices such as using WCAG 2.0 level A as a starting base and gradually progressing to level AA. The accessibility standards regulations were also extended to education where education

material and training content must be available in accessible formats as per individual's needs.

The AODA committees quickly recognized that if they were to succeed in getting the more than 360,000 organizations in Ontario to adopt the regulations, they would need to equip these organizations with the necessary resources. To affect this they tackled the provision of extensive free on-line training for all stakeholders and established a dedicated contact centre to support the implementation of the AODA. Extensive free on-line training was also developed for areas of focus such as customer services for the general public as well as specialized and industry based training offerings for hospital, tourism, education, etc.

One key factor used to promote the adoption of the AODA strategy and to gain buy-in by all, was promoting the findings related to the economic impact as researched by the Martin Prosperity Institute project. These included such findings as anywhere between $400 million and 1.6 billion in tourism alone is tied to the ability to provide accessible services and a 2.1 times return on investment (ROI) for people with disabilities in employment. Another important driver to support this change was based on current demographics in Ontario It is estimated that 1 in 7 has a disability. According to Statistics Canada, more than 1.8 million Ontarians are estimated to have a disability. By 2017 the aging population or baby boomers will surpass the number of children from the ages 0-14 and will make up a large part of the overall population in Ontario. Age-related disability is expected to increase at this time. These numbers do not vary greatly against numbers reported globally.

While many representatives from the community of people with disabilities have criticized the AODA approach, many have also recognized that since the AODA was first introduced in 2005, this set of regulations provides organizations in the public and private sector with clearer direction and increased understanding of how they could potentially achieve an accessible Ontario by2025. Many will argue that the timelines are too long, that the regulations are too vague and do not go far enough, yet several other provinces in Canada have already adopted similar regulations and many countries are closely watching the AODA as they progress along.

7.1.2   Evidences of success and influence from Ontario

The business case for accessibility was embraced by many organizations such as the Ontario Public Services (OPS) early on. The OPS employs more than 63,000 employees. Of which 12% have a disability. The Ontario Public Services recognized that by adopting the AODA regulations there was an opportunity to demonstrate leadership and recognize the importance of accessibility as a business imperative. This approach supported the OPS views on the ability to meet the needs of its constituents especially as it was linked to core business, diversity and inclusion. It further aligned with the need to support employees to achieve their full potential.

7.1.2.1 The OPS approach

In a presentation at Designing Enabling Economies and Policies 2012, Shamira Madhany, Chief Officer, Diversity and Accessibility, Ontario Public Service (OPS) outlined the OPS approach:

The OPS produced a multi-year accessibility plan which was published in January 2012 which included a corporate Statement of commitment. To support this, an accessibility link was added to every single site; making it visible at all times. The plan includes the long-term vision, going beyond compliance and provides specifics on how to achieve accessibility.

A strong foundation was required to achieve success in implementation; this meant recognizing that champions to bring to the leadership table did not always have to be from senior ranks. In addition, recognizing that networking from the ground-level up worked well.

The adoption of current and proven web standards such as WCAG 2.0 for all new websites was very effective. To support standards, a methodology for testing was designed and deployed through education such as boot camps.

The OPS fostered cultural change by promoting the notion that accessibility begins with everyone and Behavioural cultural inter-change/response happens when people recognize what accessibility means to each stakeholder.

To support employees, extensive training was developed and deployed focusing on specific items or topics which were deployed every 3 or 4 months. The topics were aligned to specific regulatory requirements which made it relevant, attainable and easier to track.

It was recognized that Kiosks go beyond the traditional form of information devices and needed to include all interactive features. Using the OPS diversity and inclusion lenses. Considering different dimensions of how people use the device/technology helped find the happy balance to meet everyone's needs. As a result, all OPS Self-service kiosks include accessibility features.

7.1.3 The AODA Summary:

People are closely watching, to what degree and how the AODA accessibility compliance will be managed and administered. In Canada, Manitoba and Quebec seemed to have followed suit by introducing their own version of accessibility standards. While others have articulated great interest in the Ontario AODA experience, there is a sense that greater harmonization is required to promote and ensure standardization across Canada is achieved. The AODA approach presents a unique opportunity with a positive and

affirmative approach to achieving accessibility and examples like the OPS model further supports how it can be achieved through proper planning. Many private organizations such as financial institutions, non-profit organizations have also voluntarily agreed to use the AODA regulations as toolkits and guidelines and have recognized the business advantages and benefits of including accessibility requirements for their employees and customers. However, it is still too early to determine its social impact. Many have also expressed concerns around the AODA truly being able to achieve an inclusive Ontario by 2025.

7.1.3.1 Critical view from the AODA for the promotion of CRPD:

When looking at the AODA and Ontario approaches and what the UN CRPD must achieve for other countries, one can debate that the two may not be comparable. However, when applying some level of scrutiny to the AODA approach and strategies, many of the common themes and findings identified during the DEEP 2012 conference and resulting from the thematic review also surfaced during the development of the AODA regulations and approaches and were loosely addressed and tested.

When taking a closer look at the harmonization of policies and standards for example. The AODA opted to adopt current and proven standards such as the WCAG 2.0, instead of introducing new ones that introduce an added a layer of complexity and confusion. In addition, several of the other Canadian provinces adopted the same standards to promote national harmonization and standardization. This supports the consensus that was articulated by many participants who attended the DEEP 2012 conference. The

engagement of policy makers from the 3 levels of government is a strong indication that policies must support and complement each other minimizing additional layers of regulation which can inadvertently introduce risk and conflicting priorities. Another example is the use of the disability definition under the Canadian and Ontario Charter of Rights. Again this approach demonstrated conformity and the use of common language/definition rather than introducing different interpretations. Even when looking at the categorization of the types of organizations, the AODA adopted measures and classifications that already existed and could be leveraged from a reporting perspective.

From an information and communication technology perspective, it is easy to see how the AODA has recognized the importance and benefits of effective communication. On-going efforts to engage individuals through public reviews and consultation, through a variety of stakeholder meetings and presentations, the AODA continue to raise awareness for the adoption of the AODA regulations. To further promote communication, the use of stakeholder participation provides the AODA a secondary layer of communication and outreach while illustrating how through strategic alliances and strong partnership, we can garner buy-in.

From a technology perspective, the use of on-line mechanisms to leverage education and training to the development of on-line reporting supports the use of digital channels. Also, the implementation and deployment of accessible kiosks sends a strong message in the provision of accessible digitally mediated services. Most notable is the strong push towards the use of accessible and inclusive practices such as offering digital

content in alternate formats which may be transformed by individuals as they themselves see fit to improve their access.

When looking at the AODA approach through social and cultural lenses, again we can see that through active partnerships and collaboration, changes can be effective. In their effort to promote equal participation and collaboration, the crafters of the AODA, the Accessibility Directorate's Office, ensured equal representation of PWD's on every standards development committee. While this was not how the AODA writing process was first implemented, pressure from the AODA Alliance advocacy group, relentlessly challenged the ADO to ensure proper representation which ultimately resulted in more inclusive and stronger regulations. This shift in process demonstrates how through social movements and strong advocacy we can make a difference. Today in Ontario, there are many examples of how strong partnerships and alliances have helped to shift the dialogue on accessibility and how Ontario is working together to sustain those changes. Examples such as the initiatives undertaken at the IDRC and OCAD U have not only affected changes in Ontario or Canada, but have served to support systemic and cultural change worldwide.

A closer look at some of the initiatives undertaken by the IDRC and other Ontario based initiatives clearly demonstrate a strong commitment to global participation, collaboration education and awareness (see http://idrc.ocadu.ca):

- The CFI and ORF-RE funded Inclusive Design Institute: a collaboration of eight Ontario post-secondary institutions lead by IDRC, focusing on development and

implementation of inclusive teaching and learning practices in Ontario and abroad.

- The Flexible Learning for Open Education (FLOE) project. Is a large, international, multi-partner project is funded by the William and Flora Hewlett Foundation, and focuses on developing technologies and practices for creating inclusive open education resources. The project includes strategic partnerships with OER Commons, the Monterey Institute of Technology, and Conations, as well as partners around world such as OER Africa, University of Cape Town, Strathmore University in Kenya, and IPTI in Brazil. Technology partners include Apple, RIM, Google, and Mozilla, with discussions ongoing to integrate content personalization technologies into iPad, iPhone, iPod, as well as Blackberry, and Android operating systems.

- The IDRC has carried out:

    a) work on standards and best practices development including several projects reflecting expertise and experience in development, evaluation and implementation of accessible technology specifications

    b) background research for the AODA's Information and Communication Standard as well as provided the seed document for the standards development committee.

    c) an international forum on ELearning standards in September 2007

    d) a contract to the National Centre for Accessible Media, expanded on work started at the IDRC (as part of The Inclusive Learning Exchange (TILE)

project) to develop accessibility metadata for use with learning object repository content and e-learning applications

e) and evaluation of the specification in terms of how well it met the needs of learners who required accessible content

f) the development and implementation of accessibility specifications for Industry Canada developed Web-4-All an innovative system for automatically modifying Community Access Point workstations to suit the individual needs of each visitor. Accessible technology standards through work with the World Wide Web Consortiums, Web Accessibility Initiative (W3C, WAI).

- The IDRC has lead several multi-partner projects that have culminated in development of best practices documents and model content for accessible technology. This technology has crossed a variety of sectors including education, health and culture. Through these projects, the IDRC has remained at the forefront of new technologies and has stayed in a position to watch for and address potential barriers to inclusion in these technologies as they develop. Current work in the area of personalization includes participation in the Cloud4All project as well as a lead role in the international implementation of the Global Public Inclusive Infrastructure (GPII), an ambitious project aimed at developing a global network through which individuals will be able to personalize their experiences with everyday activities.

- As a centre with the mandate to keep leading edge technologies accessible, the IDRC has forged excellent relationships with a broad range of organizations of and for people with disabilities including such organizations as the Canadian Association of Independent Living Centres, the Canadian Association of the Deaf, the CNIB, the CHS, the Canadian Abilities Foundation (CAF) and the Learning Disabilities Association of Ontario (LDAO) to name only a few. The IDRC has partnered frequently with the Canadian Abilities Foundation to address barriers in online culture and education.

- Recognizing the worldwide demand for skills and knowledge in inclusive design and a growing market for inclusively designed products and services, the IDRC and OCAD U established a Masters in Inclusive Design. This innovative program produces graduates with the capacity to form, lead and sustain a much- needed community of expertise in digital inclusion. The program itself is designed using inclusive design principles

In the Canadian Banking industry, five of the large Canadian banks and one of the largest insurance companies have formed a consortium called the Canadian Financial Institutions Roundtable on Accessible Technology (CFIAT) to share and support each other as it relates to the achievement of accessible services. The CFIAT meets on a quarterly basis and participates in various initiatives to leverage best practices, influence changes with several banking and technology vendors ensuring their products and services are accessible to as many people as possible. THE CFIAT also actively participated in the development of the AODA standards recognizing that while they are

federally regulated there is a need to ensure that the delivery of essential services such as banking and financial services is available and accessible to everyone regardless of the delivery channel or the format in which they wish to receive those services. The CFIAT forum is now expanding to include additional insurance providers and is forming stronger alliances in the hope of influencing a greater number of key third party vendors to adopt accessibility requirements in the development of financial tools and services. The CFIAT is yet another Canadian example of how collaboration and strong partnerships can change the landscape locally and on an international level.

Many more Canadian and Ontario sponsored initiatives and examples can be used to demonstrate how Canadians are making a difference through leadership, strong strategic alliances and partnership to promote design by inclusion across many industries, environments and global programs. Many of these same examples can be replicated globally to enable countries to leverage resources, tools and best practices which could further reduce costs and reduce redundancy and confusion.

7.2 Implications for policy makers involved in implementing the ICT accessibility agenda of the Convention on the Rights for Persons with Disabilities

The instance which could influence how the CRPD ought to be interpreted and implemented is the Committee on the Rights of Persons with Disabilities which is hosted by the Office of the High Commissioner on Human Rights in Geneva. While participants

at the DEEP 2012 conference recognize and understand the CRPD, many believe that the institutions that support the CRPD must take a more active, affirmative and stronger advocacy role in the design of policies that enable countries and stakeholders to positively affect economic change and achieve outcomes. Inclusive design, which includes accessibility, must be promoted through an eco-system and framework that starts from the ground up and is implementable and supported top down. Policies must be universal and synchronized and must share a common language. Global infusion is required to better understand progress, barriers and roadblocks that exist. Promotion of cultural integration and diversity will have a direct impact on accessibility.

Who are our stakeholders? While there has been a lot of dialogue on this particular topic, there seems to be an evident gap in our ability to better engage persons with disabilities to help move the agenda forward. So how can we ensure the policies, guidelines and services we produce and deliver meet the needs of that demographic if we don't allow ourselves to hear their voices.

Historically, many policies were designed to create awareness and articulate a desired goal, but lack in concrete and affirmative actions that include timelines, measurements and targets. Resoundingly, participants of the DEEP conference have indicated the need for clear direction and guidelines as to how the convention must be implemented. While a balance between prescriptive and directive approaches must be achieved, the convention could take a much more active role in developing guidelines focused on integration and implementation.

When considering ICT for example, there is great need for harmonization of standards and policies. How do we achieve accessibility, what are the tools that can be shared and leveraged globally? How can we further promote open access to share information and good practices collect artifacts and study cases that demonstrate progression. While developed countries may have more available resources and capacity, often their ability to achieve change is negatively impeded by bureaucracy, complicated policies and procedures that result in significant costs. We must allow ourselves to be inspired and be creative by those who use the services and products. We must allow for better communication amongst similar global and international agencies and build on collaboration rather than silos. Most importantly we must accept that this is not an easy task and while ideally we all have a desire to fully integrate accessibility and inclusion in all that we do; it has many nuances and degrees. It is affected by culture, infrastructure, politics, regulations, funding models, ICT resources, behaviours, and of course the rapid evolution of technology and social networking. Let's not discount the need for the ability to proactively respond to increased demand as it relates to our aging population, our technology savvy youths and the increased opportunities for joint collaboration and partnerships.

Further consideration must be given to:

1. The need to expand the definition of accessibility to better reflect invisible disabilities,

2. Removing the negative connotations associated with the medical model.

3. Explore the possibility to develop a place holder for the creation of a global repository that can be shared by all.

4. Build a collection of plans and activities underway to move the agenda forward for all to share and encourage participation and collaboration.

5. Define clear guidelines including good practices, lessons learned, shared tools and resources.

6. Encourage countries who have signed the convention to publish and share their implementation plans,

7. Focus on integration and implementation practices, where the opportunities for seamless integration are apparent.

8. Develop global measurements or targets including success criteria for accessibility.

9. Develop and publish adequate and appropriate reporting. Unless there is a need to report and be accountable to achieve a targeted outcome, the passive approach continues to drive this movement and it is difficult to truly manage and measure progress.

10. Develop a collection of constructive and positive study cases, promoting progress and positive impact.

11. Capture a collection of lessons learned so others can avoid the pitfalls and build knowledge.

8 Conclusions

The evolution and growing adoption of social networks will continue to play a huge role in changing the landscape for many. The voice of those individuals needing to rely on inclusive and accessible design is much more vocal and heeded. There is a great need for accessibility professionals and subject matter experts to better respond to this changing world. As our aging demographics grow and are expected to surpass the number of children ages 0-12, the dependency/expectation on the impact of personalization to reduce barriers and allow people to access information, services and products in the manner they see fit is increasing and expected.

The need for social cohesiveness and harmonization of standards and regulations at a global level is required in order to bring structure to accessibility requirements and provide direction for better integration, implementation and sustainability. We must better promote the value proposition, benefits of achieving the accessibility goal and measure the true enabling and economic impact.

As a person with an acquired disability, I have experienced firsthand the impact of disability from a personal and social inclusion level, and from an employment and educational perspective. These last two years have further strengthened and supported my own thoughts on how while there is an increased momentum in this field of accessibility, and there is undeniable progression with the cause and with technology advances, we continue to work in isolation and do not significantly recognize and embrace the true value and benefits of inclusion and accessibility. We continue to see this as a special or separate need for a specific group of people, which defies all rules

around inclusion and equality. We see countless examples of how many talk and discuss accessibility issues at length but many fail to demonstrate true leadership behaviours in this area and consistently walk the talk. On the other hand, those who have demonstrated great intentions and progress do not receive the much needed recognition for their work and continue to be shadowed by those who defy the need for change. Whether in employment where many organizations have now adopted guidelines as a result of new or upcoming regulations, whether we look at educational institutions who offer a variety of support programs through their disability offices or whether manufacturers of products introduce integrated solutions and builders include the need for ramps in their new buildings, many efforts are fragmented, ineffective and often introduce new barriers. Most importantly solutions are often developed without including persons with disabilities in the design and/or implementation with unfounded assumptions that new technology will address those gaps, or that worse, a person with a disability will always have support available to help. Many initiatives lack solid oversight and strong and effective governance. Through my own personal journey as a mature student with a significant disability, I have continued to experience and be confronted with those barriers on a daily basis regardless of talk or good intentions and this could not have become more evident during these last two years in my attempt to further research this topic. Education is a core and basic need for all people, yet the instructional institutions whether in academia or the professional stream continue to be highly inaccessible. This is no longer acceptable nor should it be tolerated given the

knowledge we have acquired in this field, the technical advances and the many legislations and regulations that now exist.

As the author of this work and along with participants of the DEEP conference, I support the notion that affecting change can be best achieved through positive and concrete and tangible action which include strong global and inter-disciplinary collaboration and an ability to better promote and encourage innovation and creation by engaging persons with disabilities through the entire process. Examples such as the AODA and Canadian experience that presents a progressive approach and focuses on strong collaboration and engagement from the PWD community can serve as a strong base for consideration and adoption by many other policy makers, states, countries or agencies. In order for real change to occur and be sustainable, several key elements need to be addressed. Here are a few;

1. The need for common language, goals and shared resources
2. The need for strong legislation and regulations and enforcers for compliance
3. The need to elevate the need for accessibility to the same level as cultural change
4. The need to use humour and visible public performances to demonstrate real and added value
5. Showcase success stories and examples, role models and champions
6. Locative Gaming/co-competition games to make visible where the gaps in provision are, plus a volunteer and industry-sponsored cross-sector

Finally recognize that all people are our allies regardless of their background, their ethnicity, gender, political stripes or religious belief. Together through initiatives like the DEEP community and examples from the Canadian experience, we can make a difference.

9 Bibliography

Baecker, R. M. A Taxonomy of Technology for Cognition--Product and Process. Retrieved from http://citeseerx.ist.psu.edu/viewdoc/summary?doi=10.1.1.178.9045 doi:10.1.1.178.9045

Barnes, C. (2007). Disability Activism and the Price of Success: A British Experience. *Intersticios Revista Sociologica de Pensamiento Critico, 1*(2). Retrieved from http://www.disability-archive.leeds.ac.uk/

Blakley, J. (Producer). (December 2010, 2013). Social media and the end of gender. *Ted Talks*. Retrieved from http://www.ted.com/talks/johanna_blakley_social_media_and_the_end_of_ge nder.html

Bryman, A. (2008). *Social research methods* (3rd ed.). Oxford; New York: Oxford University Press.

Church, K., Frazee, C., Panitch, M., Luciani, T., & Bowman, V. (2007). Doing Disability at the Bank: Discovering the Work of Learning/Teaching done by Disabled Bank Employees *Public Report*: Ryerson RBC Foundation Institute for Disability Studies Research and Education.

Consultancy, S. (2012). The process for thematic analysis. Retrieved from http://subvista.wordpress.com/2010/03/25/new/

Corbin Dwyer, S., & Buckle, J. L. (2009). The space between: on being an insider-outsider in qualitative research. *International Journal of Qualitative Methods 8*(1), 54-63.

Doyle, J. Using Focus Groups as a Research Method in Intellectual Disability Research: A Practical Guide. Retrieved from http://www.google.ca/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja &ved=0CC4QFjAA&url=http%3A%2F%2Fwww.fedvol.ie%2F_fileupload%2FResea rch%2Ffocus%2520groups%2520a%2520practical%2520guide.pdf&ei=NNi9UZ_ KO8rVrQGJgYGgAQ&usg=AFQjCNFGg13N48HObKJgxiX8mRxB0NgTmA&sig2=YC DfwKuWQqMMQno1K9o7VQ&bvm=bv.47883778,d.aWM

Forte, A., Larco, V., & Bruckman, A. (2009). Decentralization in Wikipedia Governance. *Journal of Management Information Systems, 26*(1), 49-72. doi: citeulike-article-id:6853728. doi: 10.2753/mis0742-1222260103

Franke, N., & Shah, S. (2003). How Communities Support Innovative Activities: An Exploration of Assistance and Sharing Among End-Users (Vol. 32, pp. 157-178): Elsevier, Amsterdam, PAYS-BAS.

Franklin, U. (1994). New Issues of Access to Justice Raised by Modern Technology *The Windsor yearbook of access to justice = Recueil annuel de Windsor d'accès à la justice* (Vol. 14, pp. 154-243). Windsor, Ont.: Faculty of Law, University of Windsor.

Hacking, I. (1975). Why Does Language Matter to Philosophy? Retrieved from http://myaccess.library.utoronto.ca/login?url=http://books.scholarsportal.info/viewdoc.html?id=/ebooks/ebooks1/cambridgeonline/2013-02-12/1/9780511627873

Hacking, I. (2006). *The emergence of probability: a philosophical study of early ideas about probability, induction and statistical inference* (2nd ed.). New York: Cambridge University Press.

Haythornthwaite, C. (2009, 5-8 Jan. 2009). *Crowds and Communities: Light and Heavyweight Models of Peer Production.* Paper presented at the System Sciences, 2009. HICSS '09. 42nd Hawaii International Conference on.

Kitchin, R. (2005). Towards Emancipatory and Empowering Disability Research: Reflections on Three Participatory Action Research Projects. Retrieved from NDA website:

KM, M., E, M., DS, M., S, K., RP, S., R, S.,... 2nd., T. R. (2001). What is community? An evidence-based definition for participatory public health. *American Journal of Public Health, 91*(12), 1929-1938.

Lakhani, K. R., & von Hippel, E. (2003). How open source software works: "free" user-to-user assistance. *Research Policy, 32*(6), 923-943. doi: http://dx.doi.org/10.1016/S0048-7333(02)00095-1

Latour, B. (1992). Where are the missing masses, sociology of a few mundane artefacts. In W. E. bijker & J. Law (Eds.), *Shaping Technology/Building Society: Studies in Sociotechnical Change* (pp. 225-258). Cambridge, Mass.: MIT Press.

Oliver, M. (2002). Emancipatory Research: A Vehicle for Social Transformation or Policy Development. Retrieved from http://www.nda.ie/cntmgmtnew.nsf/0/87418679FAE58B0E80256F02004753E9/$File/Plen1.htm

Parker, A., & Tritter, J. (2006). Focus Group Method and Methodology: Current Practice and Recent

Debate. *International Journal of Research an Method in Education, 29*(1), 29-37.

Poole, C. m. (Producer). (2010, 2013). The case for anonymity online. *Ted Talks*.

Retrieved   from
http://www.ted.com/talks/christopher_m00t_poole_the_case_for_anonymity_
online.html?quote=740http://www.ted.com/talks/christopher_m00t_poole_the
_case_for_anonymity_online.html?quote=740

Preece, J., Nonnecke, B., & Andresw, D. (2004). The top five reasons for lurking: improving community experiences for everyone. *Computers in Human Behavior, 20*(2), 201-223.

Preece, J., & Shneiderman, B. (2009). The reader-to-leader framework: Motivating technology-mediated social participation. *AIS Transactions on Human-Computer Interaction, 1*(1), 13-32.

Raymond, E. (1999). The cathedral and the bazaar. *Knowledge, Technology & Policy, 12*(3), 23-49. doi: citeulike-article-id:6532298, doi: 10.1007/s12130-999-1026-0

Serrant-Green, L. (2002). Black on black: Methodological issues for black researchers working in minority ethnic communities. *Nurse Researcher, 9*(4), 30-44.

Shuman, M. (2000). *Going local : creating self-reliant communities in a global age* (1st Routledge paperback ed.). New York: Routledge.

Stone, E., & Priestley, M. (1996). Parasites, Pawns and Partners: disability research and the role of non-disabled researchers. *British Journal of Sociology, 47*(4), 699-716.

Tapscott, D., & Williams, A. D. (2007). Innovation in the Age of Mass Collaboration. *BloombergBusinessweek, February*.

Wales, J. (Producer). (2006, March 2013). The Birth of Wikipedia. *Ted Talks*. Retrieved from http://www.ted.com/talks/jimmy_wales_on_the_birth_of_wikipedia.html

Wall, D. S., & Williams, M. (2007). Policing diversity in the digital age: Maintaining order in virtual communities. *Criminology and Criminal Justice, 7*(4), 391-415. doi: 10.1177/1748895807082064

Wall, D. S., & Williams, M. L. (2007). Policing Diversity in the Digital Age: Maintaining Order in Virtual Communities. *Criminology and Criminal Justice, 7*(4), 391-415.

Wellman, B. (2001). The Persistence and Transformation of Community: From Neighbourhood Groups to Social Networks. Report to the Law Commision of Canada. Toronto: Wellman Associates.

Wright, S., & Street, J. (2007). Democracy, deliberation and design: the case of online discussion forums. *New Media & Society, 9*(5), 849-869.

Zuckerman, E. (Producer). (2010, 2013). Listening to Global Voices. *Ted Talks*. Retrieved from http://www.ted.com/talks/ethan_zuckerman.html

10 Appendix A: Web Site Design Brief

Design Brief for the DEEP Online Community

by

Pina D'Intino, Jacob Mouka

INCD 6B05, Assignment 3
April 19, 2013

The Community

This document describes the organization of the DEEP (Designing Enabling Economic Policies) online community. This is a community of experts and leaders in the fields of digital inclusion and policy, working to build a more inclusive society for persons with disabilities. They are all stakeholders in this area and have strong motivations for participating. Participants include educators and instructors, developers, inventors, designers, policy makers, persons with disabilities, consumers of assistive technologies and manufactures of products and services from across the world. It is a cross-disciplinary and cross-functional group of participants located in many countries from different political and economic backgrounds.

The DEEP online community is comprised of participants of the DEEP conference, organized by G3ict (http://g3ict.com) and OCAD University (http://www.ocadu.ca).
Participation is by invitation, and includes members of government, persons with disabilities advocates, United Nations affiliated organizations, private sector, service providers, experts and academia. The conference covers many topics such as: judicial and societal discussions; standards; regulations; technology evolution and progression; advancements in alternate learning and E-learning programs in education; flexibility in the workplace; and adoption of web and content standards. The aim of the conference is to engage in in-depth discussion, and develop innovative strategies for building a more inclusive society.

The online DEEP community is the second phase of the DEEP conference. Its purpose is to continue the discussions started in the DEEP conference, to build a collaborative community for developing strategies and innovations, to engage the general public, and to be an online resource.

Organization and Governance

The DEEP community will have two tiers of participation. The first tier will be comprised of participants of the DEEP conference and additional invitees. This core group will be the governing body and core collaborators, and will be by membership only. The second tier will be open, public participation. This tier will be able to participate in public discussions, give feedback on polls and surveys, and generally follow the developments of the community.

The core group will be divided into sub-groups and led by their own committee. The sub-groups are organized by subject and led by moderators

and facilitators. The moderators and facilitators were selected during the original DEEP 2012 conference from participants. They are global representatives who are subject matter experts in their respective areas. They are responsible for inviting group members, organizing the discussions, and generally facilitating the collaborative work.

Included in the core group is the website administrator. They will be responsible for the maintenance of the website, its membership, and ensuring quality of the content. The administrator may also flag any improper behaviour and have the power to revoke membership for non-conformance to behavioral guidelines.

The public tier is open to anyone to follow and give feedback on the discussions and work being developed by the community. This tier will not require membership. The moderators and facilitators will manage public discussion forums, mailing lists, polls, surveys, Wikis, and resources, where anyone can follow and engage in the work being created by the community. The purpose of this first tier is to engage a wide audience, get feedback from the public, and help spread the ideas being developed by the community.

There are three layers of governing policy. At the top is a code of ethics that is a guideline for general behaviors that everyone participating on the platform must follow. This will include a disclaimer on privacy and information sharing, as well as code of respect, equality, non-judgmental participation, feedback and expected behaviors. This level of policy is the responsibility of the website administrator.

The second layer of governance is for the core group and consists of over-arching policies, roles, responsibilities and expectations. It will reiterate and enforce guidelines for behaviour, etiquette, respect, non-judgmental attitude and conflict resolution. The moderators and facilitators will have a major role in developing these policies. Their roles include maintaining order and conflict resolution while promoting engagement and inject different perspectives.

The third layer is for the sub-group level, where the committee leaders may adopt their own policies unique to their subject matter and group. The goal is for each sub-group to develop its own guiding principles and communication structure organically, but still abide by the overarching code of ethics, policies and guidelines in place as a base.

Technical Platform Requirements

The main goal of the platform is to enable online collaboration and peer production among the core group, and allow the public participants to follow the community's developments, provide diverse perspectives, and give feedback. The platform will require: group management; discussion forums; mailing lists; calendars; resource repositories; a Wiki; polls and surveys; video sharing and captioning; and social network integration. Most of these features will need to have a private and public visibility to allow the two-tier organization model. Not all of these features need to be provided in a single software suite, as many (e.g., surveys) can be included using external tools or widgets. Tools and widgets can be gradually introduced as the community develops.

The platform itself needs to be accessible for people using assistive technologies such as screen readers, screen magnifiers, text to speech software and a plurality of accessible technologies. It also needs to be clean, simple, intuitive to navigate, and ideally allows for multi-lingual participation. It needs to meet basic web accessibility guidelines (WCAG 2.0, level A or AA), and utilize current accessibility technologies (e.g., WAI-ARIA, no Flash, etc). Ideally the platform will have multi-lingual support, but such features can be added using external tools (e.g., Google Website Translator, https://translate.google.com/manager/website/). The online community will host videos that will need captioning and describing. These can be handled by the platform itself, by volunteers, or by external tools (e.g., Amara, http://www.amara.org).

The primary activities of the core group will be discussion and collaboration. The discussion forums and mailing list will handle most of the discussion component. For collaboration the platform will have tools for peer production. These can include Wikis, document repositories, collaborative editors such as Google Drive, etc. There isn't a specific prescription for this feature, but it needs to allow a community to collaborate on developing ideas, ideally in both synchronous and asynchronous manner.

The platform needs to be able to handle public participation. This will include public mailing lists, public Wikis and resources, and public discussion forums. The public participation can range from passively following the community's developments, providing feedback via polls and surveys, to actively collaborating in the discussion forums and idea creation (e.g., Wikis).

There may not be a software suite that matches all of the criteria. It might be possible to modify existing software or use external tools to complement it. Currently there are three candidate platforms, as well as several considerations. The first is Sakai (http://www.sakaiproject.org/project-collaboration), which has many of the required features and a commitment to accessibility (http://www.sakaiproject.org/accessibility). The second is Higher Logic (http://www.higherlogic.com), a commercial platform for creating online communities. The third is Ning (http://www.ning.com), another commercial platform for managing online communities. The considerations include simple tools for group management such as Google Groups, Linked in, Meetup (http://meetup.com), and e-learning platforms like ATutor. The advantage of the bigger platforms is they provide a consistent, integrated experience, but possibly at the expense of flexibility. The paid platforms remove the burden of managing the technical aspects of the platform, but possibly at the loss of control and customizability.

Inclusion

There are two levels of inclusion being considered. The first level is the technical aspect. This is addressed by the use of accessible software, simple organization, and choosing tools with high levels of usability. Additionally, the platform will try to accommodate diversity, such as having multi-lingual support. The second level is the organization of the community itself. To create a diverse, inclusive community the members are chosen but not limited from a broad range of subject areas and roles within the domain of the DEEP agenda. It includes leaders, subject matter experts, members of government, members of public and private sector, and the research community. Participants come from all over the world.

The organization of the community is an iterative design process, to allow the groups to adjust as their needs change. The roles of the moderators and facilitators are to encourage diverse membership, diverse discussions, and inclusive behaviour. The goal is to create an agile environment and encourage feedback on the designs, approaches and expectations. Finally, involving the public to give feedback and active participation will keep the discussions evolving and diverse.

Success Criteria

Success of this project will be measured at several intervals based on multiple factors. The level of engagement and quality of input/contribution will serve to measure and evaluate responsiveness and level of active participation. Participants will be strongly encouraged to seek new members that can broaden the discussion and ensure diverse and inclusive perspectives. The more participants are engaged, the more discussion threads can be created and provide depth. Statistical data will be gathered on the level of hits on the site, number of threads developed and number of participants joining the community. More importantly, it will be necessary to track the number of recommendations and strategies that have resulted in new collaboration and/or partnerships that translate into joint and affirmative action. This last component will confirm whether this community has reached its true potential and goal.

Analysis Of Constraints And Risks

The main constraints are available funding and resource, and the limited time frame to develop and launch the platform. The software and tools are either free and open source, or inexpensive commercial packages. The free tools come with the expense of hosting and setup. The paid tools are more convenient and require no time to set up, but will require a budget. The timeline is to launch the pilot on June 15, 2013, and fully launch the website on July 1, 2013. There are other technical considerations as well, such as finding a fully accessible solution that that meets all the requirements, as well as considerations for security, licensing, flexibility, and support.

There are several risks to the success of this community and strategies for mitigating these risks. The biggest risk is that there will be low participation. The strategy for keeping participation active has been to participants that have invested interests in the work of this community. The DEEP conference came out of the need for more collaboration between the leaders and subject matter experts. The participants expressed a strong desire and need to unite, better collaborate and take ownership and responsibility in an effort to take action on specific tasks and carry dialogue to the next level. However many of those same participants have commitments in other communities and initiatives and it may pose a challenge to have them migrate some of their ideas and/ initiative discussions to this new forum.

Another risk is that the community does not accurately reflect the goal of the DEEP guiding principles. Discussions can go lose focus or go into different tangents, resulting in frustration and high level of abandonment. Or the

discussions don't have enough diversity and become stagnant, out of touch, or echo chambers. The organization of the community into sub-groups based on areas of interest, as well as the work of the moderators and facilitators should keep the discussions interesting while still staying on the relevant topics. The involvement of cross-disciplinary members is to keep perspectives diverse and have the discussions continually evolving. The committees are also encouraged to promote new ideas and seek out members that may be inexperienced but offer fresh perspectives.

Finally, there is a risk that all of the ideas being developed do not evolve to generate joint and affirmative actions, and that the community will become just another repository of incomplete ideas. This risk has been mitigated by the choice of moderators and facilitators, as well as the goal of cross-disciplinary membership. The participants have been invited based on their area of expertise and influence. This is to ensure that the information is relevant and diverse, and that any affirmative actions have the attention of those that have the ability to carry them out.

Conclusion

The aim of the DEEP community is to bring together leaders and subject matter experts in the fields of digital inclusion and accessibility, to develop strategies and implement affirmative action for cultural and economic improvements for people with disabilities. The community is comprised of diverse members, from many disciplines, cultures, and economic background, to promote and provide diverse perspectives. The community is designed to foster rich communication and collaboration, to give them the tools needed to meet their goals. The intent is to further explore whether this web community site can be built with existing resources and whether phasing out the development of each widget/feature is viable. Alternatively, given the current timeline, limitations around accessibility and financial resources, a hosting solution may be considered to be the best option if we want to meet the prescribed timelines.

Appendix – Website Structure Draft

Project Abstract

Website or creation of Link community
The website will be one of the mechanical instruments that will be used to collect feedback and contribution from participants for the DEEP journey.

This is a high-level mock up/example of what the site may look like. The technical specifications still need to be developed. Note that the links in this mock up are not active links.

This is one of several research methods that will be included in the MRP to analyze feedback and contribution. Other methodologies and approaches will include interviews, literature reviews and information collected through conferences and seminars related to each or any of the levers and topics.

Mission statement for the website:

The DEEP community of interested individuals who collaboratively work, take action and share ideas and approaches on the removal of accessibility barriers to create effective cultural and systemic change.

Website Requirements:
A collaboration environment for the DEEP participants to expand and share ideas on various topics related to accessibility
   Site or venue must be inclusive and fully accessible
   Member community, therefore registration required
   Must be interactive and inviting
   Simple to use
   Section for feedback and discussion threads
    Opportunity to create clusters of interest
   Separate section for participants to add resources
   Separate section for participants to add study cases
   Separate section to add audio/webinar material (maybe link to a drop box, etc.)
   Separate section for participants to add or refer others to join
   Must be able to add links
   More…

Participants can contribute via the website, discussion forum, linked-in, Twitter and/or Facebook. To participate one must be a member of the community. However, others can view and share perspectives on postings

DEEP Community (page 1)

Introduction to Toronto DEEP 2012

Designing Enabling Economies and Policies (DEEP) conference – May 24-25, 2012 - a G3ict International Inquiry on ICT Accessibility hosted by OCAD University, with the support of the Province of Ontario.
Lorem ipsum, lorem ipsum, etc.

[DEEP 2012 White Paper](#) | [G3ICT](#) | [OCAD U](#) | [DEEP Events](#)

Become a member of the DEEP community
Want to join the discussion? Please [register to become a member of the DEEP community](#). Only registered members can post to this site.

This site/channel is monitored by Pina D'Intino as part of the ICS mandate to further evolve the discussion on accessibility and foster a community of engaged participants that can influence cultural and systemic changes. . . . Contact us at [pina@email.com](#)

DEEP Community Registration (page 2)

Form to fill out for member registration.

DEEP Community Initiatives (page 3)

September 2012 - DEEP is inviting various participants to provide their thoughts and recommendations on the levers and topics of discussion presented at the 2012 Toronto DEEP session. A summary of all presentations can be viewed by linking on the separate items listed below.

List of initiatives:
    The AODA and the Information and Communications (IC) Standard
    Ontario Public Service's (OPS) Information and IT Accessibility
    Experience in Implementing the AODA Standard
    Accessible Education
    Workplace Accommodation
    Broadcasting and New Media
    Telecommunications
    Contents and Services
    Economic Levers and Market Forces
    Technology for Aging Gracefully
    The Importance of Community and Social Cohesion

Technology Levers
Economic Levers, Demographics and Market Forces
CRPD and Policy Levers
Education and Training on Accessibility Self-Learning
Societal Trends

If you are interested in further collaborating in the development of any of the above topics, please join the discussion.

DEEP Collaboration (page 4)

First part of this initiative is to invite and engage you the participants in an active and interactive discussion that will result in crisp actions to move the dialogue forward.

All comments, feedback and contributions will be collected until February 28, 2013. All feedback will be amalgamated and synthesized in March 2013. A final report on findings and recommendations will be submitted in May 2013

But the conversation does not end then; it will simply be an opportunity to measure progress, follow up on action items and align initiatives.

You are invited to be creative and innovative and can choose to post and share using various mediums such as videos, presentation material, launch of discussion threads and forums, etc. We ask however that all material be accessible and inclusive to and for all for maximum participation.

Here are some thoughts and consideration for feedback and contribution:
What are some of the things we have learned from past experience and will want to avoid?
What are some new and innovative ways to create momentum and engagement?
What are some ideas on keeping the momentum going?
Strength is building on numbers; identify areas of partnerships/collaboration.
Identifying synergies, gaps, overlaps and/or redundancies
Identifying dependencies and inter-dependencies
Building on the proposed suggestions/recommendations.

Consider:
Global impact

Cultural impact
How each lever can or may affect the other
Systemic and sustainable change

Select a topic/lever:
Topic #1: The AODA and the Information and Communications (IC) Standard
Ontario Public Service's (OPS) Information and IT Accessibility
Experience in Implementing the AODA Standard
Accessible Education
Workplace Accommodation
Broadcasting and New Media
Telecommunications
Contents and Services
Economic Levers and Market Forces
Technology for Aging Gracefully
The Importance of Community and Social Cohesion
Technology Levers
Economic Levers, Demographics and Market Forces
CRPD and Policy Levers
Education and Training on Accessibility Self-Learning
Societal Trends

(When the participants link to each topic, they will be able to link to the presentation deck and/or material from the Toronto DEEP conference. They will also have the option of linking to or viewing other topics)

DEEP Community – Topics Discussion (page 4)

List of topics, number of comments, moderators, date of last post, and excerpt of last post
A topic opens into a discussion forum with threaded replies

11 Appendix B: Resources

Activism site to mobilize people in support of the democratic party
http://front.moveon.org/

ADA   http://www.ada.gov/aprjun11.pdf (American Ass'n People with Disabilities)

Alliance for Ontarians Disability Act   http://www.aodaalliance.org/

AODA   http://www.aoda.ca/
http://www.mcss.gov.on.ca/en/mcss/programs/accessibility/understanding_accessibility/aoda.aspx
http://www.aodaalliance.org/strong-effective-aoda/08062013.asp
http://www.aodaalliance.org/strong-effective-aoda/07232013.asp

AODO   www.aodoalliance.org (a disability consumer advocacy group working to support the full & effective implementation of accessibility standards in Ontario)

Apple   http://www.apple.com

ATIA   www.atia.org

Australian Network on Disability   www.and.org.au

Avaz   http://www.avazapp.com/ (a picture based communication app developed for non-verbal children)

Black Sash http://www.blacksash.org.za/index.php/our-legacy/our-history

Wikinomics--Book by Don Tapscott and Anthony D. Williams
http://www.wikinomics.com/book/

The Naked Corporation--Book by Don Tapscott and David Ticoll
http://www.nakedcorporation.com/

Growing up Digital--Book by Don Tapscott http://www.growingupdigital.com/

Canadian National Institute for the Blind www.cnib.ca

Center for Accessible Society   http://www.accessiblesociety.org (disability issues info for journalists)

Cloud4All http://cloud4all.eu

DEEP on-line community http://deep.idrc.ocadu.ca

Digital roadmap for inclusion in Ireland http://www.ria.ie/about/our-work/committees/committees-for-the-humanities-and-social-sciences/social-sciences-committtee/news.aspx

EASI   http://easi.cc/ (Equal Access to Software & Information)

EDeAN http://www.education.edean.org/index.php?filters=f30 (European design for all e-accessibility network)

Facebook   https://www.facebook.com/pages/Accessibility-for-Ontarians-with-Disabilities-Act-Alliance/106232039438820

G3/ICT http://g3ict.com/
http://g3ict.org/events/schedule/event_agenda/p/eventId_279/id_agenda
http://g3ict.org/resource_center/CRPD_2012_ICT_Accessibility_Progress_Report
http://g3ict.com/resource_center (Resource Center)
http://g3ict.com/resource_center/publications_and_reports/p/productCategory_studies/subCat_1
http://g3ict.org/resource_center/case_study_database/case_study_search_result
(search on TEITAC related projects: AccessAbill, ASK-IT, BlueEar, blue IRIS, Bobby Worldwide, EZ Access, FATT, etc.);

GPII   http://gpii.net/ (a consortium of academic, industry, and non-governmental organizations and individuals)

Google – Mozilla www.mozilla.org

Human rights watch http://www.hrw.org/

IBM   www.ibm.com/able

Independence   through   Art   Project: Tardis
http://www.thecamdensociety.co.uk/october-gallery

JOIN   http://joininfo.ca/

Kiva One Acre Fund   http://www.kiva.org/partners/202 (funding to help farmers)

LinkedIn – accessibility forums   www.linkedin.com :

Section 508 Accessibility Professionals: http://www.linkedin.com/groups/Section-508-Accessibility-Professionals-761737?gid=761737&mostPopular=&trk=tyah

Web Accessibility Group: http://www.linkedin.com/groups?gid=41800&mostPopular=&trk=tyah

Disability Advocates Group: http://www.linkedin.com/groups/Disability-Advocates-155773?gid=155773&mostPopular=&trk=tyah

Disability Management Group: http://www.linkedin.com/skills/skill/Disability_Management?trk=tyah

Return to Work Resources Forum; Integrated Disability Forum; Certification of Disability Management Specialists Commission; STD/LTD & FMLA Professionals;

March of Dimes www.marchofdimes.ca

Microsoft   www.microsoft.com/enable

My Voice Inc   http://myvoiceaac.com/

NFB.org   www.nfb.org

OCADU   www.ocadu.ca

OPS   http://www.ops.on.ca/

Paciello Group   http://paciellogroup.com/

RIM   www.rim.com

Section 508   www.section508.gov

SSB Bart   www.ssbbartgroup.com

Team Technology   http://www.teamtechnology.co.uk/tt/t-articl/tb-org.htm   (team building or cultural change)

Twitter Twitter.com@aodaalliance

United Nations Convention on the Rights of Persons with Disabilities:

http://www.un.org/disabilities/convention/conventionfull.shtml

http://www.un.org/disabilities/convention/unsystem.shtml (CRPD Links)

http://www.un.org/disabilities/convention/media.shtml

www.ccdonline.ca/en/international/un (Council of Cdn's with Disabilities)

UNESCO http://en.unesco.org/

UNESCO   (Flagship   Brochure)_____:
http://www.unesco.org/education/efa/know_sharing/flagship_initiatives/depliant_flagship.pdf

USBLN   www.usbln.org

W3C   www.w3.org

WebAIM   http://webaim.org/ (advanced web accessibility training)

Wikipedia   http://en.wikipedia.org/wiki/Social_movement

http://en.wikipedia.org/wiki/Sheltered_workshop

http://en.wikipedia.org/wiki/Community_building

http://en.wikipedia.org/wiki/Community_engagement
http://en.wikipedia.org/wiki/Community_of_practice (Wenger '98)
https://en.wikipedia.org/wiki/Virtual_community
World Health Organization http://www.who.int/features/qa/50/en/index.html and http://www.who.int/disabilities/en/index.html
Zero Project http://www.zeroproject.org/practice/ (for a world without barriers)
http://www.zeroproject.org/wp-content/uploads/2012/11/Executive-Summary_e_2013.pdf (2013 Report)

12 Appendix C: DEEP White Paper Executive Summary

More than 100 participants accepted the challenge to meet in Toronto from May 24-25, 2012 and further expand the dialogue on Designing Enabling Economies and Policies (DEEP). Discussants were encouraged to take part in an active and engaging dialogue about the different levers that could impact accessibility as it relates to inclusion and universal design, identifying existing roadblocks and barriers and recognizing how effective development and adoption of policies could better promote accessibility, standards, good practices and further the adoption and implementation of the United Nation's Convention for Persons with Disabilities CRPD.

This DEEP white paper consists of the amalgamation and synthesis of the output gathered during the DEEP 2012 conference meetings with moderators and rapporteurs. The DEEP white paper captures highlights and key messages from the presenters and includes a thematic analysis on the common themes expressed at each of the plenary sessions as well as personal perspectives from one of the authors who has a vision impairment. Ten areas of importance to accessibility were identified for discussion prior to the DEEP 2012 meeting by a steering committee: Accessible Education, Workplace Accommodation, Broadcasting and New Media, Telecommunications, Contents and Services, Technology Levers, Economic Levers, Policy Levers, Education and Training and Societal Trends. During the discussions, participants were encouraged to discuss failed attempts, identify new ideas and approaches that could better encourage accessibility and inclusion and promote innovation. With the reference of case studies and experiential examples, an introspective view on what worked and what has not has also

been captured. In this DEEP white paper, these discussions are summarized in the paper and a list of recommendations and proposed strategies that can be further developed into joint and concrete actions have been developed. The report also provides summaries from presentations and panels at the meeting: how regulations like the Accessibility for Ontarians for Disability Act (AODA) approached accessibility and inclusion through the development of 5 standards with a goal to make Ontario fully accessible by 2025; organisations such as the Ontario Public Services (OPS), IBM, Scotiabank and others who adopted the AODA standards to effect systemic and cultural changes in their day-to-day; international speakers and subject matter experts views on ways we can better influence attitudinal changes, work collaboratively across the globe and form strong partnerships to foster and promote a culture of innovation and creativity.

From the brainstorming sessions emerged several common themes which included the need to increase and develop focused training programs that spread across all stakeholders such as educational instructors, developers, testers and businesses. Furthermore it was clear that the benefits of effective collaboration to promote cultural change are required. Collaboration is cross-sectional and multi-disciplinary whether in education and training, in technology development, employment or policy, there is a need to better understand how each of the levers are dependent and inter-dependent and how they can be improved and further enhanced by the participations of all stakeholders. This DEEP white paper articulates new ideas, recommendations and

proposed strategies that will both challenge and promote open debates and/or discussions.

A thematic review was conducted to identify trends, common themes and overlaps amongst the many levers and topics discussed at the conference. Through the thematic review four key themes emerged as leading practices and strategies:1) Policies and Standards, 2) Sociocultural Change and inclusion, 3) Inter-operability, and 4) Collaboration. During this exercise, it also became clear that while there has been increased global awareness on accessibility needs and the benefits of inclusive design whether in policies, tools, products or services, there is a desperate need for global harmonization of standards, language, resource sharing and global engagement.

The DEEP 2012 participants articulated the need for a forum for continuous open discussion for adoption and deployment of accessibility as part of an overall global and inclusive strategy. To address this communication gap, this DEEP white paper will also serve as a base for the development of the DEEP on-line community (http://deep.idrc.ocadu.ca) where participants are invited to carry the work forward. The on-line community is encouraged to take specific topics of interest or ideas, develop the necessary relationships and collaboration to evolve and present progress through an evidence-based approach that is tangible and measurable. Also, through social media, blogs, and forums on specific topics or initiatives, participants are encouraged to take ownership of a particular idea or set of ideas develop it and test its viability, its effect on cultural and systemic change.

Participants of the DEEP conference believe that affecting change can only be achieved through positive and affirmative action which include collaboration and an ability to better promote and encourage innovation and creation. We must learn from the past and not repeat those same mistakes. The objective of creating the DEEP white paper and community is to keep people engaged and provide participants a forum to network and communicate freely and openly about actions that can and that are taken to further remove barriers in our global society. Through participative engagement, liberating discussions and a barrier free environment and framework, we hope to create an interactive and dynamic community that will further raise awareness and bring individuals together in changing the domestic and global landscape and paradigms around accessibility.

---

[i] Drawn from http://g3ict.org/resource_center/CRPD_2012_ICT_Accessibility_Progress_Report