The Ability Project White Paper

In May 2018, the Open Institute embarked on a data collection exercise called the Ability Project which was inspired by the Sustainable Development Goals discussed and put in place in 2015 by world leaders that seek to "leave no one behind" by the year 2030. After trying to identify who is being left behind in Kenya, We discovered the disabled community in the country as being one of those groups Who are estimated to be about 4.4 million, 68% of whom have a physical disability and 2.2 million of working age.

The Ability Project set out to record what we believe are the most basic factors that prevent the disabled community from functioning within their environments on a daily basis,like:

1. How easy is it to walk around the CBD if you have a disability?
Through research and personal experiences interacting with The disabled, One staggeringly and estimated problem surrounds the roads, pavements, parks, Walkways and staircases that persons with disabilities face every day. The majority of persons for disability not even attempt to visit the city center and other parts of Nairobi because of it's in accessibility, instead they opt to have a friend or family member run the errands and transactions they need, stifling their independence, personal growth and contributions to society.

2. Is it easy to enter and move around throughout private and public buildings/ spaces?
It is our belief that even if county government adhered to their responsibilities around discovering, defining, developing and delivering on outdoor street level features, if the buildings themselves are not built to be accessible to all kinds of people using them, then the county authorities and building owners would be working cross purpose in their efforts in making these environments accessible both externally and internally to its users.

3. Do these places, at the very least, have simple accessibility features that are in good enough repair for someone with a disability to use on their own?
We discovered there to be a problem with intentionality and consistency in those environments as they seemed to have made at least an attempt at accessibility. For example, building would have a ramp available at its front entrance, but none at the back or side entrances and stairwells throughout the rest of the building. Lifts in good working condition, but without auditory or braille features to serve the deaf and blind. Traffic lights installed on the street, but one that does not give enough time for all pedestrians, whatever the ability to cross safely and so on. As though they was no clear and coherent follow through, no understanding of the length and breath that encompasses the words 'ability' and 'disability' and no drive in continuing whatever and endeavors were previously made in in designing and

installing accessibility features, we have at best acknowledged the needs of the disabled, and at worst ignored them nevertheless.

To clearly understand how to answer these questions, our team researched accessibility standards in different parts of the world, local and international laws put in place to support the disabled and what innovations we could possibly adopt in Kenya.
In cross referencing the different laws surrounding disability in different countries as well as global conventions, One in particular stood out as being an internationally recognised concept and working effectively in several nations in the West, the concept of Universal Design (UD).

"Universal Design is the design of a building, place, product Service or technology so that they can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability" - Center for excellence in universal design (CEUD), Ireland .

UD puts an emphasis on buildings, products and services to be designed in a way that take into account a person's entire lifespan, Considering that a physically and mentally abled person today might not be the same tomorrow, in 1 year or in 40 years. UD in that respect is not just inclusive, but also future proof for those Business owners, landlords, manufacturers, engineers or designers who choose to incorporate it at an early stage, Making it cheaper than reviewing and refurbishing every few years. UD in Kenya would also mean that buildings, products and services could be accessed, understood and used by children, the elderly, the mentally disabled, physically disabled, those with learning difficulties, those with temporary conditions like a footballer with a sprained ankle or a mother with back pains as she carries her pregnancy. Better road and pavement safety could help not just those using wheelchairs and walking aids, but avid joggers and cyclists, children roller skating or handymen with their wheelbarrows. Improved and regular traffic light crossings and streetlamps could help not only those with low vision, but also the safety of students traveling home late from school, While clear and consistent signage inside and outside of buildings could assist not just the deaf, but foreigners and tourists unfamiliar with the area or the language.,

Our Process Explained:

1. Volunteer recruitment and training.

We chose to recruit university students because of their flexibility with time, their willingness to gain new experiences and the chance that planting seeds of UD through this project in them could mean that they take it forward in their chosen disciplines - they are our future designers, developers, policymakers, public servants and so on..

We had some volunteers blindfolded like the visually impaired, some tied a broomstick across the back to restrict movement like those with neck/back injuries, tied up from the knees to the ankles like those wheelchair-bound, put in earplugs to replicate the deaf, tied up hands to replicate an amputee. Again, we produced a third installment of the daily YouTube vlog documenting the training day and testimonials by the volunteers about their experience throughout the training.

The reason we wanted to recreate different types of disabilities as part of the activities for the training day was to put the volunteers in the shoes of those with disabilities. Rather than just go through the day *talking* about the difficulties this community face every day, having them experience it firsthand allowed for a deeper understanding of these issues and why this first step of data collection is so integral in trying to solve them, personal growth through the Ability Project is described in their own words on our daily YouTube vlogs. .

2. Data Collection
The data collection exercise kicked off at 9 A.M. on Thursday 24th May with the meeting point being Uhuru Park in the Nairobi CBD.
Prior going into the field, our team designed a map of the CBD and split that into 16 manageable zones so as to give structure and direction to the way the 22 volunteers would collect data. The volunteers mapped the city centre in pairs on foot from University Way to Haile Selassie and then from Tom Mboya street to Uhuru Highway whilst recording what they could see/could not see according to the 'indoor checklist' and 'outdoor checklist' provided.To view this exercise click here.

The Ability Project team provided support on the ground,over the phone and through the Whatsapp volunteer group for those who had questions,encountered difficulties enroute or needed help from others who had completed their zones.

 All the data collected was then digitized and used to create a detailed and up-to-date online map, which is now freely available to all for viewing and/or

augmentation on the Open Institute website and specifically for action to the county government and other stakeholders so that ultimately, A great conversation can begin in finding ways to make anyone with whatever degree of ability or disability feel safe and included in society, supported and free to engage fully in all environments, able to live confidently and comfortably which will in turn show all people that the government truly plans to leave no one behind.
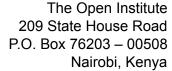

3. Data Analysis

The number of Streets Mapped were 33 and the number of buildings mapped are 200 buildings.
  ● Of the 200 buildings mapped 58 buildings were categorized as Public buildings while 115 buildings were private while the remaining 27 were not categorized.

Pavements

Are there Ramps in the pavements?
Of the streets mapped 40% had ramps on the pavements, while 25% of them did not have ramps.

Are the Ramps negotiable for wheelchairs?
- Of the streets mapped and had ramps 53% of the ramps were not negotiable for wheelchairs, 20% of them had ramps negotiable for wheelchairs while for the rest the question was left blank.

Are the pavements clear of obstacles i.e. pillars,manholes,potholes etc?
- 58% of the pavements were clear of obstacles while 49% of the pavements mapped were not clear of obstacles.

Are the pavements wide enough (about 3 metres)?
- 68% of the pavements mapped were not wide enough while only 32% were wide enough. Public buildings that had pavements wide enough accounted for 33% while those that were private buildings accounted for 37%.

Do the pavements have raised bumps at crossing points?
- None of the pavements mapped had raised bumps at the crossing points

Is there contrast in color between pavements and streets?
- None of the pavements mapped had contrast in colour with the streets.

Traffic Features

Is there a parking slot for the disabled for each block?
- 79% of the blocks had not provided a parking slot for the disabled, while only 21% had provided parking slots.
- 90% of the blocks that provided parking slots for the disabled were wide enough while only 10% did not have wide enough slots.
- 66% of the parking slots provided had been clearly marked while 34% had not marked the parking slots clearly.
- Of the blocks that provided for parking slots for the disabled 73% provided one parking slot, 15% provided two parking slots, 12% provided at least 3 parking slots.
- 81% of the parking slots provisioned for the disabled were not being used correctly and only 19% were used correctly. For example by cars, taxis and/or motor bikes.

Are there sonic traffic lights? If yes, are they functioning?
- 100% of the streets that were mapped did not have sonic traffic lights and only
- 30% of the streets had a pedestrian crossing and 70% did not have one.
- 75% of the traffic lights allocated enough time for pedestrians to cross safely.

Recreational Facilities

We asked the question are there benches that accommodate the disabled and only 25% of the streets had benches and 90% of the benches provided had a back rest. This however, were found mainly in the parks within the CBD and not generally on streets.

Street Level Features

87% of the streets that we mapped had clear signage for the roads/streets names, 91% of the buildings had clear building names. As for traffic signs 54% of the streets traffic lights had clear signage while 46% did not have.

We asked the question, where there were construction activities, was there clear warning signs?
- We found there were 71 construction activities going on 58% of the activities ongoing had clear warning signs while 42% did not have clear warning signs.

Are there overgrown hedges on the streets?
- 12% of the streets mapped had overgrown hedges on the streets while 88% were clear of the hedges.

For a visual representation of the above please click here: <<Insert hyperlink>>

 Kenya's Achievements Explained:

As part of the research for this project, the Ability Project set up interviews with key stakeholders surrounding issues with accessibility of buildings and roads. Professor Isaac Karanja Mwangi (Chairman, Department of urban & Regional Planning - University of Nairobi) explains that the problem is not the laws surrounding the design and construction of buildings to be accessible to all as there are strict and clear requirements outlined by the government, but the cancerous issue of immorality and corruption. " in the west, people have a moral compass which tells them that whatever they build should benefit society and benefit human beings. Although investors gain financially, they also consider how the end-users and society at large will gain. It is not that there are no laws, it is not that there are no regulations, it is not that there are no experts to help like architects, planners engineers and surveyors. It is that once the buildings proposals are approved people start cutting corners to save them money". He continues to explain that he has never heard of a building in the UK, America or other advanced African countries for example, fall down in the middle of construction. Why, because their citizens respect the rule of law. As the most respected University as well as one of the biggest in the country with around 84,000 students, The university of Nairobi's breakthroughs in research is considered highly not only among citizens but also

within government. After asking Professor Mwangi if disciplines within the university, especially in his department, offer studies surrounding Universal Design he said no, but was confident that if the University made a case for it to the senate and how useful and relevant it is in line with Kenya's 2030 Vision that there may be a chance for it to be realized. He also added that potential solutions to help build more accessible society should heavily include campaigns popularising the need for accessibility. If it is a consistent and strong campaign it with self as public education and that paired up with schools and universities incorporating Universal Design into their curriculums would go a very long way in achieving Kenya's ideal of leaving no one behind.

However, there are and continues to be several efforts made by the government to ensure that persons living with disabilities are considered and supported across the board in infrastructure. Apart from persons with disabilities being recognized by law within Kenya's constitution, The government established the National Council for Persons With Disability (NCPWD) Who by law have the authority to sanction any building in breach of clause 7 in the Persons with Disabilities Act: Act 14, 2003. Most recently, The UK government in partnership with the government of KENYA and along side the International Disability Alliance are, for the first time putting together a high level Global Disability Summit on 24 July 2018 to discuss galvanizing global efforts surrounding disability inclusion around the world. Being chosen to co host the first of its kind with the UK government is a testament to the international recognition but KENYA is receiving for the efforts it is making in changing the face of disability in the country. Although there is still much work to be done says PS of Labour and Social Protection, Susan Mochache, this invite alone to co host the summit in London shows that KENYA is taking steps in the right direction.

Our Successes & Lessons Explained:

Overall, the planning and execution of the project were achieved, With our main objective of getting a detailed and up-to-date status of accessibility within the Nairobi CBD reached.

Research on the disabled community in the country was key as a starting point in order to help us understand The statistics, what challenges they face daily and if these challenges could be reduced with basic adjustments by the government. It is appreciated that not every problem can be solved to the complete satisfaction of each person affected, but certainly the fundamental rights of persons with disabilities in Kenya as outlined by the law surrounding accessing buildings, support with participating fully in society, engaging freely with public services, road safety, Discrimination and equality should be a right and not request. This research stage helped to make it clear that if the government did nothing else but focus fully on improving the accessibility features described in the checklists, all people with disabilities could go to school and then after pursue higher education, they would

have a better chance of joining and staying in the workforce, they could improve their social lives through accessible recreational, cultural, sporting and technological environments, they would have The freedom to live and travel independently and enjoy activities within their communities alongside friends and family Plus so much more if only our buildings and roads were constructed or adjusted with them in mind.

Research on local, international disability laws and best practice allowed us to understand how committed detailed our laws were in serving the disabled in comparison to other countries and their efforts in innovation. It was at this stage that we discovered the concept of Universal Design which made it abundantly clear that even with the smallest of adjustments as a start, UD could bare little or no cost at all (eg buildings changing there waiting bay seating from chairs with armrests to chairs without, Or websites introducing contrasting colors, Slightly bigger font and writing in plain simple English on their online content), that UD would drastically improve our economics (The disabled are also a large part of the consumer market that would participate more if services were accessible), that UD would make KENYA more appealing to the world in all industries because of its dedication to achieving the Sustainable Development Goals through this best practice.

Volunteer recruitment was the next step after our research started to paint a clear picture of the Ability Project's impact potential. We chose to recruit university students because of their flexibility with time, their willingness to gain new experiences and the chance that planting seeds of UD through this project in them could mean that they take it forward in their chosen disciplines - they are our future designers, developers, policymakers, public servants and so on.Their journey and personal growth through the Ability Project is described in their own words on our daily YouTube vlogs and the 'Ability Project Documentary'. Another key Point of success was providing each volunteer with an Ability Project marked t-shirt. This proved important because each volunteer was easily identifiable on the data collection day, Which meant that the city Council authorities, After giving us permission and support in the field could tell us apart in case of difficulty and not to mention a small token of appreciation and recognition to each volunteer..

Planning and implementing of the training day was also a success owing to good communication with our team and daily points of action completed as detailed above.

Documenting the process through social media posts, YouTube videos, website uploads, photos and written material was important for us to encourage free access to information and transparency, which are core values here at the Open Institute. Outside of this, we ultimately hope that our documentation will increase awareness

on the issues involved, inspire other individuals/groups to replicate and better still to improve on the project relative to their context, to use it all in building a case for, and presenting it to The Nairobi county government and other stakeholders for action

Completing the data collection and digitizing our findings for the website was the most integral part of this project because without it we could not present current and factual data on the map, And without current and factual data we would not have a tangible basis in pushing our county government to make Swift changes. In addition, data analysis in an easy to understand visual format like an interactive online map, makes for simple information breakdowns and explanations. Our team also purposed to make this website accessible by engaging and seeking advice from experts in website accessibility features, so that the map and any other information found on the site " can be accessed, understood and used to the greatest extent possible by all people regardless of their age, size, ability or disability".

Conversely, there were details that could have been improved upon throughout the project which we have now identified and will act on moving forward.

Printing and sorting of data collection packs were only completed evening before the volunteers training day. Though the packs were ready relative to content, The rush in printing and sorting them meant that in the event we noticed any mistakes, Materials missing or a sudden malfunction in the printing equipment, we would not have been able to troubleshoot in time. This should be completed and ready at least 24 hours before needed, not the evening before.

Familiarizing volunteers with the map and checklists thoroughly, and repeatedly if necessary, on the training day we realized could have been executed better. We relied on one run through and assumed that all volunteers were conversant with map reading and did not consider that just because we as the Ability Project team had interacted with the map and zones several days prior and understood them clearly, did not mean the volunteers would.

Simulating how to correctly collect data would have avoided, or drastically lessen the amount of questions asked by the volunteers on the Data collection day itself. In hindsight, we could have used the training venue itself if needed as an example of what the volunteers needed to do exactly through role-plays/scenarios in addition to the afternoon session where we discussed how to collect the data. We must always remember that some learn better practically rather than theoretically.

Giving extra time for clarifications at the end of the training day - to go around individually during downtime moments making sure everyone is comfortable with what has been taught again would have reduced the number of questions asked whilst out in the field. Some volunteers may feel intimidated to ask questions in a

group setting, So we needed to have been more proactive in approaching them after the formal part of the training day had ended.

Setting up the meeting point at the start/end of the data collection day in a public park proved slightly problematic in a few ways. First, because of the current climate in the country surrounding riots and demonstrations, A group of around 30 odd youth raised concerns to the council authorities who then approached us with several questions. What we didn't know was that on the very same day there were organized protest set to take place in the city center by a group of disability activists, whom they mistook us for. Once that was cleared, another problem we encountered was meeting somewhere strategic to ensure security when handing out lunch money to each volunteer for the day as the CBD is notorious for pickpockets and petty criminals.

Recruiting a more diverse group of volunteers could also have been considered in the planning stages to create a wider range of perspectives in attempt to mirror the very people of different ages, sizes, abilities and disabilities the project aims to serve. It would have also encouraged new connections between different kinds of people within the group and hopefully build their personal and professional networks.

After all the data collection and compilation wrapped up, the Ability Project team was invited to meet with the PS of Labour & Social Protection Susan Mochache, from the Ministry of Labour, Social Security and Services, after we briefly introduced the project to her, its objectives and its outcomes thus far which took place on Tuesday 5th June 2018. This presentation involved introducing the ministry to the Ability Project and our process in realising it, how we envision the project to be re-created in other sectors like transport in future and to personally invite her to the event that we plan to host and present the Ability Project formally to national government representatives like herself, County government representatives, policymakers, civil engineers, industrial designers, the media, people from the disabled community and other stakeholders relative to the conversation surrounding accessibility in the city which we ultimately hope will be a tool that the government can use to engage in work with to make our environments better for everyone. PS Mochache was impressed with the initiative that the Open Institute has taken in creating and executing the Ability Project, commended its direction in using easy to understand technology, in the form of an interactive online map, to illustrate the raw data that has been collected and emphasized how timely our project is in line with what the ministry is doing concurrently to lobby and improve on legislation in the country. The PS extended full support from the ministry to the Ability Project in anyway needed, Showed enthusiasm for the potential that it had to help create change as it grows and has asked that the Open Institute be added to the ministries internal communications and working groups to have us to give our input and recommendations in different discussions of persons with disability.

It is our belief that this very positive meeting will become an extremely key point in the life and longevity of the Ability Project as a whole moving forward. Directly collaborating with the ministry will much better inform us in our activities and hopefully allow us to be of service and add value to the national conversation. Already this has been realized by the ministry being interested in incorporating the contents of our report and asking that it be put in their report that will be tabled during both the UN Convention on the Rights of Persons with Disabilities (CRPD) - on 12th June 2018 -and Global Disability Summit in the UK on 24th July 2018.

Our Recommendations Explained:

REFERENCES

(a) Persons with Disabilities Act: Act 14 of 2003:
https://dredf.org/legal-advocacy/international-disability-rights/international-laws/kenya-persons-with-disabilities-act/
(b) 'Ability Project' at the Open Institute: http://ability.or.ke/
(c) Centre for Excellence in Universal Design (CEUD):
http://universaldesign.ie/About-Us/