

BLIND SA
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ADVERTISEMENT FOR THE
POSITION OF CEO AT BLIND SA

Blind SA is looking for a dynamic, self-motivated CEO with strong leadership qualities and initiative to head the running of the NGO which has about 40 staff members handling several large areas of operation in the field of visual impairment including Braille Services, the largest braille printing house in Africa. The applicant must have 5 to 10 years' experience of senior management and preferably an applicable tertiary qualification. The salary is negotiable.

The incumbent is expected to:

1. Be creative and be a visionary;
2. Be committed;
3. Be versatile and willing to accept changes;
4. Be self-motivated;
5. Be initiative;
6. Be able to manage independently and with integrity and honesty;
7. Be dependable and transparent;
8. Be resolute and able to confront challenges timeously and provide guidance;
9. Be committed to meeting deadlines.

With the following skills:

1. have full knowledge of managerial responsibilities;

2. have basic financial understanding;
3. have basic legal knowledge;
4. have both verbal and writing communication skills;
5. be able to constructively give feedback, especially to the subordinates;
6. Be an active listener and have the ability to take instructions from governance;
7. have a good working knowledge of word processing, spreadsheets, e-mail, internet, visual presentation, etc;
8. have good interpersonal skills;
9. have change management, knowledge management and strategic management.

Send your CV to Mr Ntshavheni Netshituni at:

EMAIL: netshns@gmail.com

For further information call Mr Netshituni at:

TEL: 012-429-3829 or CELL: 079-871-6632 or 076-930-2661

Closing date: 18 March 2016.

Blind SA reserves the right to authenticate all qualifications.

Kindly take note that correspondence will only be limited to shortlisted candidates. If you do not receive correspondence from us two weeks after the closing date, accept that your application was unsuccessful.

Help for blind people – Mamelodi
Record, Friday January 29,
2016 – Stephen Selaluke

After he lost his sight three years ago, Kgaugelo Madua (40) came close to giving up life. But then the Mamelodi West resident decided to change both his and other blind people's lives for the better.

Madua founded Bonisanani Blind Organisation last year, to help people who are blind. Bonisanani will be launched at the Mamelodi West Community Hall on Saturday at 10:00.

In attendance will be officials from Blind SA, motivational speakers and some famous gospel singers. Bonisanani is a non-profit organisation that captures its objective succinctly in its tagline, Gatela Pele, meaning stepping forward.

Madua said the organisation had 15 members already. “We feel our government is not doing enough for blind people,” said Madua.

“Our organisation will empower people who are born blind or lost sight as well as lift their spirit. Blind people have the same feelings as other people, and we all have the same goals,” said Madua.

“We are inviting the community of Mamelodi and Nellmapius who have blind relatives to come to the launch of people who are blind to come and learn more about the organisation and what it can do for them.” he said.

For more information, phone Madua on 081 890 4714.

BLINDNESS IN A HIGH-TECH AGE

Digital technology has brought about the biggest improvement in the lives of blind people since the invention of the white cane in the early 20th century, but the visually impaired believe the true revolution is yet to come.

I am meeting Pavel at Hyde Park Corner station in London. He is standing patiently by the turnstiles with an iPhone glued to his hand waiting for me to find him. At 27, Pavel is a real technology geek, always excitedly blogging about the latest Apple gadgets, features and applications. Though a true member of the technology-dependent generation Y, he still remembers how his life was before, and has agreed to talk to me about how profoundly digital technology has changed the world for him.

“We can talk about whatever you want, I have plenty of time,” he grins mischievously. “My mother went sightseeing but I wasn't in the mood.”

Pavel has been blind since birth and whatever technology has done for him couldn't replace his missing eyesight. As we stroll through Hyde Park, he introduces me to a set of his indispensable helpers. “The reason I am into Apple is that they are really the best for blind people. They were the first to offer the screen-reading technology as part of the regular package. I don't need to install anything extra, I just press a button and it starts talking to me,” he explains. “Here in London, I am also really impressed with Google Maps for pedestrians; it really works well with the public transport.”

Through his phone, he can access apps that help him sort out his paper money, distinguish colours or even read signs and printed text by taking pictures of them. There is no doubt that digital technology, including the Internet, computers and smartphones, has changed the world for everyone, but for blind people the benefits have been immeasurable. According to Katherine

Payne from the Royal London Society for Blind People (RLSB), smartphones and computers represent the single greatest improvement in the lives of blind people since the invention of the white cane and the introduction of a guide dog in the first half of the 20th century. The only comparable previous improvement had been the development of the Braille writing system in 1824.

“When I was at university, I relied on cassettes being recorded for me in audio,” remembers 47-year old Steve Tyler, head of solutions, strategy and accessibility at the Royal National Institute of Blind People (RNIB). “I relied on a very old-style Braille display which I thought was fantastic at the time. I could type very quickly and take copious notes, but other than that I had to rely on human help. Today, I use technology on a daily basis – to shop, to learn when my train arrives, to buy tickets, to control my heating, to read newspapers. The accessibility of data through the Internet has been an amazing revolution for everybody, but for me all this was simply not possible before.”

Tyler, a graduate psychologist, joined the technology movement in the early stages. Through his involvement in artificial intelligence research projects, he contacted most of the major technology companies and made it his mission to persuade them to develop their devices to be as accessible as possible for those who can't see. It's the smartphone revolution he considers to be the major game-changer: the creation of a talking computer inside a pocket-sized box that can be equipped with an almost unlimited set of functionalities for blind people to get on with their lives. “I worked with Apple, Microsoft and other organisations like Samsung and Google to make sure that their operating platforms were accessible, because one of the decisions we made very early on – in about 2000 – was that if we can ensure that the device in your pocket, whatever it turned into, was accessible, chances would be that it could become the way in which we would be able to connect to the world, and that broadly appeared to become true.” At the outset of the new millennium, Tyler worked with Nokia and Vodafone to create the first screen-reading technology for mobile phones. It was launched in 2002 with Nokia's Symbian operating system and represented a major breakthrough for the visually impaired community.

Pavel remembers the feeling when his phone first started talking to him. “Suddenly, I didn't need to ask anyone to read my text messages for me,” he says. “I could browse maps and other media. That was a huge change.” However, Pavel's love affair with technology started even earlier. From the first Eureka computer for blind users in the early 1990s through to his first talking Windows computer when he was 10 and the dial-up Internet, Pavel was an earlier adopter of digital technology than most of his sighted peers.

“When dial-up Internet first appeared, I got hooked immediately. I remember my mother being really angry about the huge telephone bills we had because of that,” he recollects. “But I think that in the blind community I was no exception.”

In recent years, high-profile tech companies and research institutions have virtually started racing to introduce the coolest new gadgets that could make life easier for blind people in future. There is Google and its environment-mapping Project Tango smartphone. The device, currently only available to developers, uses infrared depth sensors to capture motion data in 3D and create maps of the environment that could be used by blind people to navigate in buildings. Last year in

London, Microsoft trialled a navigational headset that translates information on the surrounding environment into sound impulses to help blind users better navigate in cities. Compiling information from the GPS and Microsoft's Bing maps, the system provides step-by-step guidance along a pre-selected route. In order not to block the users' hearing, the headset transmits the information via vibrations through the jawbone. On the other hand, Oxford University researchers have been experimenting with smart glasses that can provide improved visual awareness to people with residual eyesight. The glasses are fitted with a camera that processes images and provides the wearer with simplified visual clues about nearby objects through a display located in the eyepieces.

Yet Tom Pey, chief executive of the Royal London Society for Blind People, warns that this race to create completely new gadgets might be rather counterproductive. "In the past, I used to walk around with a rucksack full of gadgets and each thing in that rucksack would be used for one specific reason," says Pey, a former investment banker who lost his vision at 39 after fighting with an undiagnosed infection for years. "I had an eye glass, I had a way-finding piece of equipment which gave me talking GPS. I had another tool that would give me access to a calendar, I had another one that would give me access to my email and another one for access to notes. All of them individually were helpful, but you would need to have a really strong back in order to be able to carry all those things around." As a result, he says, many blind people would either purchase the gadgets but not use them for inconvenience, or not buy them at all because most of them live close to the poverty line and don't have money to throw at technology. The rucksack full of gadgets has been replaced with a smartphone full of apps. According to Pey, the danger of putting too much effort into developing technology that would be of limited use still exists. "We mustn't fall into the trap that we fell into in the past, that we identified a problem and then developed a gadget that would solve that particular problem for a blind person," Pey says. "If technology is simply for blind people, it is doomed to fail. What you need to do is to design the technology in a way that it can benefit everybody. You don't want to have a separate app for the blind, then a separate app for people with dyslexia or other problems. That would be too costly. You want to design things so that they are accessible for everybody right from the start and even make things easier for the sighted." The Royal London Society for Blind People decided to lead by example and developed an indoor navigation system to be tested on the London Underground that transmits turn-by-turn directions via a network of Bluetooth beacons right into the users' smartphones. Although developed primarily with the goal of giving blind people more independence and confidence in their travels, the RLSB hopes crowds of tourists struggling to find their way in the intricate London Tube network would benefit from the system as well.

"If visitors come to London, they will be able to plug into our app and put in the location that they want to go to," Pey explains. "The phone already knows where you are and plots the route for you." The system could in future enhance navigation in cities as well as provide guidance inside airports, railway stations and shopping centres.

According to Tyler, navigation and transportation usually comes first on the list of priorities blind people would like to see improvement in. Apps such as Blindsquare or Ariadne are enhancing GPS navigation systems to make them suitable for blind users and enable them to travel independently. However, in an ideal world, these systems could do much more. Tyler

believes the emerging Internet of Things (IoT) as well as Big Data processing will lead to a major breakthrough that will provide blind users with much more confidence. "At the moment, the traditional GPS systems are really centred around car drivers. Even if they refer to them as pedestrian mode, they are talking about roundabouts in the road, whereas I want to know where the crossing is," Tyler explains. "The traditional problem I would have would be walking down Euston Road and the system will say 'yes, you have arrived', but the destination that I want is across two lanes of traffic on the other side of the road." Smart maps of the future would navigate the blind user to the destination via the most convenient crossing with almost pinpoint precision. These systems, Tyler foresees, would use not only more detailed mapping, but combine positioning data with image processing to enable the blind user to find the door of the exact shop he or she might be looking for. "The GPS accuracy at the moment doesn't allow you to be pinpointed to the right direction," says Tyler. "So you may be standing virtually ten metres away from an entrance to an exact shop but the sat-nav technology won't help you any further. To overcome this problem, we have been experimenting with visual analysis. The idea is that you will be able to take a photograph or video of where you are and this photographic information will be analysed, blended with the data that's already available to your device from GPS or any other beacons in the vicinity, and you would be able to read the shop signs."

Many of those with vision loss, including Tom Pey, hope technology will eventually bring about yet another big breakthrough. In the same way that cochlear implants have been successfully used to restore hearing in deaf people for years, the ever improving microchip technology could one day help make up for the deficits in the vision system of blind people. "At the end of the day, we can put a lot of technological solutions in place to deal with the loss of sight, but ultimately it's the loss of sight that is the cause of the problem," Pey points out. "As microchip technology gets even more powerful and faster, the possibility to transmit complex information about the environment into somebody's brain may become a reality."

However, Imperial College London researcher Konstantin Nikolic warns that despite two decades of research efforts, progress in the development of a retinal prosthesis, the number one technology explored as a cure for blindness, has been frustratingly slow. "The problem is that the visual system is much more complex than the hearing one," Nikolic explains. "We don't properly understand the underlying biology and don't know exactly how to stimulate the retina in order to create visual perception. As a result, the currently existing implants mostly provide some sort of noise from which the blind user can draw some information, but what they see is far from what sighted people can see." But Nikolic is confident the awaited breakthrough could come at any time. Until scientists and engineers can solve the big mystery of eyesight, though, digital technology will continue to make life easier for blind people.

Retinal implants, in development since the late 1960s, are experimentally used to provide some limited visual perception to people with conditions affecting the retina. They use miniature electrodes to stimulate remaining retinal cells. The implants can be placed either on the retina (epiretinal), slipped underneath (subretinal), or alternatively placed outside the eyeball (sub-choroidal). The current most common epiretinal prosthesis is Argus II, which consists of 60 tiny electrodes, each measuring 200µm in diameter. The implant is connected to an image processor that receives wireless signals from a camera on the patient's glasses. The best the implant can achieve is providing awareness of light and basic object recognition, such as locating the door or

being able to follow a white line. To enable the patient to recognise faces or read large print, 1024 electrodes would be needed. For reading normal print, 10,000 electrodes would have to be squeezed onto the chip.

Other approaches attempt to provide visual information through touch or sound, with the user trained to interpret the stimuli. In June 2015, the US Food and Drug Administration approved a device that sends signals from a camera into electrodes stimulating the tongue.

Milestones.

- 1824: Braille tactile writing system.
- 1920s-1930s: Introduction of the guide dog.
- 1920s-1940s: Development of the white cane as a mobility aid.
- 1990: Talking DOS computers.
- 1996: First portable Braille note taker with calendar, word processor and calculator.
- Late 1990s: Internet revolution.
- 2002: Nokia launches Symbian operating system for smartphones with screen-reading technology.
- 2004-2006: Development of navigation systems specifically tailored for blind users.
- 2009: VoiceOver screen-reading technology becomes an integral part of Apple's operating systems for computers and smartphones.

Source URL: <http://eandt.theiet.org/magazine/2015/12/blindness-high-tech-era.cfm>

What are your long weekend plans

How about spending the Freedom Day/Workers Day long weekend on holiday in a beautiful part of KZN? Higher Ground has been running holidays for people with disabilities since 2004 and we couldn't be more excited to announce our next one. A new venue in a forest setting with dams, walks, swimming pool and comfortable en-suite accommodation is where it's all happening.

An exciting new programme including fishing, hiking, horse riding, nightly campfires, live music, and new board games mixed with the winning ingredients of relaxing with friends new and old from all around the country, networking, great food and peaceful surroundings make for a holiday not to be missed.

Sound like something you'd like to do? Then book now for our upcoming Higher Ground holiday taking place Thursday 28 April-Monday 2 May 2016.

Space is limited so book soon and spread the word to others you'd like to holiday with!

Who: Adults who are blind or partially sighted, from anywhere in South Africa

When: 28 April-2 May

Where: Eston, KwaZulu-Natal (airport/bus/train pickups available)

Cost: R1600 per person (includes food, accommodation and activities)

Don't miss out on a fun and relaxing way to spend your long weekend!

If you would like any further information or have any questions at all please don't hesitate to contact me.

To book email HigherGroundSA@gmail.com.

We hope to see you there!

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