abaricom®

ABARI THROUGH
Sustainability Lens

SCAN ME

BUILDING A SUSTAINABLE FUTURE FOR GENERATIONS THROUGH CONNECTIVITY

Neo Nwako
(Managing Director)

"What we do and how we do it should meet social performance standards such as a clean and safe environment, equitable distribution of access to knowledge and resources, thriving local enterprises, poverty eradication and inclusion. We are deliberate about ensuring that technology is about making Batswana and their communities better. No Motswana should be left behind"

Connectivity and sustainability are intertwined threads that weave the fabric of our collective future. As we embrace the opportunities presented by an interconnected world, it is crucial to prioritize sustainable practices to safeguard the health of our planet and ensure the well-being of current and future generations. Through responsible technological advancements, global collaboration, and a commitment to inclusivity, we can navigate the path towards a more sustainable and interconnected world.

At Abaricom we have a role to play in unlocking new possibilities for Batswana, protecting our environment, enriching our society and having an impact through green technology, social inclusiveness, equitability and poverty eradication.

Introduction

We are thrilled to have this opportunity to share with you the remarkable projects we have embarked on, with a primary focus on sustainability. Our goal is to stay well-informed and adaptable to the ever-changing needs and challenges of our communities.

In this report we will showcase the diverse range of initiatives we have implemented, all aimed at harnessing the power of connectivity as a catalyst for positive change. Join us as we explore the transformative potential of internet access and its significant impact on our communities. We are always keen to grasp the pulse of the communities we serve and empathize with their challenges and aspirations. This process propels us to craft enduring solutions and foster a sustainable tomorrow for Botswana.

Our services are intended to illuminate pathways to a knowledge economy and enhance lives and empower communities nationwide.

Through this report we unveil a web of initiatives, a testament to our pursuit of technological progress that enriches lives.

Connectivity can serve as a foundation for transformation, join us as we move and shake the digital landscape and be poised in anticipation for a future where Abaricom continues to redefine the boundaries of possibility.

The journey has begun with the best yet to come in 2024!

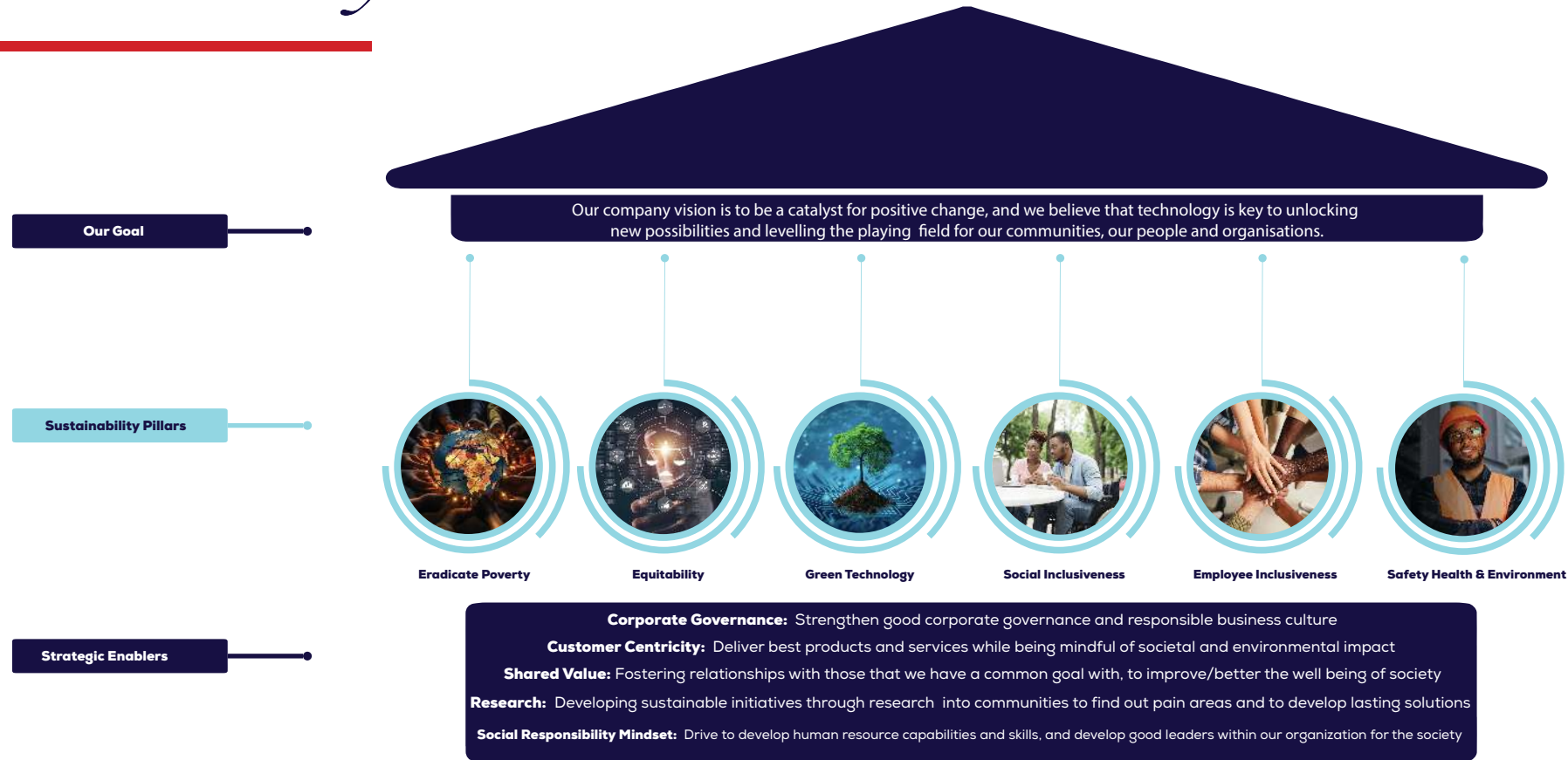# Uplifting communities and spurring economic growth

Abaricom believes in leveraging information technology to contribute to a knowledge economy that uplifts the education of all, contributes towards human capital and provides support towards skills development.

We seek to empower and improve Batswana and their communities, ensuring that no Motswana is left behind. Through technology, the playing field is leveled, that is why we have made deliberate efforts to integrate sustainability and social inclusion at the core of our business.

Sustainability Framework

Our company vision is to be a catalyst for positive change, and we believe that technology is key to unlocking new possibilities and levelling the playing field for our communities, our people and organisations.

Our Goal

Sustainability Pillars

Eradicate Poverty   Equitability   Green Technology   Social Inclusiveness   Employee Inclusiveness   Safety Health & Environment

Strategic Enablers

Corporate Governance: Strengthen good corporate governance and responsible business culture

Customer Centricity: Deliver best products and services while being mindful of societal and environmental impact

Shared Value: Fostering relationships with those that we have a common goal with, to improve/better the well being of society

Research: Developing sustainable initiatives through research into communities to find out pain areas and to develop lasting solutions

Social Responsibility Mindset: Drive to develop human resource capabilities and skills, and develop good leaders within our organization for the society

As agents of transformation and advancing human and social development, Abari is committed to helping Botswana achieve Sustainable Development Goals (SDGs) through technology, and advancing the priorities of national digital transformation strategy.

One of Abaricom's social responsiblities and sustainability initiatves have been on making impact especially in education. Connectivity plays a crucial role in education, impacting both access to learning resources and the quality of education.

The internet provides a wide range of educational resources, including articles, videos, e-books, and online courses. Connectivity ensures that students and educators can access these resources regardless of their geographical location, which opens up opportunities for self-directed learning and research.

Poverty Eradication

Our Vision

To enhance community well-being while fostering economic growth and backing local enterprises through enhanced connectivity.

Empowering marginalized communities through strategic investments

On December 7, 2023, Abaricom proudly collaborated with the SK Lopang Foundation to support the revitalization of Selibe Phikwe and enhance opportunities for its residents. This partnership was centered around our commitment to poverty eradication. Abaricom aimed to empower various areas of Selibe Phikwe by providing internet access at three key hubs: the mall, the park, and Area 2. By offering connectivity to these locations, our partnership aimed to create opportunities for residents, enabling them to access the global marketplace. We recognize that internet access facilitates global citizenship and our involvement extends beyond technology provision to breaking down digital barriers and promoting fair distribution. This initiative may lay the groundwork for reshaping the economic landscape of Selibe Phikwe, reflecting our dedication to advancing economies in the digital era.

Abaricom sought to empower areas of Selibe Phikwe by providing access at three hubs, the mall, the park and Area 2.

Abaricom is dedicated to collaborating with entities that prioritize both community welfare and economic advancement. Through strategic partnerships with aligned organizations, we endeavor to empower communities and encourage entrepreneurial endeavors. Our involvement in the Sese Sewing Project exemplifies this dedication, aiming to nurture entrepreneurial drive within the community. By fostering economic progress, our goal is to improve overall quality of life and tackle socio-economic obstacles head-on.

Empowering marginalized communities through strategic investments

Abaricom participated as the connectivity partner for World Telecommunications and Information Society Day on May 17th, 2023. The aim was to raise awareness about the potential of internet access and Information and Communication Technologies (ICTs) to unite societies and economies while bridging the digital gap. This global event highlights how the internet and ICTs can revolutionize economies and societies worldwide. It reflects our commitment to equity, ensuring that connectivity is accessible to more people. The event aligns with Abaricom's dedication to equitable distribution, promoting fairness, diversity, and inclusivity. Abaricom employees played a significant role, symbolizing how collective efforts can deliver value through ICT on a global scale. By participating in such important commemorative events in the information technology sector, we reaffirm our commitment to our core pillars.

Fair distribution gives opportunity to every economy and we promote fairness and we value diversity and inclusivity

Empowering marginalized communities through strategic investments

Abaricom remains committed to Equitability as it provides the impetus for diversification of the economy and adds tremendous value.

In commemorating Botswana's cultural richness, our involvement in the Moshupa District Show from August 9th to 13th, 2023, exemplified our dedication to our Poverty Eradication pillar. Themed "Sustainable economic & value chain development through digitalization," the event served as an ideal platform for learning, networking, shopping, and aligning with Abaricom's core values. Deeply rooted in sustainability and economic progress, the Moshupa District Show mirrored our commitment to poverty eradication by ensuring fair distribution of resources, justice, and equal opportunities through stalls and exhibitions showcasing diverse talents and entrepreneurship. This resonates with our mission to alleviate poverty and promote a more equitable society. In line with our Poverty Eradication pillar, the event provided an invaluable platform for learning, networking, and commerce, fostering unity among attendees. Small and Medium-sized Enterprises (SMMEs), artisans, and diverse individuals found fertile ground to share stories, showcase products, and exchange ideas. Abaricom remains steadfast in its commitment to Poverty Eradication as a catalyst for economic diversification and substantial societal progress.
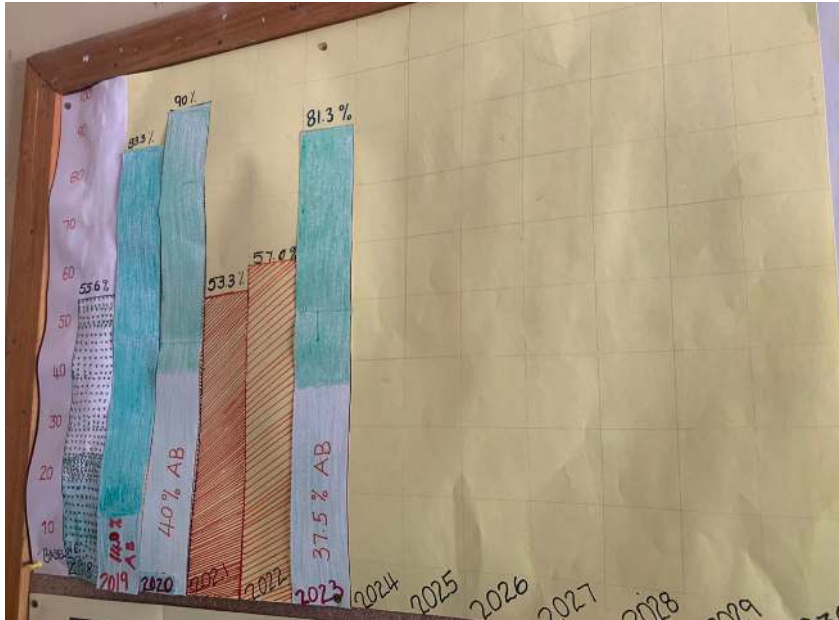
Equitability

Our Vision

To foster inclusive prosperity and community empowerment, we envision a future where every marginalized area thrives with equitable access to essential infrastructure and services. Through our unwavering commitment to corporate social investment, we aspire to uplift local businesses and empower communities, catalysing sustainable growth and fostering a world where no one is left behind.
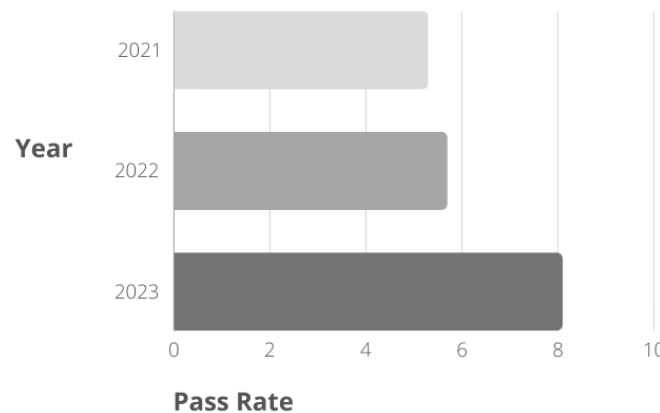
Impacting Communities

Komana Primary School

Komana is a village located in the North-West District of Botswana. Through Abari's partnership with Debswana Information Management department. The initiative was to address challenges facing the school, namely, computer lab network repairs and maintenance, and computer lab Wi-Fi coverage amongst others. Similarly, the school has noticed drastic improvements in their academic performance.

Internet has enabled better learning and ease of research by teachers to enable better learning. The school noted that they had a pass rate of 81 %.

Boteti Region School Connectivity (Ongoing)

The Boteti region connectivity involves primary schools in thirteen villages. This project seeks to deploy internet to the marginalised areas, to ensure that no one gets left behind. The project was done in partnership with one of our strategic partners through the shared value approach of our framework, which seeks to partner with those we have a common goal with to impact lives. Through this project we ensure that Botswana gravitates towards a knowledge-based economy.
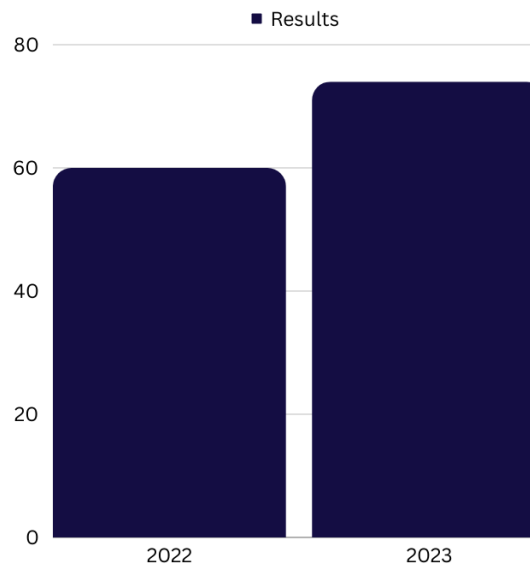
Motswedi Rehabilitation Center & Pudulogong Center For The Blind

One of our goals focuses on social inclusion and therefore seeks to improve the ability, opportunity and dignity of those disadvantaged based on their identity. In a society where the differently abled in our communities are left behind, this initiative intends to remove barriers to create an inclusive and accessible society for all. The two projects are testament to our social inclusion pillar, ensuring that even with their disabilities, they are not left behind. And so, Abari prides itself in giving the marginalised accessibility to resources.

Impacting Communities

Chanoga Primary School Connectivity

Chanoga, situated in the South- Eastern part of Maun has become a thriving tourism destination. The village, however, faces socio-economic problems such as high rate of unemployment and extreme poverty. For this reason, it was key to improve the quality and livelihoods of the inhabitants through technology, thereby bridging the digital divide gap. Internet connectivity will enable early-stage educational development for the school as well as the community, and further enable innovativeness. This project re-affirms our position as a business of being an enabler of digitalization in the country.

■ Results

This was also to enable innovativeness and connectivity in the village as a whole.

In partnership with JCI Oldies Chapter , we provided internet to Chanoga Primary School. The purpose of this was to enable early-stage educational developmnet for the community of Chanoga. Through continuos monitoring and evalution we get to realise the impact made in the school. Overall the school pass rate increased from 60% in 2022 to 74% in 2023. To assess this impact, an actual value was measured against a baseline value. It is evident that connectivity has greatly impacted academic performance, such as improving knowledge in ICT, enhancing the learners general knowledge aswell as the teachers, and enable their access to academic information.

Impacting Communities

Makalamabedi Jss

Makalamabedi Junior Secondary School has been one of our beneficiaries. Through investing in education of children in rural areas, we believe we are bettering and impacting lives. Therefore connecting schools has been one of our key projects, enabling us to touch lives and make a difference. As we continually monitor and evaluate our projects we are able to see the impact we are making.

Connecting schools allows children to develop skills and access online learning content.

Maun & Mohembo Kgotla

As part of our quest to include every Motswana in the digital economy, Abari has provided internet to remote areas such as in Mohembo and Maun Kgotla's. This is part of the digital inclusivity strategy and bridging the digital divide gap. In marginalised areas, Kgotlas serve as a vital hub for delivery essential social services such as sending letters, job applications and accessing other services. With government's digitalization agenda, most services can be accessed on the 1Gov e-services portal. Additionally, with farming being the main economic activity in rural areas, community members rely on systems such as the BAITS system in which they upload information on their livestock.

Therefore, through internet connectivity the public can easily access these services without having to travel long distances to the nearest town, or village to access them.

Green Technology

Our Vision

Our aim is to encourage the use of eco-friendly technologies and improve efficiency by setting up infrastructure that supports clean and green technologies.

Advocating green tech with enhanced infrastructure.

This year as Abaricom, we were delighted to have participated in the Vooslag Boteti Agric & Mining Expo. The event was held from June the 27th to July the 1st, 2023. The theme, "Embracing the Digital World of Technology: Unlocking the power of Business Growth," promoted a profound commitment to community outreach. The event aligned with our pillar of Green Technology. Highlighting the transformative power of technological advancements in the agricultural and mining sectors, we realized how the best sustainable practices in both sectors of mining and agriculture aligned with our Green Technology pillar to embrace technology that acknowledges minimizing impact to the environment. Through assistance of infrastructure and to sponsor dedicated farmers for a Junior Small-Stock judging course, we actively participated in collaboration with a community that takes eco-friendly practices in agriculture and mining to heart.

it's important to promote this ideal to the next generation and to look towards a future where successive generations take it upon themselves through values passed on to ensure sustainable approaches to growth.

As the mines strategic connectivity service provider, we are mindful of environmental concerns. In our efforts to be eco-friendly, we utilize solar-powered systems when providing internet connectivity services to mines.
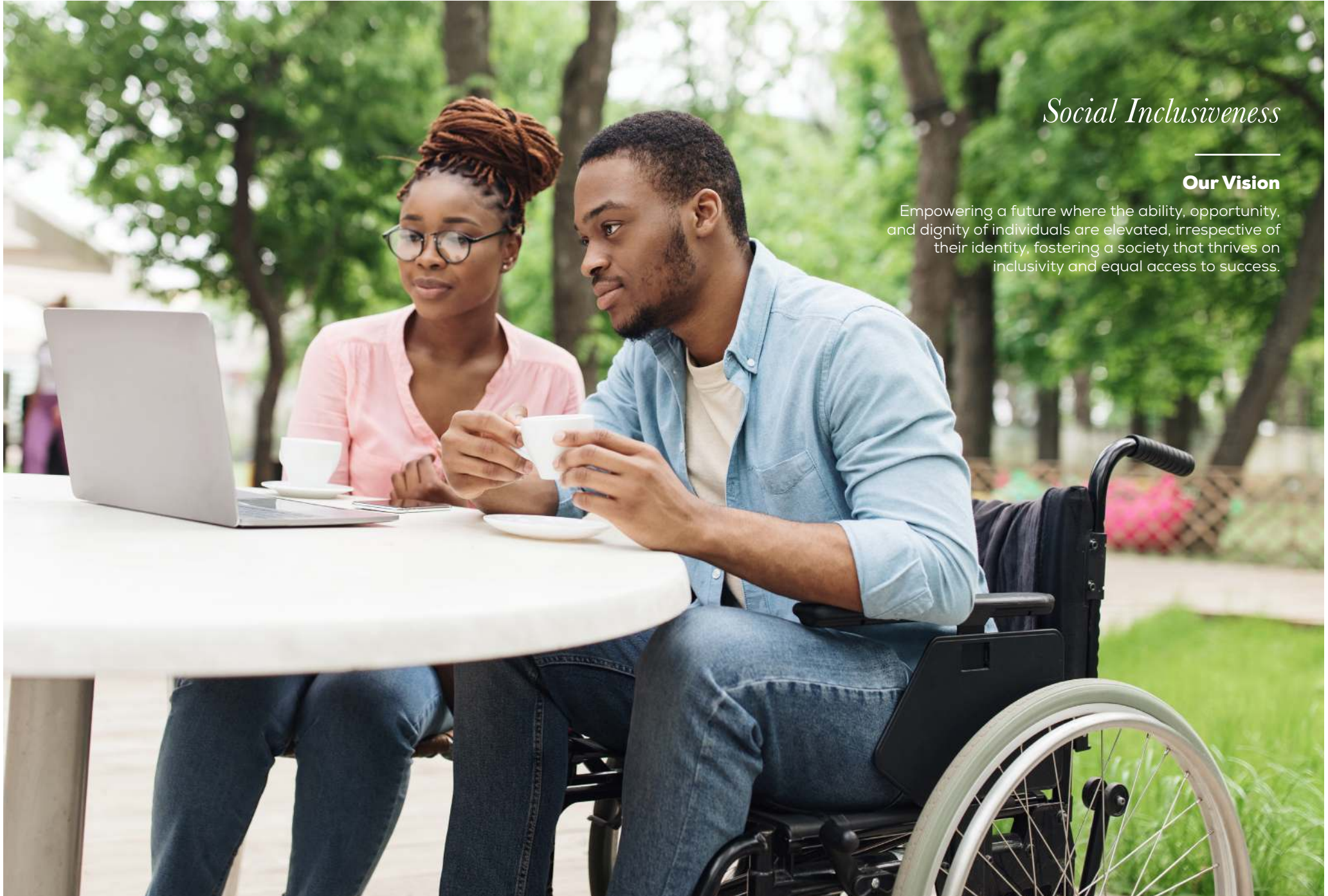
Our LTE solutions are supported by solar trailers, reflecting our commitment to sustainable practices in the mining industry.

Advocating green tech with enhanced infrastructure.

Looking towards a sustainable future, Abaricom participated in the Debswana IM Digital and Automation Roadshow under the theme, "The Future of Work – Adapting to a changing Landscape." The initiative focused on the development of a digital factory and a citizen empowerment program and resonated profoundly with our pillars of Green Techology. Through emphasizing a digital factory, the roadshow aligns with our pillar of Green Technology. The past century has demonstrated the presence of the human contribution towards Global warming, as technology continues to advance at an increasingly rapid rate, so must our understanding of our responsibility to ensure that these advancements are made with an eye on the state of our environment. A greener world should remain in the collective interests of us all, for we receive all resources from the earth and should respect the earth in return.

The vision for a digital factory underscores our commitment to reduce impact to the environment and emissions through sustainable technology.

Social Inclusiveness

Our Vision

Empowering a future where the ability, opportunity, and dignity of individuals are elevated, irrespective of their identity, fostering a society that thrives on inclusivity and equal access to success.

Fostering a community where everyone is included & valued

Jwaneng Mine Paralympic Games

On the 11th of November, 2023, Abaricom took part in the Pudulugong Sponsored Walk. The walk embodied the theme "Walking with the blind to empower the blind." Disability does not mean inability. Inclusiveness begins with all of us. The theme of the event reflects a true essence of social inclusiveness, to stand together with those differently abled. We are committed to bridging the digital divide to ensure the opportunities that can expose people to a world of opportunity are distributed equitably. Everyone including the visually impaired can benefit from the multimedia nature of the World Wide Web. We reiterate our commitment to a social responsibility mindset by ensuring that technology benefits a wider distribution of those in need of it. Walking hand in hand with Pudulugong and supporting them in their initiative to gain sponsorship through such noble means, we aim to inspire others to embrace our pillar of Social Inclusiveness. There is no end to opportunity for those, no matter their circumstances to contribute positively to society.

We have an ongoing commitment with Pudulugong that goes beyond traditional support by taking a stand to actively contribute towards their daily administrative efforts by being their dedicated internet service provider.

On April 14th and 15th, 2023, Abaricom lent support to the Jwaneng Mine Paralympic Games. The games sought to embody the theme of "Promoting the Rights of People with Disabilities Through Adaptive Sports." Our pillar of Social Inclusiveness endears us to the importance of promoting diversity and Inclusiveness in all of life's areas. Beyond celebrating athletic ability, it was a powerful platform to encourage the rights of people who are differently abled to engage in adaptive sports. The event shed light on the athletic prowess of individuals with disability in athletics, sparking profound dialogue about the importance of athletics in fostering inclusion. In our support, we seek to inspire others to learn, and challenge biases and stereotypes. Everyone, regardless of ability can achieve their goals, reach for their hopes and embrace their dreams. Regardless of ability, ones determination can carry them through and inspire others.

*Connecting businesses securely
while prioritizing safety
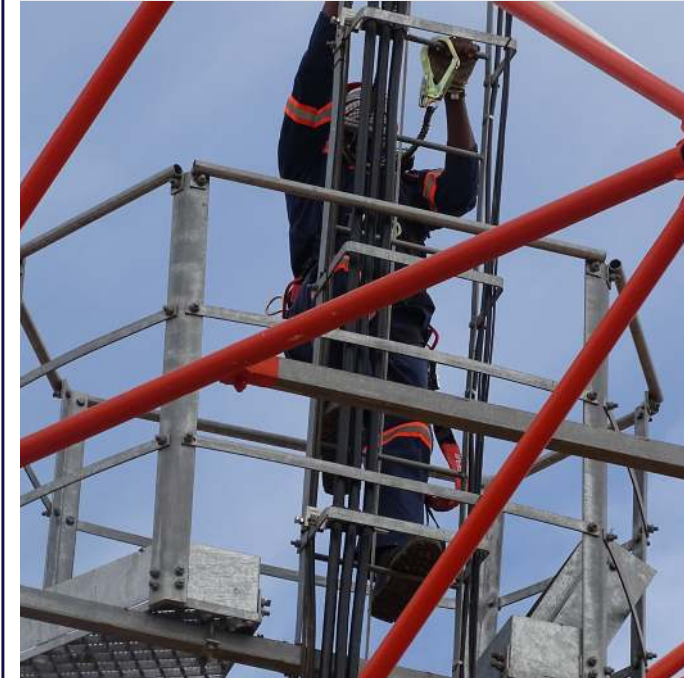is our commitment!*

Nkululeko Kgomotso

SHE Team Lead

Promoting Health and Safety at the Mines

Ensuring the safety of miners is our top priority by providing flame retardant PPE for the team doing eLTE installations on high voltage transformer skids and breaker skids.

VFLs (visible felt leadership),
PrOs planned task observations), daily safety toolbox meetings, supervisors' daily inspec-
tions monthly she meetings, near hits, high potential risks, and stand-downs to monitor,
analyze, and improve our safety

Empowering Miners to Operate Equipment by Continuous risk assessment
(JSA, SLAM, 60-60 rule) ensure all the employees working at towers are trained for working at heights.

Employee Inclusiveness

Our Vision

Embracing a future where excellence knows no bounds, our vision is to cultivate a workforce that stands as a global benchmark of proficiency and innovation. Through robust training programs and dynamic career development initiatives, we are committed to empowering our employees to attain and sustain world-class expertise.

Empowering employees for world-class success

This year Abaricom participated in the Diacore Marathon. Though not a sponsor, our participation stood to underscore our commitment to our pillar of Employee Inclusiveness. It's important to promote a working culture that values shared experiences,

well-being and engagement.
More than just being a race, the marathon is a festive event with activities that cater to all age groups. There was fun for the whole family as there were activities such as Zumba, water slides, stage performances, food courts

and refreshments. Such engagement goes beyond our usual day to day tasks and provides a shared experience that can bolster overall wellbeing. Through events like the Diacore Marathon, we reinforce our commitment to the Pillar of Employee

Inclusiveness. Lacing up our shoes in preparation for the race gets the blood pumping and creates a bond like few other things can.

By participating we encourage physical wellness, promote team building and foster a sense of community

International Labour Day

May Day or International Labour Day celebrates the workers around world. This year we organized a breakfast get together as a gesture of employee appreciation for the effort, dedication and abilities of our team. The May Day breakfast exemplified our commitment to the pillar of Employee Inclusiveness. The breakfast get together celebrated the diversity of talents, experiences and contributions that make us such a dynamic team. We feel it's important to create an environment where everyone feels appreciated, respected and included, a workplace where everyone's contributions lead to the success of the whole organization. Sharing a meal and laughter, we embraced a spirit of inclusiveness. The pillar of Employee Inclusiveness will continue to prop Abaricom up to even further heights.

We believe in a workplace where everyone's voice is heard and where everyone's efforts are rewarded

Digitally transforming
The mining industry

Communication Challenges in Mining Environments

- Diverse interfaces
- 20+ operating systems for tens of thousands of devices
- Frequency Interfence
- Multiple networks
- Desperate Data Stores
- No centralized visibility

SAFETY

EFFICIENCIES

PRODUCTIVITY

5G Deployment for Open Cast Mining

Abaricom has deployed licensed 5G and enterprise LTE (eLTE) networks in Open Cast Mine in Botswana to consolidate the various production networks into 1 unified network.

The eLTE network, which is the first **5G capable network**, was commissioned in July of **2021**.

Network Components	Responsibility/Suppliers
Enterprise Network and Infrastructure	Customer
Systems Integration, Implementation and Support	Abaricom
LTE Network Equipment (Base stations, Power Solution and Microwave)	Huawei Technologies
LANpipe Controllers and EMV UEs	AVI
Voice and LDV UEs	Huawei Technologies
Mining Applications	Mining Applications OEMs

eLTE Network
- Licensed frequency
- 5 Tower sites across the mine
- 4 Trailers to extend coverage
- 5 Microwave Links
- Ring Topology for resilience
- 2 Data Centre (Core) in Active-active configuration
- **Redundant Power** through Mains, Solar and DG

Assets & Applications
- **500+** Assets currently on the eLTE network
- Over **12** Applications migrated to-date
- **Real-time monitoring** through the Network Management Systems
- **Robust and resilient** hardware – IP67 rated
- **Legacy applications** compatible

Project Achievements
- **Digital Transformation** enablement through the eLTE network
- **Sustainable mine operations** are supported by the project
- **High Throughput** Applications
- Network wide **security**
- Multiple Applications – **One Network**

Unified 5G and Enterprise LTE (eLTE) Communications for Underground Mining

Karowe Mine Surface Connectivity Project has been ongoing since 2019. Abaricom has and continues to deploy the solution at the Underground Pad as operations expand

Network Components	Responsibility/Suppliers
Hi-Speed redundant Internet Connectivity	Abaricom
Systems Integration, Implementation and Support (multi-vendor environment)	Abaricom
5G network equipment	Huawei
Corporate and Industrial Routers and Switches	CISCO and O-Ring
Next-generation Threat Management	Fortinet

WiFi Connectivity

- **200 units** and amenities connected at the Contractor's Camp
- **WiFi 6 Access Points** and the Controller deployed at the Workshops, Production and Ventilation Shafts
- **High-speed** Internet Connectivity

Wired Connectivity

- **500+** network points deployed to-date
- **Over 20km** of FTTO and FTTM Deployed
- **Network Design** configured to support multiple services
- **End-to-End Solution** including Switching and routing
- **Multi-vendor** integration and management

Cybersecurity Centric

- Network Segmentation through **OT/IT** Integration
- **Perimeter Protection** for Internet facing applications
- **Real-time** Service Monitoring and Response
- **Secure Remote Access** for critical services
- **Fully-managed** Service Model

The Future of SMART Mining

Abaricom has been playing in the space of Smart Mining connectivity. This is the first step in enabling the mine of the future. The next frontier of the digital transformation for mining operators is around the following areas that we are developing skills and competencies around to enable us to be the partner of choice:

- Sensor Technology for Unified Device Connectivity
- Artificial Intelligence (AI)
- Cloud Infrastructure for mining
- Data, Integration and Development Enablement

Digitally

transforming

the nation

Empower your
Tourism & Hospitality
business with our Cutting-Edge Internet Solutions

Improve

Education

with reliable connectivity and seamless online learning, bridging the connectivity divide

Embrace the future of
Finance
with dedicated connectivity and personalized solutions tailored to your needs

Unlock the potential of your **Aviation** operations with our advanced connectivity solutions

Enhance patient care, optimize operations, and support

Medical

advancements, ensuring a healthier future for all

Embrace transformative technologies that redefine industries and propel us towards a connected and sustainable future

WHAT WE ENVISION

- Thriving communities

- Total citizen involvement economy

- Clean and safe environment

- Happy, healthy Batswana

- Green industries

- Smart Botswana

- Restoration of our culture